

**EFFECTS OF EDUCATIONAL MANAGERS'
INSTRUCTIONAL LEADERSHIP AND
TEACHERS SENSE OF SELF EFFICACY ON
SCHOOL EFFECTIVENESS**

BY

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OF SELF EFFICACY ON SCHOOL EFFECTIVENESS**

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ABSTRACT

Title: Effects of educational managers' instructional leadership and teachers' sense of self-efficacy on school effectiveness.

The current research aimed to see effects of educational managers' instructional leadership (IL) and teachers' sense of self-efficacy (TSSE) on school effectiveness (SESQ). Objectives of study were to: determine educational managers' instructional leadership, assess teachers' sense of self-efficacy and examine school effectiveness at secondary school level in public and private sectors; determine relationship of Instructional leadership and sense of self-efficacy; examine effects of educational managers' instructional leadership and teachers' sense of self-efficacy on school effectiveness; find out gender differences in educational managers' instructional leadership; in secondary school teachers' sense of self-efficacy and in secondary school students. Present research was descriptive and ex-post facto in nature. Mixed method convergent parallel research design was adopted for this research. Educational managers, teachers and students in public and private sector including male and female secondary level schools located in Rawalpindi district (Pakistan) were target population of the study. Proportionate stratified and purposive sampling techniques were used for sample selection. Sample size was 72 secondary schools' educational managers, 365 secondary school teachers and 400 students. The questionnaires used for quantitative data collection were: Principal Instructional Management Rating Scale (Hallinger, 1985) for educational managers, Teachers' Sense of Self-Efficacy Scale (Moran & Hoy, 2001) for teachers and School Effectiveness Survey Questionnaire (Baldwin, et al, 1993) for students. Qualitative data was collected through interviews from educational managers, teachers and students. These instruments were pilot tested before final data collection. Validity of research instruments were ensured through the experts' opinions. Reliability was checked through Cronbach Alpha. The Cronbach alpha coefficient was acceptable for all three questionnaires (PIMRS, $\alpha = .861$, TSES $\alpha = .936$, & SESQ, $\alpha = .801$). Quantitative data were analyzed through descriptive and inferential statistics. Qualitative data of interviews was analyzed through Interpretive Phenomenological Analysis (IPA) and Thematic Analysis (TA). Major finding of the study revealed strong effects of educational managers' instructional leadership and teachers' sense of self-efficacy on school effectiveness. Results further indicated a strong relationship between instructional leadership and sense of self-efficacy. It was detected from findings that male managers were found better than female in instructional leadership functions. Likewise, male teachers were found stronger in sense of self-efficacy. Educational managers from public sector were found better in IL than private sector managers in secondary schools. Teachers of public sector were found better than private teachers in TSSE. Triangulation of findings described that qualitative findings complement quantitative results by revealing that all educational managers were in favor of themes of instructional leadership functions, while teachers supported themes related to self-efficacy. It was also deduced that instructional leadership and teachers sense of self-efficacy effect school effectiveness. Study concluded that instructional leadership functions and teachers' sense of self-efficacy were significant predictors of school effectiveness at secondary school level. It is recommended that secondary schools educational managers can be provided continuous professional development on the paradigms of instructional leadership themes. The School Education Department of Punjab may arrange trainings especially for female secondary school teachers (SSTs) to enhance their sense of self-efficacy through some, incentives, encouragement to participate in professional development courses on regular basis based on certain areas of teachers' sense of self-efficacy and for this purpose specific practical training modules can be developed.

TABLE OF CONTENTS

Chapter	Page
THESIS AND DEFENSE APPROVAL FORM.....	i
AUTHOR’S DECLARATION.....	ii
PLAGIARISM UNDERTAKING.....	iv
ABSTRACT.....	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES.....	x
LIST OF FIGURES.....	xiv
LIST OF ABBREVIATION.....	xvi
LIST OF APPENDIX.....	xviii
ACKNOWLEDGEMENTS.....	xxi
DEDICATION.....	xxiii
1. INTRODUCTION	
1.1 Context of the study	1
1.2 Rationale of the Study	7
1.3 Statement of the Problem	8
1.4 Research Objectives	9
1.5 Research Questions	9
1.6 Null Hypotheses	9
1.6.1 Alternative Hypotheses.....	12
1.7 Conceptual Framework	15
1.7.1 Theoretical Framework.....	15
1.8 Significance of the study	20
1.9 Methodology	20

1.10	Delimitations of the study.....	23
1.11	Operational Definitions	24
2.	REVIEW OF THE RELATED LITERATURE	
Section I.....		
2.1	Instructional Leadership	27
2.1.1	Historical perspective of instructional leadership.....	31
2.1.2	Educational Managers Instructional Leadership.....	32
2.1.3	Models of Instructional Leadership.....	34
2.1.4	Dimensions of instructional leadership.....	38
2.1.5	International point of instructional leadership.....	40
2.1.6	Conceptualization of IL in the Pakistani context.....	44
2.1.7	Principal Instructional Management Rating Scale (PIMRS).....	46
Section II.....		
2.2	Self-efficacy.....	48
2.2.1	Sources of Self-efficacy.....	49
2.2.2	Sense of Self-efficacy.....	50
2.2.3	Teachers Sense of self efficacy.....	50
2.2.4	Dimensions of Sense of Self-efficacy.....	51
2.2.5	Teachers' Self-Efficacy Scale (TSES).....	53
2.2.6	Different theories on Self-efficacy.....	55
2.2.7	International context of Teachers Sense of self efficacy.....	58
2.2.8	Teachers Sense of self efficacy in the context of Pakistan.....	60
Section III.....		
2.3	School effectiveness.....	61
2.3.1	Secondary Schools.....	61
2.3.2	Secondary schools of Pakistan.....	62
2.3.3	Leadership in school.....	62
2.3.4	School Effectiveness Survey Questionnaire (SESQ).....	63
2.3.5	School effectiveness in Pakistani context.....	65
2.3.6	Factors of School effectiveness in the view of different Authors	65
2.4	Previous Researches.....	69
2.5	Relationship between EMIL and TSSE	73
2.6	Effects of IL on SE	74

2.7	Effects of TSSE on SE.....	74
	Section IV.....	
2.8	Discussion of literature cited	75
2.9	Summary.....	93
3.	RESEARCH MATHODOLOGY	
3.1	Introduction.....	99
3.2	Research Design.....	99
3.3	Study Procedure.....	103
3.4	Population.....	105
3.4.1	Target population.....	109
3.5	Sampling	112
3.6	Research instrument.....	120
3.7	Verification of the research instruments.....	126
3.8	Factor analysis.....	146
3.9	Pilot study.....	162
3.10	Data Collection.....	176
3.11	Data Analysis.....	179
3.12	Research Ethics.....	182
3.13	Delimitations of the Research Study.....	182
3.14	Summary	192
4	ANALYSIS AND INTERPRETATION OF THE DATA	
4.1	Introduction.....	194
4.2	Phase one: Quantitative Data Analysis.....	195
4.3	Phase 2: Qualitative Data Analysis	242
4.4	Triangulation of Results.....	302
4.5	Summary	305
5	SUMMARY, FINDINGS, DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS	
5.1	Summary.....	306
5.2	Findings.....	308
5.3	Discussion.....	330
5.4	Conclusion.....	339

5.5	Recommendations.....	346
5.6	Future Recommendations	348
5.7	Limitations of the study.....	350
References		351-391
Appendices		392- 481

LIST OF TABLES

Table No.	Title	Page. No.
Table 2.1	Characteristics of instructional leadership	30
Table 2.2	Distinguishing topographies of IL practices crossways the five societies...	43
Table 2.3	Dimensions of instructional leadership in different models	77
Table 2.4	Different theories of sense of self efficacy	81
Table 2.5	Different factors of school effectiveness	83
Table 2.6	Literature review 20 exemplar reviews	93
Table 2.7	Exemplar researches on study variables	95
Table 3.1	Explanation of the procedure of the study	104
Table 3.2	Entire population of Rawalpindi district for the study	106
Table 3.3	Total number of schools in Rawalpindi district (Tehsil wise)	106
Table 3.4	Total population (sector wise)	107
Table 3.5	Total number of schools in Rawalpindi district (gender wise)	108
Table 3.6	Total number of schools in Rawalpindi district (area wise)	108
Table 3.7	Total target population of the study	110
Table 3.8	Target population (sector wise)	110
Table 3.9	Target population (gender wise)	111
Table 3.10	Total Sample	115
Table 3.11	The sample schools	116
Table 3.12	Details of Sample schools in Rawalpindi District (Tehsil Wise).	116
Table 3.13	No. of selected schools, educational managers, teachers and students (Sector Wise).	117
Table 3.14	No. of selected schools, educational managers, teachers and students (Gender wise).	118
Table 3.15	Characteristics of interviewees (Educational Managers & Teachers)	119
Table 3.16	Number of selected educational managers and teachers for interview	120
Table 3.17	Questionnaire Items Based on IL &, TSSE Dimensions and SE Factors	123
Table 3.18	Sub-scales related to functions of PIMRS	123
Table 3.19	Dimensions of Teachers Sense of self-efficacy scale (TSES)	123
Table 3.20	Factors of school effectiveness questionnaire (SESQ)	125
Table 3.21	The sample for verification of instruments (Pilot study)	129

Table 3.22	Content validity of dimensions (IL)	131
Table 3.23	Content validity of dimensions of TSSE	133
Table 3.24	Content validity of SE factors	135
Table 3.23	Response Rate (Pilot study) of interview	112
Table 3.24	Sample for the verification/ pilot study of interview	113
Table 3.25	Evaluation of content validity PIMRS (Simplified).	137
Table 3.26	Evaluation of content validity TSES (Simplified).	139
Table 3.27	Evaluation of content validity SESQ (Simplified).	140
Table 3.28	S-CVI for PIMRS, TSES & SESQ (Version 2.0)	142
Table 3.29	KMO and Bartlett's Test PIMRS	147
Table 3.30	KMO and Bartlett's Test TSES	148
Table 3.31	KMO and Bartlett's Test SESQ	148
Table 3.32	Communalities (PIMRS)	149
Table 3.33	Communalities (TSES) of 23 items	150
Table 3.34	Communalities (SESQ) of 22 items	151
Table 3.35	Rotated Component Matrix (PIMRS, 48 items)	152
Table 3.36	Rotated Component Matrix of the items of TSSE scale long form	153
Table 3.37	Rotated Component Matrix of the items of SESQ	154
Table 3.38	The new structure of PIMRS simplified	157
Table 3.39	The new structure of TSES simplified	159
Table 3.40	The new structure of SESQ after revision	160
Table 3.41	Interview schedule (for Ems, SSTs & SSS)	161
Table 3.42	The sample for verification of instruments	163
Table 3.43	Response rate for the verification of instruments	163
Table 3.44	Sample for qualitative pilot (sector wise)	165
Table 3.45	Sample for qualitative pilot (gender wise)	165
Table 3.46	Response rate for qualitative pilot	166
Table 3.47	Reliability statistics for PIMRS, TSES & SESQ	168
Table 3.48	Item total correlation PIMRS	168
Table 3.49	Subscale correlation PIMRS	169
Table 3.50	Item total correlation TSES	170
Table 3.51	Correlation between three dimensions of TSES	171
Table 3.52	Item total correlation SESQ	172
Table 3.53	Correlation SESQ	173
Table 3.55	Details of statistical test applied for Objectives and related hypotheses	184

Table 3.56	Research Questions, Corresponding Sources and the Analysis of Data	192
Table 4.1	Response rate of the respondents	165
Table 4.2	Demographic Characteristics of Educational Managers	166
Table 4.3	Demographic characteristics of teachers	168
Table 4.4	Demographic Characteristics of students	202
Table 4.5	Frequency Distribution with respect to “Instructional Leadership”.	170
Table 4.6	Frequency Distribution with respect to “three dimensions and related ten functions of instructional leadership”.	206
Table 4.7	Frequency Distribution with respect to “Teachers’ Sense of Self Efficacy”	207
Table 4.8	Frequency Distribution with respect to “three dimensions of TSSE.	209
Table 4.9	Frequency Distribution with respect to “School Effectiveness”.	210
Table 4.10	Frequency distribution with respect to seven factors of SE	212
Table 4.11	Comparison of EMIL in the public and private sector secondary schools.	213
Table 4.12	Overall results of sector wise differences in Ems	217
Table 4.13	Comparison of TSSE in the public and private sector SS	218
Table 4.14	Over all results of sector wise differences in TSSE	219
Table 4.15	Comparison of students’ perceptions about SE (sector wise)	221
Table 4.16	Overall differences in the perceptions of students (sector wise)	223
Table 4.17	Correlation between IL and SSE	225
(a)		
Table 4.17(b)	Linear regression analysis of IL and TSSE	227
Table 4.18	Inter-relationship between IL, teachers’ SSE, and SE	228
Table 4.19(a)	Multiple regression model of IL(X1) and TSSE (X2) on SE (Y)	229
Table 4.19(b)	Coefficients	229
Table 4.19(c)	Hypothesis testing	229
Table 4. 20	Comparison of (EMIL) in male and female secondary schools.	232
Table 4.21	Over all gender wise differences in (EMIL)	235
Table 4.22	Comparison of gender differences regarding SE in SS	236
Table 4.23	Over all gender wise differences in teachers about SSE	237
Table 2.24	Comparison of gender wise differences in students’ perceptions	238
Table 4.25	Over all gender differences in perceptions of students	240
Table 4.26	Demographic information for interviewees (sector wise)	243
Table 4.27	Demographic information for interviewees (gender wise)	244
Table 4.28	Demographic information of students (sector & gender wise)	245

Table 4.29	Response rate of the interviewees	246
Table 4.30	Interview schedule (for educational managers and teachers)	246
Table 4.31	Stages Involved in the Analysis	249
Table 4.32-	IPA for educational managers	253-
Table 4.39		260
Table 4.40	Superordinate Themes and Related Subordinate Themes	261
Table 4.41	Cross-Case Analysis	263
Table 4.42	Possible themes	264
Table 4.43-	IPA for teachers	267-
Table 4.51		275
Table 4.52	Superordinate themes and related subordinate themes	276
Table 4.53	Cross case analysis	278
Table 4.54	Possible themes	279
Table 4.55	Major themes for IL	285
Table 4.56	Skeleton table of IPA for EMIL	293
Table 4.57	Skeleton table for IPA of TSSE	301
Table 4.58	Matrix of integrated results	302

LIST OF FIGURES

Figure		Page, No.
Figure 1.1	Conceptual frame work	15
Figure 1.2	Theoretical frame work	19
Figure 1.3	Research wheel	21
Figure 1.4	Triangulation design	22
Figure 2.1	Instructional leadership practices.....	33
Figure 2.2	Dwyer (1984) Model	34
Figure 2.3	Hallinger and Murphy Model	35
Figure 2.4	J. Murphy's (1990) Model of Instructional Leadership	36
Figure 2.5	DuFour (1998) Model	37
Figure 2.6	Alig-Mielcarek's Instructional Leadership Model (2003)	37
Figure 2.7	PIMRS's conceptual framework	46
Figure 2.8	Dimensions of TSES	53
Figure 2.9	Social Cognitive Theory	55
Figure 2.10	Components of Social Learning Theory	57
Figure 2.11	Self-Efficacy Theory	58
Figure 2.12	School effectiveness model, Baldwin et al, 1993	63
Figure 2.13	School effectiveness factor (Edmonds, 1979)	66
Figure 2.14	Edmonds (1982) factors of school effectiveness	67
Figure 2.15	Baldwin et al. (1993) factors	67
Figure 2.16	Lawrence Lezotte (1991)	68
Figure 2.17	Cotton (2000) factors of school effectiveness	66
Figure 2.18	Pictorial Representation of Relationship of IL and TSSE	73
Figure 2.19	Pictorial Representation of Relationship of IL and SE	74
Figure 2.20	Pictorial Representation of Relationship of TSSE and SE	75
Figure 2.21	A five dimensional model of instructional leadership in Pakistan	80
Figure 2.22	five dimensions of Teachers' self-efficacy in Pakistan	82
Figure 2.23	Summary of discussion on literature	89
Figure 2.24	PRISMA	90
Figure 2.25	A systematic guide to LRD	92
Figure 3.1	Levels of triangulation by (Flick, 2018)	99
Figure 3.2	The convergence Model of triangulation	102

Figure 3.3	Study procedure	104
Figure 3.4	Describing population and sample	105
Figure 3.5	The overall target population of District Rawalpindi	111
Figure 3.6	Sampling process	112
Figure 3.7	Sample Size Distribution	118
Figure 3.8	Stages of validity and feasibility testing of research instruments	128
Figure 3.9	Stages for translation	145
Figure 3.10	Pictorial model for mixed method research	178
Figure 3.11	Triangulation for the data analysis	180
Figure 4.1	Sector wise differences in Ems	198
Figure 4.2	Gender wise differences in Ems	198
Figure 4.3	Difference in academic qualification of Ems	198
Figure 4.4	Difference in professional qualification in Ems	198
Figure 4.5	Difference in service experience in EMS	199
Figure 4.6	Sector wise differences in SSTs	200
Figure 4.7	Gender wise differences in SSTs	201
Figure 4.8	Difference in academic qualification of SSTs	201
Figure 4.9	Difference in professional qualification in SSTs	201
Figure 4.10	Difference in service experience in SSTs	201
Figure 4.11	Sector & gender wise differences in students	202
Figure 4.12	Initial noting	283
Figure 4.13	Developing emergent themes	284
Figure 4.14	Triangulation mind map	285
Figure 4.15	Mind map for EMIL	293
Figure 4.16	Mind map for TSSE	301
Figure 5.1	Three chief zones of exploration & monitoring (Carugi, 2014)	308

LIST OF ABBREVIATION

Abbreviation	Terms
IL	Instructional leadership
TSSE	Teachers sense of self efficacy
SSE	Sense of Self efficacy
SE	School effectiveness
DEO	District education officer
CEO	Chief executive officer
SST	Secondary School teachers
PIMRS	Principal Instructional Management Rating Scale
TSES	Teachers Self-Efficacy Scale
SESQ	School Effectiveness Survey Questionnaire
EM	Educational manager
EMIL	Educational managers' instructional leadership
UNESCO	United Nations Educational, Scientific and Cultural Organizations
NEP	National Educational Policy
SOE	Safe and orderly environment
CHES	Climate of high expectations
IL	Instructional leadership
OLSTT	Opportunity to learn and student time on task
CFM	Clear and focused mission
FMSP	Frequent monitoring of student progress
HSR	Home school relation
MoE	Ministry of education
UNICEF	United Nations Children's Fund
QUAN	Quantitative
QUAL	Qualitative
OECD	Organization for Economic Co-operation and Development
FSG	Framing school goals
CSG	Communicating school goals
SEI	Supervising and evaluating instruction

CC	Coordinating curriculum
MSP	Monitoring student progress
PIT	Protecting instructional time
PPD	Promoting professional development
MHV	Maintaining high visibility
PIFT	Provide incentives for teachers
PIL	Provide incentives for learning
ESE	Efficacy in student engagement
EIS	Efficacy in instructional strategies
ECM	Efficacy in classroom management
SE	student engagement
IS	Instructional strategies
CM	classroom management
BISER	Board of intermediate and secondary education Rawalpindi
SS	Secondary School
MMR	Mixed Method Research
EFA	Exploratory Factor Analysis
FA	Factor Analysis
PSST	Proportionate Stratified Sampling Technique
SSS	Secondary School Students

LIST OF APPENDIX

Appendix I	Approval of Topic
Appendix II	University Support Letter
Appendix III	Request for Tool Validation
Appendix IV	Request for Provision of population Lists
Appendix V(a)	Population List (I) From DEO office
Appendix V(b)	Population List (II) From DEO office
Appendix V (c)	Population List (III) From DEO office
Appendix VI	Sample Size Verification letter from (CEO)
Appendix VII (a)	Instrument validation certificate I
Appendix VII (b)	Instrument Validation certificate II
Appendix VII (c)	Instrument validation certificate III
Appendix VII (d)	Instrument validation certificate IV
Appendix VII (e)	Instrument validation certificate V
Appendix VII (f)	Instrument validation certificate VI
Appendix VII (g)	Instrument validation certificate VII
Appendix VII (h)	Instrument validation certificate VIII
Appendix VIII (a)	Permission to gather data from CEO (Supervisor copy)
Appendix VIII (b)	Permission to gather data from CEO (Student copy)
Appendix IX	Letter from Education Department NUML
Appendix X (a)	Invitation to participate in survey (Educational Managers)
Appendix X (b)	Invitation to participate in survey (Teachers)
Appendix X (c)	Invitation to participate in survey (Students)

Appendix XI	Letter of Consent for Schools from DEO
Appendix XII (a)	Letter of consent from educational managers
Appendix XII (b)	Letter of Consent for Schools from Teachers
Appendix XII (c)	Letter of Consent for Schools from Students
Appendix XIII (a)	Survey Certificate from Educational Manager I
Appendix XIII (b)	Survey Certificate from Educational Manager II
Appendix XIII (c)	Survey Certificate from Educational Manager III
Appendix XIII (d)	Survey Certificate from Educational Manager IV
Appendix XIV	No of Students from BISE
Appendix XV(a)	Principal Instructional Management Rating Scale (PIMRS)
Appendix XV(b)	Principal Instructional Management Rating Scale (PIMRS) in Urdu
Appendix XV(c)	Permission letter to use PIMRS
Appendix XVI (a)	Teachers sense of self efficacy Scale (TSES)
Appendix XVI (b)	Teachers sense of self efficacy scale (TSES) in Urdu
Appendix XVI (c)	Permission letter to use TSES
Appendix XVI (d)	Permission letter to use TSES
Appendix XVII (a)	School Effectiveness Survey Questionnaire (SESQ)
Appendix XVII (b)	School effectiveness survey questionnaire (SESQ) in Urdu
Appendix XVII (c)	Permission letter to use SESQ
Appendix XVIII (a)	Total No. of public sector boys schools (Urban))
Appendix XVIII (a,2)	Total No. of public sector schools (Rural)
Appendix XVIII (b)	Total no. of public sector girls schools (Urban)
Appendix XVIII (b, 2)	Total no. of private sector girls' schools (Rural)
Appendix XIX	Demographic Sheet
Appendix XX (a)	Educational Mangers' interview in English
Appendix XX (b)	Educational Managers' interview in Urdu

Appendix XXI (a)	Interview for teachers in english
Appendix XXI (b)	Interview for teachers in Urdu
Appendix XXIII	Chain of School Effectiveness
Appendix XXIV	Table from report on ASC2017-2018
Appendix XXV	An over view of research questionnaires
Appendix XXVI	Permission to use VERP
Appendix XXVII	Triangulation of results
Appendix XXVIII(a)	VERP
Appendix XXVIII (b)	VERP
Appendix XXVIII (c)	VERP
Appendix XXVIII (d)	VERP
Appendix XXIX	Link of variables

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DEDICATION

This thesis is dedicated to my beloved father (May he live long), and my mother (Late, may her soul rest in peace, Ameen). It was due to their prayers, encouragement and motivation that I was able to achieve this endeavor.

CHAPTER I

INTRODUCTION

1.1 Context of the study

Leadership is a significant concept from the last quarter of the 20th century in the field of educational administration in terms of influencing groups in schools (Ozdemir, Sahin & Oztürk, 2020). It is regarded as an aptitude of a person to guide others to recognize their worth and equip them with necessary tools for achieving administrative goals (Ismail et al., 2018; Williams, 2019). Hence, leadership is a key component in refining schools and their performance (Adams & Velarde, 2018). In this respect, instructional leadership performances, which are normally initiated in effective schooling are derived to the vanguard in leadership conducts Özdemir, et al. (2020). It is a kind of leadership required from educational managers and have an important place in the procedure of encouraging the effectiveness of schools. It shows that as a leader, school educational managers are accountable for all encouraging and destructive behaviors in school. The term “instructional” is initiated from the expression “instruction” which denotes teaching and training. It is the pulse of teaching. Later, some researchers (e.g. Dekawati et al., 2020; Hassan, Ahmed & Boon, 2018) linked the term instructional leadership with training leadership; it is slightly one act which school leader implements in order to bring improvement in the teaching learning process.

In Pakistan, the scenario of administering teaching and learning is relatively changed from other countries. As educational managers in Pakistan have important characteristics for school change and progress, but they are restricted to follow the hierarchy of authority (Ali, 2017). The National Education Policy (NEP, 2017) delivers the outline, whereas educational managers are answerable for the school success. Pakistani educational managers are progressively seen as education leaders, principally liable to the ministry on students’ performance, school routine and

accomplishment application of the teaching arrangement (Khan, Asimiran, Kadir & Basri, 2020). The policy also stressed that educational leaders will be monitored for their performance to increase excellence in education in their institutions. Therefore, Taising and Karuppanan (2021) stated that as the leader of the school, the educational manager performs a role as a motivator, mentor, and teacher overseer to increase and sustain the excellence of instruction in the school.

Henceforth, the teachers in the secondary level schools, perform significantly in providing every learner the necessary skills, knowledge and attitude for life-long learning. It is therefore essential that the teachers as a facilitators of learning must possess the relevant skills to deliver quality learning to the students effectively and efficiently. This expertise is derived from the teachers' sense of self-efficacy. Teachers' sense of self-efficacy was introduced by Albert Bandura in (1977). He defined self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required to manage situations" (p. 3). In the consonance, for more than 40 years, a plethora of research studies have shown that teacher self- efficacy is one of the crucial variables that influence teachers' performance (Woodcock & Tournaki, 2023). Teachers' sense of self-efficacy can be well defined as confidence and dependence of teachers in themselves, and their prospects of their students' knowledge as an outcome of their instructions, which has significant effects on school effectiveness (Moran & Hoy, 2001; Özdemir et al.,2020; Noughabi & Amirian 2020). More specifically, teacher self-efficacy has been linked to improving quality of student learning outcomes, classroom management, commitment to teaching and engagement, and even job satisfaction (e.g., Abun et al., 2022; Granziera & Perera 2019; Zakariya et al., 2019; Edinger & Edinger 2018; Türkoğlu, Cansoy, & Parlar, 2017; Patterson & Seabrooks-Blackmore 2017). Furthermore, Irena and Lisa (2020) described that teachers with high levels of self-efficacy tend to cope effectively with a range of problematic student behaviors in the classroom, use proactive and student centered classroom behavior strategies, and create positive relationships with their students. In addition, the existing empirical evidence clearly supports the link between TSE and dimensions of instructional quality. For example, teachers with a strong sense of efficacy tend to create a supportive classroom environment, and effectively organize classroom activities.

According to Moradkhani and Haghi (2022) teachers' self-efficacy is intertwined with the patterns, strategies and methodologies that teachers adopt in their daily practices. Similarly, Coban, Ozdemir and Bellibas (2022) highlighted that educational managers' instructional leadership enhance teachers' sense of self-efficacy indirectly and directly. More specifically, the current research aims to provide an understanding of the extent to which educational managers' instructional leadership as well as teachers' self-efficacy plays a collective role for school effectiveness in Pakistan. Likewise, Dimitrios et al., (2020) observed that teachers' sense of self-efficacy equally affects in what way students acquire, who have complications or deficiency of incentive. Similarly, teachers' SSE have concerns not solitarily on the teachers' presentations but also on pupils' outcomes. Moreover, agreeing to Özdemir, Şahin and Öztürk (2020) teachers conveyed that they have a greater insight of incentive, happiness, determination and self-confidence when employed with educational managers deliberated as instructional leaders. Likewise, in studies (e.g., Voelkel & Chrispeels, 2017; Madimetsa et al., 2018) the importance of these variables is collectively recognized. Correspondingly, Bellibas and Liu (2017) highlighted that instructional leadership actions of educational managers' stimulus teacher's self-efficacy. In consonance of earlier literature discussed the current study gathered current information about the relationship of these variables in the Pakistani context.

A school is an institute in a changing and complex social context, confined with inadequate resources, and connecting various constituencies such as education authorities, school educational managers, teachers, students, parents and community who may have quite different and diverse expectations of school functions and goals. In such a social context, understanding school effectiveness is quite difficult without considering about school factors. Effective schools are intricate, collaborative institutions that demand a high level of performance from each staff member. SE does not depend only on academic outputs. It depends on some related factors. Among these factors, Talebloo et al. (2017) and study of Cobanglu and Yurek (2018) explained that the instructional leadership of the school educational managers is considered to have the biggest impact on school effectiveness.

Earlier, National Education Policy (NEP, 1998-2010) stated the position of secondary level schooling and deliberated it as a connection among additional stages. It also emphasized that at secondary level a student must be well equipped with the knowledge and awareness for the future professional and academic life. Likewise, as a result of 18th constitutional amendment, in Pakistan education is now a provincial subject, which was legislated by the parliament in 2010. It is 5:3:2:2 structure. Expected age of secondary level students is 13–14 years. Moreover, secondary school education is significant since it is substance for additional education, drill and effort. Later, in National Educational Policy (2017), it was decided to value the role of educational managers for school effectiveness. Equally Professional Standards (PS) in Pakistan for educational leaders (2015) have derived ten standards for effective educational manager at secondary school level. According to the first standard, educational managers are guided to formulate an educational mission, and promote the academic attainment and well-being of individual learner in the academic institution. Standard number ten elaborates significance of school leader as a creator of effective school not only for every pupil but also for teachers and nonacademic staff. Parents are also incorporated. Further, the standard directed the school leader to use ways of incessant upgrading to attain the mission, accomplishing the vision, and supporting the fundamental canons of the school. Keeping in view the importance of secondary level and the vital role of educational managers at secondary schools, it was decided in 7th Inter Provisional Education Ministers Conference (IPEMC) held in Islamabad (the capital city) of Pakistan in February, 2016 that the quality of relationship is fundamental between educational managers and teachers of the school.

Based on social cognitive theory (Bandura, 1997), educational manager leadership promotes efficacy with such actions as vicarious experiences and verbal persuasion. Educational managers' role model behavior, such as modeling values and practices to support continuous improvement of teaching and learning, is a source of vicarious experience. Instructional leaders foster verbal persuasion through a continuous feedback culture. Ma and Marion (2021) found a significant, positive effect on teacher efficacy. They stated that through instructional leadership school leaders can positively influence teacher sense of efficacy, and thereby indirectly improve classroom instruction and student achievement. Furthermore, instructional

leadership's components of educational managers and efficacy beliefs of teachers both added to school effectiveness (Blatti et al., 2019) respectively. Additionally, Boyce and Bowers (2018) analyzed 109 studies published between 1988 and 2013 using Meta-narrative review. According to them, the most often examined subjects in relation to instructional leadership were satisfaction, retention, and commitment of teacher. But, this research examines educational managers' IL with teachers' SSE efficacy. It would enrich in-depth understanding about study variables from school effectiveness perspective in Pakistani context.

The theoretical framework of this study was based on IL model presented by Hallinger and Murphy (1985). According to Hallinger (2018), this model was used most repeatedly in empirical surveys. This model recommends three dimensions of IL (defining school mission, managing instructional program and promoting a positive learning environment) regarding function of educational managers of a school. Moreover, the study focused model of Tschannen-Moran et al. (1998). According to the model teacher behavior in the classroom is highly relevant to their SSE. Moran et al. (1998) defined teacher efficacy as "the teacher's belief in his or her capability to organize and execute course of action required to successfully accomplish a specific teaching task in a particular context" (p. 22). They developed a scale that separates teaching efficacy for student engagement, instructional strategies, and classroom management in order to touch the domain- and task-specific nature of efficacy beliefs. This research expect that teachers feel more confident about performing their teaching task while following three beliefs related to their teaching behavior. In line with the present focus on instructional leadership and self-efficacy as signs for school effectiveness, the researcher chose teacher efficacy in student engagement, in instruction, and in classroom management as relevant dimensions. According to Cheng (2023) from the notion of school factors school effectiveness can be defined as the degree to which a school can perform school factors. Further, the current study focused SE factors which were described by Baldwin et al. (1993). Also, Magulod (2017) elaborates that these correlates of effective schools enabled students to attain high results. These factors were the following: safe and ordered environment, high expectation's climate, instructional leadership, opportunity for students to learn through time on task, clear-cut focused

mission, monitoring of students' progress frequently, and relationship of school and home.

In recent years, Zheng et al. (2019) highlighted that studies have suggested a positive relationship between educational managers' leadership behaviors and teachers' sense of self-efficacy. Shengnan and Hallinger (2020) demonstrates that educational managers' focus on creating a vision and goals for learning and success of students, mentoring teachers and encouraging their professional development can enhance teachers' sense of self-efficacy. Likewise, Darling- Hammond (2017) described that through this strong instructional leadership, teachers find themselves in a learning environment that nurtures their ability to deal with classroom issues and enhances their teaching practices in a way that leads to enhanced student learning outcomes. More, Bellibas and Liu (2017) suggests that educational managers' emphasis on critical instructional practices has a positive relationship with the three domains of TSE: instructional methods, classroom management and student engagement. Specifically, Alwaleedi (2017) described that researchers have found stronger self-efficacy awareness in female teachers than their male coworkers.

Before reviewing the literature this research hypothesized that instructional leadership in defining the school's mission, managing instructional program, and promoting a positive environment for learning will be positively associated with teacher sense of self- efficacy for school effectiveness. But, the researcher could not find any research while conducting literature review that carries out to determine that how educational managers' instructional leadership and teachers sense of self-efficacy together effects school effectiveness. Realizing this research gap in the Pakistani scenario, the researcher focused on these variables. The responses provided by the educational managers and teachers helped to evaluate their instructional leadership and sense of self-efficacy, and consequently pupils' views delivered understanding on the subject of school effectiveness. The study is an attempt to add new directions in this area of educational research. Further to date, no study could also be accessed how educational managers' IL and teachers' SSE affects school effectiveness across gender and sector in secondary schools. Further, studies have not connected IL and TSSE along the continuum of school effectiveness track (i.e., from educational manager to teacher, and then to students). This study makes these comparisons

1.2 Rationale of the Study

The researcher was interested to explore the functions of school educational managers as recently, there is an increasing agreement in exploring instructional leadership (IL) which is being considered as one of the core roles of educational managers. Likewise, teachers' sense of self-efficacy again is an important component to create impact on educational process in schools. In addition, there were some other facts, mentioned below, which motivated the researcher to conduct the research on IL and teachers' sense of self-efficacy in district Rawalpindi, Punjab, Pakistan.

National and international documents like national education policies of Government of Pakistan and its various reports and the World Bank reports emphasized quality in education through improvement in educational leadership and teachers but there are still deficiencies and highlighted insufficient quality of education in Pakistan and lack of teachers' sense of self-efficacy. Likewise, economic survey of Pakistan reported the Government agenda for quality in education through dissemination of educational information and improvement in teachers and students' knowledge. Similarly, educational reforms like Punjab Education Sector Plan acknowledged the role of school leaders as instructional to support teachers for achieving quality in education. But through education sector analysis (ESA) the plan identified that there is still a need to enhance capability of school leadership and teachers for school effectiveness. The plan also identified teachers' incompetency in instructional strategies and classroom management and need for safe and ordered school environment.

Some researchers highlighted the lack of IL use, understanding, need of improvement of instructional leadership, and its application in school. Another gap was found regarding the development of understanding in relation to instructional leadership functions among school leaders in Pakistani context. Most recently, some researchers reported that school leaders played restricted role as instructional leader in Pakistan. In the Pakistani context it has also been observed that there is a lack of references to the adaptation of IL to secondary school regardless of the grounding in

IL research on primary school. Therefore, it is the strong ground to conduct research on these variables.

1.3 Statement of the problem

It is widely accepted that school leadership is the key factor to enhance school effectiveness. Pakistani school educational managers are increasingly seen as educational leaders, primarily answerable to school education department on school performance. For the purpose there have been various criteria and characteristics associated with an effective school leader, and one of the requirements endorsed by many is that school leaders should practice instructional leadership. Researchers identified that the knowledge found on instructional leadership is well set up in Western societies. Within the countries in Global South, the information about instructional leadership studies is still small. As Pakistan is one of the countries located in Global South, it is also found that in Pakistani context there is need of research on instructional leadership. Consequently, in the past, a teacher's responsibility was only to teach but today, special skills needed to taught the students, for this, a teacher must have sense of self-efficacy (TSSE) which provide them confidence to accomplish teaching tasks. The study at hand aims to highlight self-efficacy skills hidden in teachers as most of them do not utilize these skills as they are unaware of them. Through literature review it is observed that some studies highlighted effects of educational managers' instructional leadership on school effectiveness. Likewise, other studies described relationship of instructional leadership with teachers' sense of self - efficacy. While some have studied TSSE as mediator. Some reported strong effect of TSSE on student achievement. Some researchers reported effects of TSSE on SE. But the researcher did not find any research that could have combined and checked the variables under study. Therefore, the problem under study was to examine the effects of educational managers' instructional leadership and teachers' sense of self-efficacy on school effectiveness in both public and private sector at secondary school level in Pakistani context. In addition, the study also explored gender and sector wise differences among the instructional leadership and sense of self- efficacy.

1.4 Research Objectives

The major objectives of the present research were to:

1. investigate educational managers' instructional leadership in public and private sectors;
2. assess teachers' sense of self-efficacy at secondary school level in public and private sectors;
3. determine school effectiveness as perceived by the students in public and private sector at secondary school level;
4. determine the relationship among instructional leadership and sense of self- efficacy;
5. examine the effects of educational managers' instructional leadership and teachers' sense of self-efficacy on school effectiveness;
6. find out gender differences in educational managers' instructional leadership;
7. investigate gender differences in secondary school teachers' sense of self-efficacy;
8. find out gender difference in the perceptions of students regarding school effectiveness;

1.5 Research Questions

RQ1. How do educational managers' perceive their instructional leadership functions?

RQ2. How do teachers' perceive their sense of self- efficacy?

RQ3. To what extend educational mangers' instructional leadership functions and teachers' sense of self efficacy effects school effectiveness?

1.6 Null Hypotheses

The researcher formulated following null hypotheses including sub hypotheses for the current study:

H₀: There is no significant difference in educational managers' instructional leadership at secondary school level in the public and private sectors.

- Ho_{1.1}: There is no significant difference in educational managers' instructional leadership (EMIL) about define mission of school (DMS) at secondary school level in the public and private sectors.
- Ho_{1.2}: There is no significant difference in educational managers' instructional leadership (EMIL) related to manage program of instruction (MPI) at secondary school level in the public and private sectors.
- Ho_{1.3}: There is no significant difference in educational managers' instructional leadership (EMIL) about promote a positive climate for school (PPCS) in the public and private sectors.
- Ho₂: There is no significant difference in teachers' sense of self-efficacy at secondary school level in the public and private sectors.
- Ho_{2.1}: There is no significant difference in teachers' sense of self-efficacy (TSSE) in student engagement at secondary school level in the public and private sectors.
- Ho_{2.2}: There is no significant difference in teachers' sense of self-efficacy (TSSE) about instructional strategies at secondary school level in the public and private sectors.
- Ho_{2.3}: There is no significant difference in teachers' sense of self-efficacy (TSSE) about classroom management at secondary school level in the public and private sectors.
- Ho₃: There is no significant difference among students' perceptions about school effectiveness in public and private sector.
- Ho_{3.1}: There is no significant difference among students' perceptions about safe and ordered environment (SOE) in public and private sector.
- Ho_{3.2}: There is no significant difference among students' perceptions about climate of high expectations (CHES) in public and private sector.
- Ho_{3.3}: There is no significant difference among students' perceptions about instructional leadership (IL) in public and private sector.

- Ho_{3.4}: There is no significant difference among students' perceptions about opportunity to learn and student time on task (OLSTT) in public and private sector.
- Ho_{3.5}: There is no significant difference among students' perceptions about clear-cut focused mission (CFM) in public and private sector.
- Ho_{3.6}: There is no significant difference among students' perceptions about monitoring of student progress frequently (MSPF) in public and private sector.
- Ho_{3.7}: There is no significant difference among students' perceptions about home school relation (HSR) in public and private sector.
- Ho₄: There is no significant relationship among instructional leadership (IL) and sense of self-efficacy (SSE).
- Ho₅: There is no significant effect of educational managers' instructional leadership and teachers' sense of self-efficacy on school effectiveness.
- Ho₆: There is no significant difference in educational managers' instructional leadership (EMIL) in males and females at secondary level school.
- Ho_{6.1}: There is no significant difference in educational managers' instructional leadership about define mission of school (DMS) in males and females.
- Ho_{6.2}: There is no significant difference among educational managers' instructional leadership about managing program of instruction (MPI) in males and females.
- Ho_{6.3}: There is no significant difference between educational managers' instructional leadership related to promote positive climate for school (PPCS) in males and females.
- Ho₇: There is no significant difference among teachers' sense of self-efficacy in males and females at secondary school level.
- Ho_{7.1}: There is no significant difference between teachers' sense of self-efficacy (TSSE) in student engagement in males and females.

- Ho_{7.2}: There is no significant difference in teachers' sense of self-efficacy (TSSE) about instructional strategies in males and females.
- Ho_{7.3}: There is no significant difference in teachers' sense of self-efficacy (TSSE) about classroom management in males and females.
- Ho₈: There is no significant difference among students' perceptions about school effectiveness in male and female.
- Ho_{8.1}: There is no significant difference among students' perceptions about safe and ordered environment (SOE) in male and female.
- Ho_{8.2}: There is no significant difference among students' perceptions about climate of high expectations (CHES) in male and female.
- Ho_{8.3}: There is no significant difference among students' perceptions about instructional leadership (IL) in male and female.
- Ho_{8.4}: There is no significant difference among students' perceptions about opportunity to learn and student time on task (OLSTT) in male and female.
- Ho_{8.5}: There is no significant difference among students' perceptions about clear-cut focused mission (CFM) in male and female.
- Ho_{8.6}: There is no significant difference among students' perceptions about monitoring of student progress frequently (MSPF) in male and female.
- Ho_{8.7}: There is no significant difference among students' perceptions about home school relation (HSR) in male and female.

1.6.1 Alternative Hypotheses

The researcher formulated following alternative hypotheses including sub hypotheses for the current study:

- Ha₁: There is significant difference in educational managers' instructional leadership at secondary school level in the public and private sectors.
- Ha_{1.1}: There is significant difference in educational managers' instructional leadership (EMIL) about define mission of school (DMS) at secondary school level in the public and private sectors.

- Ha_{1.2}: There is significant difference in educational managers' instructional leadership (EMIL) related to manage program of instruction (MPI) at secondary school level in the public and private sectors.
- Ha_{1.3}: There is significant difference in educational managers' instructional leadership (EMIL) about promote a positive climate for school (PPCS) in the public and private sectors.
- Ha₂: There is significant difference in teachers' sense of self-efficacy at secondary school level in the public and private sectors.
- Ha_{2.1}: There is significant difference in teachers' sense of self-efficacy (TSSE) in student engagement at secondary school level in the public and private sectors.
- Ha_{2.2}: There is significant difference in teachers' sense of self-efficacy (TSSE) about instructional strategies at secondary school level in the public and private sectors.
- Ha_{2.3}: There is significant difference in teachers' sense of self-efficacy (TSSE) about classroom management at secondary school level in the public and private sectors.
- Ha₃: There is significant difference among students' perceptions about school effectiveness in public and private sector.
- Ha_{3.1}: There is significant difference among students' perceptions about safe and ordered environment (SOE) in public and private sector.
- Ha_{3.2}: There is significant difference among students' perceptions about climate of high expectations (CHES) in public and private sector.
- Ha_{3.3}: There is significant difference among students' perceptions about instructional leadership (IL) in public and private sector.
- Ha_{3.4}: There is significant difference among students' perceptions about opportunity to learn and student time on task (OLSTT) in public and private sector.
- Ha_{3.5}: There is significant difference among students' perceptions about clear-cut focused mission (CFM) in public and private sector.

- Ha_{3.6}: There is significant difference among students' perceptions about monitoring of student progress frequently (MSPF) in public and private sector.
- Ha_{3.7}: There is significant difference among students' perceptions about home school relation (HSR) in public and private sector.
- Ha₄: There is significant relationship among instructional leadership (IL) and sense of self-efficacy (SSE).
- Ha₅: There is significant effect of educational managers' instructional leadership and teachers' sense of self-efficacy on school effectiveness.
- Ha₆: There is significant difference in educational managers' instructional leadership (EMIL) in males and females at secondary level school.
- Ha_{6.1}: There is significant difference in educational managers' instructional leadership about define mission of school (DMS) in males and females.
- Ha_{6.2}: There is significant difference among educational managers' instructional leadership about managing program of instruction (MPI) in males and females.
- Ha_{6.3}: There is significant difference between educational managers' instructional leadership related to promote positive climate for school (PPCS) in males and females.
- Ha₇: There is significant difference among teachers' sense of self-efficacy in males and females at secondary school level.
- Ha_{7.1}: There is significant difference between teachers' sense of self-efficacy (TSSE) in student engagement in males and females.
- Ha_{7.2}: There is significant difference in teachers' sense of self-efficacy (TSSE) about instructional strategies in males and females.
- Ha_{7.3}: There is significant difference in teachers' sense of self-efficacy (TSSE) about classroom management in males and females.
- Ha_{8.1}: There is significant difference among students' perceptions about safe and ordered environment (SOE) in male and female.

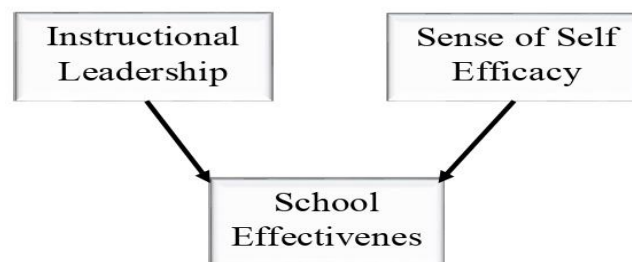
- Has.2: There is significant difference among students' perceptions about climate of high expectations (CHES) in male and female.
- Has.3: There is significant difference among students' perceptions about instructional leadership (IL) in male and female.
- Has.4: There is significant difference among students' perceptions about opportunity to learn and student time on task (OLSTT) in male and female.
- Has.5: There is significant difference among students' perceptions about clear-cut focused mission (CFM) in male and female.
- Has.6: There is significant difference among students' perceptions about monitoring of student progress frequently (MSPF) in male and female.
- Has.7: There is significant difference among students' perceptions about home school relation (HSR) in male and female.

1.7 Conceptual Framework

The researcher developed a conceptual framework based on three dimensions of instructional leadership, three dimensions of SSE of teachers, and seven school effectiveness's factors.

Figure 1.1

Conceptual frame work



Note: Created by Sagheer (2018).

1.7.1 Theoretical Framework of the study

The theoretical framework proposed for this study incorporates three elements: (1) Model of instructional leadership, (2) Model of self-efficacy, (3) Model of School effectiveness. Theoretical framework describes the research route and the

bases (Adom et al., 2018). Equally it assists the researcher as a guide. It makes research findings meaningful and generalizable (Ravitch et al., 2016).

1.7.1.1 Model of Instructional Leadership (IL)

Define mission of school (DMS), discusses the educational manager's duty for discussing and communicating a vision and mission for school. This dimension included the educational manager's practices related to framing school goals and communicating school goals. The function of communicating school goals refers to the ways the educational manager expresses the importance of the school goals to staff, students, and parents.

Manage program of instruction (MPI), refers to leadership actions that develop, coordinate and monitor the quality of learning and teaching. This dimension comprised functions which had direct involvement of teachers in areas related to curriculum and instruction, Supervising and evaluating instruction, monitor classroom instruction, Coordinating the curriculum, and monitoring student progress. According to different researchers all these functions refers to the educational manager's for setting goals, assessing the curriculum, evaluating instruction, and measuring progress toward school goals.

According to different researchers (e.g., Karacabey, Bellibaş & Adams, 2022; Gumus et al, 2018; Mestry, 2017; Hallinger & Murphy, 1985) promote a positive climate for school (PPCS), describes the role that educational managers' play in creating conditions that motivate and support teachers and students towards productive engagement in teaching, learning, and school improvement. This dimension of instructional leadership encompassed functions like protecting time of instruction, promoting professional development, and sustaining high visibility, providing incentives for educational process and developing high expectations and standards.

Synthesizing the above discussion, it has been realized that school manager's job functions consisted of mostly indirect activities that help create a positive learning environment, through a focused mission and management of instruction for school effectiveness. According to Day et al. (2018) all of these dimensions provide an effective theoretical framework to achieve continuous school effectiveness.

1.7.1.2 Model of Tschannen-Moran et al. (1998)

They proposed an integrated model of teacher efficacy based on Social Cognitive Theory of Bandura (1986) and works of Gibson and Dembo (1984). SCT discusses personal confidence of a teacher to accomplish their teaching tasks. The theory explained that teaching behavior changes through observation and they learn in social setting by observing their own experiences and by others' success and failure. Further they developed a measure of teacher efficacy that includes three dimensions such as classroom management, instructional practices, and student engagement.

Efficacy for student engagement refers to teachers' beliefs about their abilities to bring about desired outcomes of student engagement and learning. It comprises both behavioral and emotional components. Students who can engage in learning show sustained behavioral involvement in learning activities and positive emotions. Likewise, Efficacy for instructional strategies refers to teachers' conceptions in their instructional practices on assessments, teaching, learning, and curriculum to promote students' thinking. It gauges the strength of teachers' beliefs regarding their ability to implement alternative teaching strategies and to use a variety of assessment strategies in the classroom. In addition, it gauges teachers' level of confidence in responding to difficult questions posed by the students and providing an appropriate challenge to more capable students. Moreover, Efficacy for classroom management encompasses strategies aimed at increasing or, encouraging desirable student responses through praise, encouragement, attention, and rewards. Previous researches (Taxer et al., 2018; Valente et al., 2019; Johar, 2022; Bandura, 2006; Tschannen Moran et al., 1998) reveals that this dimension is crucial before learning as failure to deter arising

classroom problems associated with a misdemeanor can affect the teaching and learning process.

1.7.1.3 Model of School Effectiveness (SE)

The main purpose of school effectiveness examination was discovering variables, which affecting performance of school (Özgenel, 2020). First, Coleman (1966) conducted a study to evaluate school effectiveness. After that Edmonds (1979) and Lezotte (1991) researched to determine the characteristics of SE. Then in their research study Baldwin et al. (1993) identified 7 factors of effective schools which are main focus of this study as a theoretical framework. These factors were as follows:

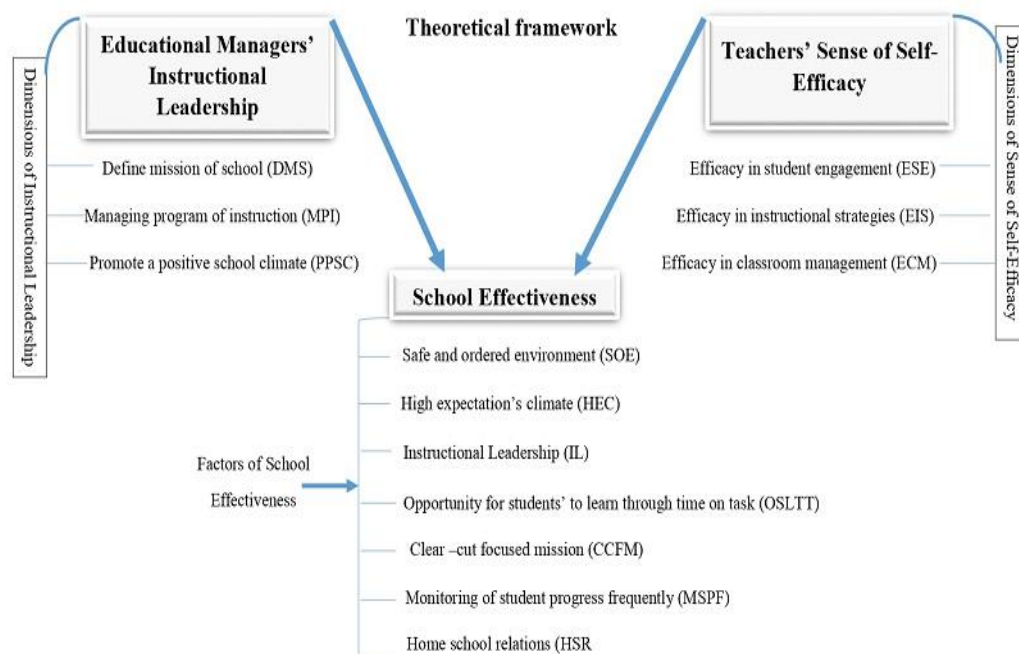
Safe and ordered environment (SOE) relates the excellence of instructional leadership (IL) at secondary school level for the formation of safe and ordered climate for learning rather than directing on speculative attainment of the learner has highly been emphasized by Toprakei et al. (2016) and Baldwin et al. (1993). High expectation's climate (HEC) discussed high expectation's climate, which refers to school climate that grounds a significant difference in refining opportunities of learning (Kazak & Polat, 2018). According to this factor, all the students are expected to achieve high academic requirements using specified, assessable performance indicators. Instructional leadership debated instructional leadership for school effectiveness. Turkoglu and Consoy (2018) described instructional leadership as an important factor for developing school effectiveness. Furthermore, Bellibas and Liu (2018) considered instructional leadership as crucial factor for building a positive environment, and it was an essential requirement for school effectiveness. Opportunity for student to learn through time on task (OSLTT) described Opportunity for student to learn through time on task. It shows that transitions are smooth and that time is not missed in adverse asides from the lesson. Co-curricular activities complement the school's academic program. In addition, non-instructional activities take up very little instructional time.

Clear-cut focused mission comes on fifth number which highlights that every school has a focused goal which is unchangeable. That goal may lead to ensure

academic excellence and educating all children. In schools for Monitoring of student's progress frequently, educational leaders direct instructional planning and guarantee that it is carried out. Teachers made advantage of accessible resources, guided teaching methodology, and evaluation criteria. Similarly, a range of assessment methods are used to track student academic progress. Relationship of school and home considered as seven factor of school effectiveness. It discussed that parents and community members are advocates for all children. As parents are the former teachers in the home. School staffs, parents, and community members are partners in all aspects of the educational program. (D'Sa & Sheela, 2015; Baldwin et al., 1993). Theoretical framework provides a clear picture about the interrelationship of the variables which the researcher found through the proposed research study. It inferred the use of educational managers' instructional leadership and teachers' sense of efficacy to strengthen school effectiveness.

Figure 1.2

Theoretical frame work



Note: The picture describes three models selected as theoretical frame work in the study. Instructional Leadership Model (Hallinger & Murphy, 1985; Munna 2021, 2022; Karacabay, Bellibaş & Adams, 2022). Model of self-efficacy (Tschannen-Moran

et al., 1998; Johar, 2022; MoradKhani & Hoghi 2022). Model of school effectiveness (Baldwin et al., 1993; Magulod, 2017).

This theoretical framework tracked the study towards conceptual framework to presents a clear sketch about the process of the study. Theoretical framework provides a clear picture about the interrelationship of the variables which the researcher found through the proposed research study. It inferred the use of educational managers' instructional leadership and teachers' sense of efficacy to strengthen school effectiveness.

1.8 Significance of the Study

It is expected that the findings of the present study will be beneficial for secondary school educational managers, teachers, policy makers, curriculum developers, teacher's trainers, national and international organizations (Governmental and Non-Governmental) which are interested to improve the various parameters of quality education like: school management, teacher's efficacy and school effectiveness in Pakistan. A greater understanding of the relation between IL and TSSE for school effectiveness may be valuable for those who develop, provide and evaluate leadership preparation accreditation, and certificate programs.

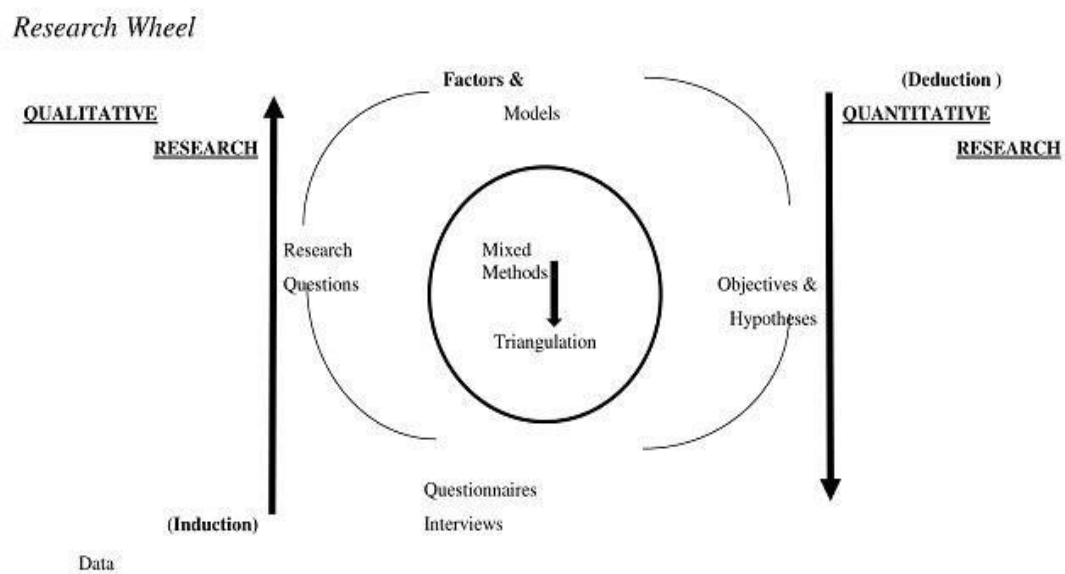
1.9 Methodology

A Mixed Method Research (MMR) with triangulation was employed to accumulate the data. A mixed methods design is characterized by the combination of at least one qualitative and one quantitative research component (Schoonenboom & Johnson, 2017). The overall goal of using mixed methods research (MMR) in this study of combining quantitative and qualitative research components, is to expand and strengthen conclusions and, therefore, contribute to the published literature in Pakistani context. Current research described that the quantitative and the qualitative component yield convergent results (*triangulation*).

1.9.1 Design of the study: Creswell (2018) refers to the research design as “procedure for collecting, analyzing and interpreting and reporting data (p.158). This study was based on mixed methods research (MMR) design, which is a procedure for mixing both methodologies in a single study to obtain evidence needed to provide

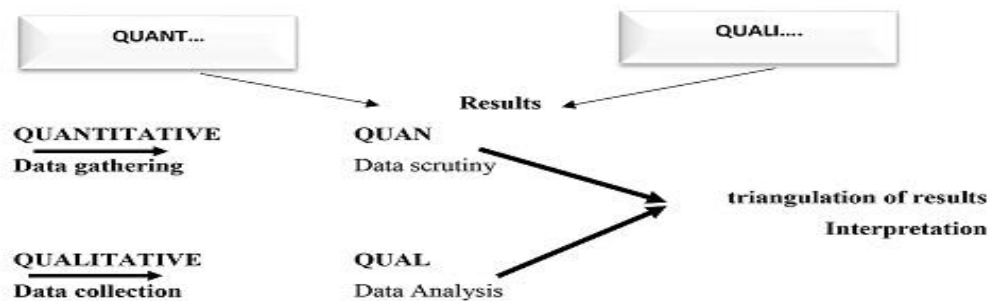
a deep understanding of the research problem (Baran, 2022). For an in-depth understanding of the topic, the design of the present research was convergent parallel design which is a typology of mixed methods research (MMR). According to Schoonenboom and Johnson, (2017) in convergent parallel design the researcher performed quantitative and qualitative strands of the research independently, and their results are brought together in the overall interpretation. According to Morse and Niehaus (2009) our shorthand labels and description of research design is QUAN + qual which is considered as (deductive-simultaneous design where, the core component is quantitative and the supplemental component is qualitative). The researcher followed the research wheel described in figure 1.3:

Figure 1.3



Note: the figure elaborates the research wheel taken from Khaldi, (2017) for explaining the procedure.

1.9.1.1 Procedure of the study: The research process can be symbolized as quantitative and qualitative (QUAN+ qual; Morse, 1991). With the purpose of validation, the researcher aims to triangulate the methods by directly comparing the quantitative statistical results and qualitative findings. In the research process, two datasets have been obtained, analyzed separately, and compared. The research process in this study is given in figure 1.4:

Figure 1.4*Triangulating design*

Note: This figure describes the design which is used in this study for triangulation, and has been drawn from (Creswell & Creswell, 2018). Moreover, this research process represents the convergent model of triangulation.

1.9.2 Research Instruments: Three adapted research instruments were used. The first instrument: Principal Instructional Management Rating Scale (PIMRS) was used for educational managers (senior headmistress/master) of the secondary level institutions. The second selected research instrument Teachers Self-Efficacy Scale (TSES) was used to gather responses from the teachers. While the third chosen instrument School Effectiveness Survey Questionnaire (SESQ) was used to collect responses of the students regarding school effectiveness.

1.9.3 Sampling Technique: For quantitative data collection proportionate stratified sampling technique was applied for the sample selection. Likewise, for qualitative data collection the researcher applied purposive sampling technique.

1.9.4 Data collection Techniques: Data was collected through personal visits of researcher to the sample institutions to approach all the research participants personally. Data was collected in two phases namely:

Phase I: quantitative data collection,

Phase II: qualitative data collection.

1.9.5 Data Analysis: First, answers to the instruments were analyzed across the whole sample. After that the answers gathered through fifteen interviews with

educational managers and fifteen with teachers were analyzed. After that the responses over instruments and interviews were connected and compared in a matrix. So this part of thesis was distributed in two phases:

Phase I: Quantitative data analysis: For analysis concerning quantitative data, correlation, regression (linear & multiple) and t-test were applied.

Phase II: Qualitative data analysis: This phase was completed through Interpretative Phenomenological Analysis (IPA). According to Smith et al. (2009) Interpretative Phenomenological Analysis (IPA) is participant oriented. IPA is more concerned with the lived experiences of humans and suggests that these experience may be understood through an analysis of their meanings, which individuals' reports on it. Moreover, Creswell and Creswell (2018) stated that the lived experiences of research participants are what aids, and create logic of their analysis. In line with Creswell, (2018) and Smith et al. (2009) this study, used IPA to examine qualitative statistics. According to Fereday and Muir-Cochrane (2006, p.82), IPA search for emerging themes, for the explanation of the phenomena under study.

According to Smith et al. (2009) stages involved in IPA were:

1. Reading and re-reading (R &RR),
2. Exploratory commenting/ initial noting (IN),
3. Developing the emerged themes (DET),
4. Searching for themes wide-connections (SCET),
5. Move to the subsequent case (MNC)
6. Looking for patterns across case (LPAC).

1.10 Delimitations of the study

It was problematic for the scholar to gather data from all secondary level schools located in the province of Punjab in Pakistan due to economic and time limitations. The delimiting characteristics of the current study which defined the boundaries of the inquiry were included:

- Heads and secondary school teachers of public and private sectors.
- Further sample of the study was delimited to public and private sector secondary level schools including male and female registered secondary schools in the Board of Intermediate and Secondary Education (BISE) Rawalpindi during session (2017-2018).

- The students of class 9th and 10th during session 2017-2018.
- District: Rawalpindi (Punjab, Pakistan) only.
- Study was delimited to Exploratory Factor Analysis.
- Selecting convergent mixed method design research and utilizing pragmatism paradigm of research.

1.11 Operational definitions of terms used in the study

1.11.1 Educational managers: It means the individuals who are performing their services as a headmistress/master or principal in public and private sector educational institutions.

1.11.2 Instructional Leadership: It involves educational managers' functions of instructional leadership based on three dimensions: defining mission/ vision of school, manage instructional program for positive learning environment for effective school performed by the educational managers to support teaching and learning process for school effectiveness in secondary level schools.

1.11.3 Teachers: A person who supports learners to attain knowledge, improve learning aptitude by using sense of self-efficacy in a secondary level school.

1.11.4 Self-efficacy: In this study self-efficacy is considered as beliefs of teacher's own capabilities to accomplish his/her professional duty.

1.11.5 Teachers' self – efficacy: It refers to the teacher's set of beliefs about the higher skills related to students' engagement, use of appropriate instructional strategy and managing the classroom, to accomplish their professional role as SSTs for the school effectiveness in a particular context.

1.11.6 School effectiveness: The schools which possess a set of common characteristics, like the schools having mission/vision which is clear and focused. Expectations for the success of that school are high. More Instructional leadership, monitoring students' progress frequently, be answerable for learning opportunities, offering period to students for assignment, providing orderly, and safe environs, creating positive relations between school and home are the characteristics of that school.

1.11.7 Secondary Level: It is also called secondary education. It is the level following primary and elementary levels. It is the final stage of compulsory education and comprises classes 9th and 10th.

1.11.8 Public sector schools: These secondary schools are run and controlled by the government. They are guided and controlled by the school education department of the Government of Punjab. These schools are obliged to follow the rules, instructions and policies of the government in all school affairs.

1.11.9 Private sector schools: The schools governed by any organization/ individual other than government. The affiliation and registration with the Board of Intermediate and secondary education Rawalpindi is obligatory for these institutions in Pakistan.

It has been the prime purpose of this chapter to summarize the topic under investigation. The chapter has provided a thorough outline of the study such as brief background of study variables along with objectives, hypotheses, and research questions, in order to explain discourse of the problem of current study. This chapter also described significance of the study. Moreover, ethical issues are briefly discussed. Finally, a list of terms commonly used throughout this study is also presented. The study is organized according to a sequence so that everyone can recognize the objectives on the source of which this study exists. First, the study introduces the research variables, while the second chapter provides a review of the collected works regarding the effect of educational managers' instructional leadership on school effectiveness with special focus on the work of Hallinger & Murphy (1985), the relation between educational managers' instructional leadership practices and school effectiveness. It deliberates IL practice's effect and impact taking place in educational institutes of Pakistan. Further, it elaborates IL phenomenon in various countries. This chapter also focused efficacy beliefs of teachers with reference to SET (Bandura, 1977) (its theoretic base, sources, and influence on school effectiveness). Chapter 3 introduces the research paradigm. This chapter specifically outlines the data source, population, and sampling, pilot testing, research instruments, and their reliability and validity. Correspondingly, the chapter no 3 comprises the process of data collection and describes different stages of that process. Likewise, it defines the procedure of data analysis. Additionally, the

chapter 3 clarifies the reason for the adaptation of the mixed methods research (MMR) in this research. It also defines procedure and rationale for the application of triangulation in this research. Chapter 4 of the research presents the findings. This chapter also outlines quantitative outcomes through descriptive and inferential analysis. Furthermore, in chapter 4, the emerged themes through qualitative information were demonstrated, and discussed thoroughly. Further it described findings from objectives. Analysis were done through Statistical Package for the Social Sciences (version, 21). Finally, Chapter 5 provides summary of results, discussion and limitations, policy implications, contribution to the literature, implication of research consequences and suggestions for areas where further research may be fruitful. Moreover, scholar draws momentary conclusion for this research. References, and Appendix are also included in this dissertation. Moreover, appendixes contain the copy of the research instruments such as questionnaires for survey and semi structure interviews, informed consent document, and other necessary documents which were required for the development of current research.

CHAPTER 2

LITERATURE REVIEW

The present research particularly displays effects of educational managers' instructional leadership (IL), and teachers' SSE on school effectiveness (SE) at secondary level. The chapter explains the development of the study in the perspective of current and previous knowledge for in-depth understanding of the research variables (IL, TSSE & SE). Most related research, and models of instructional leadership in the Pakistani and European context and its link with school effectiveness are discussed. Additionally, the chapter elaborates different theories of self-efficacy and its connection with school effectiveness. This chapter further added factors of school effectiveness. It can be said that this literature review will offer a speculative valuation of the foremost conceptions of IL, TSSE and SE. Chapter is arranged in four sections:

Section I: comprises literature about instructional leadership,

Section II: discusses studies regarding teachers' sense of self-efficacy,

Section III: explores school effectiveness and related factors,

Section IV: discussion on literature cited

Section I

2.1 Instructional Leadership (IL)

Definition of IL remains evolving, in addition it can vary depending on the context of institution (Cambell et al., 2019). On the contrary, Hassan et al. (2018) explained that the word "instructional" comes from the word "instruction" which meaning "to teach". While providing a definition of instructional leadership (Bush, 2003, p.17, as cited in Gumus et al., 2018) used learning-centered leadership as a synonym for IL interchangeably with instructional leaders. He further stated that, the term IL derives from North America and it has been superseded in England and elsewhere by the notion of learning-centered leadership. In addition, the usage of learning-centered or leadership for learning terms has become widespread for IL

during the last decade (Gumus, Bellibas, Esen & Gumus, 2018). Moreover, Turkoglu and Cansoy (2018) defined IL as outcome of an awareness that an educational manager considers to be an education specialist. In research of educational leadership, the most shared description that originated to the front position in the studies on IL, emphasis on the practices of IL associated with educational activities of school manager. Subsequently, Nnebedum and Akinfolarin, (2017) asserted that instructional leadership plays role as a mentor.

Furthermore, Chad et al. (2019) identified that scholars have described instructional leadership as an educational manager's endeavor to lead and support teachers. Likewise, Shaked (2019) explained that school EM are also called upon to exhibit IL. They focus the teaching as well as learning characteristics of leadership in school. In addition, they can affect student learning by changing classroom environment through hiring competent teachers, influencing reliable pedagogical practices, and enforcing high expectations and curriculum alignment (Hayes & Irby, 2019). On the contrary, most educational leadership experts contended that educational administrators eventually affect what classroom instructors do through instructional leadership. Further instructional leadership has risen as a powerful leadership model which fosters school improvement. Essentially, the major role of an instructional leader is to improve student's performance and teacher's delivery. Instructional leaders, according to Bellibas and Liu (2018), are strong and directive leaders. They stated that instructional leaders successfully change the school as a whole. They also oversee instructional methods, and foster a pleasant learning environment. The literature which was discussed elaborates the role of instructional leader as a facilitator and resource provider to teachers and students in teaching learning process.

An effective instructional leader is an individual who directs teachers in not only refining but also in implementing the curriculum of school. For stability and successful teaching process, instructional leaders need to promote a positive learning climate through encouraging teachers, monitoring their professional development, and apply academic standards, as well as maintain a high visibility (Ozdemir, Şahin & Oztürk, 2020). Important characteristics of instructional leadership constitute to establish direction, knowledge and purpose for school success (Campbell, et al.,

2018). It is noted from the literature cited that initially effective instructional leaders were considered responsible for the learners' success, and builders of positive school culture and directive leaders. In comparison with past it was observed that instructional leaders influence the school results through time allocation for education, alignment of academic standards, and curriculum and school culture with the desired mission. In line with this, the initially different researchers who have viewed instructional leaders as culture builders, this also has an impact on the aims and vision of an educational institution. Further, they can have an influence on school variables associated with teachers' understanding about topic and their pedagogical ability as on culture of school and priorities learning.

In comparison with past, a recent research study considered instructional leaders as goal oriented, positive culture builders and creators of an environment which is conducive for learning. Most importantly as an instructional leader school educational managers act as directive leaders who possess a profound wealth of knowledge related to curriculum and instruction (Duyar et al., 2019). This was building up on a rationale that capacity building of instructional leaders as educational managers would be the leaders who have deep wealth of knowledge regarding instruction and curriculum. Likewise, it has been seen through literature search that effective instructional leaders should also be innovative. They should demonstrate capability to plan appropriate instructional activities at the school level. They must know new instructional activities and programs, research based evidence and attend to professional improvement opportunities for teachers.

The literature shows that previous perspectives on instructional leadership focused on a top-down directive approach. In contrast, current accountability struggles between the federal and State governments have made it nearly hard for an educational manager to function as a school's only instructional leader. Duyar (2019) described educational manager's role as an instructional leader requiring him/her to not only communicate a vision, but also to clarify school outcome expectations. Additionally, the instructional leader requires to recognize not only the needs of an individual for learning, but also form an environment which can interact with community and parents within the school. He must appreciate the outcomes of

learning, motivate the instructors and students. As well an instructional leader the educational manager should provide sufficient source and support for learning. Consistent with Ali's (2017) recent observations, instructional leaders are termed as smaller number of educational managers, who accomplish to overwhelm burdens, which push school leaders away from engaging curriculum, classroom and teaching. The characteristics of IL spread over 50 years and explained in the following table:

Table 2.1
Characteristics of instructional leadership

Box A From administration to leadership	Box B Related to Instructional leadership	Box C As an educational manager (EM)
Form administrative principles; Regulate instructive purposes; Be conscious about the difficulties in the class; Accept fairness & be self-assured;	Building school culture; Academic management high expectations in achieving goals; demonstrate respectable role models;	Not strictly bureaucratic; Orients strong results; Is critical observer Is persuasive and possessive;
Connect effortlessly; set objectives Energetically; Be peaceful;	Man of vision and determination Adequate information about lessons development; Managing & monitoring through visibility during supervision;	Is supposed as an individual of a difficult work; Achieves lifelong learning; A risk taker to bring change;
Use a shared intellect of vision between all affiliates of the school; Be directive and Critical leader;	Possess knowledge based skills; Have high motivation for success;	Sticks with the position quo; Is innovative and strong stable;
Inspire associates in administrative decisions; Expert in curricular improvement;	Believes in innovative and creative work Exhibits educational philosophy coherently;	Is visible and self-confident; Monitors student progress;
Specialist in teaching and learning; Assessing goal achievements		Sets stability in social life and at school maintaining ethical standards; Leads to sustainability through authorization and direction;

Note: Source (Ali, 2017).

Some other researchers characterized instructional leaders as talented to describe a strong direction (Munna, 2021). The literature highlighted that instructional leaders play their role as culture builder and as an assessor of achievement headed for predictable accomplishment of school tasks as a whole. They not only concentrated on direction but also control and manage instruction and curriculum. They are goal oriented as well.

2.1.1 Historical perspective of Instructional Leadership (IL)

Historic roots of IL go back to 50 years of struggle to the effective school movement. Zuckerman, (2020) stated that instructional leadership has its backgrounds in initial investigations, which be apt to setting instructional leadership as a quality centered form of leadership Rajab (2019) analyzed its development over three decades since 1970s to 2000s; it covered different theories and models derived from instructional leadership. He further elaborated that current age has directed three related dimensions of IL model (Hallinger & Murphy, 1985), and then noticeably dissimilar means to contemplate it. More, another definition said, instructional leadership motivated those activities that school educational manager yield and delegate to others, to encourage advance learning of student (Mestry, 2017). In North America the most frequently mentioned educational leadership concept was instructional leadership. Others, it was distinguished between broad and narrow opinions of instructional leadership as additional varieties of IL have been involved. It can also be well-defined as an essential character of educational manager to offer provision as an instructional leader for tutoring, including managing teaching strategies, correctly scheduling teacher professional development courses, evaluating teachers' teaching, etc. Existing literature underlines the position of management and instructional leadership as educational managers' effort with educators on refining coaching and encouraging learning of the students (Murphy et al., 2016). Furthermore, according to Glanz and Heinmann (2018) IL has also stressed teachers themselves, in thoughtfully replicating on their instruction over and done with additional methods for example including meaningful walkthroughs, lesson studies, appreciative inquiry and action research.

This review recognized a trend of increasing geographic variety in print literature. More precisely, in Asia, and Latin America, a quickly increasing quantity of related researches have been directed. On the other hand, some researchers have found studies in Africa about IL. The researcher, therefore, concluded that instructional leadership has expanded, as an essential model in the worldwide set of educational leadership practice, and research.

2.1.2 Educational managers' Instructional Leadership (EMIL)

Effective leadership plays momentous role in effectiveness of a school (Khan, Khan, & Naseer ud Din, 2019). In recent researches educational managers were continuously called up to exhibit instructional leadership (Shaked, 2020). Educational leadership literature has proven that educational managers who exhibit strong skills and expertise in instructional leadership, were considered the need for school improvement (Hallinger et al., 2020). In a study, Adams et al. (2017) highlighted the role of IL for development of school in their study. Similarly, educational managers' priorities engage in ensuring high-quality teaching, and learning for all pupils over administrative responsibilities as IL (Hallinger et al., 2020; Shaked, 2021). It described significance of educational manager as an instructional leader displaying that they are a chief connection among the student teachers in school and their parents or guardians, the education system, and the community in broader perspectives (OECD, 2019). High-quality instruction, which is prerequisite for positive student outcomes, necessitates the school's instructional leader's continual nurturing, oversight, and guiding (Shaked, 2021). They can set the tone for teachers with the help of new teaching practices, and development of their teaching skills, and via confirming that teachers feel accountable for student learning. These practices were known as instructional leadership (OECD, 2019). Nguyen et al. (2018) writes about instructional leadership. They stated that in a society, where bureaucratic and management tasks essentially characterized the functional set of school educational managers at the time, this role was rarely acknowledged.

Over the last 25 years, Duyar (2019) has defined instructional leadership of educational managers as the most often studied model of school leadership.

Likewise, for more than 30 years, instructional leadership has been regarded as important practices of school educational managers (Cambell et al., 2019). Subsequently, grounded on a well-documented worldwide empirical, and enormous literature, Harris et al. (2019) originated that EMIL is dynamic feature in improving school's performance. According to research (Hallinger et al., 2017), school leadership has an impact on school environment. Likewise, in recent studies (e.g. Hallinger et al., 2020; Shaked, 2021) reported priorities of EM, to help engage in assuring high quality education with special focus on all learner, over administrative responsibilities as instructional leaders. This is necessary for educational managers to enrich an environment for promoting learning for all students. All of these actions or practices generate sustainability for school systems. School educational managers' leadership has invited a great of international interest over the past three decades in understanding effectiveness of a school (Lai et al., 2017). This is stipulated in the following figure 2.1.

Figure 2.1

Instructional leadership actions / practices of an educational manager

Niece (1983)	Focused on connections, Network creator of Other educational managers, Obtain affiliation from other education specialists
Hallinger & Murphy (1986)	Frame and Communicate goals for school, Supervise & Evaluate instruction, Curriculum coordination, Developed high expectations and academic standards, Monitor progress of student, Promote professional development of teachers, Protect instructional time, Develop incentives for student and teacher
Bamburg & Andrews (1990)	Provide resources, An Instructional Resource, Can communicate well, visibly present
Blasé & Blasé (1999)	Give emphasis to learning and teaching, Supportive teamwork efforts amongst teachers, Developing training contacts between educators, Encourage and Support to reshape the programs, Apply the main beliefs of adult development and learning, Implement action research for instructional decision-making
King (2002)	Lead the Learning, Focus on Teaching, Focus on learning, Nurture leadership capability, Professional growth for teachers, Usage of data for Instructional development, Use of resources
Zepeda (2013)	Supervise and evaluate instruction, Evaluate Teachers, Offer professional development, Make available learning opportunities for teachers, Model the active uses of data to make well-versed decisions, Promote a climate of excellence in instruction, Establish shared relations with teachers
Lunenberg (2010)	Learning is for all, Foster collaborative practices, Using data to update instructional practices, Supportive, Standardize Curriculum, instruction and assessment

Note: Source, Williams (2019)

2.1.3 Models of Instructional Leadership (IL)

Educational leadership particularly in its instructional aspect carries perhaps the most vital place in the milieu and moral fabric of a school leader. Although the previous researches dilate on educational leadership yet those studies did not suggest how to translate instructional leadership into educational managers' moral profile and imbibe it in our educational management. The models of IL encompass both leadership, and management tasks, that may be executed correctly (Cardno et al., 2019). Most researchers agreed that there are some essential practices of IL that are constant across all studies. Choice and importance of IL's dimensions was according to aims, and the context. In earlier studies related to instructional leadership different researchers presented several notable models of instructional leadership during 1980's such as Villanova et al. (1981), Leithwood and Montgomery (1982), Murphy et al. (1983) and the model of Hallinger and Murphy (1985); Dwyer (1984) and Glickman (1985). While in 20s, many researchers presented models related to instructional leadership practices of school educational managers (e.g. Glatthorn, 2000; McGuire, 2001; Alig-Mielcarek, 2003; Robinson et al., 2008, 2010). Some models are detailed below:

2.1.3.1 Dwyer's (1984) Model: Dwyer (1984) introduced a model describing the educational manager's role as an instructional leader. The model focused on leadership behaviors communicating the routine performance of the educational manager inside the school such as: Define the school mission; Plan and Supervise; and Evaluate students' success and teachers' performance.

Figure 2.2

Dwyer (1984) Model

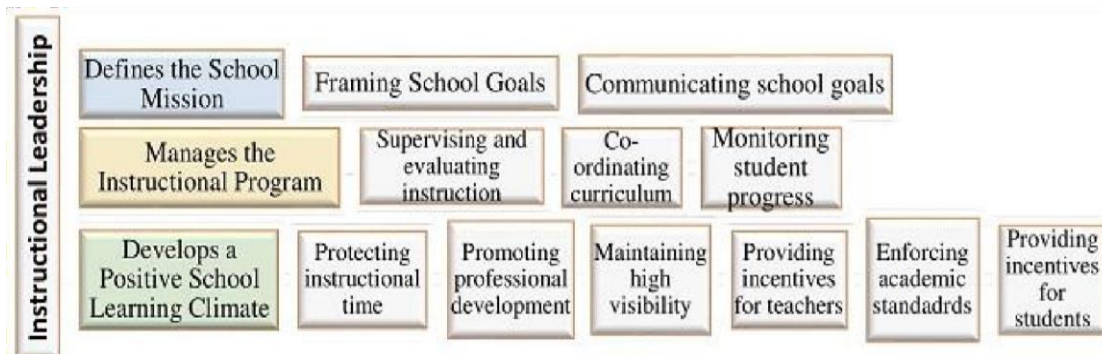


Note. Pictorial presentation by Sagheer (2022).

2.1.3.2 Hallinger and Murphy’s (1985) Model: Their model examined IL practices of ten elementary educational managers in one school. More, they reviewed school effectiveness literature (Turkoglu & Consoy, 2018). Further, this model established a framework of IL with three dimensions: DMS; MPI; and PPCS (Mestry, 2017). It is the most frequently used model in both qualitative and quantitative research studies (Hallinger & Wang, 2015). Further, Hallinger (2020) identified that the model had been used most frequently in empirical investigations. Similarly, Turkoglu and Consoy (2018) elaborated in their investigation that many studies (e.g., Alsaleh, 2018; Hallinger & Wang, 2015; Harris, Jones, Cheah, Devadason & Adam, 2017) examined IL through this model in international literature. According to this model instructional leadership requires educational managers to act as per requirement of the three major dimensions (Gumus et al., 2018; Hayes & Irby 2019). These three dimensions were further delineated into 10 functions of IL (Figure 2.3).

Figure 2.3

Hallinger and Murphy Model



Note. Source. (Shava, Heystek & Chasara, 2021; Hayes & Irby, 2019; Hallinger 2011.p, 276; Hallinger & Murphy, 1985).

Hallinger & Murphy’s (1985) conceptualization of IL model was illustrated as:

- Defining mission of school;
- Manage program of instruction; and
- Promote positive climate for school.

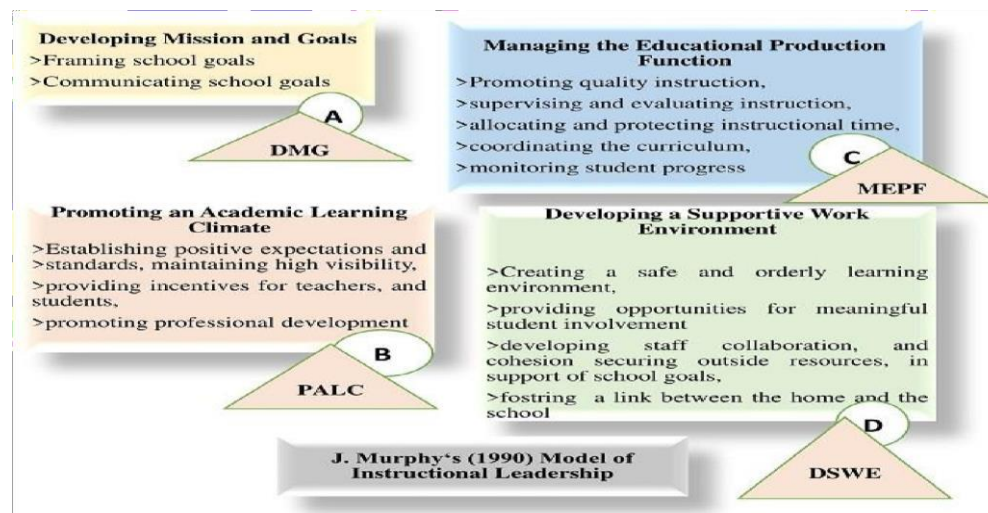
In terms of explaining the concept of IL, this model was identified as the most cited (Bellibas, Esen & Gumus, 2018). It was also used as a “theoretical framework” in the current investigation. This approach is comparable to the ones mentioned

above in essential ways. This model was also used as a theoretical framework in this research. By the turn of the century, this model was utilized to capture evidence of educational managers' practices in over fifty studies.

2.1.3.3 Murphy's (1990) Model: This model enlarged Hallinger and Murphy's (1985) Model. Educational leaders in effective schools, he remarked, display IL in both direct and indirect ways. During his assessment, he developed IL framework that stressed four tasks and sixteen functions that an instructional leader must perform (Mestry, 2017). These were presented in following figure

Figure 2.4

J. Murphy's (1990) Model of Instructional Leadership



Note. Source. Simmons (2017). Pictorial presentation is created by Sagheer (2022).

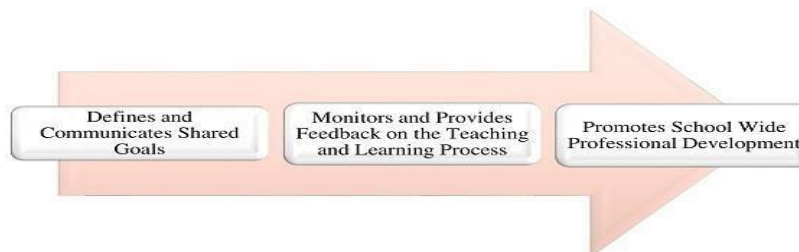
This model was developed based on literature research and Murphy's extensive observations of school leadership, it has some weaknesses, and it has not been empirically validated in schools (Hassan et al., 2018).

2.1.3.4 DuFour (1998) Model: This model enlisted some factors as the dimensions for instructional leadership (Eaker & DuFour, 2015). The dimensions were presented in figure:

Figure 2.5*DuFour (1998) Model*

Note. Pictorial presentation by Sagheer (2022).

2.1.3.5 Alig-Mielcarek's (2003) Model: They originate three different similarities that appeared from a revision of three models (Hallinger & Murphy, 1985; Murphy, 1990; Weber, 1996).

Figure 2.6*Alig-Mielcarek's Instructional Leadership Model (2003)*

Note. Pictorial presentation by Sagheer (2022).

In short, despite the range of published models on IL, there are similarities in identifying the duties and practices of EMs. They in particular, are expected to set school vision, connect teaching with established vision/mission, coordinate curriculum, supervise instruction, monitor student success, develop human resources, and provide a supportive working environment as IL. Among all of these models, one presented by Hallinger and Murphy (1985) have been used in many studies to enquire leadership practices/ behaviors and this study sought to see what effect of educational managers with teachers' sense of self-efficacy has on school effectiveness. This study sought to explore what leadership behaviors identified by

Waters et al. (2005) have impact on student achievement through the lens and reflections of assistant educational managers.

2.1.4 Dimensions of Instructional Leadership

As instructional leader, role of educational manager was described through three dimensions in a conceptual framework, which was presented by Hallinger and Murphy (1985). These three dimensions were the blend of ten functions. Educational managers performed these functions as an instructional leader (Bush & Tony, 2018).

- **Define mission of school (DMS)**
 - Framing the school goals (FSG)
 - Communicate the school goals (CSG)
- **Managing program of instruction (MPI)**
 - Supervise and evaluate instruction (SEI)
 - Coordinate curriculum (CC)
 - Monitoring student progress (MSP)
- **Promote a positive school climate (PPSC)**
 - Protect instructional time (PIT)
 - Maintaining high visibility (MHV)
 - Provide incentives for teachers (PIFT)
 - Promote professional development (PPD)
 - Provide incentives for learning (PIL)

2.1.4.1 Define Mission of School (DMS): One of the most significant aspects of the instructional manager's role was to identify and express the school's mission or purpose. Learning can be influenced by an educational manager's vision and the goals of an educational institution. This function refers to the responsibility of the educational management in determining where team will dedicate time, and resources throughout the school year. Consequently, schools with clear goals are more effective. However, an educational institution is regarded ineffective if it lacks concentrated aims/ vision. The educational manager's position is described as a facilitator of the staff, ensuring that the school has a defined mission. Shava, Heystek and Chasara, (2021) added that the educational manager emphasizes the employees that the school's major goal is for students to attain academic success. Further this

dimension also addresses the educational managers' competence to communicate the goals with all the stakeholders (e.g, teachers, parents and students). They can verify that staff members comprehend the worth and importance of goals. For communicating, EM can use multiple ways: teachers' conferences, (PTM) parent teacher meeting, newsletters, school council, community, informal discussions with staff, etc.

2.1.4.2 Manage Program of Instruction (MPI): The dimension entails collaborating, with teachers on numerous job functions that are connected with set of courses and teaching. It is based on numerous work roles. According to Hallinger et al. (2016), educational leaders pay the least attention to this dimension of instructional leadership. More researchers divided these practices into three dimensions. The educational managers, in their capacity as instructional leaders, are held to a high standard of accountability when it comes to classroom instruction. Furthermore, Instructional leadership aids in the development of carefully planned instructional strategies as well as providing assistance for effective evaluation. According to Akins (2019) the primary responsibility of instructional educational manager is to keep an eye on his subordinates. Teachers capabilities in terms of teaching methodologies, behavior and assessment procedures, among others, are assessed by educational managers.

2.1.4.3 Promote a positive school climate (PPSC): As an instructional leader, EM promotes an environment rich in such activities which aid in the achievement of focused and desired results. School atmosphere has a significant impact on students' educational, social, emotional, moral and physical growth. Students who feel safe, are cared for by adults, and have good friends are more likely to be respectful and have intelligence to be in the right place in school (Chiedozié & Victor, 2017). Protecting instructional time, promoting professional development, maintaining high visibility, providing incentives and rewards for teachers and learners are all part of the third dimension, which promotes a healthy school learning climate (Shava & Tlou 2018). This dimension's nature and function are much broader. It backs up the premise that great schools foster an intellectual press by holding students and teachers to high standards and expectations. The educational managers is also responsible for maintaining a high standard of excellence in the school's environment. These job functions are used to define the conceptual definitions for

the educational managers' variables in this study. These functions were employed to aid in the creation of the particular rules and processes that make up the questionnaire to collect data on IL practices among educational manager. Future research on effective school leadership should shed more light on the essential question of how educational managers' leadership should be used to improve school effectiveness under varying conditions.

2.1.5 International viewpoint of Instructional Leadership

Some investigators recognized the lack of investigation on instructional leadership in Asia. They summarized that studies about leadership, and its practices, containing IL, still predominantly inconsistent in addition is comparatively short. Consequently, the practical suggestion from certain states, as well as contexts is however short, whereas the global information about IL remains flourish, and grow. Additionally, it has been discussed that more related researches are obligatory to strengthen the research associated with IL, essentially in East Asia (Hallinger, 2018). Moreover, the conceptualization of educational managers' instructional leadership may also vary within social setting (Qian et al., 2017). Turning to European context it was found that instructional leadership is a prevailing leadership style.

In Indonesia Rahayu et al. (2022) found that some educational managers willingly and effectively played the role of instructional leadership in their schools. A research paper by Junjun Chen and Wei Guo (2020) confirmed the theoretic suggestion that EMs' IL practices are leading features about instructional approaches of teachers. Discoveries were of certain attentiveness, because they evaluating school leaders' effectiveness. In their research, Hou et al. (2019) further elaborated influence of IL on academic success of high school students in China. They studied that which sole characteristics of IL have the most significant role. Different patterns of impact were found with respect to four distinct dimensions. In both direct and indirect ways, dimensions: (1) managing instruction, (3) identifying school mission, and objectives, and (3) fostering educator advancement remained originated to affect the college entrance scores of students; however, no significant effect was found on pupils from handling civic dealings. Another study of Chinese schools showed that educational managers' instructional leadership promotes teacher self-efficacy

(Zheng et al., 2019). Likewise, Qian et al. (2017) explored that the positions of EM have transformed significantly in China, with the increase of scholastic improvement, effect of Western standards of headship, correspondingly growing stresses on practiced growth.

Taiwan is situated at the junction of East Asia and Southeast Asia (Chen & Cheng, 2017). The Taiwanese Ministry of Education (MOE) necessitates educational managers to continue up-to-date content knowledge in order to more efficiently accomplish teacher's performance in varied curriculum domains (Hallinger & Walker, 2017). Malaysia is a multi-cultural society. However, the school standards are relatively high. It offers a parallel system arranged by Ministry of Education (MoE) from primary to university, a unique system in the world. Harris et al. (2017) described that in Malaysia, MOE actually requires monitoring as an officially trained IL routine for EMs.

Article by Rajab et al. (2019) aimed to identify the level of IL practices among educational managers of Secondary School in Malaysia. Their results showed significantly high level of instructional leadership practices. They recommended, that educational managers and teachers' practices in Malaysia should be adopted as instructional leadership, for they play an important role for school effectiveness. They detailed that instructional leaders are accountable for making sure that encouraging attitude towards change is ordered and shaped between members of the school. In England, Instructional leadership is still an under-focused (Hopkin's et al., 1997) project related to school improvement advocating important role of instructional leaders to improve institutional effectiveness and student achievement (Kaparou & Bush, 2016). Sumiati and Niemted (2020) found a positive relationship between principals' instructional leadership and teacher self-efficacy in the Indonesian context.

In Iran, Hallinger and Hosseingholizadeh (2019) conducted a study to comprehend and define outlines of educational manager IL practices in Iranian primary schools. They also assessed variances about the high- and low-rated EMs. The major findings revealed that even though at work in an extremely centralized context, high ranking educational managers in the sample were distinguished from their lower ranking counterparts in terms of distinctive IL practices. Maintaining a shared, and cooperative setting for educators was frequently highlighted as a key

aspect of effective educational manager's instructional leadership in their research. In the Umraniye district of Istanbul in Turkey, Parlar and Cansoy (2017) stated that positive and significant correlations were found between the sub-dimensions of IL practices in addition to those of administrative well-being of schools. Results showed that school educational managers performed the instructional leadership practices such as: sharing and defining the objectives of school at maximum level. Study revealed that both variables were positively and significantly related. Moreover, instructional leadership practices were found to be an important variable predicting the organized strength of schools.

Kim and Lee (2019) focused on the association among IL of EM and teacher involvement in numerous forms of professional development across three Asian countries: Japan, Singapore and South Korea. They revealed that the influence of educational managers' IL on teachers' participation in professional development varied depending on the type of learning activity and country. In comparison to other types of professional development, their findings suggested that EMIL be able to effect teachers' contribution in mentoring, colleague's reflection, and training. Earlier, in United Arab Emirates, Sharma (2012) found EMIL as management for overall student development. They stated that EMIL supported, and committed for common decision making, involved supervision models, and nonstop specialized progress. The study came to the inference with development of a new model based on IL practices, as performed by EM in these Asian countries.

Hallinger & Walker (2017) pointed out educational managers in the five sites were accountable for mission/ goals of institute, however in centrally agreed bounds. Still, well-known dissimilarity crosswise the five societies in the level of preference rendered headed for educational manager in defining mission that was appropriate for specific school. They originated that in Malaysia, (mission of school) was generally determined at district level government, and the MOE. In Vietnam, KPIs derived from the Ministry of Education. Further, school mission was grounded definitely on central plans in both China and Singapore. In both the societies, school managers are likely to create and expose more fine-grained determinations. Again, Taiwanese school leaders involved both parents and educators in shaping mission of school in line with the central policy. A significant share of the IL part of educational managers transversely, the five countries, was to guarantee coaching excellence, and

observe pupil's education. A shared approach declared by the school leaders across the 5 societies was maintaining, visible occurrence in schools, besides classroom observation, engaging students also teachers.

Table 2.2

Distinguishing topographies of IL practice crossways the five societies (Hallinger & Walker, 2017).

Society	IL role	Defines a school mission	Manage instructional program	Develops a positive school learning climate	Distinctive leadership challenges
China	Limited training accessible for school leaders, Not well defined in policy	leaders up gradation grounded in school strengths, Based upon the MOE initiatives	Outstanding teachers schemes and using educator leadership through research groups	emphasis on indigenous structures, Teacher teamwork embedded in informal and formal mean	
Malaysia	Extremely strict policy Training presented for E.M	Determined by district level government and the ministry	In monitoring student learning progress *E. M's' role is unclear		
Taiwan	Training offered for *Ems is well defined in policy	Both teachers and parents are involved in shaping school mission and vision	*E.M should have subject knowledge, required by the government to manage teachers at micro level		Leaders seek out to increase teacher contribution to distribute Leadership
Vietnam	Limited No instructional leadership training offered for*EM Not defined in policy	Mission and KPIs are mainly strong minded by the ministry of education	*E.M hold comprehensive effect in managerial process		Unitary Leadership Vs enabling Tension among political and instructional roles

Singapore	Well-defined in policy and training initiated for educational managers and middle leaders	leaders develop their own vision that highlights school strengths, and based upon MOE initiatives	As an evaluation strategy leaders use benchmarking Approving a bottom up approach encouraging workforce and pupils to suggest creativities	Leaders indorse research for teachers, but not obligatory *E.M encourages open communication with educators and learners
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*Note: Hallinger and Walker (2017), *E.M= educational managers*

2.1.6 Conceptualization of IL in the Pakistani context

Educational managers' IL may also be influenced by the cultural context. Pakistan is a typological country. Urban areas are highly developed, semiurban are medium and one-third rural areas are marginalized one. Over 70 percent population (over 200 million) is in agricultural zone. However, the structure is over 12 years (5:3:2:2). Turning to the Pakistani context, it is noted that the highest position in Pakistani school is school educational manager. They are generally older in age and experienced as compared to other staff members. Their selection is based on seniority and successive annual evaluation. The role and responsibilities of the educational manager are well-defined and outlined in the educational policy. Their tasks are mainly the implementation of educational curriculum prearranged by the education policy of the country. The National Education Policy (2017) provided the framework and described that the Pakistani educational managers will be perceived as leaders of education, preliminary accountable to the ministry on success and implementation of education system, school and student's performance (Khan et al., 2020). Effective leadership can create a strong relationship between these two variables. Educational leaders who are professionally strong through professional development courses, and having vast job experience, presented good results with a large team and have expertise in preparing PC-1 showing better performance of the school. Qian et al. (2017) elaborated that the conceptualization of instructional leadership of educational managers varied according to cultural context.

Akra et al. (2018) conducted a study in Pakistan. Their main focus was the perceptions of teachers regarding instructional practices, of their educational managers and school climate at secondary level in Punjab, Pakistan. The researcher collected the data from two districts of Punjab (Lahore & Okara). Findings of their study revealed no significant difference among gender regarding teachers' perceptions on instructional leadership practices; on the other hand, no significant difference was found based on school location as well. Further, results revealed positive correlation among IL practices, and school climate. In a qualitative study, Khan, Asimiran, Abdul Kadir, and Basri (2020) aimed to explore the instructional leadership practices and conceptualization of instructional leadership within the context of Pakistan. Semistructured interviews were used as the research instrument. Likewise, the study planned to examine an initial empirical understanding of how educational managers see and confirm their role as instructional leaders, and furthermore confines to current knowledge established on instructional leadership practices in Pakistan. The sample of their study included educational managers from 14 rural, 14 towns and 14 urban areas elementary level public sector schools in Pakistan. Overall results revealed that educational managers in Pakistan understood the defined tasks related to promote instructional practices. Precisely as regards supervising teachers, monitoring and evaluating the excellence of teaching and knowledge in the schools, and leading professional knowledge were significant in the data. Even without having the knowledge and recognition of instructional leadership, the study exposed that more or less responsibilities and activities of educational managers in Pakistan were frequently well-matched with instructional leadership practices. Evidence showed that educational managers were rated same functions related to instructional leader but not others.

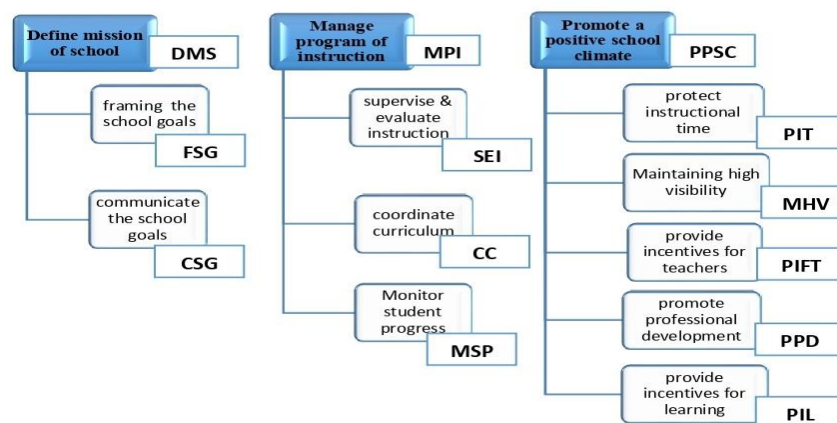
The literature highlights the gap which invites further research. The literature review of the current study suggests more in-depth investigations that can further increase the knowledge regarding educational managers' duties as instructional leader, and the practices they used in Pakistan. It further highlights that there is sturdy policy desire, defined in Pakistan's National Education Policy that educational managers are supposed to be instructional leaders, and are not only responsible but also answerable for complete development in the schools.

2.1.7 Principal Instructional Management Rating Scale (PIMRS)

Scale PIMRS was developed for checkup, of practices, of educational managers. Initially it was consisted of eleven subscales. Also, it contained seventy-one “statements”, with “subscales” composed of amongst four and 11 items. Later author concentrated on 10 (subscales) and 50 (items) through subsequent review of the instrument (Hallinger et al., 2018). Further it was based up on three dimensions. These dimensions and related functions are summarized in figure:

Figure 2.7

Principal Instructional Management Rating Scale’s conceptual framework



Note. Source: (Shava et al., 2021; Horton, 2013; Hallinger, 2011. p. 276; Hallinger, 2005; Hallinger & Murphy, 1985).

First dimension was consisted of two job functions: framing goals, and communicating school goals (Thien, Lim & Adams, 2021; Flimban, 2019).

- (a) Framing Goals: In order to achieve exceptional learning goals, the school educational manager may develop unique goals for school that are simply understood and practiced by teachers.
- (b) Communicating Goals: The educational manager should expand and link school objectives to all teachers during meetings or by crafting a clear school mission that, highlights the importance of achieving educational goals.

Functioning through instructors in zones of curriculum, and instruction, is part of managing instructional program (Hallinger & Murphy, 1985). This dimension includes three job functions.

- (a) **Managing Instruction:** During visits to the classroom, school educational manager should manage, oversee, and assess instructive processes, provide valuable assessments, and feedback to each teacher about their strong point besides flaws, then evaluating students' attainments, and results via seeing their daily performance or test result.
- (b) **Curriculum Coordination:** The educational manger should confer with teachers to assess whether the school curriculum is prepared appropriately to meet institutional objectives; additionally, they should also be well-informed about curriculum coordinators, and engage in conversation regarding their roles and duties.
- (c) **Monitoring Student Progress:** The school EM should maintain track of students' progress on a regular basis via observation of their outcomes, and test results; additionally, educational manager should be able to recognize pupils' problems and strong point, so that they may be discussed with teachers.

Third dimension of PIMRS, namely promoting a learning climate for school, included five job functions (Thien, Lim & Adams, 2021). Consequently, Hallinger et al. (2015) outlined the following practices.

- (a) **Instructional Time:** The school educational managers of the school must take full advantage of learning opportunities while maintaining instruction as well as learning time. They essentially reduce school meetings, and must focus on skills, curriculum, content, and evade bringing students into the educational managers' office during class time.
- (b) **Professional Development:** The school's educational manager should provide opportunities for teachers to advance their careers by providing PD chances equally inside, and outdoor the school. Furthermore, these chances allow teachers to exchange and share their experiences, knowledge, and abilities with their colleagues.
- (c) **High Visibility:** All stakeholders must be able to observe the educational manager. During break time or by visiting the classroom, educational managers should engage with students and teachers to discuss pertinent concerns and provide leadership for them to handle any problem.

- (d) Providing appreciation to Teachers: The educational manager of school has a duty to be aware of, and acknowledge their teachers for outstanding executions, or certified progress through holding an appreciation ceremony inside or outside the school to give certificate, and rewards. EM may offer these rewards privately, or in front of the other teachers.
- (e) Providing incentives to Learners: EM need to give incentives for students to learn. They can recognize gifted students, honor them, congratulate them on their success, and support them by incorporating their parents in the celebration.

Section II

2.2 Self-Efficacy (SE)

Self-efficacy is known as self-perception; it influences how teachers choose assignments and learning activities as well as their efforts and perseverance in overcoming specific problems and balances their emotional management in even the most difficult situations. According to Rachmawati¹ and Fadhilawati (2020), SE is an active contact with some added belief systems, which are different to execute certain activities, or in dissimilar conditions. Likewise, SE is a communal belief of somebody's competencies to control their primary performance effectively. Further, Cansoy and Parlar (2017) elaborated the worth of an individual's constructive tactics to their own deeds and self-beliefs in finishing everyday jobs for increasing SE. As the position of SE has been recognized in the literature, researchers have detected, ways to improve it. For instance, reviews have observed into a variability of school, and teacher- related, factors that influence TSE and exposed, that a variation in school individualities, together with school leadership, proportions of school, and pupils' socioeconomic position, similarly, teacher's individualities, such as qualification, gender, and practice, are chief factors of TSE (Gumus & Bellibaş, 2021). The literature depicts that self-efficacy is an individual's belief on his/her ability to accomplish a task or to get terminated a target. As self-efficacy is a person's credibility. It consisted of an individual's whole characteristics, all factors like mind intelligence and social behavior.

2.2.1 Sources of Self-Efficacy (SE)

Bandura (1997) supported 4 interacting sources of SE. According to him, self-efficacy is accurate or not; it is based on four basic sources of SE (Gundel & S. Piro, 2021). The first source Bandura (1977) described by Bjorklund, Jr. et al. (2020) was mastery or successful experience. It refers to a person who, based on their experience, produces effective outcomes of performance in diverse periods. It obtains confident approaches to this achievement. Teachers' mastery experiences are derived from classroom accomplishment, and they are powerful source of SE Successful tasks help build a strong sense of efficacy, whereas failure can erode it. Effective mastery experiences create a balance between easy achievement and pushing one's limits because if a task is too simple, an individual may become quickly discouraged by failure when faced with a more challenging task. Simply in a study, the researcher explained mastery experiences as teachers' attainment during their teaching (Kuusinen, 2016). Moreover, Bandura's social theory originally maintains, that important source of SE information is derivative of mastery experiences and performance.

The second source is vicarious experiences. These experiences a teacher actualized through observation of their peers. Vicarious experiences are those in which others successfully replicate the action of interest. This is especially effective when the person modeling someone with whom one identifies. These are linked to teacher following successful practice models and seeing and emulating the success of others in their jobs. Rewarding behaviors are more accessible to exploration. The third source is verbal persuasion. It affects beliefs of teacher about self-efficacy if teachers obtain constructive answer from an individual who have additional abilities as compared to them. Persuasion and encouragement of behaviors related to tasks that can be completed are referred to as verbal persuasion. The persuader's knowledge and personal attributes are significant in persuading. Verbal persuasion is a technique for convincing people that they have the skills they need to attain their goals. When significant others believe in one's talents, it is simpler to maintain efficacy that may be difficult to achieve through verbal persuasion, especially in a variety of situations (L. Brown, Myers & Collins, 2021). The fourth and final source to improve self-efficacy is physical and affective states. Affective experiences associate with the findings of individuals about their capability to complete allocated

responsibilities (Kuusinen, 2016). Individuals' interpretations of their physical and affective experiences are linked with individuals' self-efficacy by their ability to cope with an encouraging approach concerning bodily, and disturbing situations. Their successful experiences in which they view on a social basis helpful actions are thus, supposed to effect the improvement of SE (Bjorklund. Jr, 2020).

2.2.2 Sense of Self-Efficacy (SSE)

SSE is a lively cooperation, according to Rachmawati and Fadhilawati (2020), SE is collective self-confidence of one's skills to successfully regulate a control on their decisive activities efficaciously. In connection to his thought in a recent study, according to Goddard, Bailes and Kim (2020), an individual judgment of personal competence to shape and perform the actions obligatory to complete effectively a specific future task is one's sense of self-efficacy. Another study, also supported that SE helps to accomplish a task successfully (Malandrakisa et al., 2019). Thus certainty about SE is vital precursor to attainment (Goddard et al., 2020). In literature, "self-efficacy" and "teacher efficacy" may be used synonymously (Ozemir, Sahin, & Ozturk, 2020). The literature highlighted that persons do not learn from their experiences but also learn more through observation. When they observe the more success full people, they question from them how they can attain things in their life. Through reflection of past achievements one can build self-efficacy. Before starting any task if a person recall past performance and the ways an individual followed to accomplish those works will lead to enhance sense of self-efficacy. Same like that the literature expressed that teachers' sense of self-efficacy is connected to the willingness of performance towards teaching. Those teachers who have sense of self-efficacy are extra dedicated and purpose focused in their classroom teaching.

2.2.3 Teachers' Sense of Self-Efficacy (TSSE)

SE of teachers can be characterized as their belief and trust in themselves, as well as their expectations of their students' learning as a result of their lessons (Ozdemir, Sahin & Oztruk, 2020). The status of teacher has been established by significant research on school improvement over the previous decades (Bellibas & Gumus, 2021). Furthermore, Brown, Myers and Collins (2021) reported that there is

still a lot to learn about its evolution. In addition, research on TSE shown that it is linked to outcomes that are advantageous not just to teachers, but also to students (Zee & Koomen, 2016). Efficacy in teaching is connected with student achievement (Brown, Myers & Collins, 2021). Likewise, teachers, with strong self-efficacy for instructional strategies, on the other hand, have a tendency to assume that all children can be taught. They spend more time in class on academic activities, invest more effort into struggling students, and recognize academic accomplishments that are linked to student achievement (Zee & Koomen, 2016). Teachers with higher SE are more engaged in their classrooms (Bjorklund. Jr, et al., 2020). Earlier it has been observed that SE of teachers refers to their attitudes or judgments regarding teacher's roles in increasing student learning, and their perceptions of ability they have to undertake a powerful instructional activity, and their beliefs or judgments about their roles in improving student learning (Cansoy & Parlar, 2017). According to Love et al. (2020), teachers' have confidence that problematic students can be taught with extra effort, and suitable methods. Likely, Semul (2018) defined teacher self-efficacy as a method for analyzing instructors' feelings of competence in implementing self-regulated learning by looking at their self-efficacy views. Besides, to investigate teachers' feeling of competence in implementing self-regulated learning is by examining their beliefs about SE. In the perspective and view of self-efficacious teachers they feel comfortable in their teaching. They may be able to review the excellence and practicality of the information and expertise they own in their teaching profession.

2.2.4 Dimensions of Teachers' Sense of Self-efficacy

Teachers have been playing a very significant role in the academic achievement of students. This is one of the objectives of every teacher. However, achieving such an objective may not be easy without self-efficacy which according to Bandura (1997), is important on how this objective can be achieved. According to Bandura (1997) person who has high self-efficacy develops an interest in the activity, a sense of commitment, and can handle setbacks and challenges. Following such a concept, having high self-efficacy will affect the way how teachers are conducting their classes. Teaching is not only about delivering the content

effectively but to deliver the content effectively, different elements are involved such as instructional strategies, classroom management, student engagement (Tschannen-Moran & Woolfolk, 2001). Thus, teachers' self-efficacy in instructional strategies, classroom management, and student engagement are important elements to achieve the instructional objective. Teachers should believe in themselves that they can handle their tasks, obligations, and problems effectively (Barni, et.al, 2019) and this is the concern of self-efficacy. This concept refers to the definition of Bandura (1977, 1986, and 1997) about self-efficacy. Bandura defined self-efficacy as "an individual belief in his/her capability to execute behaviors necessary to produce specific performance outcome". In a similar vein, teachers' self-efficacy can boost their motivation and excitement to perform their teaching job. This is evidenced in the study of Alibakhshi et al., (2020) about the consequences of teachers' self-efficacy. The result of their study pointed out that teachers' self-efficacy brought some consequences such as teaching practices, learners' motivation, and academic achievement. Thus, it is often said that teachers' self-efficacy is a determinant factor in the teaching behaviors of teachers. The current study adopts the three dimensions of Tschannen-Moran and Woolfolk (2007) which are instructional strategies, classroom management, and student engagement. The current researcher takes these three dimensions because these three dimensions are closely related to the main function of teachers in the classroom daily.

Efficacy for student engagement refers to teachers' beliefs about their abilities to bring about desired outcomes of student engagement and learning (Bandura, 2006). It comprises both behavioral and emotional components. Students who can engage in learning show sustained behavioral involvement in learning activities and positive emotions. Efficacy for instructional strategies talk about teachers' conceptions in their instructional practices on assessments, teaching, learning, and curriculum to promote students' thinking. It gauges the strength of teachers' beliefs regarding their ability to implement alternative teaching strategies and to use a variety of assessment strategies in the classroom (TschannenMoran et al., 1998). In addition, it gauges teachers' level of confidence in responding to difficult questions posed by the students and providing an appropriate challenge to more capable students (Johar, 2022). Efficacy for classroom management encompasses strategies aimed at increasing or, encouraging desirable student responses through praise,

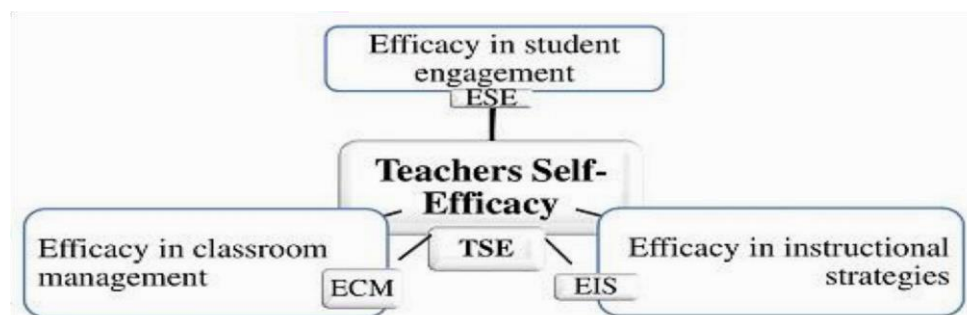
encouragement, attention, and rewards. Previous research reveals that this dimension is crucial before learning as failure to deter arising classroom problems associated with a misdemeanor can affect the teaching and learning process (Taxer et al., 2018; Valente et al., 2019).

2.2.5 Teachers' Self-Efficacy Scale (TSES)

Moran and Hoy (2001) created this instrument during the dawn of the twenty first century. They developed the scale in two variants in English (1) a 24-item long form, and (2) a 12-item short form to assess teacher believes that how much they can influence a student's academic performance. ESE, EIS, and ECM were identified as critical elements of TSE during the validation of this scale. Reliabilities above .81 were recorded for the complete scales, and three dimensions in both long and short versions. According to the study Wolf et al. (2013), the three existing dimensions (each with n=8 items) were highly reliable with Cronbach's alpha showing ESE ($\alpha = .81$), ECM ($\alpha = .83$), and efficacy in instructional strategies ($\alpha = .88$). The discussed dimensions are shown in figure:

Figure 2.8

Dimensions of TSES



Note. Pictorial presentation created by Sagheer (2022).

TSSE, while appearing to be a simple notion, is actually a quite complex when it comes to teacher success, student attainment, and most importantly teachers' beliefs about their efficacy related to dimensions like: (1) ESE, (2) EIS, and (3) ECM.

- a. **Student Engagement:** Researchers have also employed the concept of TSE in student engagement. This approach emphasized the connection between

student engagement and motivational processes. It also helped student learn more effectively. Furthermore, teachers have an important role in promoting SE (Bellibas & Liu, 2016). For instance, self-efficacy beliefs support teachers to use different ethical approaches that positively support autonomy of students, motivation aimed at learning and academic presentation (Egido Galvez et al.,

- b. **Instructional strategies:** Raath (2016) demonstrated in a study that teachers' SSE has favorable relationship with their behavior. As a result, it has an impact on leaning outcomes. Teachers with higher SSE may bring change in climate of the institution. Further strong sense of self-efficacy improves their self-confidence in classroom. Therefor in another study, it was hypothesized that TSSE has an impact on teachers' classroom instructional practices (Alrefaei, 2015).
- c. **Classroom management:** CM is the process of ensuring that children learn to their greatest capacity, and it is done through motivating and interactive classroom environment. In other words, it refers to the strategies and procedures used to create a learning environment that focused children's attitude and thoughts (Bay, 2020). It was identified as a critical contextual feature influencing novice teachers' SE in their first year of teaching in an international study (Chaaban & Du, 2017). Analytically, it was examined whether CM abilities are a critical component of effective teaching, and contribute to improved student success. As a result, it is more necessary than ever to improve CM skills. Classroom management encompasses a wide range of responsibilities, which can be broken down into five categories: First and foremost, teachers must set clear norms and procedures (Lopes et al., 2017). Second, it helps to preserve strong relationships between teachers and students (Soydan et al., 2018). Third, teachers who set clear objectives see fewer disruptive behaviors from students (Skiba et al., 2016), and they can retain student participation through classroom management (Aloe, Arno & Shanahan, 2014). The only reactive aspect in the fifth classroom management

component according to Al-Abd and Chaaban (2020) is responding to disruptive student actions.

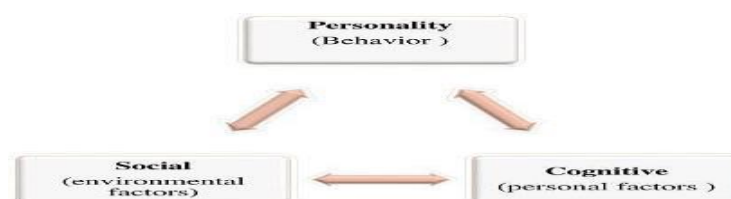
2.2.6 Different Theories on Self-efficacy

There are some other theories which are discussed here:

2.2.6.1 Social Cognitive Theory (SCT): SCT, which contains concept of SE, is likewise based on Bandura's (1977) work. In the mid-1970s and beyond Bandura (1977) developed SCT. According to his view, successful learning occurs when a person is in a social setting and is able to engage in active and shared interactions between behavior, person and environment. Individuals are neither automatically governed by external events nor propelled by internal forces, according to Bandura (2011). Instead, they take an active role in their own growth and have an impact on it. They adapt to change and opportunity, and overtime, they embark on a process of self-renewal. Furthermore, Social Cognitive Theory was utilized to explain individual agency and choices, as well as functioning and motivation, as a paradigm of reciprocal determinism (Bandura, 1986). The result of a bidirectional interplay between personal factors, behavioral patterns and environmental events exhibited as emotional, biological and cognitive components, and it is reciprocal determinism (Sharma & George, 2016). As a result, SCT equips teachers with the tools they need to better understand their own attitudes and beliefs, allowing them to better grasp their own ideas about their abilities to teach (Bandura, 1986). This theory is a psychologically developed theory in general terms. It explains how people in a social system carry out a variety of human processes and the interactions among different parts of those activities. It has been frequently used in studies across variety of fields.

Figure 2.9

Social Cognitive Theory



Note. Pictorial presentation created by Sagheer (2022).

There are six constructs of Social Cognitive Theory:

- 1) **Reciprocal Determinism** (the active relations of behavior and person),
- 2) **Behavioral Capability** (the actual ability of an individual to perform the suitable behavior),
- 3) **Observational Learning** (learning a piece of information, or a new skill through observation of others including modeling),
- 4) **Reinforcements** (the outside replies to the person's behavior that either discourage or encourage the behavior),
- 5) **Expectations** (the expected penalties of behavior),
- 6) **Self-efficacy** (is confidence of an individual in abilities he owns, to execute a behavior and accomplish a task).

It is also a theory of learning and change, and a device for information of self. It is the only theory of its kind which highlights on the importance of the social context, and the importance of preservation performance in addition to starting actions.

2.2.6.2 Social Learning Theory (SLT) by Rotter (1966): The core tenet of Social Learning Theory is that an individual's personality is shaped by his or her interactions with the environment. It is hard to think of behavior as a preplanned reaction, to a set of objective external cues. Rather, understanding behavior necessitates taking into account both the individual and the environment. Rotter (1966), believes that one's personality, and one's actions, can be changed at any time. Change a person's mindset or the environment in which they react, and their conduct will shift. He believes that personality is not established during a critical period. The more life experience one has in creating certain sets of ideas, the more work and intervention are required for transformation to occur. Rotter is a person who has a cheerful outlook on life. He sees them as motivated by their goals rather than by a desire to escape punishment. According to Rotter (1966), Social Learning Theory model comprises four essential components. Potentiality, anticipation, reinforcing value, and the psychological context are all factors that influence behavior.

Behavior Potential: refer to the possibility of engaging in a given scenario. In other words, it examined a person's reaction in a certain way for specific situation. In each given setting, one can engage in a wide range of behaviors. There is a behavioral potential, for highly possible behavior. Whichever conduct has the most potential will be demonstrated by the individual.

- a) **Expectancy:** the perceived possibility that a particular action will result in a specific consequence, or reinforcing, is known as expectancy. Low expectancies indicate that the person believes his or her behaviors will be unlikely to be reinforced. If both outcomes are desirable, we will opt for the method with the best possibility of succeeding.
- b) **Reinforcement value:** quite simply, reinforcement value denotes a preference for a specific reinforcement.
- c) **Psychological situation:** According to Rotter (1986), it is not enough to communicate because an assumed circumstance may appear different to each individual. Psychologists must classify a variety of indications inside the circumstance in order to treat it in a more objective manner.

Figure: 2.10

Components of Social Learning Theory



Note. Pictorial presentation created by Sagheer (2022).

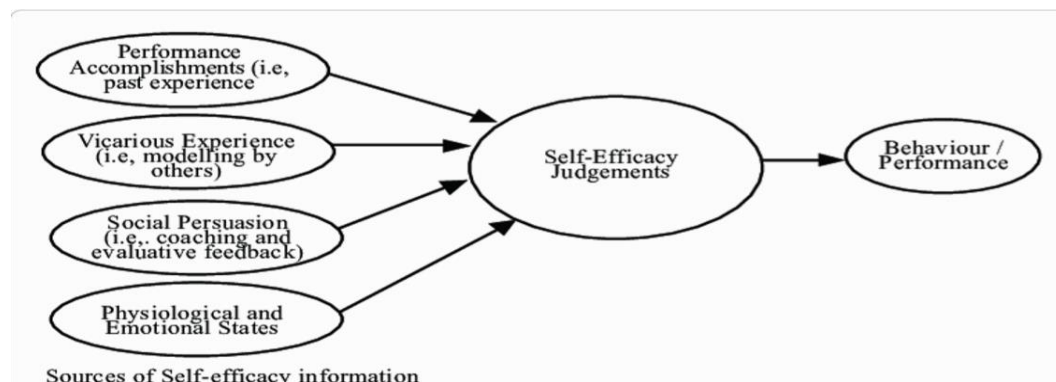
2.2.6.3 Self-Efficacy Theory (SET): The self-efficacy theory (Bandura, 1977, 78, 88; Gist & Mitchell, 1992; Saks, 1995) offered four key sources of information that a person could use while making self-efficacy judgments (Figure 2.11).

- a. **Performance accomplishments:** It refers to mastery achievements of an individual. Failure in the past have lowered them, whilst previous successes have raised mastery expectations.

- b. Vicarious experience: the term “modeling” is used to characterize this procedure. It can be improved through defining individuals, who have accomplished activities successfully. It has the power to raise people’s expectations. Over and done with learning, they can also increase their own performance by observing learning.
- c. Social persuasion: it refers to roles that guide persons, that they can successfully manage specific works through recommendations. Two popular approaches of SP are coaching and offering evaluative feedback on performance.
- d. Physiological and emotional states: SE assessments for diverse tasks are influenced with a person’s emotional or psychological state. Negative appraisals of an individual’s ability to do such activities may be influenced by emotional reactions to such exercises, such as anxiety.

Figure 2.11

Self-Efficacy Theory



Note: Source Lee (2013). Pictorial presentation created by Sagheer (2022).

2.2.7 International Context of teachers’ sense of self-efficacy

Handrianton et al. (2021) conducted a study in Sarawak’s context of Malaysia. They identified that the teachers who have high self-efficacy may be able to solve problems faced by students. They further highlighted that teachers with higher self-efficacy in classroom management may have confidence to solve learner’s problems effectively. If a teacher is self-efficacious in classroom management the students enjoy the learning process as teacher bring ease to teach complex topics, and students

feel free to participate in classroom which develops their critical thinking. They get motivated to perform their best for their success in future. In state schools of Colombo and Homagama zones in Sri Lanka a study by (Seneviratne, et al., 2018) examined how professional development (PD) designs affect in-service teachers' efficacy belief. The results found no statistically significant differences in perceived efficacy in student engagement by education division in which school was situated. It also reported self-reported efficacy in engaging students significantly differed according to school type. In Turkey, Sak (2015) compared male and female pre-service early childhood teachers' SE. The outcomes of study exposed substantial variance in overall SE, as well as in particular areas of classroom management between male and female respondents. Furthermore, there were no significant differences in gender's SE in terms of student engagement or instructional strategies. Also, according to Arslan's (2013) study in Turkey, there were considerable gender variations in students' perspectives concerning sources of self-efficacy. A study of Tison et al. (2011) reviewed the relationship among gender and student engagement on the postsecondary level. Findings showed a significant association among gender and student engagement, as females scored higher than males.

Pfitzner-Eden (2016) examined changes that might arise regarding pre-service teachers' self-efficacy during the field experience component of their education, based upon Bandura's sources. The study identified gaps in educator preparation programs and recommended more emotional and reflective practice incorporated into pre-service teacher programs in order to build greater self-efficacy in pre-service teachers. Moreover, in US, Ferrara (2013) found a noteworthy gender dissimilarity about classroom management. Likewise, Al-GZu'bi (2013) revealed no substantial variance in CM according to gender (Male & Female). Consequently, girls scored greater on SE than boys in Kenya (Ongowo & Hungi, 2014). Further in another study man reported significantly higher levels of self-efficacy than women do (Nanjala, 2012). In contrast Odanga, Raburu and Aloka (2015) revealed no statistical variance in gender on TSSE through descriptive analysis, but qualitative results of their study revealed that gender had an influence on self-efficacy of teachers in boys' school and co-educational institutions.

2.2.8 Teachers' sense of self-efficacy in the context of Pakistan

TSSE in Pakistan has been investigated with an association of other variables. Some studies are discussed for instance Pakistani social scientists such as Gulistan, Hussain and Mushtaq (2017), did study on the influence of TSE on students' achievement scores. Furthermore, 96 teachers and 480 students from Punjab Province were chosen as a sample. Teacher data was collected through Moray and Hoy's (2001) scale. Their findings demonstrated a considerable positive relationship between TSE perceptions and their pupil's success score. In another study, Kazmi, Siddiqui and Siddiqui (2021) explained the correlation between TSE (with a different variable) emotional intelligence. Bandura's Teacher Self-Efficacy Scale was used as research instrument. Outcomes of their study identified that SE is merely influenced by age, and not experience.

Rashid, Shah and Naz (2021) investigated connection of university teachers' computer SE, perceived teaching skills, and perceived research skills regarding their usage of ICT. The results of the correlation analysis depicted that teachers' CSE and PTS and PRS had significant association. Further, they suggested computer training for use of ICT in teaching and research to improve CSE of teachers. Earlier, a quantitative ex-post-facto study discovered effect of TSE on students' achievement scores by means of trilingual teachings for their attainment. The discoveries from regression analysis depicted that overall teachers' SE has affected 65 % on students' achievement scores. While SE (59 %), IS (60 %), CM (59 %), while teachers' medium of education has affected (30 %) by (Hassan, 2019). Moreover, Shahzad and Naureen, (2017) identified an association among TSE and learner's score. They used Moran and Hoy's (2001) long form of TSES. 160 respondents; (60 teachers) and (100 students) from Quetta were selected as sample. The study portrayed significant association between teachers' self-efficacy and students' achievement scores.

Section III

2.3 School Effectiveness:

School effectiveness as the capability of achieving the aims and goals planned through the school has been defined by Cobanoglu and Yurek (2018). Earlier, Talebloo et al. (2017) stated that several researchers have defined school effectiveness based on just academic achievements, however, school effectiveness does not depend only on academic outputs. It is a match that measures, how much stated objectives are achieved. Consequently, different and contextual features had an influence on effectiveness. As individualities of the schools made them more effective; these remained constant with the previous works (Hanushek, & Woessmann, 2017). A considerable number of studies have attempted to find out what are the components of an effective school. There are many factors which make difference in the performance of an institution. The Coleman report (1966) claimed that socioeconomic status, race, and other family contextual variables had a greater influence on student achievement compared to the effects of school variables (Ismail, Khatibi, & Azam, 2021). As in schools, effectiveness can be measured through standardized factors. More Dongo (2016) characterized effective school on the basis of purposeful and quality education. Keeping in view the literature discussed the current study focused seven factors of Baldwin et al., (1993) and related research instrument SESQ developed by the same authors for the assessment of school effectiveness.

2.3.1 Secondary Schools (SS)

The secondary school educational manager is assumed as a major determinant of the secondary education system (Lipham, 2016). The educational manager according to Adaegbe (2016), is a manager, an administrative head, a supervisor, a community public relations man, an instructional leader, a curriculum developer and a catalyst for planned revolution. Likewise, Egwu (2016) believed that the educational manager is a leader who must organize, coordinate and supervise the school's affairs in order for them to run smoothly. Secondary school education is a final destination for the majority of Pakistani students; however, the harsh reality is that high school students' performance is not sufficient or in accordance with social expectations. Therefore, it is critical to educate learners with awareness, skills and

self-confidence necessary to prepare them for a successful life. It is proper for the educational system to cater to social desires in order to generate successful, enthusiastic and motivated individuals. Aziz and Qureshi (2017) described that it is important to picture it without teachers who are efficient, committed, enthusiastic and professionally competent in imparting and transferring knowledge.

2.3.2 Secondary Schools (SS) of Pakistan

Secondary schools are classified as social institutions because, they teach students for real-world life expectancy. Ministry of Education (NEP-1998-2010) focused that after finishing secondary school, students must have the abilities, as well as information to style suitable selections for their forthcoming practical and professional lives. Education system of Pakistan is divided into four levels: primary, elementary, secondary and higher education. According to the Ministry of Education (2013), secondary education is separated into two stages: Class VI to VIII (stage I) and Class IX to X (stage II). The Ministry of education's National Education Policy (NEP) has clearly stated that the secondary stages are used as a finishing ground for students who are unable to complete college level, and are interested in working in the economic field. Therefore, secondary education should be of high quality and useful practically. They further argued the most significant reason that National Education Policy requires is related research to improve SE. Saleem et al. (2012) recommended assessment of secondary level (rural & urban), and girls' vs boys' schools in Pakistanian setting for SE.

2.3.3 Leadership in School

Leadership is crucial aspect of SE and student progress (Adams & Velarde, 2018). Likewise, school leadership practices are increasingly being realized as a key factor for SE. Educational managers' IL is vital to the institute's success, owing to its link to advancements in training and education (Alsaleh, 2019). More, effective school leadership is important to enhancing educational capacity (Flimban, 2019). School leadership is crucial for school's overall effectiveness, and defined as providing direction and exerting influence to assist the school in achieving its goals. Strong school leadership improves SE in general, because it develops frameworks for well-organized interconnected effort, and provides clear directions for

improvement. The formal leadership of EM has an impact on a variety of educational outcomes. Majority of advantages related to relationships between leadership and student academic results are indirect, but the benefits are minor. Some qualities as setting schools' direction via identifying and conveying objectives and goals of school, as well as generating shared meanings essential to achieve these ambitions, are commonly recognized as critical components of good leadership, coupled with high standards for staff performance. This means providing intellectual stimulation and, if necessary, individualized support to assist the individual in their development. The establishment of collaborative procedures and the strengthening of the school culture are also important aspects of effective leadership. Thus, school leadership for Ramberg et al. (2019) is the organization, which works at all levels in schools' structure.

2.3.4 School Effectiveness Survey Questionnaire (SESQ)

According to Baldwin et al. (1993), SE was determined over eleven factors, which were modified in 2010. In this research, School effectiveness Survey Questionnaire was used to examine school effectiveness. The questionnaire was based on seven school effectiveness factors discussed below:

Figure 2.12

School effectiveness model, Baldwin et al, (1993)



Note. Pictorial presentation created by Sagheer, (2022).

Safe and ordered atmosphere described that an instructional leader plays vital role to achieve this target. According to Kazak and Polat (2018), instructional leadership was the utmost and influential factor of an effective learning environment for learning. Likewise, Karadag and Oztekin-Bayir (2018) said that the school culture formulates the basic outlook of the school. Further, it helped the several

participants to make sense of themselves, and their interactions within the school. Moreover, ZahedBabelan et al. (2019) described that through teamwork and shared leadership, instructional leaders contribute to a positive and sharing school atmosphere. High expectation's climate reveals that all the students are expected to achieve high academic requirements using specified, assessable performance indicators. The success criteria emphasize conceptual understanding. These standards contribute to a high expectation's climate. This type of environment facilitates the application of knowledge, skills and processes. School climate grounds in a significant difference in refining opportunities of learning (Baldwin et al., 1993; Kazak & Polat, 2018). Instructional Leadership showed that the school managers are not only involved in the instructional process personally, but also they develop instructional leadership in teachers as well. Moreover, Turkoglu and Consoy (2018) described instructional leadership as an important factor for student learning, and in developing school effectiveness. Thus in the views of Senol and Lesinger (2018), it is necessary for managers of the school to be aware of the serious role of instructional leadership, and its position in creating a positive and a shared culture to ensure school effectiveness. Furthermore, Bellibas and Liu (2018) considered instructional leadership as crucial factor for building a positive environment, and it was an essential requirement for school effectiveness. Opportunities for learning and students' time on task demonstrates that transitions are even, and that time is not wasted on unrelated distractions from the lesson. Co-Curricular activities are designed to match with academic program of school. Furthermore, curricular doings occupy a small percentage of instructional time. Clear-cut focused mission determines that in spite of the detail that school has manifold objectives, the primary objective of maintaining academic achievement, and educating all students remain constant. Focus of the frequent monitoring of students' progress is that in schools, educational leaders direct instructional planning and guarantee that it is carried out. Teachers take advantage of accessible resources, guide teaching methodology and evaluate criteria. Similarly, a range of assessment methods are used to track student academic progress. Relationship of school and home shows that father and mother of a student are former teachers in home. So they and the members of community are advocates for all children. In all aspects of an educational program school staff,

parents and community members are partners. Their strong relationship matters for SE (Baldwin et al., 1993; Sheela & D' Sa Claris, 2015).

2.3.5 School Effectiveness in Pakistani context

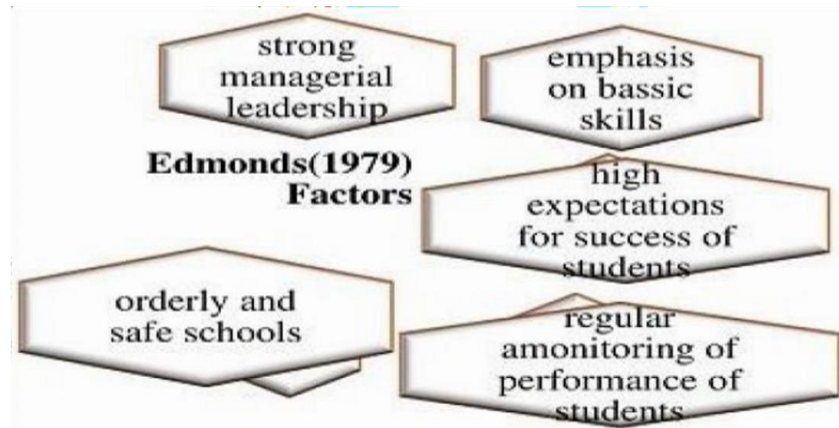
Research on SE addresses the issues of the education system as outlined in Article 38 (d) of the Constitution, which gradually clarifies the accomplishment of moral principles and EFA, regardless of gender, class, and faith. Pakistan intends to eliminate illiteracy and provide free/obligatory secondary education in the shortest possible time (A-37, b) mentioned in NEP (2009). Alike (A-34) discussed female engagement in all aspects of National life (Ministry of Education, NEP-2009), but education system has shown slightly assured in the direction of achieving these objectives. For the reason that, entrance, impartiality, and equivalence in schooling, are concerned with similar (public & private) systems, gender disparity in gender, and area (rural & urban) wise division of schools. Somehow, National Education Management Information System (NEMIS) has begun endeavor for determining SE indicators, but, the Ministry of Education has taken majority of them from UNESCO (NEP-2009). Moreover, the factors for ineffectiveness of school, on the other hand, are evident (NEP, 2009) through Ministry of Education in Pakistan. Problems with educational system, curriculum, textbooks, assessment techniques and procedures, teachers' sense of self-efficacy (TSSE), learning environment, and lack of relevance of education in everyday life were among them.

2.3.6 Factors of school effectiveness in the view of different Authors

2.3.5.1 Edmonds (1979): Edmonds (1979) suggested five noticeable factors of effective schools. Dos (2014) described that these factors have been repeated in maximum studies. He described following five most essential and concrete factors of school effectiveness: Strong managerial leadership, highlighting basic skills, High expectations for the success of schoolchildren, Regular monitoring of performance of students, and Orderly and safe schools.

Figure 2.13

School effectiveness factor (Edmonds, 1979)



Note: source Dos (2014). Pictorial presentation created by Sagheer (2022).

An educational manager must possess strong managerial leadership abilities to administer routine tasks of the institution. Emphasis on basic skills highlighting fundamental objective of the school for training of basic skills. Moreover, preference should be given to acquisition of basic skills rather than all other activities in schools. High expectations for success of students described a setting that is favorable for teaching in which any single learner is not permitted to decrease underneath points of success. For regular monitoring of performance of student, learner's success is regularly checked with the help of different methods of evaluation like: quizzes, standardized tests, and other assessment tools. This factors clarify objectives related to instruction for monitoring student performance. Orderly and safe schools describe that atmosphere of school is orderly. This factor guides to create an environment that must be conducive for learning without being rigid. It should not be oppressive but quiet (Dos, 2014).

2.3.5.2 Edmonds (1982): Edmonds (1982) identified five concrete and crucial factors of effective schools: educational manager's leadership and focused quality of education: instructional attention; conducive learning, safe and orderly climate, teacher performances and, to achieve mastery, and as a foundation for evaluation of program, use of methods of learner success.

Figure 2.14

Edmonds (1982) factors of school effectiveness

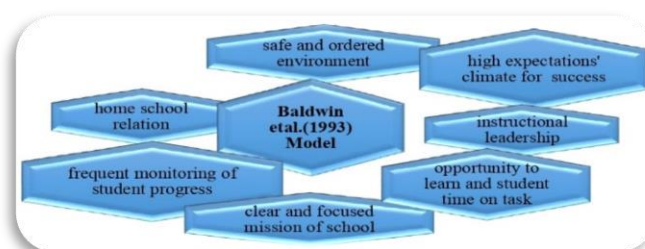


Note. Pictorial presentation created by Sagheer (2022).

2.3.5.3 Baldwin et al. (1993) factors: They presented a school effectiveness model based on factors: (effective Instructional Leadership), (clear, and Focused Mission), (safe, and Orderly School Environment), (positive School Climate), (high Expectations for Students), (frequent Monitoring, of Student Achievement), (emphasis on Basic Skills, Acquisition), (maximum Opportunities for Learning), (parent, and Community Involvement), (strong, Professional Development Programs for Teachers), and (teacher Involvement, in Decision Making) are some of the factors described by them. In (2001), the above reported factors were modified and were limited to the seven school effectiveness factors which were the part of this study to examine school effectiveness.

Figure 2.15

Baldwin et al. (1993) factors

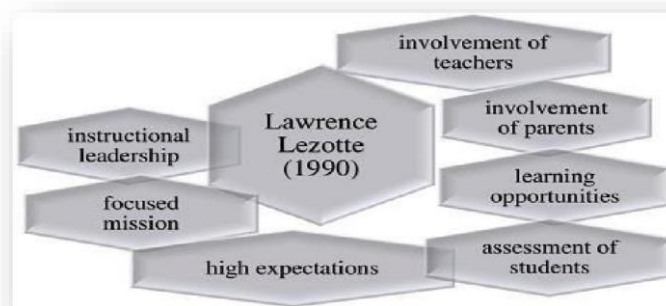


Note. Pictorial presentation created by Sagheer (2022).

2.3.5.4 Lawrence Lezotte (1991): The researchers also identified similar seven qualities of effective schools. These are: strong Instructional Leadership, focused and clear mission, high expectations, assessment/monitoring of student frequently, learning with maximum opportunities, and involvement of parents and community.

Figure 2.16

Lawrence Lezotte (1991)

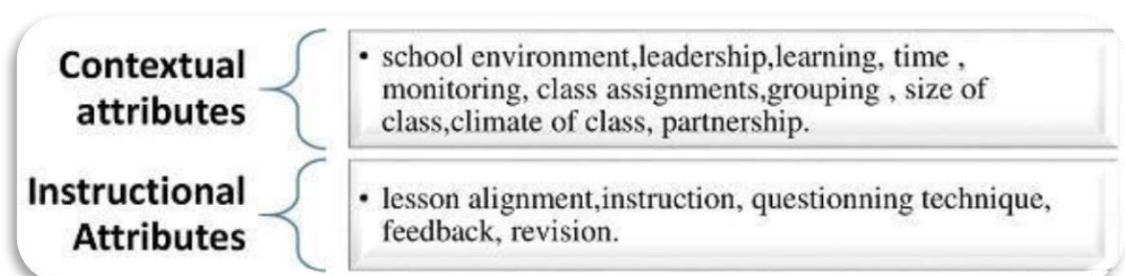


Note. Pictorial presentation created by Sagheer (2022).

2.3.5.5 Cotton's (2000) factors: Her research revealed connections amongst factors, allowing to create her own list of SE practices. Contextual attributes of Cotton (2000) discussed safe, and ordered school environment; Strong managerial leadership; Chief emphasis on, learning; Maximum time, for learning; Monitor improvement of student; Academically, varied class assignments; Flexible grouping in class; Small size of class; Supportive climate, of classroom; Involvement of community and parent. While instructional attributes focused careful alignment to lessons focusing on clear instruction, techniques of effective questioning, re-enforcement and feedback, and reviewing teaching as needed.

Figure 2.17

Cotton (2000) factors of school effectiveness



Note. Pictorial presentation created by Sagheer (2022).

The attributes those identified by Brookover and Lezotte (1979) and Edmonds (1979) were closely related to above mentioned attributes. In 1990, the School Effectiveness Questionnaire (SEQ) was created by educational investigators in the Orange County School District in central Florida. After a thorough assessment of the literature on effective schools, a committee on district level personnel and educational managers from different elementary and secondary schools as well as parent and community representatives, prepared a questionnaire. Despite the fact that the features of efficient schools varied to some extent from research to study, the committee selected 11 similar elements of school effectiveness of Baldwin et al. (1993) based on the literature.

2.4 Previous Researches

Craig (2021) found that school leaders can shape the goals and actions as well as motivate others by setting missions, visions and values. The study of Parlar, Turkoglu and Cansoy (2021) reported instructional leadership practices are significantly related to collaborative culture. Findings from the study of Shava, Heystek and Chasara (2021) revealed that educational managers play a vital role in nourishing improvement of school. Their findings strengthen current works that ascertain instructional leadership as a keystone for school effectiveness. Findings revealed in service teachers' perceived self-efficacy in student engagement were lower than that of classroom management and instructional strategies (IS) associated with inquiry-based teaching. Findings of a Meta-analysis done by Tan et al. (2020) are also along the lines, describing the effect of instructional leadership regarding institutions' results and climate. They found the effect of IL on school culture, and climate to be .55. While Hallinger et al. (2020) relating the school mission as a key role of educational managers. According to Espuny et al., (2020) Portuguese leaders focused to be bureaucratic leaders rather than instructional leaders. They were supposed to enforce national policies rather than engage in educational matters with teachers. So, they do not perform their duties as a facilitator for classroom matters.

In Iran, Hallinger and Hosseingholizadeh (2020) reported that most educational managers were assisted by their vice educational manager and curriculum leaders in instructional matters at the district level. They were responsible for tracking the success of students and for curriculum issues. Therefore,

educational managers appear not to be involved in monitoring student progress and curriculum coordination. A study done by Bay (2020) revealed that preschool teachers' self-efficacy belief was affected by the age of teacher, seniority, kind of school, and strength of the class, but the levels of their self-efficacy and CM skills were high. In addition, a positive, moderate, and strong relationships among preschool TSE and classroom management skills was also observed. Likewise, an article by Stuart Woodcock and Garry Jones (2020) explored higher levels of teacher self-efficacy at secondary level schools.

According to Duyer et al. (2019), educational managers played their part as IL in public private institutes differently. They found public sector educational managers were less rigid regarding their traditional beliefs as compared to their peers who are performing in private sector schools. Likewise, the study of Flores and Ferreira (2019) was consistent with their work. Safitri et al. (2019) discovered that four of the seven school effectiveness factors have met with their targeted school. These factors were (1) CFM, (2) IL, (3) MSPF, and (4) RSH. In contrast, the dimensions needed to be further improved were 1) SOE, (2) HEC, and (3) OSLTT. In order to increase school effectiveness in the three unfulfilled categories, their research discovered that developing quality classroom management was thought to have the potential to progressively transform the entire school environment into successful teaching.

Bal (2019) reported the importance of instructional leadership to provide a learning environment. However, Agasisti et al. (2019) found that educational managers seldom managed students' work, offered feedback to teachers to enhance their teaching, and seldom or never observed educational activities in the classroom. In secondary school, Dandi Woreda Kabene and Mamo (2019) identified ineffective practices of school educational managers based on instruction management. They were involved in the difficult task of management without having prior trainings. They were also incompetent in promoting professional competence of teachers. Furthermore, the study revealed a lack of communication skill of EM, that delay appropriate application of school based management.

Additionally, Skelton (2019) reported that male educational managers were better in communicating school goals more often than female educational managers. Shaked (2019) identified three perceptual inhibitors of instructional leadership: (a)

Educational managers' assumed that their connection with teachers was particularly important, but they had fear that monitoring can damage their relation with teacher. (b) Educational managers gave secondary importance to their instructional leadership role; they mainly focused on their connections in school and outside participants. (c) In their schools, educational managers' assign much significance to the nonacademic, humanistic, socializing goals of schooling, rather than to the function of improving educational process.

The earlier research studies count that leaders' role as educational managers influence the success of school (Gray, 2018). Likewise, Barni et al. (2018) showed the effect of teachers on school. They described that teachers make stronger school effectiveness and work for student engagement, create better classroom management and use modern instructional strategies. The reason may be that presently teachers are held more accountable for their performances due to strict monitoring system of the government then it was done in the past. Bellibas and Liu (2018) focused on strong practices of EMIL which were: direct classroom supervision, functioning collaboratively with teachers, assisting teachers, secure resources, and providing staff development activities.

On the contrary Lack (2018) conducted research on school climate and teachers' sense of self-efficacy and found that there was no correlation between school climate and teacher efficacy. Furthermore, other study (Hallinger, 2018) correlated with the dimension managing instructional programs with teachers' sense of self-efficacy. The findings of Saeed and Khan (2018) described that educational managers monitor students' academic results on regular basis. The results of Park (2016) are not in conformity with the results of this study as they reported that educational managers need to offer effective systems for incentives or punishment to motivate teachers. Based on a synthesis of more than 40 empirical studies, Hallinger (2018) described that educational manager IL had a small, and indirect, but significant influence on learning outcomes of students. Similarly, some researchers, for example, (Glanz & Gross, 2018; Harris et al. 2018) identified that educational managers' individualities influenced their role as instructional leaders on learning and teaching. Yagmur (2018) also favors that educational managers' practice instructional leadership. Qualitative study by Turkoglu and Cansoy (2018) also elaborated the same results.

Khun-inkeeree et al. (2018) focused on three dimensions of instructional leadership model (Hallinger & Murphy, 1985, 1986). Their results showed significant relationship among EMIL and TSE. The study conducted in China found a significant relationship among EMIL and TSSE (Zheng, Yin & Li, 2019). As in another study for the improvement in teaching, instructional leadership was identified vital for teachers and students (Qian et al., 2017). Earlier, a qualitative research by Gunawan (2017) concentrated, on the profile of IL shown by the EM of Junior High School, Malang City. Interviews, observations and documentations were used as the tools for data collection. Miles and Huberman's interactive model was used for analysis. Their findings indicated that the actions of the educational manager were according to the mission, and vision of school. They developed curriculum for achievement of vision, mission and objectives of the school. They improved the schools, and worked hard to achieve the success of the school as a learning organization. They created an innovative conducive learning school climate and managed learners in order to develop schools' capacity. Isa et al. (2018) conducted a quantitative cross-sectional survey involving a public school and a privately-run school in Kuala Lumpur, Malaysia. They used PIMRS for Ems and TSES for teachers. Findings of their inspection showed a strong, and progressive connection amongst the educational managers' supposed IL practices and the teachers' SE. The responses of the participants of the current research echoed the results of Urlick and Bowers (2017). They identified PPD of teachers, supervision of instruction, setting goals, and vision for school as practices of instructional leadership of educational managers. They concluded that educational managers from 20 countries did not have common understanding about instructional leadership practices.

Emin Turkoglu et al. (2017) found teachers' self-efficacy was a reliable indicator to deal with problems that students face and their efficacy as teachers. These finding are in line with the current study. According to Ali (2017), no clear standards for school effectiveness were given in research studies and education policies of Pakistan. It is also evident, that (NEP, 1998-2010) has visibly voiced the shortfall of dimensions of effective administrative. Sisman (2016) reported the effect of instructional leadership on some functions like safe environment. Sankey (2017) described that a strong educational manager could manage well internal and external order in shaping effective school climate for school effectiveness. Another study

also found that teacher self-efficacy affects students' engagement, instruction, and classroom management (Fackler et al., 2021). The result of researches as cited by Lazarides and Warner (2020) showed that teachers who have a high level of self-efficacy are more open to new teaching methods, set challenging goals, exhibit a greater level of planning and organization, enjoy solving problems, and can adjust their teaching strategies when they encounter problems or difficulties.

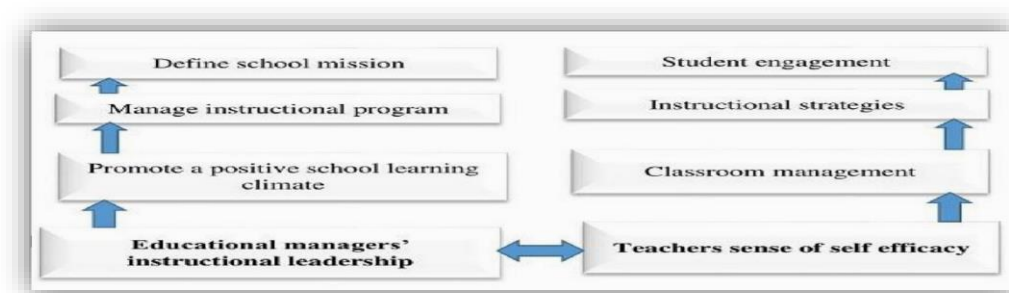
Hassan (2017) has concluded that the key and core factors for school effectiveness were shaping mission, and communicating the school goals. The results of his study showed that an instructional leader can raise the spirits of teachers for professional development and enhance the sense of self-efficacy. The study by Bellibas and Liu (2017) found a significant relationship between EMIL and TSSE. Regarding Protecting Instructional Time (PIT), Harris et al. (2017) explained that educational managers in Malaysian public schools did not take responsibility to perform PIT as instructional leadership function.

2.5 Relationship between educational managers' instructional leadership and teachers' sense of self-efficacy

According to Goddard et al. (2020), educational managers' efficacy beliefs for instructional leadership positively and significantly associate with teachers' collective self-efficacy, which as a result led to students' achievement. In connection with history, a review of earlier researches identifies connection of leadership practices and TSSE, showed a positive and significant relationship among these two variables.

Figure 2. 18

Pictorial Representation of Relationship of IL and TSSE



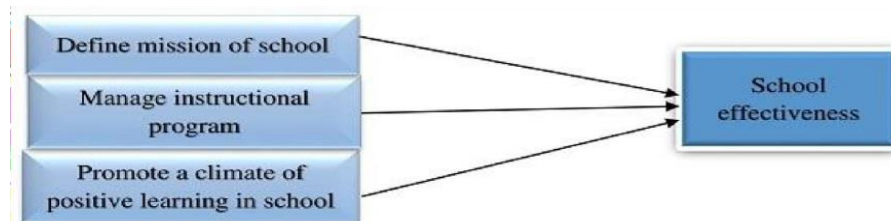
Note: Picture is prepared by Sagheer (2022). It shows relationship of independent variables between them.

2.6 Effects of Instructional Leadership on School Effectiveness

Murphy et al. (2016) compared less and more effective schools. He identified that more effective schools use instructional leadership frequently. As a result, instructional leadership was regarded as critical to effectiveness of school (Chaseling et al., 2017). While, some researchers' (Abonyi & Sofu, 2019) and (Si-Rajab et al., 2019) recognized IL as reliable feature for SE research. Liu, Bellibas, and Gumus (2020), stated that school educational managers' IL describes actions and practices that they carry out to improve the results of school. Among these tasks, according to Si-Rajab et al. (2019) student achievement, and quality of teaching, and learning were main concerns of instructional leaders. The correlates of effective schools that had been adopted by numerous researchers for determining the effectiveness of schools were the concepts of Edmonds (1986), Lezotte (1991) and Baldwin et al. (1993). These connects of SE had been associated with student's achievement. Distinctive characteristics empower pupils to study the important knowledge and skills to attain high results in spite of their previous experiences (Magulod, 2017).

Figure 2.19

Pictorial Representation of connection of Instructional Leadership and School effectiveness



Note: Picture is prepared by Sagheer (2022). It shows relationship of one independent variable and one dependent variable.

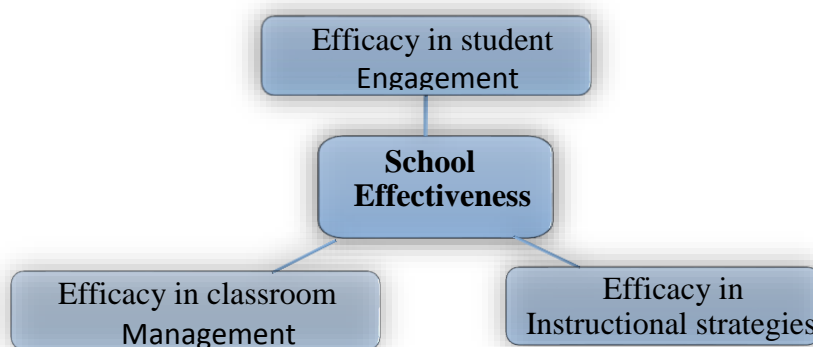
2.7 Effects of Teachers Sense of Self-efficacy on School Effectiveness

Very earlier Dembo and Gibson (1985) highlighted teachers' sense of efficacy as an important factor in school improvement. Recently the researcher found studies related to relationship between school educational managers' leadership behaviors and teachers' sense of self-efficacy (Mehdinezhad & Mansouri, 2016), relationship

of teachers' values (i.e., conservation, openness to change, self-transcendence, and self enhancement) and their self-efficacy (Barni et al., 2021), consequences of teachers' self-efficacy (Alibakhshi et al., 2020), positive relationship between teacher self-efficacy and student academic achievement (Shahzad & Noureen, 2017), interconnectedness among self-efficacy and teacher effectiveness (Karim et al., 2021). They further highlighted that numerous studies have demonstrated that teachers with better aspects of self in teaching abilities can help students attain higher levels of accomplishment in a range of areas. But no study during the literature review was found related to the connection under investigation.

Figure 2.20

Pictorial Representation of connection of teachers' sense of self-efficacy and School effectiveness



Note: Picture is prepared by sagheer (2022). It shows relationship of independent and dependent variables.

Section IV:

2.8 Discussion of literature cited

The Literature review of the current research has shown that educational managers skills related to defining mission of school, manage instructional program for promotion of a learning environment for effective school, and teachers' sense of self-efficacy about student engagement, instructional strategies and classroom management effects school effectiveness. From this body of research, one can conclude that effective school educational manager's instructional leadership is

critical for the development of teachers' instructional practices for an effective school. In particular, the following discussion is a synthesis of the literature reviewed on IL, TSSE and SE.

Firstly, the review focused on concept and three dimensions of instructional leadership: defining school mission, managing instructional program and promoting positive climate for school. Secondly, it discusses the second variable teachers' sense of self-efficacy which defines sense of self-efficacy with reference to efficacy in: student engagement, instructional strategies and classroom management. Lastly, the literature highlighted factors: (safe and ordered environment, high expectation's climate, instructional leadership, opportunity for student to learn through time on task, clear-cut focused mission, monitoring of student's progress frequently, Relationship of school and home), of school effectiveness. This review objectively evaluates and clarifies previous researches in the related topics.

In first section the research has made it possible to address the weak areas which was either neglected or not addressed by the previous researches on perceptions of educational managers' instructional leadership. Literature shows that Craig (2021) has not addressed the relationship of instructional leadership with teachers' sense of self-efficacy. He focused instructional leadership practices and discussed importance of IL for defining goals for school. Further in literature Tan et al, (2020) in their research discussed the IL as a chief indicator for school results and climate, but ignored teachers' sense of self-efficacy for school success and related factors. Moreover, some researches (e.g, Goddard et al., 2020; Zheng et al., 2019; Isa et al., 2018; Khun-inkeeree et al., 2018) were added in the literature which addressed relationship of instructional leadership and teachers' sense of self-efficacy for student achievement but ignored the importance of both the variables for school effectiveness. Ali (2017) did not recommend factors to measure school effectiveness, as he discussed the lack of identified factors for school effectiveness in the education policies of Pakistan. Likewise, some studies in the literature review (Liu et al., 2020; Abonyi & Sofu, 2019; Chaseling et al., 2017; Murphy et al., 2016) also focused effects of instructional leadership on school effectiveness, but they did not add teachers' sense of self -efficacy as an important factor for SE. Dandi et al.

(2019) carried out research on problems of instruction management, however missed teachers' sense of self-efficacy and factors of school effectiveness. Overall scrutiny of the literature highlighted that most of the studies did not address the sector wise and gender wise comparisons in the same study. Shahzad and Naureen, (2017) observed that Pakistan is facing a great shortage of quality teachers in terms of self-efficacy beliefs. Most of the teachers do not utilize their efficacy skills while they are in the field. But they do not discuss instructional leadership in their study. In the same context, Ahmed, Khan and Rehman (2015) conducted a comparative study to investigate the sense of teacher efficacy between male and female school teachers of District Attock. But they ignored sector wise comparisons.

Moving to the theoretical framework for the study this research used instructional leadership model, Tschannen-Moran and Colleagues' Model 1998, and school effectiveness factors. Instructional leadership model used in this research focuses on three dimensions: "defining school mission", "managing instructional program" and "promoting positive climate for school" (Iqbal, Nasrullah, & Amin, 2021). Instructional leadership remains relevant even after more than three decades. This situation can be substantiated by the diversity of instructional leadership models resulting from the efforts of western and local scholars (Samichan, Yunus, Awang, & Beram, 2021). So various models (e.g., Dwyers, 1984; Hallinger & Morphy, 1985, Murphy, 1990; Dufour, 1998; Alig-Mielcarek, 2003) exist in literature which elaborates the concepts of instructional leadership. Dimensions related to these models have been shown in the given Table (2.3):

Table 2.3

Dimensions of instructional leadership in different models

Dwyer (1984)	Hallinger & Murphy (1985)	Murphy (1990)	Dufour (1998)	Alig- Mielcareks (2003)
Define mission of school	Defines school mission	Developing mission and goals	Vision	Defines and communicate shared goals

Planning and supervising	Manage instructional program	Managing educational production function	Collective inquiry	Monitors and provide feedback on teaching and learning process
Evaluating student's achievement and teachers performance	Develops a positive school learning climate	Promoting an academic learning climate	Actions and experimentations	Promote school wide professional development
		Developing a supportive work environment	Continued improvement	
			Good results	
Instrument				
PIMRS				

The discussion of these models is an emphasis on strong, instructional leadership for school effectiveness. Among these models current research focused instructional leadership model developed by Hallinger and Murphy (1985) for the following reasons.

- 1) In this model the most prevalent conceptualization of educational managers' instructional leadership was discussed. Hallinger and Murphy defined IL in terms of the behavior of the educational manager which targets an improvement and promotion of teaching learning process. Therefore, this model was used as a theoretical frame work for this research. This model proposed three dimensions included ten instructional leadership functions:
 - Framing the school goals
 - Communicate the school goals.

- Supervise and evaluate instruction.
- Coordinate curriculum.
- Monitoring student progress.
- Protecting instructional time
- Maintaining high visibility
- Providing incentives for teachers
- Promote professional development
- Provide incentives for learning

Define a school mission refers to the educational manager's responsibility for articulating and communicating a direction for learning, as well as building support for enacting the mission in the life of the school. Manages the instructional program refers to leadership actions that develop, coordinate and monitor the quality of teaching and learning. Promote a positive school climate describes the role educational manager play in creating conditions that motivate and support teachers and students towards productive engagement in the school.

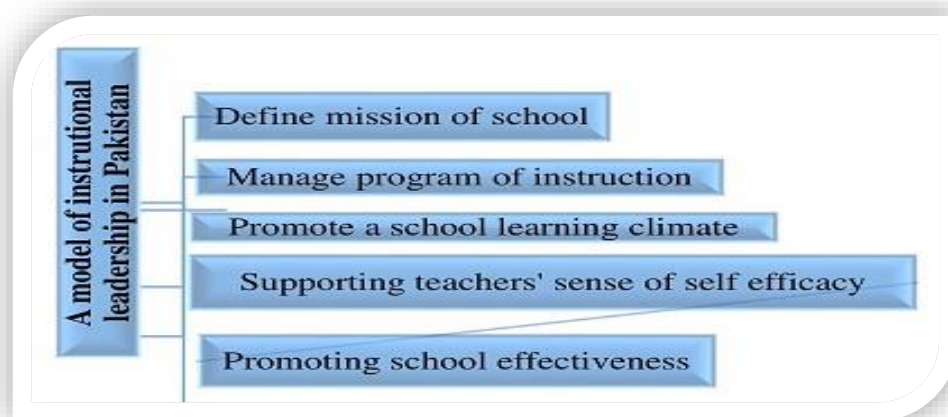
- 2) Due to its reliability, as more than 500 studies have been completed using this framework and associated survey instrument, the Principal Instructional Management Rating Scale (PIMRS). Notably, these PIMRS studies offer considerable empirical support for this study (Hallinger & Murphy, 1985; Hallinger & Wang, 2015; Hallinger et al., 2017).
- 3) This model of school educational manager's leadership was chosen due to the extensive research and meta-analysis that described the influence of this model appears to have had on student learning (Day et al., 2016).
- 4) Another reason of the adaptation of this model for the current research was that researchers, who have adopted this model, have successfully investigated basic educational managers' instructional leadership behavior. They used Hallinger's main rating instructions (PIMRS), consisting of 50 behaviors related to instructional leadership, which have great impact on the quality of

school. Several studies have used the PIMRS (e.g. Isa et al., 2018; Salazar, 2014; Horton, 2013; Rew, 2013; Dale & Phillips, 2011). These studies find that educational managers can strengthen teachers' self-efficacy by articulating an inspiring vision of learning for the school, setting attainable goals with teachers, clarifying standards of teacher and pupil performance, clarifying how teacher actions can positively impact students learning for success. But no one study highlighted IL effect on school effectiveness.

When the models of instructional leadership are examined, it seems that in order to create an effective school environment, school educational manager have to both fulfill their own responsibilities and IL to support teachers and effect other stake holders (Ozdemir, Sahin & Ozturk, 2020). Therefore, the researcher added one dimension in instructional leadership model of Hallinger and Murphy (1985) for Pakistani context.

Figure 2.21

A five dimensional model of instructional leadership in Pakistan



Note: Picture is prepared by sagheer (2022). It shows an addition of two dimensions as an addition of two dimensions in earlier proposed model of IL to get indepth understanding about educational managers' IL.

The review also discusses the second variable teachers' sense of self-efficacy. Various theories (e.g., Social Cognitive Theory (SCT, Bandura, 1986); Social Learning Theory (SLT, Rotter, 1966), Self-Efficacy Theory, (SET, Bandura, 1977)

exist in literature which elaborates the concepts of teachers' sense of self-efficacy. Dimensions associated with each theory have been shown in the given Table (2.4):

Table 2.4

Different theories of sense of self-efficacy

Social cognitive theory Bandura 1986	Social Learning theory Rooter 1966	Self-efficacy theory Bandura 1977	Tschannen-Moran and Colleagues' Model 1998
I. Personality behavior	I. Behavior potential	I. Performance accomplishment (Past experiences)	i. Efficacy in student engagement
ii .Social environment factor	ii. Expectancy	ii. Vicarious experiences (modelling by others	ii. Efficacy in instructional strategies
iii. Cognitive personal factor	iii. Reinforcement value	iii. Social persuasion (coaching and evaluative feedback)	iii. Efficacy in classroom management
	iv. Psychological situation	iv. Psychological and emotional states	
			Instrument (TSSE)

The discussion of these theories in literature is an emphasis on teachers' sense of self-efficacy with different perspectives. Among these three theories and a model current research focused Tschannen-Moran et al. (1998) for the following reasons:

1. Tshannen-Moran et al., (1998) developed Teachers Self-efficacy (TSES) on the basis of their model in 2001 which was used in this research to collect responses from teachers.

2. Due to the proved construct validity and reliability of the associated research instrument TSES. Which has been widely tested and supported in other studies (Michaela & Armando, 2022; Holzberger et al., 2013).

After the discussion it appears that in the area of education, when looking for possible variables that could explain and determine the quality and effectiveness of teachers' Tschannen-Moran et al. (1998) adapted the concept of Bandura's SSE to the teaching context defining it as the beliefs teachers hold towards their capabilities to improve the overall teaching-learning process (Chesnut & Burley, 2015; Michaela & Armando, 2022). So after discussion of different theories in review and examining the outcomes, the researcher framed two new dimension for teachers' sense of self-efficacy for Pakistani context.

Figure 2.22

Teachers' self-efficacy in Pakistan can be observed through following five dimensions



Note: Picture is prepared by sagheer (2022). It shows five dimensions of TSSE.

In the above diagram the current study tried to explain that in an effective school if a teacher has efficacy in five dimensions: student engagement, instructional strategies, classroom management, instructional leadership, and school effectiveness factors can play an efficacious role for the overall improvement of education. Efficacy in school effectiveness factors relate to efficacy in related seven factors which have been selected for the current research. The study further highlighted different factors of school effectiveness which are shown in Table (2.5):

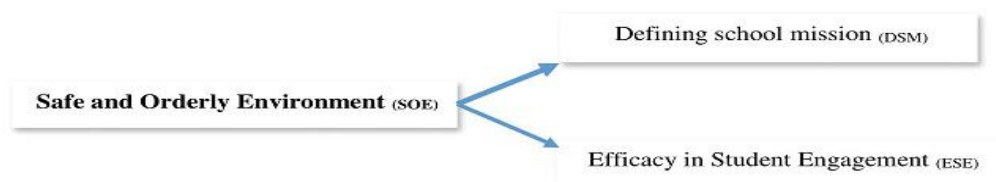
Table 2.5*Different factors of school effectiveness*

Edmonds (1979)	Edmonds (1982)	Baldwin et al (1993)	Lawrence Lezotte (1991)	Cotton (2000)
Strong managerial leadership	Educational managers' leadership	Safe and ordered environment	Involvement of teachers	Contextual attributes (school environment, leadership, time,
Emphasis on basic skills	Focus on instruction	High expectations for success	Involvement of parents	monitoring, class assignment, grouping, size of
High expectations for success of students	Learning and safety	Instructional leadership	Learning opportunities	class, climate of class, partnership).
Regular monitoring of performance of students	Teachers' performance	Opportunity to learn and student time o task	Assessment of students	Instructional attributes (lesson alignment,
Orderly and safe schools	Use of methods for student success	Clear and focused mission	High expectations	instruction, questioning technique, feedback, revision)
		Frequent monitoring of student progress	Focused mission	
		Home school relation	Instructional leadership	
		Instrument		
		SESQ		

A synthesis of different school effectiveness factors, suggested current research to focus the generalizable factors presented by Baldwin et al (1993), e.g safe and ordered environment, high expectation's climate, instructional leadership, and opportunity for student to learn through time on task, clear-cut focused mission, monitoring of student's progress frequently, Relationship of school and home, of

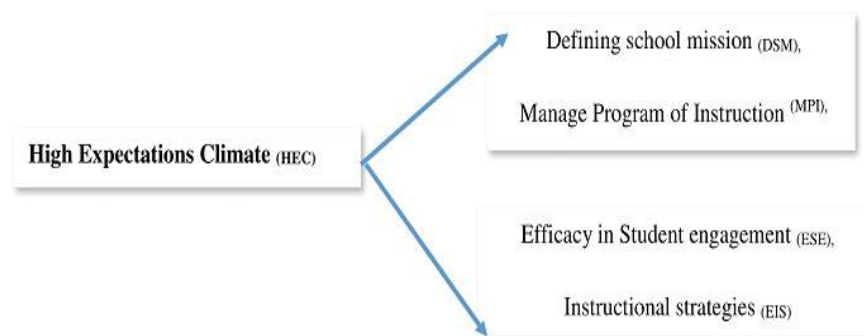
school effectiveness. These factors are aligned with the study variables IL and TSSE. This research interprets the relationship of IL model and TSSE.

1. Safe and orderly environment: It is one of the identified factors in an effective school. It is hypothesized that effective schools maintain a safe and orderly environment. The basic question is what is the safe and orderly environment? It is possible to define a safe and orderly environment as one in which students and teachers do not have to fear physical violence. The researcher interprets a safe and orderly environment as one which provides much more than freedom from fear of physical violence. It is an environment in which educational manager can frame and communicate goals for school. It is an environment in which each participant in the educational process knows his/her role and is given the means and methods whereby to complete the tasks which are assigned according to that role. So in a safe and orderly environment teacher have ability to deal with most difficult students, improve their critical thinking, motivate them for learning, encourage them to do well in school work, foster their creativity, try to improve understanding of weak students and assist parents to help their child to perform well. This study provided an in-depth understanding of safe and orderly environment through the practices of educational manager's instructional leadership regarding defining school mission and teachers sense of self-efficacy about efficacy in student engagement. Side by side educational managers and teacher convey conduct rules, concept of social behavior, how we can keep our school nice-looking, and involvement of every student in school activities.

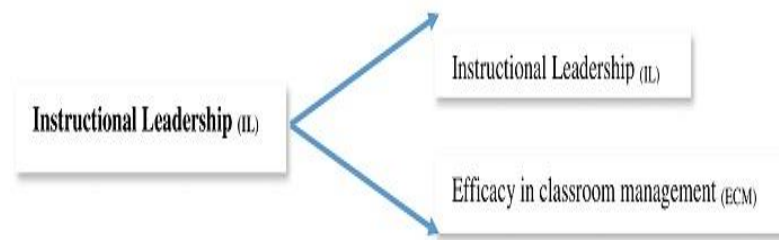


2. High expectations climate: The aspect of expectations is important to an effective school. If educators impart an attitude of high expectations to students, the results are likely to be high accomplishments by those students. It is important that while the expectations be high, they must also be reasonable and realistic. There will be some students who are capable of achieving more than others, but all students can

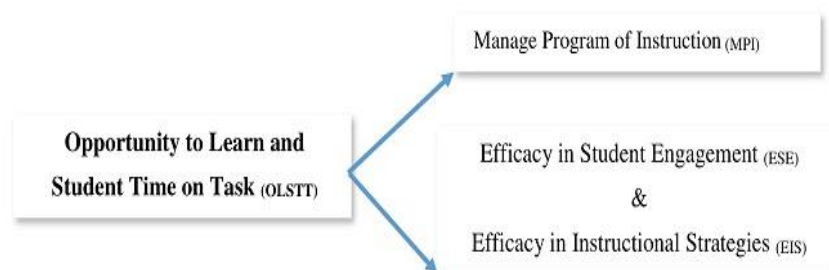
be expected to achieve basic and minimal competence in essential skills areas. School effectiveness research indicates that students perform better in a climate of high expectations than they would probably otherwise perform if expectations were lower. In this study in such climate educational managers expect that all students perform well. Teachers have strong communication with parents. They also expect that every student in class to learn.



3. Instructional Leadership: The term instructional leader is synonymous with educational managers for many individuals. He/ she is responsible for creating a climate in which the educational process is facilitated. The instructional staff (teachers) needs equipment, materials, time, and facilities to perform the teaching tasks. It is part of the job of the administrator/ educational manager to provide those items which are needed by the teachers to perform the teaching tasks for school effectiveness. Ignoring this need can lead to stagnation and ineffectiveness. The role of instructional leadership is to keep the school moving forward through monitor student progress, coordination of curriculum and continually striving for improvement in all areas of the school program. The elements which follow are perceived by the writer as being essential to the process of providing instructional leadership are that educational manager directs the setting of goals and objectives for the school. The educational manager provides opportunities for teachers to broaden their efficacy for class room management to control behavioral problems, manage activities so they can run smoothly, teach the learner to follow class room rules, calm disruptive, problematic and non-cooperative students. The educational manager may also supervise and evaluate instruction for school effectiveness.

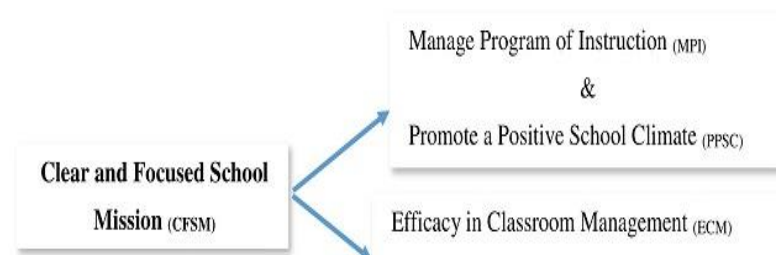


4. Opportunity to Learn and Student Time on Task: The primary function of school is to provide students with the opportunity to learn. Time allotted for learning has no meaning if students do not spend that time on tasks which result in learning. It is necessary that the faculty, administration, and staff provide the supplies that are necessary to help keep the students on task and to keep any interruptions of the instructional time at a minimum. The following section lists suggestions that can serve to enhance opportunity to learn and time on task. The educational manager schedules time to manage instructional program. A variety of teaching methods are used in order to widen appeal to students and raise interest. Pull out programs are planned so that there is a minimum of interruption to the regular instructional program. Interruptions of class time are kept at a minimum. Teachers closely monitor seat work. Teachers set a good example by modeling courteous behavior and urge acceptance of individual characteristics by: honoring quiet and orderly procedures, discouraging distractions of any nature, respecting student's abilities to do school work, permitting variety in responses to assigned tasks.



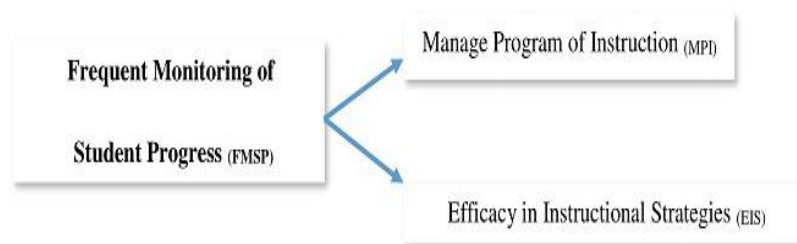
5. Clear and Focused School Mission: Common understanding provides a base on which trust and respect can be built. Schools which are composed of individuals who share a common commitment to what is being done, and understand why it is being done, function more effectively than one in which the individuals do not share a common commitment. It is necessary for faculty, staff, administration, and students to clearly understand what the school is supposed to be doing to function effectively.

A list of practices that can be implemented to communicate the mission of the school to all participants in the educational creativity are linked with managing instructional program. Supervise and evaluate instructions by the educational manager is top priority. Coordination of curriculum exist for improved classroom management. Classroom instructional time is rarely interrupted. Teachers have the opportunity to update instructional skills and techniques through in-service professional development opportunities. All students can craft good questions. Provision of alternate challenges are coordinated with the classroom program. Improving self-efficacy in students as all students are expected to achieve. Pride in self and school is fostered. Proper social behavior is emphasized and teachers have ability to calm disruptive students. Students are rewarded for academic achievement Rewards exist for teachers as well. Frequent communication occurs with parents concerning the mission of the school. All these practices elaborate that an effective school needs instructional leadership and teachers' sense of self-efficacy.

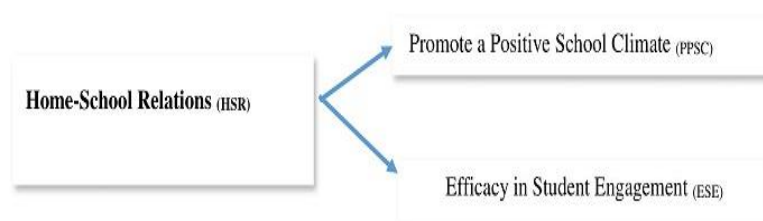


6. Frequent Monitoring of Student Progress: This factor relates with the second dimension (managing instructional program) of instructional leadership and second dimension (efficacy in instructional strategies) of teachers' sense of self-efficacy. This factor explained that assessment of student progress needs to be an ongoing and perpetual process that takes place at frequent and regular intervals. Monitoring of student progress should take place on a daily basis and on a long term basis (weekly, monthly, semester, and yearly) may be available is to determine if progress is being made toward meeting goals and objectives. Primary function of monitoring is to provide feedback to educational managers, teachers, and students which can be used to reinforce, alter, or eliminate activities that are in practice to make instruction more effective. The elements which can be put into action to enhance the monitoring of student progress. The educational managers supervise and evaluate instruction. Sharing of achievement test results with parents frequently. Multiple and varied

assessment methods are used. Academic activities are running smoothly. Good communication exists with parents: alternate explanation of difficult concepts is provided or the purpose of improving the effectiveness of instruction. Organized plan exists to monitor progress through provision of appropriate challenges to individual students.



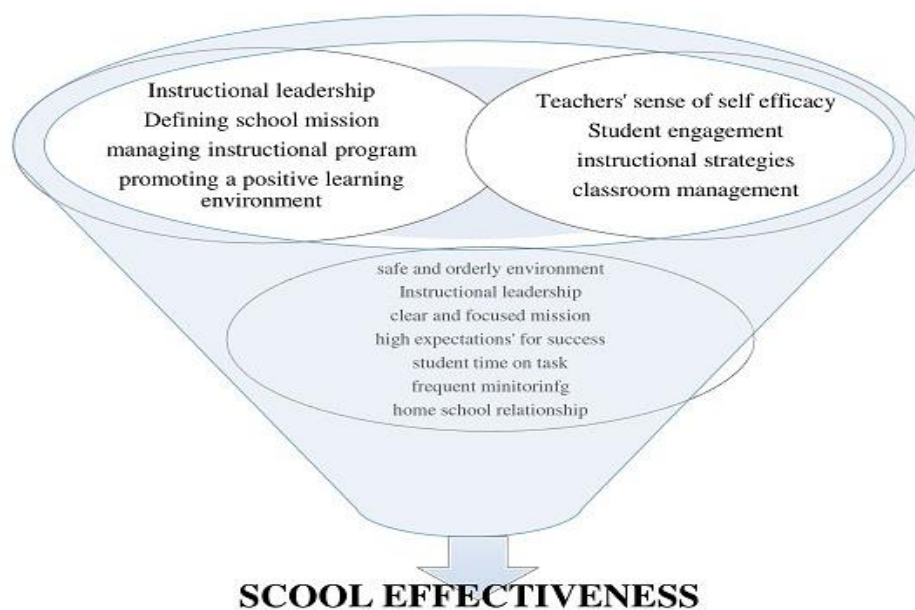
7. Home-School Relations: It is a factor which has great potential for having an effect on the overall school program. The cultivation and growth of good home-school relations is evident in all of the aspects that serve to make effective schools. The quality of communication between home and school is determined by an educational manager, teachers, as well as support staff's desire to promote good relations between home and schools. Coordinated monitoring of homework by educational managers as instructional leader covers their practice monitor student progress (MSP). This factor also improves teachers' sense of self-efficacy in student engagement. The promotion of good home-school relations can help to encourage participation of parents, which in turn increases the probability of success for the overall school program. Moreover, teachers to improve understanding of students through a strong management of instructional program by the educational managers' instructional leadership. Likewise, Home-School relations is linked with handling of difficult students through parent teacher meetings. Motivate students, develop their critical thinking, improving self-efficacy, and foster creativity in students, an open door policy which allows parents to visit the school.



The above discussion reveals that all seven factor related to school effectiveness are based up on the functions of instructional leadership and dimensions of teachers' sense of self-efficacy. All the variables are inter linked with each other, but in the current research responses of educational mangers were collected through PIMRS. While teachers responded on TSES. the study added responses of students through SESQ without emerging all the instrument to collect response of key stake holders of the secondary level school respectively To get in-depth knowledge to develop an effective school. Summary of above discussion have been shown in the following diagram:

Figure 2.23

Summary of discussion on literature



Created by Sagheer (2022)

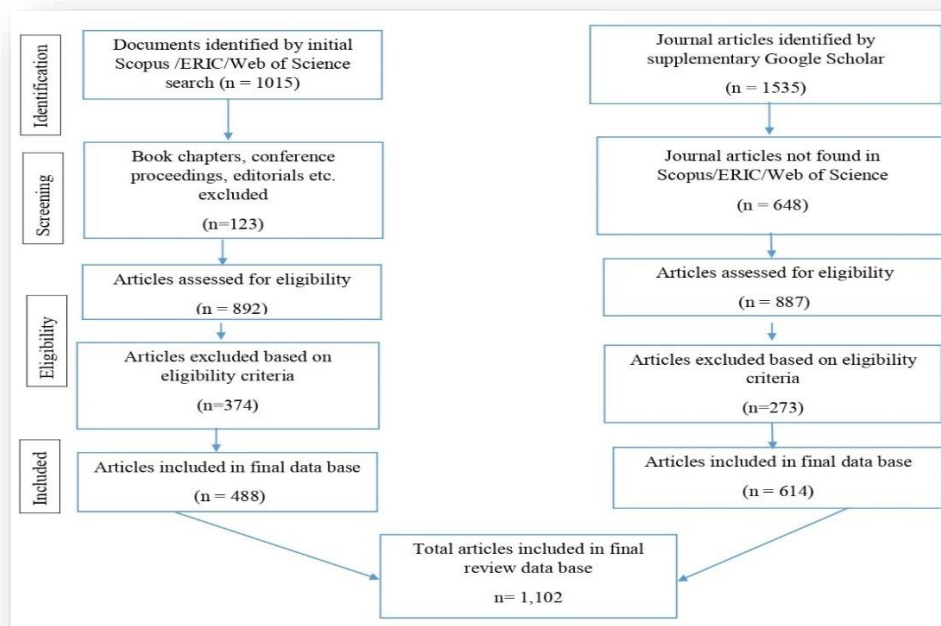
2.9 Current emphases of the instructional leadership, sense of self-efficacy and school effectiveness literature from 2017-2019

The most frequent occurring keywords in our document database were school leadership (23 occurrences), instructional leadership (71), principal (13), teacher (10), school (3), School leadership (12), teachers' professional development (5), school management (8), school improvement (22), student achievement (21),

leadership styles (30), leadership for learning (7), education policy (17), teacher evaluation (15), educational reforms (27), pedagogical leadership (28), leadership for learning (13), self-efficacy (13) sense of self -efficacy (18) teachers' self-efficacy (22) teachers' sense of self- efficacy (58), school effectiveness (56), school improvement (27) . These keywords highlight models of school leadership, theories of sense of self-efficacy, factors of school effectiveness, sources of instructional leadership, sense of self-efficacy, context in which leadership, self-efficacy and school effectiveness is enacted and the range of instructional leadership and sense of self-efficacy effects studied in this literature. The researcher followed PRISMA for the literature search as described in diagram (2.24):

Fig. 2.24

PRISMA flow diagram detailing steps in the identification and screening of sources for this review of research on instructional leadership, sense of self-efficacy and school effectiveness (Moher et al. 2009)



Guidelines provided by Moher et al. (2009) for conducting systematic reviews of research (Moher et al. 2009) the researcher followed PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). Steps described in Figure 2.1 guide the identification of documents. The search began with several distinct combinations of

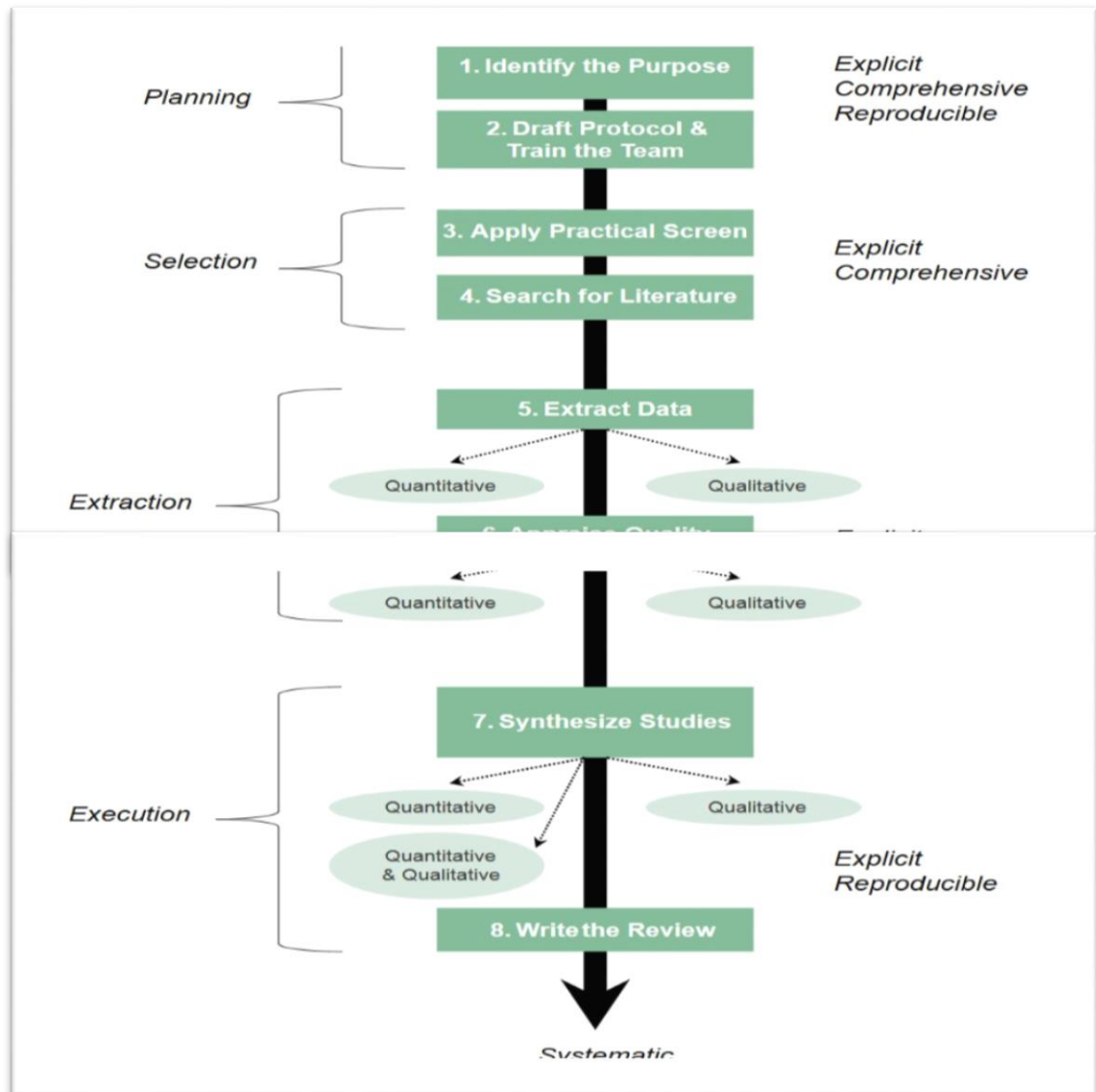
search terms that included ‘instructional leadership’ ‘leadership for learning’ and ‘learning centered leadership’ “Teachers self-efficacy” “Teachers sense of self-efficacy”, “Efficacious teachers”, “school improvement”, “school effectiveness”, “School success”. Finally, arrived at the following keyword string. TITLE-ABS-KEY "instructional leader*" OR "leadership for learning" OR "leadership of learning" OR "pedagogic leader*" OR "pedagogical leader*" OR "pedagogical leadership*" OR Self-Efficacy” *, OR “Sense of Self-Efficacy” * OR “Self-belief” *OR “Self-Confidence” *OR “Belief in one self” *OR “can do attitude” * OR “Pride in one self-abilities” * OR “School success*” OR “School efficiency” *, OR “School Improvement” *.

In addition, for Systematic Literature Review (SLR) the researcher selected a total of 25 exemplars from 2012 to 2023 (see Table 2.6 & 2.7). Of these 20, one was meta-analysis, two contained both causal comparative and correlational, four were of MMR and the rest employed exclusively quantitative survey design. Discussion included detailed construct development of topics such as IL behaviors (Bauiol & Celso, 2023; Kahn, 2022; Saeed, 2019; Turkoglu & Cansoy, 2018), leadership behaviors (Maqbool, 2017), self-efficacy beliefs in teachers (Khan & Hafeez, 2021; Nemat-Ullah, 2020; Qamar, 2020; Shamim-Ullah, 2020; Hassan, 2020; Munir, 2017; Mahfooz-ul -Haq, 2013), School effectiveness (Sami, 2016), principals’ intervention for SE (Parveen 2014), self-efficacy and student academic achievement (Gulistan, 2015), and TSSE, locus of control and teaching methods on student achievement (Mehboob-ul-Hassan, 2020). The researcher followed following eight steps to conduct SLR:

1. Identify the purpose
2. Draft protocol and train the team
3. Apply practical screen
4. Search for literature
5. Extract data
6. Appraise quality
7. Synthesize studies
8. Write the review

Figure 2.25

A Systematic Guide to Literature Review Development



Note: adopted from Okoli (2015).

Table 2.6*Literature Review 20 Exemplar Reviews*

Citation	Synthesis type	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
Baki, (2020)	Quantitative	☐	☐	☐	☐	☐	☐	☐	☐
Munna (2022)	Case study	☐	☐	☐	☐			☐	☐
Robinson (2020)	Qualitative		☐	☐			☐		☐
Gray (2018)	Quantitative	☐			☐		☐	☐	☐
Shamim-Ullah (2020)	MMR	☐							☐
Nemat-Ullah (2020)	Survey	☐	☐	☐	☐	☐	☐	☐	☐
Ali Khan & Hafeez (2021)	Correlational	☐	☐		☐	☐		☐	☐
Mehboob-Ul- Hassan (2020)	Ex-post-facto	☐			☐				☐
Zara Khan (2022)	Mixed Method	☐						☐	☐
Shamim Ullah (2020)	Sequential Explanatory	☐	☐	☐	☐	☐	☐	☐	☐
Bal (2019)	Quantitative	☐			☐			☐	☐
Bozkurt (2019)	Mixed Method	☐							☐
Çalık and Kılınç (2018)	Qualitative	☐		☐				☐	☐
Turkoglu & Cansoy (2018)	Qualitative	☐		☐	☐	☐		☐	☐
Özdoğru (2020)	Qualitative	☐							☐
Topaloğlu (2020)	Qualitative	☐	☐		☐			☐	
Jabeen & Khan (2022)	Quantitative	☐		☐	☐	☐		☐	☐
Doğan, E. & Sönmez, E. (2023)	Qualitative	☐							☐
Yakut (2018)	Qualitative	☐						☐	☐
Shahzad & Noureen (2017)	Quantitative	☐		☐	☐			☐	☐

As the researcher noted above, there is an important distinction between the scholarly value of conducting a literature review and the thoroughness required in documenting its procedures. The researcher selected the exemplars in Table 2.6 because they are all quality researches. The researcher noted no uniformity in methodology among these studies exist.

2.10 SUMMARY

The instructional leadership stipulates to use both formal and informal instructional style for school effectiveness. It is envisaged that instructional

leadership style used by the school educational managers at secondary level will open new doors for school effectiveness in Pakistan. Instructional leadership of educational managers and the TSSE are corner stone of the study at secondary level. Instructional leadership is a powerful catalyzing agent which provides three domains. So, it enables educational managers to have full consciousness of their responsibilities as a school leader and equips them to improve school effectiveness. It is an instrument for the professional development as well as the managerial skill. Instructional leadership is an instrument for developing the attitudes of educational managers in accordance with the developing goals for the success of school. Sufficient attention has not been paid to the leadership of schools especially at secondary level in Pakistan. Concluding that in modern era, instructional leadership has gained global appreciation as a best model for educational managers' as instructional leaders. The concept has progressed, and various models have been developed, as a source to understand IL. The framework of Hallinger and Murphy (1985), by far and large remains the most used and popular model. The literature review on instructional leadership (IL) articulated twenty models of instructional leadership. It identified three dimensions (1) (2) (3) as the key aspect of this research. The chapter also discussed the different theories of self-efficacy. Further, many key factors of school effectiveness have been elaborated through revision on the different factors of school effectiveness that had been discussed in earlier researches. The Research work in the Pakistani context has also been discussed. The revisions discussed in the current literature review testified that educational managers can perform the momentous role in promoting TSSE (Duyar et al., 2013). In short, the vision of this study is to transform the Pakistani school's educational manager's leadership into instructional leadership as cohesive entity to TSSE. That can compete the challenges of 21st century, and can stand up for school effectiveness. The study was formulated to realize the vision that instructional leadership of educational managers at school level, and the TSSE are necessary for educationally elevated schools.

Table 2.7*Exemplar researches on study variables for systematic literature review (SLR)*

No.	Author Name	Title	Method	Year	F.A	Level	Context	Sample	S. technique	Instruments	Results & Recommendations
1	D. Baguiol & L. Tagadiad	The Influence Of Instructional Leadership and Organizational Socialization On Teacher Self-Efficacy	Quantitative utilizing descriptive correlational research design	2023	F.A	elementary	Philippines Division of Davao del Norte.	55 male & 279 female teachers 334 permanent ESTs from 10 schools in Santo.	Purposive sampling technique	Self-developed	The questionnaire's seven dimensions all demonstrated substantial positive relationships. The results also of a broader study on academics' willingness to use a critical approach to curriculum implementation.
2	Zara Khan	Relationship among heads' instructional leadership, school culture and student engagement at secondary level	MMR Thematic Analysis (TA)	2022	No	Public Secondary School	Punjab, University Pakistan	Qual = 27, SS heads & 57 secondary SS teachers. Quan= 1016 SS teachers	Multistage Sampling Techniques	PIMRS & ACES developed by Diperna & Jelliot (2000).	The results of this study indicate that instructional leadership style is moderately recognized in schools. Based on the findings, it is proposed that school leaders concentrate on instructional leadership style in order to promote a supportive school culture that improve student engagement.
3	Tahira Riffat	Impact of Family Patterns and Self Efficacy Beliefs on the Educational and Career Aspirations of	Survey	2022	-	University level	Islamia University, Bahawalpur	2635 students of B.S.	Simple random sampling	Self-efficacy Scale developed by Tyler and Betz (1983)	The results showed that students gender wise self-efficacy beliefs were similar and no variation was found from the male and female students' responses.

		University Students in Punjab									
4	Raman, Thannimalai and Jalapang	An Empirical Study on Instructional Leadership, School Climate and Teacher Efficacy	cross-sectional survey	2022	-	Secondary	Malaysia	381 SSTs from six divisions in Sarawak, Malaysia	Random sampling	PIMRS & TSES	The results revealed that principals' instructional leadership and school climate had no substantial impact on student academic performance. It was also discovered that teacher efficacy has a considerable impact on student academic performance. Furthermore, teacher experience was not a significant moderator variable. Future research should focus on principals' self-assessment of instructional leadership and the moderating effect of school climate on student performance.
5	Ali, Akram & Hafeez	Analyzing the Link between Distributed Leadership and Teachers' Self Efficacy Beliefs at Secondary School Level	correlational study	2021	-	Secondary schools	Multan Pakistan	1335 secondary school teachers	Randomly selected sample	Distributed Leadership Inventory (Hulpia et al., 2009), and 10 item Teacher Self-efficacy Scale (Schwarzer et al., 1999)	Results of the descriptive analysis revealed that SSTs perceived themselves as highly self-efficacious and coherent leadership team variable was the strongest predictor of SSTs self-efficacy beliefs. Results also suggested that coherence among leadership teams affects SSTs' self-efficacy beliefs more positively in comparison with all the other independent variables. The study recommended that school leaders should work in cooperation with all the teachers with a clear view on school goals in a trustworthy and open environment avoiding any role conflicts.
6	Shamim-Ullah	Relationship among leads' distributed	Sequential Explanatory MMR	2020	-	G. Boys Secondary Schools	P.U Pakistan	38 male teachers	Multi-Stage Proportionate	Self-developed questionnaire	There was a moderate relationship among distributed leadership styles of head, self-efficacy, and commitment of secondary school teachers and

		leadership style and teachers' self-efficacy, commitment and motivation							Sampling Technique		a positive high relationship between distributed leadership styles and motivation of secondary school teachers. The senior teachers would be motivated and encouraged through seminars or workshops along with monetary benefits.
7	Sabeen Qumar	Relationship among self-esteem, self-efficacy and resilience of students at secondary school level	Cross sectional survey method	2020	-	Secondary SCHOOL	University of the Punjab	2,762 students including 1,577 male & 1,185 female of Grade 10	Multi stage stratified simple random sampling technique	RSES-10 Self-developed SEQ CYRM-28	Girls showed high level of self-efficacy beliefs than boys. Similarly, urban students showed higher level of self-efficacy than rural students. The correlation between self-esteem and self-efficacy is positive, significant and moderate in nature. All stakeholders in education need to focus on efforts that can create positive mind-set among the learners.
8	Mehboob-ul-Hassan	Effect of Teachers' Self-Efficacy, Locus of Control and Teaching Methods on Students' Achievement Scores at Secondary Level in Punjab	ex-post-facto	2020	-	Secondary level	University of the Punjab Lahore	1,152 SSTs 576 sciences & 576 arts. second category contained 5,760 secondary schools' students; 2,880 science & 2,880 arts	multistage stratified random sampling technique	QTSE, QTLOC & SQTMM	Results of the study ascertained that Pakistani secondary schools' teachers were weak in their cognitive, social and pedagogical beliefs used in classrooms. It is recommended on the basis of results that teachers' training institutions may enhance TSE, through trainings based on content-oriented pedagogy reinforcing through fringe benefits; tangible and nontangible rewards.
9	Shamam Ullah	Relationship among heads' distributed	sequential explanatory mixed	2020	-	Secondary level	Punjab University Pakistan	550 secondary	proportionate stratified sampling	General Self-Efficacy Scale (GSE)	There was a moderate relationship among distributed leadership styles of head, self-efficacy, and commitment of secondary school teachers and

		leadership style and teachers' self-efficacy, commitment and motivation	methods design					school teachers	developed by Schwarzer (1995) distributed leadership inventory (Hulpia & Devos, 2009)	a positive high relationship between distributed leadership styles and motivation of secondary school teachers. The teachers with Ph.D. qualifications perceived that mostly team leadership style was used and had a high relation with self-efficacy, commitment, and motivation of teachers. The senior teachers would be motivated and encouraged through seminars or workshops along with monetary benefits.	
10	Nemat Ullah	A Study of Gender differences in Self-Efficacy, Motivation, and Attitude Toward Science Education at Higher Secondary Level	Survey	2020	-	Higher secondary level	BahaUddin Zakariya University Multan 9 districts of Punjab, Pakistan	sample of 1507 students	Simple random	Questionnaire containing items related to self-efficacy, motivation and attitude was developed by the researcher	The regression analysis inferred that self-efficacy, motivation and attitude affect academic achievement at the higher secondary education. The study concluded that gender difference does not affect the level of motivation among students enrolled in education. However, attitude towards science based on gender difference was found statistically significant. Consequently, it has been recommended that policies regarding career counselling should be made and the motivation level is needed to be stimulated by the people associated with the education sector. Secondary level.
11	Khanshan and Yousefi	The relationship between self-efficacy and instructional practice of in-service soft disciplines, hard	Mixed method	2020	No	University level	Iran	70 teachers from the soft science, hard science and English language teaching	Random sampling	Teacher Efficacy Scale (TES) (Gibson & Dembo, 1984)	Results of Pearson correlation coefficients revealed that the self-efficacy of soft science and hard science teachers was significantly correlated with their teaching practice, with the ELT teachers' efficacy-teaching relation not reaching a statistical significance. Findings offering important implications for the classrooms.

		disciplines and EFL teachers						(ELT) disciplines			
12	Stuniasi & Niermed	The impact of instructional leadership on Indonesian elementary teacher efficacy	Quantitative	2020	-	elementary	Indonesia	339 teachers from 20 private elementary schools in ten provinces in Indonesia	Random sampling	ILS, TSE on group skill scale, and TSES	Findings showed that instructional leadership practices, as perceived by teachers, were positively related to teacher self-efficacy as well as teacher efficacy on group skills. Moreover, in the Indonesian private school context, instructional leadership practices, especially on the component of encouraging school climate, tended to be more influential on teacher efficacy group skills, while the components of establishing goals and ensuring the teaching and learning process determined teacher self-efficacy.
13	Sayyam Bin Saeed	A comparative study of instructional supervision in Army Public Schools and Colleges and Federal Government Educational institutions in Pakistan	MMR Thematic Analysis (TA)	2019	-	secondary	Hazara University Pakistan	Heads =20 (FGEIs), 10 (APS & Cs), teachers= 20 (FGEIs) & 30 (APS & Cs) for interviews Heads =80 APS & Cs & 130 (FGEI), teachers= 400 (APS & Cs) & 390 (FGEIs)	Random sampling & Purposive Sampling Technique	Self-developed quest.....	It was found that instructional supervision, its regularity, maintenance of record of supervision and its utility in the form of teachers' punctuality, performance and improved instructional methodology based on feedback to the teachers is more frequent in APS & Cs than in FGEIs. The process needs to be further improved in FGEIs through effective measures taken at departmental level.

14	Maqsood Ahmed	Effect of heads' distributed leadership practices on teachers' classroom management	Descriptive	2019	-	secondary	A-I-O-U Pakistan	Heads of all the selected schools (N=156) and 1560 teachers (1.0 from each school)	stratified random sampling technique	DLRS & TCMSQ	The results suggest that heads' distributed leadership practices have an effect on teachers' classroom management. Moreover, a positive relationship has been highlighted between heads' distributed leadership practices and teachers' classroom management. It was established that teachers' professional qualifications do affect their classroom management. The study highlighted many implications for the heads, policymakers, teachers, teacher training institutes and future researchers.
15	Turkoglu, & Cansoy	Instructional Leadership Behaviors according to perceptions of school principals in Turkey	Qualitative research methods	2018-2017	No	Primary and secondary schools	Turkey	15 principals	Convenience sampling from the purposeful sampling types	Semi structured interviews Based on Hallinger & Murphy model 1985	It was observed that principals did not take the initiative regarding curriculum development or management and left these decisions to teachers. They made significant efforts to develop the most positive learning climate and were highly effective in this field. In the study, it was also determined that daily routines, creating resources for school, and over-centralized structure were important obstacles to the instructional leadership of school principals.
16	Gray	Instructional Leadership of Principals and its relationship with The Academic Achievement of High-Poverty Students	Quantitative	2018	No	elementary	Murray State University	teachers (N=44) from the 14 schools	Simple random	Instructional Management Rating Scale (PIMRS)	The three subscales were included in the survey: promoting professional development, supervising and evaluating instruction, and monitoring student progress. Through (MANOVA) the study concluded that there were no statistically significant differences in any of the three different subscales on the PIMRS survey.

17	L. Pearce	The Effects of Instructional Leadership on Teacher Efficacy	Mixed method	2017	No	elementary	Kennesaw State University	29 principals and 109 teachers	Random sampling	PIMRS & TSES	A significant finding of this study was shown by the qualitative questions included on the two survey instruments. The teachers and principals had strong feelings on the behaviors that impacted efficacy the most. They held beliefs about why these behaviors and actions were significant to their efficacy.
18	Namra Munir	Comparison of self-efficacy beliefs of Urdu and English teachers	Survey method Descriptive	2017	No	elementary and Secondary	University of Lahore Pakistan 9 districts of Punjab	864 (432 M & 432 F) teachers (429 Urban & 435 rural) 452 teaching English & 412 Urdu	Multistage stratified random and convenient sampling	TSES Tschannen-Moran & Woolfolk (2001) With Urdu translation	The study revealed that teachers of Urdu had a higher level of self-efficacy as compared to teachers of English on the overall TSES scores as well as on the three subscales of the instrument.
19	Sarwat Maqbool	Inter-relationship of leadership behaviors, efficacy beliefs and job satisfaction of teachers in public and private schools	correlational	2017	-	Secondary	NUML Pakistan Islamabad	210 Public and private secondary schools	Random sampling	LBDQ	There was a strong correlation between public and private teacher's collective efficacy and job satisfaction. "Overall" the findings from this study will help adequately prepare future school leaders with effective leadership skills that are imperative towards implementing an environment that sustains positive teacher's job satisfaction and collective teacher's efficacy.
20	Salma Sami	Analysis of school effectiveness at secondary level in	Descriptive	2016	No	Secondary	University of Peshawar Pakistan	GGHS = 60 10 = each were selected	cluster sampling technique	Self-developed	The result of the study revealed that there was found a lack of mutual understanding and interaction between school function, mission and leadership, liked to work in isolation from other

		Khyber Pakhtunkhwa									staff members with the view that school's activities and school's discipline was just the responsibility of the principal.
21	Muhammad Gulistan	Teachers self-efficacy and students' academic achievement at secondary school level in Pakistan	Descriptive survey	2015	No	Secondary schools	International Islamic University, Islamabad	3072 participants with a break up of 512 teachers and 2560 students from all over the country	stratified sampling technique	Tschannen – Moran & Hoy (2001) Translated	The correlation between TE and students' academic achievement were highly context specific. Relationship between female teachers' efficacy and their related female students' academic achievement in the subject of English was found higher as compared to male English teachers' efficacy and their related male students' academic achievement. Moderate gender differences were observed in the subject of English and Mathematics as well. Location wise differences (rural and urban) were also recorded. It is recommended that in teacher training program teachers' self-efficacy may be developed.
22	Parveen	An analysis of principals' interventions for school effectiveness	Descriptive	2014	No	Govt girls' high school	Sarhad University of Pakistan	270 STs and all the 04 DEOs (female) Of those 18 (100 headmistresses and 04(100% female %) principals/ DEOs	Random sampling	Self-developed Questionnaire	The results revealed that principals could play more effective role for school effectiveness by developing clear vision; providing instructional feedback to teachers; effective monitoring and supervisory mechanism; setting a democratic environment conducive to teaching learning process and involving the stakeholders in decision-making. The recommendations for improving interventional role of principals required instructional supervision, commitment of teachers to the teaching profession and improved pedagogical skills of teachers.

23	Mahfooz- ul-Haq	Comparison of self-efficacy beliefs of English and Urdu medium school teachers	Descriptive Survey	2013	No	primary, middle, and secondary schools	P.U Pakistan public sector schools of the Punjab province of Pakistan	1761 with (880 M & 881 F), 861 Urban & 900 rural (923 English & 838 Urdu medium) teachers selected from 419	Multistage stratified random sampling technique	TSES developed by Tschannen-Moran & Woolfolk (2001)	The study revealed that Urdu medium school teachers had a higher level of self-efficacy as compared to English medium teachers on overall TSES scores as well as on the three sub-scales of the instrument. Gender was not found significant for efficacy difference. School level, school local, designation and teaching experience wise difference were significant. The study recommended for rethinking over the recently taken decision of transforming school education system from Urdu and English medium.
24	Zulfiqar Ali	Effect of school climate on students' academic achievement at secondary school level	Causal comparative as well as correlational	2013	No	Secondary school	University of Education Lahore	5 districts of Punjab 1500 students 60 schools	Non-Proportionate stratified random sampling.	School Climate Questionnaire (SCSQ)	The Study concluded positive correlation ($r = .766$) between School Climate and Students academic achievement. The study further showed that school climate has positive effect on students' academic achievement which measured through regression analysis. The findings of this study suggested that students achieve high achievement in schools with healthy climate.
25	Zafar Khan	Relationship between instructional leadership and teachers' job performance in secondary schools in the province of KPK, Pakistan	Survey	2012	No	Secondary Schools	Khyber Pakhtunkhwa Pakistan Gomal University	493 (309 male & 184 female) teachers from 14 districts of the province	Stratified random sampling	ILQ & TJPS	A positive and statistical significant correlation at moderate level was found between Teachers' perceptions of instructional leadership with their job performance. Research study suggested that secondary school heads should pay more attention on supervision and monitoring of the instructional process in their schools.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The current study was an exploration of effects of educational managers' instructional leadership (EMIL) and teachers' sense of self-efficacy (TSSE) on school effectiveness (SE). The sample was drawn from five tehsils in Rawalpindi district of the province of Punjab, Pakistan. This chapter outlines the methodological approaches applied in the study. The chapter highlights the research design, methodology used to explore eight research objectives and three research questions in this mixed methods research (MMR). Pilot test results are also presented. Further it adds the process of validity, reliability, and administration of the three research questionnaires (PIMRS, TSES, & SESQ). The chapter also added interviews used in this research with educational managers, teachers and students. Additionally, this chapter elaborates the population, selection of sample, philosophical position, data collection methods, analysis, ethical considerations, issues of trust worthiness, and delimitations of the study. The chapter concludes with a summary.

3.2 Research Design

The design of the present study was the convergent parallel design, of Mixed Methods Research (MMR). A convergent design that follows pragmatism as a theoretical assumption, is an efficient and popular approach to mixing methods research (Creswell & Plano Clark, 2018; Creswell & Guetterman, 2021). The purpose to use convergent parallel design mixed methods is to provide a comprehensive analysis of the research problem. In this design, the researcher collected both forms of data concurrently, prioritize the methods equally, and keep the data analysis independent (Schoonenboom & Johnson, 2017; Shorten & Smith, 2017; Creswell & Plano Clark, 2018; Razali et al., 2019; Dawadi et al., 2021). The researcher's main purpose in focusing mixed method design was to triangulate the data to assess effects of educational managers' instructional leadership and teachers' sense of self-efficacy

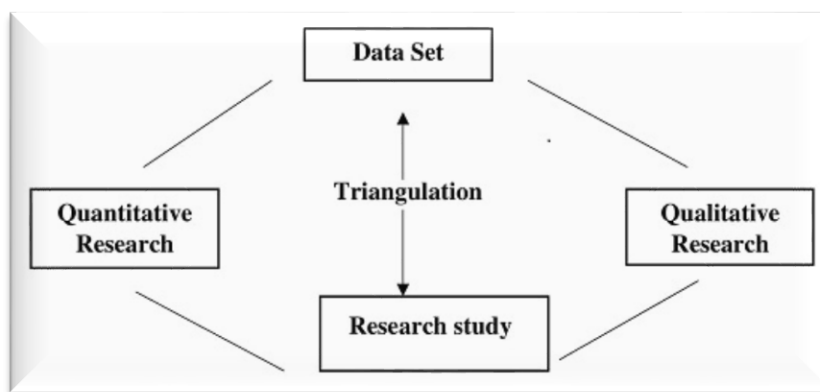
on school effectiveness. As, according to Gibson (2017) and Fusch et al. (2018) triangulation increases the value of research and magnifies the researcher's self-confidence for results. This research study focused on triangulation for two major intents confirmatory and completeness identified by Shih (1998). Moreover, Fusch and Ness (2015) consider it as a validity measure.

3.2.1 Use of Triangulation in study

First of all, the study focused levels of triangulation shown in figure 3.1. Which were described by Flick (2018, p.23).

Figure 3.1

Levels of triangulation by (Flick, 2018)



Note: Flick (2018, p. 24) Levels of triangulation of quantitative and qualitative research.

Secondly, the study, concentrated on the four kinds of triangulation: (1) Data (2) Investigator (3) Theory (4) Method (5) Environmental (Further the study added the fifth concept presented by Guion, Diehl, and McDonald (2011). which explains the figure thoroughly.

3.2.1.1 Data Triangulation: The researcher used Data triangulation. In order to increase validity, the current study involves two types of sources of information. These sources are: (1) three research questionnaires and (2) two interviews. The procedure of the study started by identifying the perceptions of three study groups such as educational managers, teachers and the students of the five tehsils of Rawalpindi district of the province of Punjab in Pakistan. Semi structured interviews were accompanied with two groups: (1) educational managers, and (2) teachers.

Likewise, the study focused on the acquisition of in-depth understanding into their perspectives on IL and TSSE. Data triangulation has been used to strengthen conclusions about findings.

3.2.1.2 Investigator Triangulation: The researcher added prime supervisor as the observer and a data analyst to recheck the results and findings of the study. The reason was to improve in-depth understanding of how these observers view the research problem.

3.2.1.3 Theory/ model Triangulation: This type involves using more than one theory/ model for interpretation of data. This research study used model of Instructional leadership, model of self-efficacy & model of school effectiveness, as theory triangulation. It also includes hypotheses (null and alternative), and sub-hypotheses null and alternative to examine the research problem. Further, it comprises educational managers, teachers and students. Their status and positions are different. The idea is to look at the current research problem with focus on diverse questions from different perspectives through dissimilar lenses.

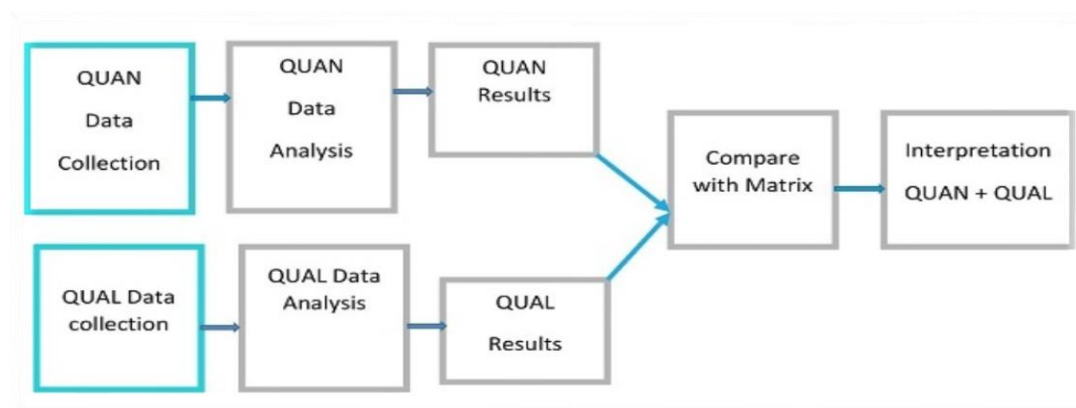
3.2.1.4 Methodological Triangulation: Methodological triangulation involves the use more than one method to gather data. This study used Mixed Method Research (MMR) as methodological triangulation. MMR involves qualitative and quantitative approaches to find the results. Results from survey questionnaires and interviews were correlated to find similarities and dissimilarities.

3.2.1.5 Environmental Triangulation: This research study also focused on environmental triangulation. The study took place in five tehsils of Rawalpindi district. The location where study was conducted, year and other key factors such as time and day were also mentioned. The intention to use this type of triangulation is to identify influence of mentioned ecological features like weather, time, and location. Any factor can influence the data gathered during this study. This triangulation helped the researcher to establish validity if findings are the same across settings.

3.2.1.6 Variants of the Triangulation Design: The four variants are the convergence model, the data transformation model, the validating quantitative data model, and the multilevel model (Creswell et al., 2018). The convergence model (Figure, 3.2) represents the traditional model of a mixed methods triangulation design (Creswell, 1999, 2013). In this model, the researcher collects and analyzes quantitative and qualitative data separately on the same phenomenon and then the different results are converged (by comparing and contrasting the different results) during the triangulation. Researcher used this model to compare results/ validate confirm, corroborate quantitative results with qualitative findings. The purpose of this model is to end up with valid and well-substantiated conclusions.

Figure 3.2

The convergence Model of triangulation



Adapted from Creswell et al. (2003, p. 216-217, Table 8.1; Creswell & Guetterman, 2021, p.602).

3.2.2 Research Philosophy

Howe (1988) proposed that the pragmatism is the philosophy adopted for Mixed Methods Research (MMR). However, the quantitative research approach is often associated with the post positivist position, while the qualitative research approach is usually coupled with the constructive/interpretivist position (Shan, 2021). But some researches supported the notion that the most popular position as the philosophical foundations of mixed methods research (MMR) is the pragmatist (e.g., Creswell & Plano Clark, 2018; Johnson et al., 2017; Teddlie &

Tashakkori, 2009; Morgan, 2007; Johnson & Onwuegbuzie, 2004). Accordingly, this research is based on pragmatist position.

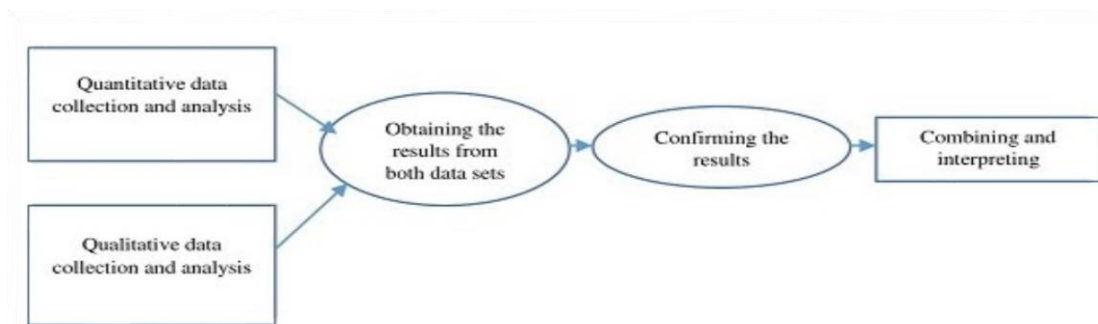
3.2.3 Rationale for Mixed Methods Research (MMR): However, to develop an even deeper understanding of the conceptual understanding of these social phenomena, both quantitative and qualitative data are required. The rationale for mixing quantitative and qualitative methods was that both types of data do not provide sufficient details of the complexity of the phenomenon on their own (Creswell & Creswell, 2018). Another value of an MMR approach is its triangulation component. Data triangulation in a mixed-methods study is generally accepted as a strategy for validating results obtained with the individual method (Plano Clark & Ivankova, 2016). Thus, in this study data triangulation leads to a well-validated conclusion and also promotes the credibility of inferences obtained from one approach (Dawadi et al., 2021).

3.3 Study Procedure

The study procedure is based on three phases:

- Phase I: Quantitative component: This phase was completed through survey. Three research questionnaires (PIMRS, TSES, & SESQ) were used for the survey.
- Phase II: Qualitative component: Second phase was accomplished with the help of semi- structured interviews with educational managers, teachers and students.
- Phase III: (I + II) Quantitative & Qualitative components: This phase was completed through a matrix.

Consequently, Figure (3.3) displays the study procedure employed for this study with the help of levels and the design of triangulation, which have been discussed above.

Figure 3.3*Study procedure*

The picture elaborates that Quantitative data was collected through PIMRS completed by 72 educational managers, TSES completed by 365 secondary school teachers' and 400 students of class 9th and 10th voluntarily. This data was analyzed in order to answer objectives # 1-8. Qualitative data was collected from 45 interviewees (15 educational managers, 15 teachers and 15 students) over semi-structured interviews. This data was compiled to produce themes and sub-themes in order to answer research question # 1, 2 & 3. The data retrieved from these methods were triangulated through a matrix. This triangulation of data allowed for an interpretation of the findings in order to propose new knowledge. Additionally, the procedure of the study given in Table 3.1 elaborates a clear picture to understand whole process of this research.

Table 3.1*Explanation of the procedure of the study*

Steps	Procedure
Quantitative data collection	<ul style="list-style-type: none"> • Survey • Proportionate stratified sampling
Quantitative data analysis	<ul style="list-style-type: none"> • Frequencies, Means, Standard deviation • t-test • Correlation • Linear regression • Multiple regression

Qualitative data collection	<ul style="list-style-type: none"> • Individual Semi-structured interviews with 30 participants based on Purposive sampling
Qualitative data analysis	<ul style="list-style-type: none"> • Interpretative phenomenological analysis (IPA)
Integration of the quantitative and qualitative results	<ul style="list-style-type: none"> • Triangulation of results
Final	<ul style="list-style-type: none"> • Interpretation of the quantitative and qualitative results

3.4 Population

According to Willie (2022) this section was divided in to two sections:

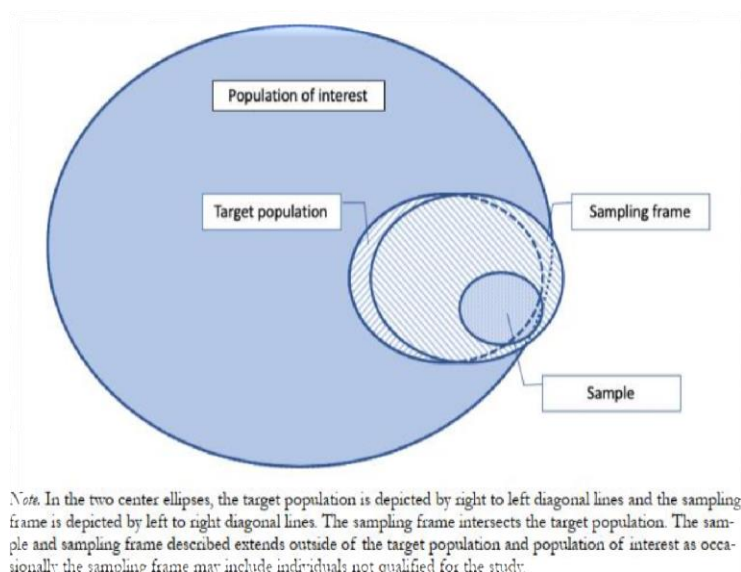
Section I: description of population of interest,

Section II: description of target population.

The detail of the distribution is explained through figure 3.4:

Figure 3.4

Describing Populations and Samples



Source: Casteel & Bridier (2021).

3.4.1 Section I: Population of interest

All male and female secondary school educational managers, teachers teaching class 9th and 10th and students of class 9th and 10th during the session 2017-2018 in public and private sector were the population of the study. Additionally, the context of population was district Rawalpindi of the province Punjab, Pakistan. Moreover, all the institutions were located in rural and urban areas of the selected tehsils of Rawalpindi district. These institutions were under the management of Education Department of the Punjab Government and also affiliated with the Board of Intermediate and Secondary Education (BISE) Rawalpindi. The complete description about the population is given in the following tables:

Table 3.2

Entire population of Rawalpindi District for the study

Tehsils	Schools	Educational Managers	Teachers	Students
7	809	514	3655	122515

Source: List provided by the DEO (EE) Rawalpindi District; the CEO education Rawalpindi; Report on Annual School Census 2017-2018 (p.29). The Computer Department Board of Intermediate and Secondary Education, (BISE), Rawalpindi.

Table 3.2 described that there were 7 tehsils in the Rawalpindi district. In Rawalpindi, there were (809) secondary level schools and (514) individuals were performing their services as educational managers. There were (3655) secondary school teachers (SST) in Rawalpindi, and (122515) students were enrolled as secondary level students.

Table 3.3

Total Number of schools in the Rawalpindi District (Tehsil Wise).

Tehsils	Total Number of Schools	Public sector	Private sector	Male	Female	Rural	Urban
Murree	73	37	36	41	32	50	23
Kotli Sattian	29	29	0	12	17	29	0
Kahuta	50	31	19	28	22	39	11
Kallar Sayedan	60	39	21	30	30	59	1

Gujar Khan	145	83	62	72	73	116	29
Rawalpindi	409	148	261	185	224	130	279
Taxila	43	20	23	22	21	20	23
Total	809	387	422	390	419	443	366

Source: A list provided by the DEO (EE) Rawalpindi District; the CEO education Rawalpindi; Report on Annual School Census 2017-2018 (p.29). The Computer Department Board of Intermediate and Secondary Education, (BISE), Rawalpindi.

Table 3.3 displayed seven tehsils in Rawalpindi district and both (public & private) sectors schools located in each tehsil. The table also particularized the strength of schools in rural, urban areas, and male and female schools located in seven tehsils. According to Table 3.2, tehsil Rawalpindi has the highest number of schools (409), whereas tehsil Kotli Sattian has the lowest number of schools (29). Likewise, tehsil Gujarkhan has (145) schools. The number of schools located in tehsil Murree was (73). On the other hand, tehsil Taxila is comprised of (43) schools. Likewise, there are (60) schools in tehsil Kallar Sayedan. Moreover, in tehsil Kahuta (50) schools have been found (Appendix, XXVIII & XXIX).

Table 3.4

Total population (sector wise).

Sector	Schools	Educational Managers	Teachers	Students
Public	387	387	1967	88500
Private	422	422	1688	34015
Total	809	809	3655	122515

Source: List provided by the DEO (EE) Rawalpindi District; the CEO education Rawalpindi; Report on Annual School Census 2017-2018 (p.29). The Computer Department Board of Intermediate and Secondary Education, (BISE), Rawalpindi.

Table 3.4 depicted that (387) schools were treated as public sector institutions (Report on Annual School Census 2017-2018), whereas (422) were functional as private sector schools (List provided by DEO office) Appendix (V-VII). Likewise, seven tehsils of Rawalpindi district comprised (92) public sector and (422) private sector educational managers performed their role at secondary school level.

Moreover, Table 3.3 showed that (1967) teachers were working as secondary school teachers (SST) in public sector, while (1688) were treated as SST in private sector ((List provided by DEO office) Appendix (VII). Moreover, (88500) students were enrolled in public sector schools, while (34015) were enrolled in private sector at secondary level particularly in (9th & 10th) classes (Appendix, XIV).

Table 3.5

Total Number of Schools in District Rawalpindi (Gender Wise).

Gender	Schools	Educational Managers	Teachers	Students
Male	390	390	1892	68097
Female	419	419	1763	54418
Total	809	514	3655	122515

Source: List provided by the DEO (EE) Rawalpindi District; the CEO education Rawalpindi; Report on Annual School Census 2017-2018 (p.29). The Computer Department Board of Intermediate and Secondary Education, (BISE), Rawalpindi

Table 3.5 portrayed that there were (809) institutions in total, whereas (390) were functional as male and (419) were as female schools. Consequently, there were (390) male and (419) female educational managers performing their role at secondary school level. Besides, table 3.4 showed that (1892) teachers were working as secondary school teachers (SST) in male schools, while (1763) were treated as SST in female schools. Likewise, (68097) students were enrolled in boys while (54418) were enrolled in girls' educational institutions at secondary level particularly in (9th & 10th) classes.

Table 3.6

Total Number of Schools in District Rawalpindi (Area Wise).

Area	Schools	Educational Managers	Teachers	Students
Rural	443	443	1772	83814
Urban	366	366	1883	38701
Total	809	514	3655	122515

Source: List provided by the DEO (EE) Rawalpindi District; the CEO education Rawalpindi; Report on Annual School Census 2017-2018 (p.29). The Computer Department Board of Intermediate and Secondary Education, (BISE), Rawalpindi.

Table 3.6 revealed that (443) schools were located in rural areas, while (366) were in urban areas. Moreover, the table showed that (1772) teachers were working as secondary school teachers (SST) in rural area, while (1883) were treated as secondary school teachers in urban area. Likewise, (83814) students were enrolled in rural area schools, while (38701) were enrolled in urban area at secondary level particularly in (9th & 10th) classes.

3.4.1.2 Section II: Target population:

This part of the study was divided to two phases. Phase one was related to the selection of target population for the quantitative study, while phase two presented population of the qualitative participants.

3.4.1.2.1 Phase I: Quantitative Target Population: The researcher did not find any single school of private sector in tehsil Kotli Sattian. Similarly, in tehsil Kallar Sayedan, there was just one private sector school found according to the population details provided by the District Education Office (EE) Rawalpindi District. Hence, the researcher selected:

- All Secondary level schools located in five tehsils of Rawalpindi district (Rawalpindi, Gujar Khan, Taxila, Kahuta & Murree) comprises the target population.
- All the educational managers in secondary level schools and teachers working as SST (Secondary School Teachers) of Rawalpindi, Gujar Khan, Taxila, Kahuta, and Murree were included.
- Another distribution of the target population was related to sectors including public and private from five tehsils.
- All the students studying in class (9th & 10th) at secondary level were treated as target population.
- The population of the study also had another distribution of gender. The total number of schools was 407 males and 402 female situated in Rawalpindi district.
- The target population was limited to the year 2017-2018.

The detail of target population is revealed in following table:

Table 3.7*Total target population of the study*

Tehsils	Schools	Educational Managers	Teachers	Students
5	720	720	3655	122515

Source: List provided by the DEO (EE) Rawalpindi District; the CEO education Rawalpindi; Report on Annual School Census 2017-2018 (p.29). The Computer Department Board of Intermediate and Secondary Education, (BISE), Rawalpindi.

Table 3.7 described that (5) tehsils, (720) of secondary level schools, (720) educational managers, (3655) secondary school teachers, (122515) secondary level students in Rawalpindi district were selected as target population.

Table 3.8*Target population of the study (sector wise).*

Sector	Schools	Educational Managers	Teachers	Students
Public	319	319	1967	88500
Private	401	401	1688	34015
Total	720	720	3655	122515

Source: List provided by the DEO (EE) Rawalpindi District; the CEO education Rawalpindi; Report on Annual School Census 2017-2018 (p.29). The Computer Department Board of Intermediate and Secondary Education, (BISE), Rawalpindi.

Table 3.8 shows that there were (319) schools treated as public sector institutions, whereas (401) were functional as private sector schools. Moreover, five tehsils of Rawalpindi district comprised (319) educational managers in public and (401) in the private sector educational managers performing their role at secondary school level. Furthermore, the table demonstrated that there were (1967) teachers working as secondary level teachers (SST) in the public sector, while (1688) were treated as secondary school teachers in the private sector. Likewise, there were (88500) students who are enrolled in the public sector schools, while (34015) were enrolled in the private sector at secondary level particularly in (9th & 10th) classes.

Table 3.9

Total Number of Schools in District Rawalpindi (Gender Wise, target population).

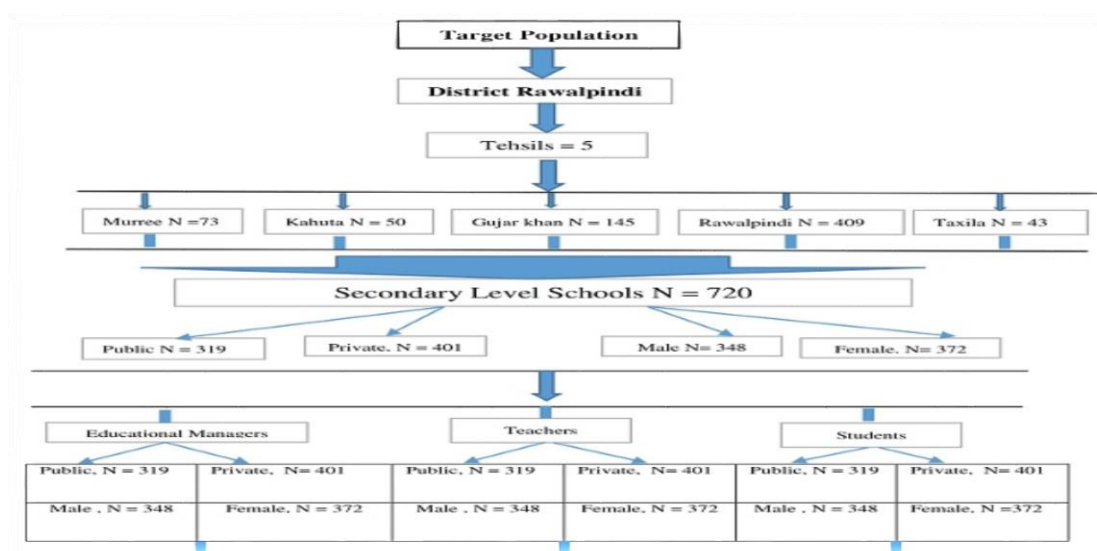
Gender	Schools	Educational Managers	Teachers	Students
Male	348	348	1892	68097
Female	372	720	1763	54418
Total	720	514	3655	122515

Source: List provided by the DEO (EE) Rawalpindi District; the CEO education Rawalpindi; Report on Annual School Census 2017-2018 (p.29). The Computer Department Board of Intermediate and Secondary Education, (BISE), Rawalpindi.

Table 3.9 illustrates that there were (348) male and (372) females' schools located in five tehsils. The number of educational managers is same. Additionally, the table showed that there were (1892) male teachers working as secondary school, while (1763) females were working as SST. Likewise, (68097) male students particularly in (9th & 10th) classes were enrolled at secondary level schools while, (54418) were female students enrolled at secondary level. The detail of the target population was defined through figure (3.5).

Figure 3.5

The overall target population of District Rawalpindi



Source: List provided by the DEO (EE) Rawalpindi District; the CEO education Rawalpindi, Punjab, Pakistan; Report on Annual School Census 2017-2018 (p.29). The

Computer Department Board of Intermediate and Secondary Education, (BISE) Rawalpindi.

3.4.1.2 Phase II: Qualitative Target population: All the secondary school educational managers, teachers and students who have volunteered to participate in interviews were the target population of qualitative phase.

3.5 Sampling

The researcher wanted the survey study to have a representative sample and the interview study to result in “saturated” QUAL data. For selection of sample the researcher divided this portion in to two phases.

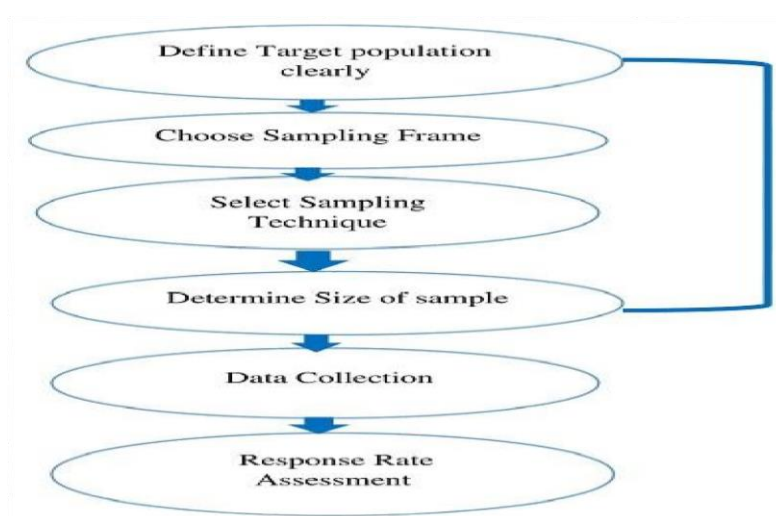
Phase I: Quantitative Sample Selection

Phase II: Qualitative Sample Selection

3.5.1 Sample selection: In this research the researcher followed the sampling process steps given in figure 3.6 by Taherdoost (2016) for the sample selection:

Figure 3.6

Sampling process



Note. Source: (Taherdoost, 2016). Figure 3.5 showed the process that researcher adopted to select sample for the current research. The figure elaborated that first the

researcher defined target “population”, after that she moved towards sampling frame. Then stage of the selection of sampling technique was followed. Afterwards, the sample size was determined which helped to collect the data. Lastly, the response rate was identified.

3.5.1.1 Target population: It was defined in the section of population in (Tables, 3.6, 3.7 and 3.8).

3.5.1.2 Sampling Frame: Sampling frame is a set of source material from which the sample is selected (Rahman et al., 2022). The researcher has 720 educational managers, 3650 teachers and 122515 students of 720 public and private secondary level schools in Rawalpindi district of the province of Punjab as a population, Pakistan as a target population. In the first instance the frame comprises, first the list of schools, educational managers, teachers and students. All the lists of participants were taken from the district education office of the district Rawalpindi, Board of Intermediate and Secondary Education (BISER), and the Annual Statistics Report (2017). All the sources represent all the tehsils of district Rawalpindi. In the second instance, the researcher has decided to collect the data from 72 educational managers, 365 teachers and 400 students of 72 public and private secondary level schools in five tehsils of Rawalpindi district of the province of Punjab. It was representative sample with at least one member from each tehsil.

3.5.1.3 Sampling Technique: This research used triangulation method from component design. So the researcher selected samples for the study by following the Table (3.10) given in (Appendix, XXX). This study used parallel MM sampling technique, which involves the selection of units of analysis for an MM study through the parallel use of probability and purposive sampling strategies (QUAN-QUAL), or vice versa (QUAL-QUAN). For quantitative data collection proportionate stratified sampling technique (PSST) was applied for the sample selection. Since PSST produces representative sampling. In its design, the proportions of variables are made to be the same as “the proportions in the total population on certain characteristics” (Christensem & Jhonson, 2014.p, 259). Likewise, for qualitative data collection the researcher applied purposive sampling technique. However, purposeful sampling is widely used in qualitative research for the identification and

selection of information related to the phenomenon of interest (Palinkas, Horwitz, Wisdom, Duan & Hoagwood, 2015; Creswell & Plano Clark, 2018; Hassan et al., 2022; Kilag & Abendan, 2023).

3.5.1.4 Determine size of sample: This section involves both the phases (I) quantitative sample (II) qualitative sample.

3.5.1.4.1 Phase I: Quantitative sample size: In this study, the information generated through the QUAN phase was necessary to select participants with particular characteristics for the QUAL phase. Following proportion through interval “k” $720 / 72 = 10$ was decided to select study participants (educational managers, and teachers working as SSTs) from secondary level schools in Rawalpindi district of the province of Punjab, Pakistan.

- 10% out of total public sector schools, stratum of public sector schools (Sector wise).
- 10 % out of total private sector schools, stratum of the private schools (Sector wise).
- 10 % out of total male schools, stratum of male schools (Gender wise).
- 10 % out of total female sector schools, stratum of female schools (Gender wise).

For the selection of schools as list of schools and the candidates was available but enrolment was not known. So the researcher obtained a list of the schools and numbered them from 1 to N (the total number of schools). After that determined the number of schools' sample (n). Moreover, calculated the sampling interval (k) by N/n (always round down to the nearest whole integer). Whereas, by using the Morgan's sample selection table the researcher selected a number between 1 and k. Then used the randomly selected number to refer to the school list, and include that school in the survey. Finally, the researcher selected every k^{th} school after the first selected school.

Step one: There were 720 schools therefore $N = 720$.

Step Two: The number of schools to sample is 72. the researcher estimated that around 4 schools the researcher will visit in each tehsil, and based on this estimate an ideal sample was calculated, therefore $n = 3.5$ or 4

Step Three: the sampling interval is $72/4 = 18$ therefore $k = 18$.

Step Four: using a random no table, select a number from 1 to (and including 18). The number selected had been 6. Accordingly, the first school to be selected would be six on the list which is (school name).

Step Five: selected every 18th school thereafter, the selected schools were 6th, 12th, 18th, and so on.

Consequently, for the students' selection, the sample was selected according to the sample table presented by Krejcie & Morgan (1970). Slovin's formula at 5 % level of significance was used to validate the selected sample as the behaviors regarding their responses were unknown and results were the same as given in the table. Stephanie (2013) describes that Slovin's formula is suitable to sample a population up to desired degree of accuracy. Further, Kalimba et al (2016) also supported his views by applying "Slovin's formula, i.e., $n = N \div (1 + Ne^2)$ " for (sample) selection in their study. Accuracy of sample selection for the students was also cross-checked with the help of Morgan's (2006) sample selection table. Likewise, there were four reasons to select Rawalpindi district: i) It is researcher's home district, ii) researcher is familiar with the educational setup of this district, iii) The literature review identified paucity of research on instructional leadership, teachers sense of self efficacy and school effectiveness together, iv) there was a potential to focus these three variables collectively in a single research in this district.

Table 3.10

Total sample of Rawalpindi District for the study.

Tehsils	Schools	Educational Managers	Teachers	Students
5	72	72	365	400

Source: Morgan's (2006) sample selection table, Slovin's formula at 5 level of significance, the sample table presented by (Krejcie & Morgan, 1970).

Table 3.10 labels that (5) tehsils have been taken as sample in Rawalpindi district, while (72) secondary level schools and (72) educational managers were taken as sample. The sample of teachers was consisted of (365) secondary level teachers, and (400) students were selected as sample in Rawalpindi district.

Table 3.11

The sample schools in Rawalpindi District (Tehsil Wise, sector wise, gender wise).

Tehsils	Total No. of Schools	Public sector	Private sector	Male	Female
Murree	7	4	4	4	3
Kahuta	5	3	2	3	2
Gujar Khan	15	8	6	8	7
Rawalpindi	41	15	26	19	22
Taxila	4	2	2	2	2
Total	72	32	40	36	36

Source: Morgan's (2006) sample selection table, Slovin's formula at 5 % level of significance, sample table presented by Krejcie & Morgan (1970).

Table 3.11 exhibited seven tehsils in Rawalpindi district and both (public & private) sector schools located in each tehsil, while the table also particularized the strength of schools in rural, urban areas and male and female schools located in five tehsils. According to the table, tehsil Rawalpindi has the highest number of schools (41), whereas tehsil Taxila has the lowest number of schools (4). Likewise, tehsil Gujarkhan has (15) schools, while number of schools located in tehsil Murree was (7). Moreover, tehsil Kahuta was comprised of (5) schools (Appendix, XXVIII).

Table 3.12

Details of Sample schools in Rawalpindi District (Tehsil Wise).

Tehsils	Total Number of Schools	Selected Schools
Murree	73	7
Kahuta	50	5

Gujar Khan	145	15
Rawalpindi	409	41
Taxila	43	4
Total	72	72

Source: Morgan's (2006) sample selection table, Slovin's formula at 5 % level of significance, the sample table presented by Krejcie & Morgan (1970).

Table 3.12 particularized total (72) functional educational institutions under the ownership of school education department of the government of Punjab. They have been taken as the sample of the study. Further, the table explained that tehsil Rawalpindi has the highest number of schools (41) as sample, while tehsil Taxila represents the lowest number of sample, i.e., (4) schools. Currently, there are (5) from Kahuta, (15) from GujarKhan and (7) from Murree that have been taken as sample institutions for the study.

Table 3.13

No. of selected schools, educational managers, teachers and students for data collection (sector wise).

Sector	Schools	Educational Managers	Teachers	Students
Public	32	32	196	192
Private	40	40	168	208
Total	72	72	365	400

Source: Sample selection table (Morgan, 2006), Slovin's formula at 5 % level of significance, the sample table presented by Krejcie & Morgan (1970).

Table 3.13 showed that there are (32) public sector schools which were selected for data collection, whereas (40) were selected as private sector sample schools. On the other hand, (32) educational managers as of the public and (40) educational managers of private schools were chosen as sample. Moreover, the table shows that (196) teachers were taken from public, while (168) from the private sector were treated as the sample of study. Likewise, (400) students (192) from public and (208) from private were chosen as sample.

Table 3.14

No. of selected schools, educational managers, teachers and students for data collection (Gender Wise) Year 2017-2018.

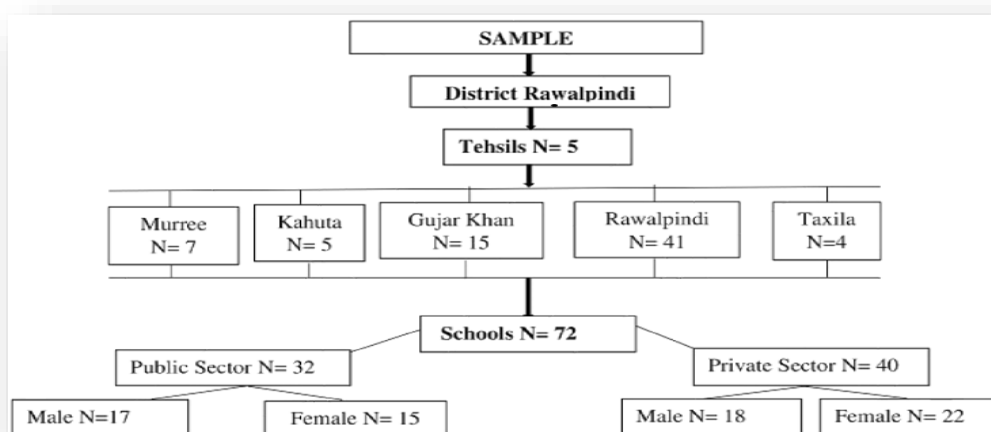
Gender	Schools	Educational Managers	Teachers	Students
Male	35	35	189	210
Female	37	37	176	190
Total	72	72	365	400

Source: Morgan's (2006) sample selection table, Slovin's formula at 5 % level of significance, the sample table presented by Krejcie & Morgan (1970).

Table 3.14 depicts gender wise distribution of sample. The table showed that there were (35) male schools, whereas (37) as female schools, and they were selected as sample. On the other hand, there were (35) male and (37) female educational managers, and (189) male and (176) female teachers stood as the sample. Likewise, there were (210) male students and (190) female students who participated as sample. Figure 3.7 presents pictorial presentation of sample.

Figure 3.7

Sample Size Distribution



Note. The above figure describes selected number of tehsils, and the schools located in respective tehsil. Further the figure describes no. of selected schools sector wise and gender wise.

3.5.1.4.2 Phase II: Qualitative sample size: Pietkiewicz and Smith (2012) said there is no rule regarding the selection of participants in Interpretative Phenomenological Analysis (IPA). Samples in IPA studies can be small, as main concern of IPA is to provide complete appreciation to the case of individual participant. They further explained that in IPA studies small sample size e.g. one, four, nine, fifteen, etc. participants are common as compared to large sample sizes. The sample was selected through purposive sampling technique. The researcher intended to interview 15 educational managers of the secondary level schools, 15 Secondary School Teachers (SSTs), and 15 secondary school students (SSS) of the five tehsils of Rawalpindi district of the province of Punjab, Pakistan. For the interviewee's selection, the researcher followed Morse, (1994) and Creswell (2018) sample selection suggestions. In final interviews, there were 39 participants. There were no respondents included from the pilot study.

Table 3.15

Characteristics of interviewees (Educational Managers, Teachers & students)

Interviewees	Gender		Total	Sector		Total
	M	F		Public	Private	
Educational managers	9	6	15	8	7	15
Teachers	9	6	15	8	7	15
Students	9	6	15	8	7	15
Total	27	18	45	24	21	45

Table 3.15 depicts that the total number of participants was 45 including 27 males, 18 females and 24 from the (public), and 21 as of (private sector). This sample included 9 males and 6 female educational managers, secondary school teachers (SST), and students' level schools. The Table also portrays that there were 8 SSEM, SSTs and SSS from public sector and 7 from private sector were selected as sample for interview. The interviewees were given pseudonyms (fictitious names) and are described in the following Table (3.16).

Table 3.16

Number of selected educational managers, teachers and students for interview

Interviewees	Gender		Total	Sector		Total
	M	F		Public	private	
*SSEM	9	6	15	9	6	15
**SST	8	7	15	8	7	15
***SSS	8	7	15	8	7	15
Total	25	20	45	25	20	45

Note: *SSEM= Secondary school educational managers, **SST= Secondary school teachers, ***SSS= secondary school students.

Table 3.16 depicts the sample of interviewees. It displays that 9 male and 6 female, 9 from public sector and 8 from private school educational managers, who were the selected sample for interviews. Likewise, 8 males and 7 females, 8 from public sector and 7 from private sector teachers were selected as sample. Similarly, 8 males and 7 females, 8 from public sector and 7 from private sector students were selected as sample. The table also depicts the pseudonyms (fictitious names) assigned to educational managers', teachers' and students.

3.6 Research Instruments

This portion of the chapter focused on the description of research instruments used for data collection purposes. The current study used two research instruments: (1) Three adapted research questionnaires, (1) self-developed questionnaire (2) semi-structured interviews. After a careful comparison, the researcher and the supervisor with collaboration and discussion selected these research instruments. In consonance with our society and culture, the researcher has made some changes within the adapted research questionnaires to bring our research study on the lines suited to the focused sample of the study. Additionally, validity (content, construct & face) and the reliability check of the modified research instruments was determined. The following three adapted research and one self-developed questionnaires were used to achieve current research objectives.

3.6.1 Principal Instructional Management Rating Scale (PIMRS): used for educational managers. It is a questionnaire of five-point Likert scale ranging from “always” to “never”. It was developed by Hallinger (1985). The researcher used this questionnaire with the permission of prime developer at the early stage of this research. The permission letter from Hallinger (Appendix, XIX) is attached. It was used to measure 3 dimensions based on ten related functions with 48 items as follows: (i) define mission of school (10, items), (ii) manage instructional program (15, items) and (iii) promote positive school climate (23, items). The first dimension comprises two functions which explain that mission is focused on educational advancement of students. It also centered on the EM’s role in working with staff to ensure that school is clear on its goals (Hallinger et al., 2013). On the other hand, the second dimension emphasizes the practice of EM in organization of the practical core of the school (Hallinger & Murphy, 1985). Consequently, the third dimension is broader in scope. This dimension presented the idea, that effective schools build an academic press through high expectations. Additionally, the reliability check of the modified scales was determined. The researcher has made some changes within the adapted questionnaire to bring our research study on the lines suited to the focused sample of the study. Moreover, it was realized that this questionnaire had been validated and provided reliable results in studies of school leadership. PIMRS has also been used in 500 plus studies during the year 2005- 2016. Moreover, 250 empirical studies also have used it (Hallinger, 2011; Pearce, 2017; Hallinger et al., 2017).

3.6.2 Teachers’ Self-Efficacy Scale (TSES): is an instrument of nine point Likert scale ranging from “not at all” to “a great deal” by Tschannen-Moran & Hoy (2001). They created this instrument to examine the conceptualizations and research concerning teachers’ sense of self-efficacy (Kang et al., 2020). Initially, this instrument was called “Ohio State teacher efficacy scale”. It was based up on conceptual lens of Social Cognitive Theory (SCT) presented by Bandura (1997). In this study, long form of TSES (Appendix, XVII) based on 23 items with “9 point Likert scale” from “nothing” to “a great deal” was used to collect the perceptions about the SSE from teachers. Permission in the direction of reprint and use from copy right authors about this scale was gained on the preliminary stage of this

research work. The permission letter from Anita Woolfolk Hoy (Appendix, XX, a), and a letter of permission from Tschannen - Moran (Appendix. XX, b), are attached. The instrument was used to measure 3 sub constructs with 23 items as follows: (i) student engagement (7, items), (ii) instructional strategies (8 items) and (iii) classroom management (8 items). Teachers self-efficacy scale (TSES) used for teachers. TSES to be the best favorable scale described by Duffin et al. (2012).

3.6.3 School Effectiveness Survey Questionnaire (SESQ): Correspondingly, school effectiveness survey questionnaire (SESQ, Appendix, and XVIII, d) developed by Baldwin, Coney, Fardig & Thomas (1993) and have modified in (2010). The SESQ was used to examine school effectiveness. Respondents of this instrument were secondary level students. Questionnaire was based on 22 items. It is an instrument of five point Likert scale ranging from “strongly disagree” to “strongly agree” developed by Baldwin et al., (1993) with their permission at the initial stage of this research (Appendix XXI). According to Baldwin et al., (1993) school effectiveness was determined by eleven components which were modified in 2010. Their modified school effectiveness survey questionnaire was used to measure 7 factors with 22 items as follows: (i) safe and ordered environment (4, items), (ii) high expectation’s climate (3, items), (iii) instructional leadership (4, items), (iv) opportunity for student to learn through time on task (3, items), (v) clear-cut focused mission (2, items), (vi) monitoring of student progress frequently (3, items), (vii) relationship of school and home (3, items). These factor were related to the environment, monitoring, time for learning, better performance, relationship with parents, school, teachers and instructional leadership. School Effectiveness Survey Questionnaire (SESQ) used for students.

The researcher took willingness from the participants before administration of research instruments, so all the participants eagerly participated in the survey. All the research scales were based on two sections:

- (i) Demographic
- (ii) Personal outlook

Table 3.17*Detail of Research Instrument Items*

Questionnaires	Major Dimensions/Factors	Representative items	Total
PIMRS*	Defining mission of school	1 – 10	10
	Managing instructional program	11 – 25	15
	Promoting a positive school climate	26 – 48	23
TSES **	Efficacy in engagement of students	1-7	7
	Efficacy in instructional strategies	8 – 15	8
	Efficacy in managing classroom	16 – 23	8
	Safe and ordered environment	1 – 4	4
SESQ***	High expectation's Climate	5 – 7	3
	Instructional leadership	8 – 11	4
	Opportunity for student to learn through time on task	12 – 14	3
	Clear-cut focused mission	15,16	2
	Monitoring of student's progress frequently	17 – 19	3
	Relationship of school and home	20 – 22	3

Note: *Principal Instructional Management Rating Scale, **Teachers Sense of Efficacy Scale, ***School Effectiveness Survey Questionnaire.

Table 3.17 shows number of related items related to each dimension of PIMRS and TSES. Further, the Table (3.17) elaborates related items of each factor of SESQ.

Table 3.18

Functions related to dimensions of Principal Instructional Management Rating Scale (PIMRS)

Functions	No. of items
Define school mission	
(a) Frame goals of the school	1,2,3,4,5
(b) Communicate the school goals	6,7,8,9,10
Instructional program management	
(c) Supervise and evaluate instruction	11,12,13,14,15

(d)Coordinate curriculum	16,17,18,19,20
(e)Monitor student progress	21,22,23,24,25
Promotion of a positive climate	
(f)Protection of instructional time	26,27,28
(g)Maintaining high visibility	29,30, 31,32,33
(h)Provide incentives for teachers	34,35,36,37,38
(i)Provide incentives for learning	39,40,41,42,43
(j)Promote professional development	44,45,46,47,48

Table 3.18 shows number of related items to functions of PIMRS and variation in total number of items. Items 1 to 10 assess educational managers' perception about their practices regarding defining a mission for school. Items 11 to 25 explore EM's perceptions about management of instructional program; on the other hand, items 26 to 48 define IL functions about promoting a positive school learning climate.

Table 3.19

Dimensions of Teachers Sense of self-efficacy scale (TSES)

Dimensions (Efficacy in)	No. of items
Student engagement (SE)	1,2,3,4,5,6,7
Instructional strategies (IS)	8,9,10,11,12,13,14,15
Classroom management (CM)	16,17,18,19,20,21,22,23

Table 3.19 displays item number of dimensions of TSES. First dimension SE comprises items from 1 – 7, while in the second dimension IS consisted of items from 8- 15 (Table, 3.19). On the other hand, items number 16 to 23 estimate teachers' perceptions about their SSE in classroom management.

Table 3.20*Factors of School Effectiveness Survey questionnaire (SESQ)*

Factors	No. of items
Safe and ordered environment (SOE)	1,2,3,4
High expectation's climate (HEC)	5,6,7
Instructional leadership (IL)	8,9,10,11
Opportunity for student to learn through time on task (OSLTT)	12,13,14
Clear-cut focused mission (CFM)	15,16
monitoring of student's progress frequently(MSPF)	17,18,19
Relationship of school and home (RSH)	20,21,22

Table 3.20 displays item number of factors of SESQ. First factor (SOE) comprises items from 1 – 4, while in the second factor (HEC) consisted of items from 5- 7 (Table, 3.20). On the other hand, items number 8 to 11 estimate students' perceptions about (IL), 12-14 collected their views for (OSLTT). Likewise factor five (CFM) encompasses item no. 15 and 16. Factor no. six (MSPF) comprehend item no. 17-19, while the last factor (RSH) covers item no. 20-21.

3.6.4 Interviews

The researcher used interviews as flexible data collection instrument. The aim of using semi-structured interviews (Appendix XXIII & XXV) were used as a means of triangulation with the survey questionnaires. For instance, Hammond and Wellington (2020) described that interviews are considered as a dialogue between interviewee and interviewer. This research study used term interviewees instead of interview participants. However, the interviewer can be referred to as the topic, participant or interviewee in former studies. According to Hammond & Willington, (2013, p. 92; 2020) "Creating an interview schedule includes converting an area of inquiry on the series of question that are important to the interviewee". The researcher tried to avoid jargon and used easy language to construct interview items.

Further, the questions of semi structured interview were phrased for making clarity of terms unquestionable while conducting interviews.

3.6.5 Purpose of research Instruments

The main purpose of research instruments (Questionnaires and semi-structured interviews) is as under:

3.6.5.1 Questionnaires: The purpose of the selected research instruments is to collect data from the selected respondents with their willingness that is relevant and suitable for the study design. The above mentioned research instruments: questionnaires (PIMRS, TSES, & SESQ) were used for the completion of quantitative phase. While interviews were administered for the accomplishment of qualitative phase of the study.

3.6.5.2 Interviews: Magaldi and Berler (2020) define the semi-structured interview as an exploratory interview. They further explain that the semi-structured interview is generally based on a guide and that it is typically focused on the main topic that provides a general pattern and enables a researcher to go deep for a discovery. The purpose of using semi-structure interview was to acquire in-depth information of interviewees regarding variables of the study. For this purpose, educational managers were interviewed regarding their views about functions of instructional leadership and teachers' views about their sense of self-efficacy. In addition, semi- structured interview allows flexibility and adaptability to ask spontaneous questions to the interviewees. It was also aimed to unfold the meaning of educational managers' and teachers' experiences and to uncover their lived world.

3.7 Verification of the research instruments

Different researches have guidelines for the evaluation of research instrument. Probably the Scientific Advisory Committee of the Medical Outcomes Trust (SAC, 2002) offers eight attributes that should be taken in to consideration when evaluating the instrument. These comprise: Measurement and conceptual model, Validation,

Reliability, Responsiveness, Interpretability, Administrative and respondent load, Alternate forms, Translations. The current research focused on three attributes of SAC (2002): Reliability, Translation and, Validity.

3.7.1 Validity

Validation of the research instruments was done in two phases.

Phase I: quantitative validation

Phase II: qualitative validation

Phase I: Validity of the adapted three research questionnaires: PIMRS, TSES, SESQ was established. According to M and Prabu (2019), the amount to which the tool processes, whatever it is envisioned? to quantify is discussed in validation. There are eight measurement properties of validation which were proposed by Scientific Advisory Committee (2002) that is: Internal consistency (Reliability), construct validity, validity of content, criterion, effects of ceiling and floor, reproducibility, responsiveness and interpretability. But this research followed (a) content validity, and (b) construct validity for the research questionnaires.

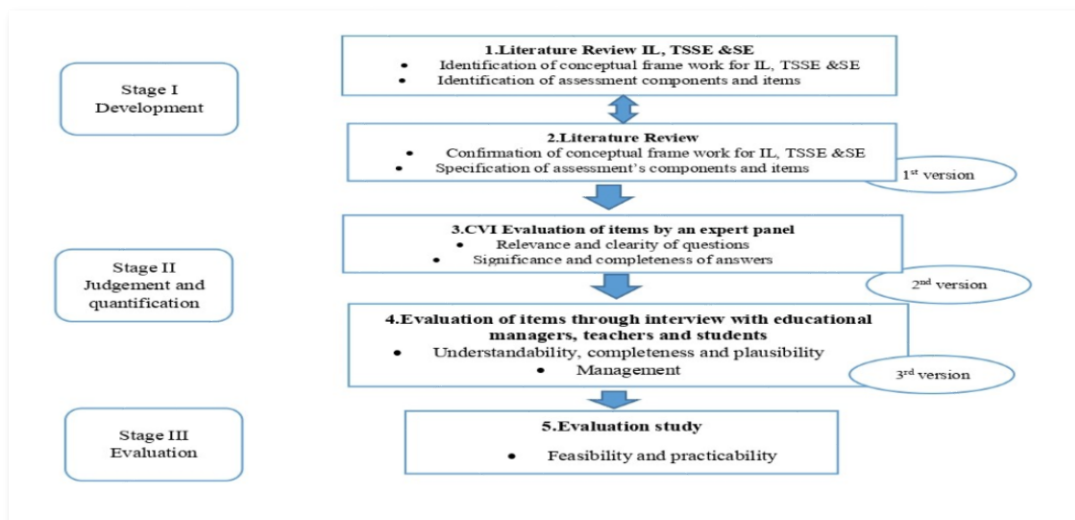
3.7.1 Content validity: It deals with the inquiry related to items in the research instrument that how well the items reflect the concepts of interest under investigation (De-Souza et al., 2017; M & Prabu, 2019). This way, the researchers may provide a brief outline of the characteristics through which they can rate the quality of an instrument. As noted by Lynn (1986), researchers compute CVI through the following six steps of content validation:

1. Preparing content validation form
2. Selecting a review panel of experts
3. Conducting content validation
4. Reviewing domain and items
5. Providing score on each item
6. Calculating CVI (Yusof, 2019).

3.7.1.1 Method for the content validity: For the selection and content validity of the instruments related to research variables, the approach described by Lynn (1986) was used. This approach advocates two stages, I (development), and II (judgment and quantification). Through stage II the researcher evaluated the performance of the instrument's items. Further in this study, stage II was accompanied by a third stage (evaluation), in which the study tested feasibility and practicability of these questionnaires (Fig. 3.8).

Figure 3.8

Stages of validity and feasibility testing of research instruments



Note: Created by Sagheer (2023).

Source: Stages of Lynn (1986) for validity of research instrument

According to picture the content validity was accomplished in three stages.

Stage I: The literature review identified a few models that aimed to explain the instructional leadership, Dwyer's (1984), Hallinger and Murphy's (1985), Murphy's (1990), DuFour (1998), and Alig-Mielcarek's (2003) models. Likewise, Theories (Social Cognitive, Social Learning, and Self-efficacy) enlighten teachers' sense of self-efficacy. Moreover, Edmonds (1979), Edmonds (1982), Baldwin et al. (1993), Lezotte (1991), and Cotton's (2000) factors of school effectiveness describe SE. The review explained that IL and TSSE focus solely on school effectiveness but combined expectations about the effects on school effectiveness was assumed. This complexity

demands for an explanation model that considers all aspects mentioned in selected models related to IL, TSSE and SE as described in figure 2.23 in chapter 2.

In addition, from the instructional leadership and teachers' sense of self-efficacy perspective, the Hallinger and Murphy (1985) model of IL and Moran et al. (1998) model of self-efficacy fulfilled all of the requirements for this study. They provided a literature-based, comprehensive frame work for assessing the IL functions and TSSE dimensions. Moreover, the review showed different factors of school effectiveness presented mentioned above by different authors, but none of them except Baldwin et al. (1993) model of school effectiveness included the assessment scale to assess SE.

Stage II: included two evaluations (Judgment and quantification). The first assessment consisted of an expert panel that focused on the relevance and clarity of the questions as well as the significance and completeness of responses in the research instruments. The second evaluation comprised interviews with educational managers, teachers and students that focused on the understandability, completeness, plausibility and management of these adapted research instrument.

(a) 1st evaluation (Expert panel) of the content validity: in stage II, according to Halek et al (2017), in the panel, experts are the individuals who worked in the relevant field. keeping in view their recommendation in current research panel of experts is from the field of education i.e., the criteria included being a researcher and having an understanding of the field of assessment instruments, and most importantly one participant from the sample of study who is going to fill the final version for the final data collection. Ten experts were identified and contacted.

Table 3.21*Sample characteristics of the expert panel, N= 10*

Gender	3 men, 7 women
Academic Disciplines (some with more than one degree)	4 (education), 2 (psychology), 2 (Urdu), 1 (TEFL), 1 (English),
Position	1, employed by the university, 1, lecturer, 4 in leading positions in school education department, 2 working as school teachers, 2 students.
Theoretical knowledge about Assessment instruments in education	6 experts
Research experience: in the field of education	4 experts
General work experience	On average, 18 years (min 5; max 30)
Work experience in field of education	On average, 10 years (min 4; max 35)

The researcher contacted 10 experts. Response rate was 100 %. The data confirmed that these persons had the required expertise to evaluate the instrument (Table 3.21). The experts were from a broad spectrum of disciplines; most of them had a double qualification. Almost all the experts had longstanding experience in the field of education.

Stage II: Content validity index (CVI): Each question was evaluated by rating (a) its relevance to the instrument's aim and (b) its understandability. Each answer was assessed regarding its (c) completeness and (d) meaningfulness for the related question. The four attributes were rated on a 4-point scale (1 = not relevant; 4 = highly relevant). In addition, the experts were asked to evaluate whether the items covered all important aspects or if there were missing components. The experts could also comment on every item. A content validity index was calculated both at the item level (I-CVI) and scale level (S-CVI) for all attributes. The (I-CVI) was calculated as the number of experts providing a score of 3 or 4 divided by the total number of experts. With more than 5 experts, the I-CVI should not be lower than 0.78 (Polit & Beck, 2006). (2). S-CVI/Ave is calculated by taking the average of the item-level CVIs. The average proportion of the items on one scale rated 3 or 4. The acceptable

standard for the S-CVI-Ave is 0.8; values up to 0.9 indicate an excellent average (Holle et al, 2014; Halek et al., 2017).

Additionally, a modified Kappa index was computed to estimate the I-CVI (Wynd et al, 2003). The modified Kappa (k^*) is an index of agreement among experts that indicates beyond chance that the item is relevant, clear, or another characteristic of interest. Tables shows that present research applied the formula suggested by Polit and Beck (2007). Moreover, k^* was interpreted according to the standards recommended by Fleiss (1981). The results of the expert panel contributed to the second version of the questionnaires. A final version of the questionnaire was established based on the experts' comments.

Table 3.22

Content validity of dimensions (instructional leadership)

Instructional Leadership (Relevance of questions)							
No.	Content of items	No. of experts	No. of ratings 3 or 4	I-CVI ^a	Pc ^b	K ^{*,c,d}	interpretation
1	Communication	10	10	1.00	0.001	1.00	****
2	Monitoring	10	10	1.00	0.001	1.00	****
3	Motivation	10	10	1.00	0.001	1.00	****
4	Visibility	10	10	1.00	0.001	1.00	****
5	Professional development	10	10	1.00	0.001	1.00	****
6	Honor accomplishments (teacher & Students)	10	10	1.00	0.001	1.00	****
S-CVI/AVE= .99							
Instructional Leadership (clarity of questions)							
1	Communication	10	10	1.00	0.001	1.00	****
2	Monitoring	10	10	1.00	0.001	1.00	****
3	Motivation	10	10	1.00	0.001	1.00	****
4	Visibility	10	10	1.00	0.001	1.00	****
5	Professional development	10	10	1.00	0.001	1.00	****
6	Honor accomplishments (teacher & students)	10	10	1.00	0.001	1.00	****
S-CVI/AVE= .99							
Instructional Leadership (meaningfulness of answers)							
1	Communication	10		1.00	0.001	1.00	****

2	Monitoring	10	10	1.00	0.001	1.00	****
3	Motivation	10		1.00	0.001	1.00	****
4	Visibility	10	10	1.00	0.001	1.00	****
5	Professional development	10		1.00	0.001	1.00	****
6	Interaction with parents	10	10	1.00	0.001	1.00	****
S-CVI/AVE=.99							
Instructional leadership (completeness of answers)							
No.	Content of items	No. of experts	No. of ratings 3 or 4	I-CVI ^a	Pc ^b	K ^{*,c,d}	Evaluation
1	Communication	10	10	1.00	0.001	1.00	****
2	Monitoring	10	10	1.00	0.001	1.00	****
3	Motivation	10	10	1.00	0.001	1.00	****
4	Visibility	10	10	1.00	0.001	1.00	****
5	Professional development	10	10	1.00	0.001	1.00	****
6	Honor accomplishment (teachers & students)	10	10	1.00	0.001	1.00	****
S-CVI/AVE=.99							

Table 3.23*Content validity of dimensions (teachers' sense of self-efficacy)*

Teachers sense of self-efficacy (Relevance of questions)							
No.	Content of items	No. of experts	No. of ratings 3 or 4	I-CVI ^a	Pc ^b	K ^{*,c,d}	Evaluation
1	Engage students	10	10	1.00	0,001	1.00	****
2	Motivate students	10	10	1.00	0.001	1.00	****
3	Assessment	10	10	1.00	0.001	1.00	****
4	Instructional strategies	10	10	1.00	0.001	1.00	****
5	Deal with non-cooperative students	10	10	1.00	0.001	1.00	****
6	Classroom management	10	10	1.00	0.001	1.00	****
S-CVI/AVE=.99							
Teachers sense of self-efficacy (clarity of questions)							
1	Engage students	10	10	1.00	0.001	1.00	****
2	Motivate students	10	10	1.00	0.001	1.00	****
3	Assessment/monitoring	10	10	1.00	0.001	1.00	****
4	Instructional strategies	10	10	1.00	0.001	1.00	****
5	Deal with non-cooperative students	10	10	1.00	0.001	1.00	****
6	Classroom management	10	10	1.00	0.001	1.00	****
S-CVI/AVE=.99							
Teachers sense of self –efficacy (meaningfulness of answers)							
1	Engage students	10	10	1.00	0.001	1.00	****
2	Motivate students	10	10	1.00	0.001	1.00	****
3	Assessment/monitoring	10	10	1.00	0.001	1.00	****
4	Instructional strategies	10	10	1.00	0.001	1.00	****
5	Deal with non-cooperative students	10	10	1.00	0.001	1.00	****
6	Classroom management	10	10	1.00	0.001	1.00	****
S-CVI/Ave ^e .99							

Table 3.24*Content validity of factors of “School effectiveness”*

School effectiveness (Relevance of questions)							
No.	Content of items	No. of experts	No. of ratings 3 or 4	I-CVI ^a	Pc ^b	K ^{*,c,d}	Evaluation
1	Safety	10	10	1.00	0.001	1.00	****
2	Learning	10	10	1.00	0.001	1.00	****
3	Visibility	10	10	1.00	0.001	1.00	****
4	No interruption	10	10	1.00	0.001	1.00	****
5	Mission of school	10	10	1.00	0.001	1.00	****
6	Frequent monitoring	10	10	1.00	0.001	1.00	****
7	Relationship	10	10	1.00	0.001	1.00	****
S-CVI/AVE=.99							
School effectiveness (clarity of questions)							
1	Safety	10	10	1.00	0.001	1.00	****
2	Learning	10	10	1.00	0.001	1.00	****
3	Visibility	10	10	1.00	0.001	1.00	****
4	No interruption	10	10	1.00	0.001	1.00	****
5	Mission of school	10	10	1.00	0.001	1.00	****
6	Frequent monitoring	10	10	1.00	0.001	1.00	****
7	Relationship	10	10	1.00	0.001	1.00	****
S-CVI/AVE=.99							
School effectiveness (Meaningfulness of answers)							
1	Safety	10	10	1.00	0.001	1.00	****
2	Learning	10	10	1.00	0.001	1.00	****
3	Visibility	10	10	1.00	0.001	1.00	****
4	No interruption	10	10	1.00	0.001	1.00	****
5	Mission of school	10	10	1.00	0.001	1.00	****
6	Frequent monitoring	10	10	1.00	0.001	1.00	****
7	Relationship	10	10	1.00	0.001	1.00	****
S-CVI/AVE= .99							

Table 3.24 (Continue.....)*Content validity of factors of "School effectiveness"*

School effectiveness (completeness of answers)							
1	Safety	10	10	1.00	0.001	1.00	****
2	Learning	10	10	1.00	0.001	1.00	****
3	Visibility	10	10	1.00	0.001	1.00	****
4	No interruption	10	10	1.00	0.001	1.00	****
5	Mission of school	10	10	1.00	0.001	1.00	****
6	Frequent monitoring	10	10	1.00	0.001	1.00	****
7	Relationship	10	10	1.00	0.001	1.00	****
S-CVI/AVE=		.99					

Table 3.25*Evaluation of content validity PIMRS (Simplified).*

PIMRS (Simplified) items	Number of experts	Number in agreement	I-CVI ^a	Pc ^b	K ^{*,c,d}	Evaluation
1	5	5	1.00	.000	1.00	Excellent
2	5	5	1.00	.000	1.00	Excellent
3	5	5	1.00	.000	1.00	Excellent
4	5	5	1.00	.000	1.00	Excellent
5	5	5	1.00	.000	1.00	Excellent
6	5	5	1.00	.000	1.00	Excellent
7	5	5	1.00	.000	1.00	Excellent
8	5	5	1.00	.000	1.00	Excellent
9	5	5	1.00	.000	1.00	Excellent
10	5	5	1.00	.000	1.00	Excellent
11	5	5	1.00	.000	1.00	Excellent
12	5	5	1.00	.000	1.00	Excellent
13	5	5	1.00	.000	1.00	Excellent
14	5	5	1.00	.000	1.00	Excellent
15	5	5	1.00	.000	1.00	Excellent
16	5	5	1.00	.000	1.00	Excellent
17	5	5	1.00	.000	1.00	Excellent
18	5	5	1.00	.000	1.00	Excellent
19	5	5	1.00	.000	1.00	Excellent
20	5	5	1.00	.000	1.00	Excellent
21	5	5	1.00	.000	1.00	Excellent
22	5	5	1.00	.000	1.00	Excellent
23	5	5	1.00	.000	1.00	Excellent
24	5	5	1.00	.000	1.00	Excellent
25	5	5	1.00	.000	1.00	Excellent
26	5	5	1.00	.000	1.00	Excellent
27	5	5	1.00	.000	1.00	Excellent
28	5	5	1.00	.000	1.00	Excellent
29	5	5	1.00	.000	1.00	Excellent
S-CVI/Ave ^e			0.99			

^a -CVI (item content validity index) = number giving a rating of 4 or 5/number of experts.

^b Pc (probability of a chance occurrence) = $[N!/A!(N-A)!] 9 0.5^N$ where N = number of experts and A = number agreeing on good relevance.

^c K* = kappa designating agreement on relevance: $K^* = (I-CVI-Pc)/(1-Pc)$.

^d Evaluation criteria for kappa: fair = j* of 0.40–0.59, good = K* of 0.60–0.74 and excellent = K* > 0.74.

^e S-CVI/Ave (average scale content validity index) = mean of I-CVI

Table 3.25 (continue....)*Evaluation of content validity PIMRS (Simplified).*

PIMRS (Simplified) items	Number of experts	Number in agreement	I-CVI ^a	Pc ^b	K ^{*,c,d}	Evaluation
30	5	5	1.00	.000	1.00	Excellent
31	5	5	1.00	.000	1.00	Excellent
32	5	5	1.00	.000	1.00	Excellent
33	5	5	1.00	.000	1.00	Excellent
34	5	5	1.00	.000	1.00	Excellent
35	5	5	1.00	.000	1.00	Excellent
36	5	5	1.00	.000	1.00	Excellent
37	5	5	1.00	.000	1.00	Excellent
38	5	5	1.00	.000	1.00	Excellent
39	5	5	1.00	.000	1.00	Excellent
40	5	5	1.00	.000	1.00	Excellent
41	5	5	1.00	.000	1.00	Excellent
42	5	5	1.00	.000	1.00	Excellent
43	5	5	1.00	.000	1.00	Excellent
44	5	5	1.00	.000	1.00	Excellent
45	5	5	1.00	.000	1.00	Excellent
46	5	5	1.00	.000	1.00	Excellent
47	5	5	1.00	.000	1.00	Excellent
48	5	5	1.00	.000	1.00	Excellent
S-CVI/Ave ^e			0.99			

^a -CVI (item content validity index) = number giving a rating of 4 or 5/number of experts.

^b Pc (probability of a chance occurrence) = $[N!/A!(N-A)!] 9 0.5^N$ where N = number of experts and A = number agreeing on good relevance.

^c K* = kappa designating agreement on relevance: $K^* = (I-CVI-Pc)/(1-Pc)$.

^d Evaluation criteria for kappa: fair = j* of 0.40–0.59, good = K* of 0.60–0.74 and excellent = K* > 0.74.

^e S-CVI/Ave (average scale content validity index) = mean of I-CVI.

Table 3.26*Evaluation of content validity TSES (Simplified).*

TSES (Simplified) items	Number of experts	Number in Agreement	I-CVI ^a	Pc ^b	K ^{*,c,d}	Evaluation
1	5	5	1.00	.000	1.00	Excellent
2	5	5	1.00	.000	1.00	Excellent
3	5	5	1.00	.000	1.00	Excellent
4	5	5	1.00	.000	1.00	Excellent
5	5	5	1.00	.000	1.00	Excellent
6	5	5	1.00	.000	1.00	Excellent
7	5	5	1.00	.000	1.00	Excellent
8	5	5	1.00	.000	1.00	Excellent
9	5	3	1.00	.000	1.00	Excellent
10	5	3	1.00	.000	1.00	Excellent
11	5	5	1.00	.000	1.00	Excellent
13	5	5	1.00	.000	1.00	Excellent
14	5	5	1.00	.000	1.00	Excellent
15	5	5	1.00	.000	1.00	Excellent
16	5	5	1.00	.000	1.00	Excellent
17	5	5	1.00	.000	1.00	Excellent
18	5	5	1.00	.000	1.00	Excellent
19	5	5	1.00	.000	1.00	Excellent
20	5	3	1.00	.000	1.00	Excellent
21	5	5	1.00	.000	1.00	Excellent
22	5	3	1.00	.000	1.00	Excellent
23	5	5	1.00	.000	1.00	Excellent
S-CVI/Ave ^e			0.99			

^a I-CVI (item content validity index) = number giving a rating of 3 or 4/number of experts.

^b Pc (probability of a chance occurrence) = $[N!/A!(N-A)!] 9 0.5^N$ where N = number of experts and A = number agreeing on good relevance.

^c K* = kappa designating agreement on relevance: $K^* = (I-CVI-Pc)/(1-Pc)$.

^d Evaluation criteria for kappa: fair = j* of 0.40–0.59, good = K* of 0.60–0.74 and excellent = K* > 0.74.

^e S-CVI/Ave (average scale content validity index) = mean of I-CV

Table 3.27*Evaluation of content validity SESQ (Simplified).*

SESQ(Simplified) items ^a	Number of experts	Number in agreement	I-CVI ^a	Pc ^b	K ^{*,c,d}	Evaluation
1	5	5	1.00	.000	1.00	Excellent
2	5	5	1.00	.000	1.00	Excellent
3	5	5	1.00	.000	1.00	Excellent
4	5	5	1.00	.000	1.00	Excellent
5	5	5	1.00	.000	1.00	Excellent
6	5	5	1.00	.000	1.00	Excellent
7	5	5	1.00	.000	1.00	Excellent
8	5	5	1.00	.000	1.00	Excellent
9	5	5	1.00	.000	1.00	Excellent
10	5	5	1.00	.000	1.00	Excellent
11	5	5	1.00	.000	1.00	Excellent
12	5	5	1.00	.000	1.00	Excellent
13	5	5	1.00	.000	1.00	Excellent
14	5	5	1.00	.000	1.00	Excellent
15	5	5	1.00	.000	1.00	Excellent
16	5	5	1.00	.000	1.00	Excellent
17	5	5	1.00	.000	1.00	Excellent
18	5	5	1.00	.000	1.00	Excellent
19	5	5	1.00	.000	1.00	Excellent
20	5	5	1.00	.000	1.00	Excellent
21	5	5	1.00	.000	1.00	Excellent
22	5	5	1.00	.000	1.00	Excellent
S-CVI/Ave ^e			0.99			Excellent

^a I-CVI (item content validity index) = number giving a rating of 4 or 5/number of experts.

^b Pc (probability of a chance occurrence) = $[N!/A!(N-A)!] 9 0.5^N$ where N = number of experts and A = number agreeing on good relevance.

^c K* = kappa designating agreement on relevance: $K^* = (I-CVI-Pc)/(1-Pc)$.

^d Evaluation criteria for kappa: fair = j* of 0.40–0.59, good = K* of 0.60–0.74 and excellent = K* > 0.74.

^e S-CVI/Ave (average scale content validity index) = mean of I-CVI.

Tables 3.22 – 3.27 shows the content validity of the questionnaires PIMRS, TSES, and SESQ and their evaluation. None of the items received an “I-CVI” score lower than “0.78” for all three adapted and one personally developed questionnaires. All the items of PIMRS, TSES, and SESQ also showed excellent “K*” (kappa designating agreement on relevance), indicating very good content validity. The S-CVI/Ave scores 0.99 for PIMRS, TSES, and SESQ indicating acceptable content validity.

(a, c) In stage II of the content validity “2nd evaluation”: Interviews with experts according to Lynn (1986), the same experts should reevaluate the modified version of an instrument. Due to the comprehensiveness of the instrument and the limited resources of the first expert panel, a second round of evaluations with the same experts was not possible. Therefore, a second evaluation was organized with other experts, in which key individuals from secondary schools were invited to participate in an interview. The researcher was free to select the key persons; the only inclusion criteria were that the persons who were not from the relevant field. During interview, which lasted for half an hour, the modified version 2 of PIMRS, TSES, and SESQ, were introduced, and the objectives were explained. Subsequently, the experts were asked to assess the understandability, plausibility and completeness of the items. The discussion and suggested modifications were noted, resulting in a further revised version 3 of all research questionnaires.

(b) Stage III: Evaluation: The third stage administered research instruments to evaluate the feasibility of (PIMRS, TSES, & SESQ), their practicability, relevance and usefulness.

Average S-CVI: The S-CVI was calculated for all three dimensions of IL, three dimensions of TSSE and seven factors of school effectiveness. The S-CVI/Ave ranged from 0.66 to 1.00. Two (28 %) of the 48 indices were lower than 0.80 in PIMRS, and 1 index (18.6 %) was lower than 0.90. The majority of the items indicated content validity according to both cutoffs (83% & 72% for 0.80 & 0.90,

respectively). All SCVI/UA values except one were below the acceptable minimum of 0.80 (Table 3.28).

Table 3.28

S-CVI for PIMRS, TSES & SESQ (Version 2.0)

Dimensions of PIMRS, TSES and factors of SESQ	Relevance of Questions S- CVI/Ave	Clarity of Questions S- CVI/Ave	Significance /meaning fullness of questions S-CVI/Ave	Completeness of Answers S-CVI/Ave
Defining school mission	0.95	0.84	0.88	0.83
Managing instructional program	0.81	0.81	0.85	0.76
Promoting positive school climate	0.92	0.93	0.89	0.78
Efficacy in student engagement	1.00	0.66	0.90	0.79
Efficacy in instructional strategies	0.93	0.85	0.74	0.75
Efficacy in classroom management	0.92	0.92	0.83	0.86
Safe and ordered environment	0.87	0.85	0.87	0.92
High expectation's climate	0.85	0.87	0.80	0.81
Instructional leadership	0.81	0.95	0.80	0.78
Opportunity for student to learn through time on task	0.93	0.85	0.89	0.83
Clear-cut focused mission	0.91	0.90	0.81	0.77
Monitoring of student progress frequently	0.89	0.91	0.83	0.85
Relationship of school and home	0.90	0.92	0.80	0.84

Two Items in the function (protect instructional time) of second dimension of IL (managing instructional program) received the lowest relevance scores for SCVI/Ave (SCVI/Ave 0.81), followed by the defining school mission (SCVI/Ave 0.95) and promoting positive school climate (S-CVI/Ave 0.92). The best score for the relevance of items was for the dimension efficacy in student engagement at 1.0 (Table 3.28). The average S-CVI for understandability ranged between 0.66 and 0.93. The one question on efficacy in student engagement was the least understood (S-CVI/Ave 0.66). Instructional leadership (SCVI/Ave 0.95) as well as promoting positive school climate (S-CVI/Ave 0.93) appeared to be best understood (Table 3.32). The scores for meaningfulness of items ranged from 0.74 to 0.90. The instructional leadership dimension defining school mission received the fewest negative values (S-CVI/Ave 0.88) followed by the factor of school effectiveness named safe and ordered environment (SCVI/Ave 0.87). Moreover, Table (3.28) shows that the weakest dimension regarding the meaningfulness of items was efficacy in instructional strategies (SCVI/Ave 0.74). The results related to each item are shown in Tables 3.24, 3.25, 3.26 and 3.27 respectively.

3.7.2 Face Validation: Ten experts' who fulfilled the addition and elimination criteria were selected for face validity of the adapted research instruments. 10 experts were given both the English and Urdu version of PIMRS, TSES and SESQ. The instruments were self-administered to the expert. The researcher requested to the participants to take note of the time taken to answer the questions, clarity of the content, language and wording used and the general structure of the instruments. Their opinions on understanding of the instruments were assessed and noted. This included their understanding of wording and general structure. Results were discussed among the panel of experts. Minor corrections and fine tuning of the questions were addressed according to their comments and suggestions.

3.7.3 Construct validity: Moreover, for construct validity of PIMRS researcher observed that according to Antoniou and Lu (2018) very few information was provided in relation to the reliability and construct validity of the PIMRS based on the results obtained in previous studies. This concern stresses the importance of an

updated evaluation of the validity and reliability of the PIMRS through appropriate statistical approach such as the Exploratory Factor Analysis (EFA). In addition, very little information is available in relation to the measuring properties, and especially about the construct validity, of the PIRMS in the Pakistani Educational System. However, doubts have been raised in relation to the suitability of some items in the Pakistani education system. At this stage, current study decided to keep the PIMRS in its formal and complete version and explore those subjects empirically via the results of the EFA analyses, and provide suggestions to researchers, school educational managers and teachers in relation to the extent to which the PIMRS could be used in the Pakistani educational system to evaluate instructional leadership. This modified version of PIMRS will be considered as Pakistani version.

Consequently, Teacher's Sense of Efficacy Scale (TSES) was developed in order to examine their sense of self-efficacy by Tschannen-Moran and Hoy (2001). This instrument consists of three dimensions, namely student engagement, instructional practices, and classroom management. The instrument has a short form with 12 items and a long form with 24 items. Translations and modification of the TSES have been published, reporting different implications about the constructs of the scale. Overall, these studies (e.g. Ma et al., 2020; Monteiro et al., 2019; Burgueno et al., 2019; Valls, Bonvin, & Benoit, 2020; Khairani & Makara, 2020) suggest that psychometric properties of the scale would vary based on teachers' experiences, and that in their adoption across cultural boundaries, the scale must be adjusted for appropriateness to the unique context of teachers being studied. Keeping in view these recommendations researcher modified the instrument according to the Pakistani context. This version of TSES will be considered as Pakistani TSES.

Moreover, Abgoli and Sabeti (2013) used SESQ as research instrument in their research to evaluate relationship between Managers' Transformational and Transactional Leadership Styles and School Effectiveness in Secondary Schools in Iran. But, they did not validate the research instrument. During literature review it is observed that translations and modification of the SESQ have not been published earlier.

The researcher followed following procedures for the construct validity of the adapted research instruments. Further the researcher focused 4 steps proposed by Daunert and Seel (2020) in translating and adapting a research instruments:

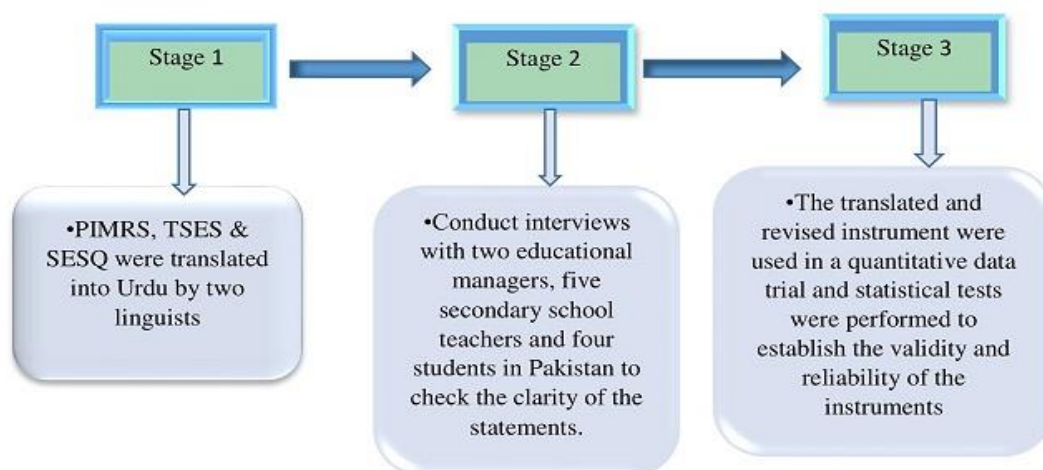
- “Phase 1: Initial translation and adaptation of the instrument
- Phase 2: Conduct a pilot test of the instrument (i.e., gathering data; analyzing, and summarizing the initial data; and summarizing feedback on the instrument)
- Phase 3: Revise, refine, and finalize the adapted instrument
- Phase 4: Ongoing monitoring of the adapted instrument (revise or update as deemed necessary)”.

3.7.3.1 Phase I: Initial translation and adaptation of the instrument

(a) **Procedures:** In the direction to achieve the goal for producing a translated version of the PIMRS, TSES and SESQ instruments and to preserve the meaning and purpose of the original instruments items, the researcher followed the process listed in Figure 3.9:

Figure 3.9

Stages for translation



The first stage was the change of language (translation) from English to Urdu. PIMRS has been translated in Urdu following the approach proposed by Beaton et al., (2000). Particularly, for the forward translation step, we generated two translations of the original PIMRS by two independent translators, who are native speakers of the Urdu language. Following the comparison between the two independent translations, a reconciled language version has been developed along

with a report elaborating on the reconciliation rationale. Then, for the backward translation step, the reconciled PIMRS in Urdu language was translated into English by one professional translator, native speaker of the Urdu language and fluent in English. The backward translation version and the original PIMRS have been finally compared. Some minor discrepancies that have been encountered have been resolved. Translation of TSES was done by two experts respectively. While, one of these experts was related to the field of education and one was from field of psychology as well. After the translation, due to differences in context, culture and language the meaning of the sentence was checked so that sentences of Urdu version contain the same meaning as the original sentences in English. With the help of experts and the supervisor the researcher tried to preserve the meaning of each item in TSES and translated version. SESQ was also translated through the same procedure adopted for TSES.

The second stage was an interview with study participants (two educational managers, four secondary school teachers (SSTs), and four students) in Rawalpindi city to check the clarity of the statements. These interviews helped the researcher to determine whether the meaning of the sentence in the translation matches the original meaning. Respondents were asked to read each instrument item. Then, they were asked about the meaning of each item that was read. When there was a respondent who did not understand the meaning correctly, the researcher explained the intended meaning.

The third stage was field-testing of the translated and revised instruments. Then, a statistical test was performed to determine the reliability of modified PIMRS, TSES and SESQ. The reliability was analyzed using Alpha-Cronbach Reliability. Data obtained from the study were analyzed using SPS 23. The researcher performed factor analysis (Exploratory Factor Analysis, EFA) for the construct validity of all adapted research instruments.

3.8 Factor analysis (FA)

FA assessment of item structures can be handled using either Exploratory Factor Analysis (EFA) or Confirmatory Factor Analysis (CFA) model (Lorenzo-Seva & Ferrando, 2020). Before the first phase (collection of quantitative data) of

the study could begin, researcher conducted a pilot study to modify, delete or add items according to the context of the study. These sample items were based on interviews with educational managers about their perceptions regarding instructional leadership, teachers about what they thought about sense of self-efficacy, and students regarding effectiveness of their schools. The participants in the pilot study had the opportunity to respond to the instrument of PIMRS-50, pilot items of TSES-24 and SESQ 22-items, after which researcher used factor analysis and eliminated items with poor variability, and maintained items that loaded clearly on one of the substantive factors. Any items remaining in the pilot instrument were clarified and checked for proper item selection. Factor analyses were conducted to verify the factorial validity of the research instruments.

3.8.1 Exploratory Factor Analysis (EFA):

EFA was performed with the Maximum Likelihood (ML) method and Varimax rotation with Kaiser Normalization. These analyses were used to verify factor saturations of the items in each dimension and cross-check the results with those from reliability analysis. A value of less than 0.5 indicates the sample is too small, but ideally, we are aiming 0.7 or above. Exploratory Factor Analysis (EFA) was conducted on the factors that are influential to the adaption of PIMRS, TSES and SESQ.

Table 3.29

KMO and Bartlett's Test (PIMRS)

KMO and Bartlett's Test for	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	Bartlett's Test of Sphericity Approx. Chi-Square	df	Sig.
*O-PIMRS (50 items)	.819	948.198	70	.000
**M-PIMRS (48 items)	.828	2057.275	70	.000

Note: $p < .05$, * original PIMRS, ** Modified PIMRS

Table 3.29 outlines a KMO value of 0.819 for 50 items of original PIMRS and 0.828 for 48 modified items of PIMRS according to the Pakistani context. In addition, the Bartlett test of sphericity gave a value of 948.198 for O-PIMRS and 2057.275 for M-PIMRS, while a p-value of 0.000 for both, thus being significant. These results affirm the factorability and suitability of the data to undergo EFA. Furthermore, the correlation matrix of the output was inspected to ascertain the suitability of the data for analysis. Findings revealed that most of the variables had a value ≥ 0.3 , which upholds the suitability of the dataset. Moreover, the Cronbach alpha value of 0.852, .947 and .803 were given, as reported in the preceding section.

Table 3.30

KMO and Bartlett's Test (TSES)

KMO and Bartlett's Test for	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	Bartlett's Test of Sphericity Approx. Chi-Square	df	Sig.
*O-TSES (24 items)	.668	205.991	363	.000
**M-TSES (23 items)	.896	5211.260	363	.000

Note: p<.05, * original TSES, ** Modified TSES

Table (3.30) shows that the value of Kaiser-Meyer-Olkin test is (.668) for OTSES and (.896) for M-TSES indicates that the sampling is adequate to identify teachers' sense of self-efficacy. It means that there is a positive relationship between the variables and scale is factorable. Moreover, the Table indicated appropriateness of the 23 item TSES for Pakistani context.

Table 3.31

KMO and Bartlett's Test (SESQ)

KMO and Bartlett's Test for	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	Bartlett's Test of Sphericity Approx. Chi-Square	df	Sig.
SESQ (22 items)	0.828	2057.275	398	.000

Note: p<.05

This study used original SESQ with minor modifications. In Table 3.31 value (.828) means our sample size is sufficient. The value of Bartlett's Test of Sphericity is $p < .05$, which means that we have enough correlations for factor analysis and items are accurate for the context of the study.

Table 3.32

Communalities (PIMRS)

	1	2	3	4	5	6	7	8	9	10	11	12
Initial	1	1	1	1	1	1	1	1	1	1	1	1
Extraction	.510	.621	.834	.553	.652	.621	.803	.692	.661	.759	.496	.613
	13	14	15	16	17	18	19	20	21	22	23	24
Initial	1	1	1	1	1	1	1	1	1	1	1	1
Extraction	.656	.729	.723	.688	.615	.776	.822	.763	.728	.634	.716	.819
	25	26	27	28	29	30	31	32	33	34	35	36
Initial	1	1	1	1	1	1	1	1	1	1	1	1
Extraction	.721	.641	.652	.732	.628	.842	.765	.628	.732	.689	.637	.738
	37	38	39	40	41	42	43	44	45	46	47	48
Initial	1	1	1	1	1	1	1	1	1	1	1	1
Extraction	.782	.510	.524	.655	.833	.644	.878	.784	.639	.578	.668	.514
<i>Communalities (PIMRS) of three dimensions</i>												
Dimensions					DSM			MPI			PPSC	
Initials					1			1			1	
Extraction					.616			.607			.546	

Note: Extraction Method: Principal Component Analysis.

Table 3.33*Communalities (TSES) of 23 items*

Codes	Items	Initial	Extraction
ESE	1	1	.432
	2	1	.594
	3	1	.598
	4	1	.646
	5	1	.545
	6	1	.668
	7	1	.629
EIS	8	1	.652
	9	1	.613
	10	1	.705
	11	1	.443
	12	1	.723
	13	1	.550
	14	1	.623
ECM	15	1	.451
	16	1	.731
	17	1	.666
	18	1	.731
	19	1	.830
	20	1	.716
	21	1	.688
	22	1	.862
	23	1	.716
Communalities of dimensions of TSES			
Dimensions		Initial	Extraction
ESE		1	.615
EIS		1	.686
ECM		1	.602

Note: Extraction Method: Principal Component Analysis.

Table 3.34*Communalities (SESQ) of 22 items*

	1	2	3	4	5	6	7	8	9	10	11	12
Initial	1	1	1	1	1	1	1	1	1	1	1	1
extraction	.536	.454	.590	.513	.638	.586	.323	.702	.533	.648	.445	.514
	13	14	15	16	17	18	19	20	21	22	23	
Initial	1	1	1	1	1	1	1	1	1	1	1	
extraction	.589	.577	.561	.599	.588	.472	.412	.539	.623	.657		

Communalities (SESQ) of seven factors

Factors	SOE	CHES	IL	OLSTT	CFM	FMSP	HSR
Initials	1	1	1	1	1	1	1
Extraction	.450	.265	.439	.608	.615	.556	.379

Note: Extraction method; Principal Component Analysis

Tables 3.32, 3.33 and 3.34 represented the extraction of communalities of the three questionnaires PIMRS, TSES and SESQ.

Table 3.35*Rotated Component Matrix (PIMRS, 48 items)*

Item No.	Components/ Factors			Dimension
	1	2	3	
1	.711			
2	.610			
4	.556			
4	.747			
5	.824			
6	.741			DSM
7	.710			
8	.520			
9	.516			
10	.584			
11		.746		
12		.516		
13		.665		
14		.574		
15		.521		
16		.585		
17		.543		
18		.506		MIP
20		.544		
21		.561		
22		.678		
23		.658		
24		.599		
25		.565		
26		.522		
27			.843	
28			.725	
29			.741	
30			.757	
31			.772	
32			.561	
33			.524	
34			.516	
35			.748	
36			.522	
37			.766	PPSC
38			.676	
39			.528	
40			.712	
41			.667	
42			.698	
43			.704	
44			.674	

45	.567
46	.598
47	.756
48	.566

Note. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalisation.
DSM = defining school mission; MIP = managing instructional program; PPSC = promoting positive school climate.

The result of the rotated component matrix of PIMRS in Table (3.35) indicates that there are three factors extracted. Factor 1 was composed by 10 items with loadings from .520 to .824; factor 2 comprised 15 items with loadings between .506 and .746; and factor 3 included 23 items with loadings from .524 to .843. Loadings below .40 were not considered.

Table 3.36

Rotated Component Matrix of the items of the teachers' sense of efficacy scale long form (23 items)

Item No.	Components/ Factors			Dimension
	1	2	3	
1	.621		.543	
2	.611			
3	.538			ESE
4	.767			
5	.556			
6	.684	.433		
7	.779			
8	.601			
9		.766		
10		.662		
11		.565		
12		.664	.543	
13		.732		EIS
14		.675	.428	

15		.737	
16		.753	
17	.415		.562
18			.624
19			.787
20			.683
21			.736
22			.665
23			.745
24			.632

Note. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalisation. ESE = efficacy in student engagement; EIS = efficacy in instructional strategies; ECM = efficacy in classroom management.

The result of the rotated component matrix of TSES in Table (3.36) indicates that there are three factors extracted. Factor 1 was composed by 8 items with loadings from .417 to .612; factor 2 comprised 8 items with loadings between .462 and .764; and factor 3 included 4 items with loadings from .447 to .688. Loadings below .40 were not considered.

Table 3.37

Rotated Component Matrix of the items of the school effectiveness survey questionnaire (22 items)

Item No.	Components							Factors
	1	2	3	4	5	6	7	
1	.722							SOE
2	.511							
3	.631							
4	.524							
5		.582						CHIS
6		.675						

7	.504			
8		.662		
9		.546		
10		.638		IL
11		.578		
12			.543	
13			.674	OLSTT
14			.753	
15				.663
16				.784
17				
18				.712
19				.690
20				.567
21				.843
22				.774
				.678

Note. Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalisation. SOE = safe and ordered environment; HEC = high expectation's climate; IL = instructional leadership, OSLTT= opportunity for student to learn through time on task, CFM= clear-cut mission, MSPF = monitoring of student progress, RSH = relationship of school and home.

The result of the rotated component matrix of SESQ in Table (3.37) indicates that there are seven factors extracted. Factor 1 was composed by 4 items with loadings from .511 to .722; factor 2 comprised 3 items with loadings between .504 and .675; factor 3 included 4 items with loadings from .546 to .662, factor 4 comprised 3 items with loadings between .543 and .753; factor 5 included 2 items with loadings from .663 to .784, factor 6 comprised 3 items with loadings between .567 and .712; and factor 7 included 2 items with loadings from .774 to .843. Loadings below .40 were not considered.

3.8.1.1 Findings

The KMO testing and Bartlett's test presented that the assumption of sampling adequacy and sphericity based on the size of the respondents has been achieved. Moreover, the calculated Cronbach's is within the limits as suggested by (Taber, 2018). The KMO testing and Bartlett's test presented that the assumption of sampling adequacy and sphericity based on the size of the respondents has been achieved. Moreover, the calculated Cronbach's is within the limits suggested (Taber, 2018). Table 3.36, 3.37, and 3.38 presents the results of the communalities per item. Using parameters set by Mundfrom, Shaw and Ke Mundfrom et al., (2005), the results show wide communality pattern for each adapted research instrument PIMRS, TSES and SESQ. Tables 3.39, 3.40, and 3.41 shows the result of the rotated component matrix of the measurement variables for IL, TSSE and SE. The result outlines that the factor loading for the variables is above 0.4, which is the starting point for the study. In conjunction with the values of the extracted communalities, these results showcase that all the variables within a given factor attain a good relationship with each other.

Table 3.38*The new structure of M-PIMRS after revision*

Code	Item No.	Subscale									
		FSG	CSG	SEI	CC	MSP	PIT	MHV	PITT	PPD	PIL
FSG1	1	✓									
FSG2	2	✓									
FSG3	3	✓									
FSG4	4	✓									
FSG5	5	✓									
CSG1	6		✓								
CSG2	7		✓								
CSG3	8		✓								
CSG4	9		✓								
CSG5	10		✓								
SEI1	11			✓							
SEI2	12			✓							
SEI3	13			✓							
SEI4	14			✓							
SEI5	15			✓							
CC1	16				✓						
CC2	17				✓						
CC3	18				✓						
CC4	19				✓						
CC5	20				✓						
MSP1	21					✓					
MSP2	22					✓					
MSP3	23					✓					
MSP4	24					✓					

Note: FSG = frame the school goals; CSG = communicate school goals; SEI = supervise instruction, CC= coordinate the curriculum,

Table 3.38 Continued*The new structure of M-PIMRS after revision*

Code	Item No.	Subscale									
		F S G	CS G	S EI	C C	MS P	PIT	MH V	PITT	PPD	PI L
MSP5	25					✓					
PIT1	26						✓				
PIT2	27						✓				
PIT3	28						✓				
MHV1	29							✓			
MHV2	30							✓			
MHV3	31							✓			
MHV4	32							✓			
MHV5	33							✓			
PITT1	34								✓		
PITT2	35								✓		
PITT3	36								✓		
PITT4	37								✓		
PITT5	38								✓		
PPD1	39									✓	
PPD2	40									✓	
PPD3	41									✓	
PPD4	42									✓	
PPD5	43									✓	
PIL1	44										✓
PIL2	45										✓
PIL3	46										✓
PIL4	47										✓
PIL5	48										✓

Note: MSP= monitor student progress, PIT= protect instructional program, MHV= maintaining high visibility, PITT= provide incentives for teachers, PPD= promote professional development, PIL= provide incentives for learning.

Table 3.39*The new structure of M-TSES after revision*

Code	Item Number	Subscale		
		SE	IS	CM
SE1	1	✓		
SE2	2	✓		
SE3	3	✓		
SE4	4	✓		
SE5	5	✓		
SE6	6	✓		
SE7	7	✓		
IS1	8		✓	
IS2	9		✓	
IS3	10		✓	
IS4	11		✓	
IS5	12		✓	
IS6	13		✓	
IS7	14		✓	
IS8	15		✓	
CM1	16			✓
CM2	17			✓
CM3	18			✓
CM4	19			✓
CM5	20			✓
CM6	21			✓
CM7	22			✓
CM8	23			✓

Note. SE = efficacy for student engagement; IS = efficacy for instructional strategy; CM = efficacy for classroom management.

Table 3.40*The new structure of M-SESQ after revision*

Code	Item Number	Subscales						
		SOE	CHES	IL	OLSTT	CFM	FMSP	HSR
SOE	1	✓						
	2	✓						
	3	✓						
	4	✓						
CHES	5		✓					
	6		✓					
	7		✓					
IL	8			✓				
	9			✓				
	10			✓				
	11			✓				
OLSTT	12				✓			
	13				✓			
	14				✓			
CFM	15					✓		
	16					✓		
FMSP	17						✓	
	18						✓	
	19						✓	
HSR	20							✓
	21							✓
	22							✓

Note. SOE = safe and ordered environment, HEC= high expectation's environment, IL= instructional leadership, OLSTT= opportunity for students to learn through time on task, CFM = clear cut focused mission, MSPF= monitoring of student progress frequently, RSH= relationship of school and home.

3.8.2 Phase II: Validity of an Interview

According to Khan (2016), the validation of interview depends on the kind of interview. She advised some steps for validation of an interview. The steps were: review of the literature, Self-reflection, Semi-structure interview with both (sample & experts), preparation of provisional interview schedule, requesting for response

on interview schedule related to simplicity of queries, and piloting the protocol. First of all, the researcher followed Khan's (2016) steps.

Step I: Review of literature: The researcher reviewed the related literature before administration and preparation of interview questions.

Step II: Self –reflection: After literature review the researcher moved forward to next step of self-reflection to identify accuracy of the searched material for the literature.

Step III: Semi- Structure interview: In step three, the researcher supposed to conduct a semi structure interview with the sample of study only. As Khan (2016) mentioned in her study the investigator can conduct semi structure interview with not only the sample but may with the experts as well.

Step IV (a): Preparation of interview schedule: In step four, an interview schedule was also planned to check how much time will be required for the final data collection through interviews.

Table 3.41

Interview schedule (for educational managers, teachers and students)

Codes	Respondents	Duration
SSEM1	Educational managers	28 min
SSEM2		45 min
SST1	Secondary school teachers	30 min
SST2		25 min
SSS1	Secondary level student of class 9 th	20 min
SSS2	Secondary level student of class 10 th	29 min

Table 3.41 shows that the researcher scheduled interviews from the educational managers, teachers and students. It also elaborates the timing spent on each interviewee.

Step IV (b): Preparation of interview questions: After consultation with the developers of PIMRS and TSES, the researcher prepared semi structure interviews on statements related to study variables. The reply of developer is attached in

appendix (XIX). Further, through experts' opinion interview was revised for validation. For the purpose, the researcher got approval about the usage of VREP from Simon and White (2013). It is also called Interview Validation Rubric for Expert Panel. According to Simon and Goes (2014), VREP was created to have a panel of experts in arena to obtain validation of interview questions. In this process, three experts were involved (Appendix, XXXXI). They sought their opinions through VREP. The final version was developed after incorporation of their comments on the preliminary version of interview.

Step V: Request for response on interview schedule: The researcher requested to the respondents (educational managers & teachers) for the participation in interview through invitation letter (Appendix, XV, a to XV c).

Step VI: Piloting the interview: In step six the researcher piloted the interviews. Detail description of this step is given in pilot study section no 2.

3.9 Pilot study

According to Malmqvist et al. (2019) pilot studies are normally directed to evaluate the effectiveness of research instruments. Piloting was accompanied on a minor sample for checking rationality of the adapted research instruments according the culture of Pakistani school system. After validation, refined scales were administered in the secondary level schools. According to some researchers like Connelly (2008) and Treece (1982), the sample of a pilot study should be 10 % of the selected sample from the whole population. Therefore, research instruments were piloted at 10 % of the selected sample to obtain their comments on the following:

- Clearness, usefulness, easy to read, objectivity, errors, language accuracy, available resources for data collection, relevance of the style then organization of questions; in addition
- Demographic variables, obligatory time for the completion of the questionnaire; and
- To attain objectives of the study.

Further, the Pilot study was divided into two Phases namely:

Phase 1: quantitative piloting

Phase 2: qualitative piloting

3.9.1 Phase 1: Quantitative Piloting

Table 3.42

The sample for verification of instruments (Pilot study)

Variables	Population	Sample	Pilot testing sample				
			Total	M	F	Public	Private
Schools	720	70	7	3	4	4	3
Educational managers	720	70	7	3	4	4	3
Teachers	3655	365	35	18	17	19	16
Students	122515	400	40	20	20	16	20

Note. The selected sample is 10 % of the total population while the selected sample for pilot testing is the 10 % of the total selected sample @ 5 % margin of error (MoE) according to Connelly (2008).

Table 3.42 demonstrated the sample selected for piloting. There were (7) schools, (7) educational managers, (36) teachers and (40) students who were selected as for pilot study sample. The table further depicted that (4) from public, whereas (3) as private sector were piloted. On the other hand, educational managers (4) schools from public and (3) from private were chosen as sample of the pilot. Moreover, the Table showed that (19) teachers were taken from public sector, while (16) from private sector were treated as sample of this part of the current study. Similarly, there are (20) male students and (20) female students who were taken as sample for the pilot study. As well, there were (3) male and (4) female educational managers and (18) male teachers, while (17) females were chosen as sample.

Table 3.43

Response Rate for the verification of instruments (Pilot study)

Categories	Research Questionnaires							Response Rate
	Sample		Sent		Returned	Discard	Used	
	M	F	M	F				
Educational managers	3	4	3	4	7	0	7	100%

Teachers	18	18	18	18	36	0	36	100%
Students	20	20	20	20	40	0	40	100%

Table 3.43 elaborated healthy participation of the participants including educational managers, teachers and students. It also elaborated high rate of return response of the research scales.

The data was collected through standardized research scales. The researcher personally visited the sample schools of Rawalpindi District for data collection. The researcher spent time in schools while the participants were filling in the responses to provide guidance in case of any difficulty and problems that arise during the survey that can be resolved immediately. For qualitative aspect by focusing on the research questions, the researcher interviewed two educational managers and two teachers.

It was observed during the pilot study that the normal time mandatory for the accomplishment of survey was approximately thirteen to eighteen minutes. So for the main study, it was obvious that finishing time of 20 minutes would be granted as satisfactory feedback rate amongst the tested educational managers, teachers and students. Further, the survey instructions were adjusted accordingly. The rate of responses to each item was acceptable, and there was no sign of ambiguity, whereas in reviewing the research instrument simplicity of each question was observed. Further deficiency of answer was not detected related to the simplicity. Appreciated response remained expected, so these questions were retained. Whereas, two items related to protect instructional time (PIT) were found irrelevant to the culture, so they were removed. That is why finally the researcher administered the PIMRS based on 48 items across three dimensions i.e., DMC, IPM, and PPCS. Moreover, TSES was used to evaluate teacher self-efficacy. However, the original draft of TSES consisted of 24 items related to three dimensions. Response five related to efficacy in student engagement was not related to the contextual demand, so the item was deleted after the pilot testing and research instrument validation. On the other hand, in reviewing each question some difficult terms were changed. Finally, TSES based on 23 items was administered to collect the data. All the items of SESQ were found correct so were retained. The researcher added demographic variables in the instruments by taking

consent of the supervisor. It is concluded that no complications were observed that might stop the research participants. As a result, no questionnaire was got half-finished or unfinished.

3.9.2 Phase 2: Pilot for interview

Table 3.44

Sample for the verification/ pilot study of interview (Interviewees, educational managers, teachers and students) gender wise.

Interviewees	Gender		Total
	Male	Female	
Educational Managers	1	1	2
Teachers	1	1	2
Students	1	1	2

Note: Smith et al. (2009) IPA sample selection method.

Table 3.44 revealed the sample selected for the pilot study of the interviews. There were (2) educational managers, (2) teachers, and (2) students, who were selected as sample. The table further depicted that (1) from public sector, whereas (1) from private sector educational managers and teachers were piloted.

Table 3.45

Sample for the verification/ pilot study of interview (Interviewees, educational managers, teachers and students) sector wise.

Interviewees	Sector		Total
	Public	Private	
Educational Managers	1	1	2
Teachers	1	1	2
Students	1	1	2

Note: Smith et al. (2009) IPA sample selection method

Table 3.45 revealed the sample selected for the pilot study of the interviews. There were (2) educational managers, (2) teachers, and (2) students, who were selected as sample from public sector, whereas (1) from private sector educational managers, teachers, and students were piloted.

Table 3. 46*Response Rate for the verification of interview (pilot study)*

Designation	Interviews							Response Rate
	Sample size		Interviewed		Answered	Not Answered	Used	
	M	F	M	F				
SSEM*	1	1	1	1	4	0	4	100%
**SST	1	1	1	1	4	0	4	100%
***SSS	1	1	1	1	4	0	4	100%
Total	3	3	3	3	4	0	4	100%

Note: *SSEM = Secondary School Educational Manager, **SST= Secondary School Teacher, ***SSS= Secondary School Students (Pseudo names of the interview participants).

Table 3.46 explained healthy participation of the participants including educational managers and teachers of secondary level schools. It also showed high rate of return response of the interview.

For qualitative aspect by focusing on the research questions, the researcher interviewed two educational managers, two teachers and two students. Semi-structured interviews were piloted with the participants. The pilot study provided an opportunity to develop interview schedule. It was an influential learning point, which supported to reflect on the interview process. After piloting, some changes were made to the interview questions (Appendix, IX & X). Achieving six subjects (two educational managers, two teachers, and two students) for interview was not as difficult as expected. It was quite easy due to the personal interest of interviewees about IL, TSSE and SE. One of the educational managers in the sample of two and both the selected teachers in the sample of two were unwilling for the interview to be taped. In view of this, it was decided that none of the interviews would be taped and written notes were made. Pilot testing of these interviews provided the researcher a chance to reproduce data on individual interview. Further, piloting guided to figure out the appropriateness of interviews. Finally, the researcher analyzed the interviews using IPA in order to practice the process. Through the analytical process, the researcher gained knowledge about the complexity of the procedure. It also helped to

get a better insight to realize the required time duration, and challenges which researchers faced in the analysis of data. The piloting guided the researcher in the direction of scheduling the interviews with suitable time scales to accomplish analysis. The pilot study concluded that this research is feasible with some changes in research instruments and interview which have been reported in the discussion of piloting. The pilot-test determined how much the selected instrument is valid and reliable for the problem under study. Participants and schools of the pilot-testing were not part of final targeted participants of the present study. It has revealed that all the educational managers, teachers and the students returned all the distributed research instruments because the researcher personally visited and administered the research instruments in the sampled institutions for pilot-testing. Moreover, all the participants were personally approached by the researcher. The researcher got permission from the educational managers, teachers and the students before the administration of instruments and collected the responses on the same day from each school personally. Although the terms TSSE, IL and SE were fresh for all the participants. But as the researcher was present over there and explained the meaning and substance, so they filled in the responses without any confusion and difficulty. Additionally, educational managers, teachers and students were guided wherever they felt difficulty. It is concluded that the major focuses of this piloting were to obtain an in-depth understanding about what educational managers and teachers do practically. Further, it was to get information about how they talk about it. This procedure helped the researcher to produce detailed understanding of the subject matter.

3.9.1 Reliability

Reliability means that the scores of an instrument are stable and consistent. It denotes to the uniformity, stability and repeatability of the research instrument (Bordeianu & Danila, 2013; Creswell, 2018). There are different approaches of reliability, while this study focused "*Internal consistency*". Which measures the correlation between multiple items (Koo & Li, 2016). Moreover, to ensure internal consistency, Cronbach's alpha is considered a reliable measure for the purpose (Terwee et al., 2002). The study described the application of internal consistency reliability in the Principal Instructional Management Rating Scale (PIMRS), Teachers self-efficacy Scale (TSES), and School Effectiveness Survey

Questionnaire (SESQ), which show that the scores of each instrument are reliable and accurate.

Table 3.47

Reliability Statistics (Internal Consistency) for PIMRS, TSES and for SESQ

Instruments	(α)	(α) Standardized Items	No. of Items
PIMRS*	.852	.861	48
TSES**	.947	.936	23
SESQ***	.803	.801	22

Note. *Principal Instructional Management Rating Scale, **Teachers' Self-Efficacy scale ***School Effectiveness Survey Questionnaire, **** Self-Administered Composite Questionnaire. Value of α of .8 or larger is considered good; equal to .7 or greater but smaller than .8 is acceptable; .6 or upper but less than .7 is marginally acceptable; below .6 is not acceptable (McCullough et al., 2016).

In Table (3.47) Cronbach's α indicated that the items of PIMRS, TSES, and SESQ have relatively high internal consistency. Moreover, α value suggested that the low value indicates the unreliability of the instrument, while high value shows that items are consistent.

3.9.1.1 Items' total correlation (Reliability check)

Table 3.48

Item total correlation of Principal Instructional Management Rating Scale (PIMRS)

Items	Corrected items total Correlation	Items	Corrected items total Correlation	Items	Corrected items total Correlation
1	.66*	19	.65*	37	.70*
2	.59*	20	.45*	38	.84*
3	.73*	21	.66*	39	.75*
4	.78*	22	.41*	40	.85*
5	.61*	23	.73*	41	.69*
6	.63*	24	.83*	42	.80*
7	.77*	25	.39*	43	.65*
8	.73*	26	.43*	44	.56*
9	.86*	27	.56*	45	.66*
10	.66*	28	.43*	46	.91*

11	.77*	29	.29*	47	.91*
12	.81*	30	.28*	48	.90*
13	.88*	31	.60*	49	.90*
14	.74*	32	.79*	50	.78*
15	.49*	33	.88*	40	
16	.53*	34	.61*	41	
17	.80*	35	.79*	42	
18	.79*	36	.67*	43	

Note. * $p < .05$,

Table (3.48) displays that the item's total correlation amongst items. All the items were found acceptable as a significant relationship among all items with the total scale of educational managers' Instructional Management Rating Scale was observed. The correlation coefficient lies .39 to .91 and can be considered acceptable (De Vaus, 2004). The item-total correlations which lies between .30 and .70 that can be considered acceptable (Carmines & Zeller, 1979). So 48 items out of 50 appeared to be worth of retention. Correlations among the total scale of PIMRS was calculated through SPSS (Statistical Package for Social Sciences) Version 23.

Table 3.49

Subscale correlation of PIMRS among three dimensions of instructional leadership

Instructional leadership	(DMS)	(MIP)	(PPSC)
Define Mission of School (DMS)	1	.517*	.609**
Manage Instructional Program (MIP)		0.003	0.009
Promote Positive School Climate (PPSC)		1	.712**
			0.001

Note: ** Correlation is significant at 0.05 level.

In Table 3.49, there is a significant relationship between function number one which is defined a mission of school and function number three which promotes a positive school climate, as $(r) = .61$, indicating a strong positive relationship. However, the table also displays a statistically significant association amongst "define mission of school" and "manage instructional program", i.e., $(r) = .52$. It has been observed that when school educational managers defined the mission of school clearly, their

practices in promoting a positive climate of school increased ($r = .609$, $p = .009 < .05$) and management of instructional program increased ($r = .517$, $p = .003 < .05$), too. In particular, it seemed that the more a school educational managers knew about school mission, the greater their creative and management skills were. Moreover, Table 3.27 showed a statistically significant relationship between MPI and PPCS, as value of ($r = 0.712$, indicating a strong positive relationship. That was an evidence that when school educational managers' manage the instructional program, their practices and behaviors in promoting an excellent school environment increased as ($r = .712$, $p < 0.05$).

Table 3.50

Items' total correlation of TSES

Items	Corrected items total Correlation	Items	Corrected items total Correlation
1	.92*	14	.89*
2	.80*	15	.80*
3	.95*	16	.96*
4	.92*	17	.95*
5	.28*	18	.91*
6	.63*	19	.93*
7	.93*	20	.91*
8	.89*	21	.66*
9	.94*	22	.78*
10	.93*	23	.80*
11	.87*	24	.90*
12	.80*		
13	.94*		

Note. * $p < .05$,

Table 3.50 presented that all items of the total scale of the instrument were interrelated significantly except one. The item-total correlations lies within .30 to .70 and can be considered acceptable (De Vaus 2004). As the correlation coefficient lies .63 to .96, 23 items had good correlation and appeared to be worth of retention. Correlations among the total scale of TSES were determined by SPSS. Correlation is significant at 0.05.

Table 3.51

Correlation between three dimensions of TSSE

Teachers' sense of self-efficacy	SE	IS	CM
Student Engagement (SE)	1	.700*	.750*
Instructional Strategies (IS)		0.00	0.00
Classroom management (CM)		1	.654*
			0.00
			1

In Table 3.51, significant relationship between SE and IS, i.e., $(r) = .7$ was observed. It concludes that when teachers engage their students with their peers and assist in the classroom, their efficacy in instructional strategies increased. Generally, it seemed $(r = .700, p = 0 < .05)$ that teacher SSE for engagement of students in their classroom setting increase in their sense of SSE about instructional teaching expertise. A strong positive relationship $(r) = .75$ between ESE and ECM is detected in Table 3.29. In particular, $(r = 0.750, p = 0 < .05)$ the result was an indication that when teachers encourage their students in collaboration with their peers and assist them in the classroom increase their efficacy in managing the classroom. Moreover, value of $(r) = .64$ indicates a strong positive relationship between IS and CM Table (3.330). That was an indication that progress in teaching skills and knowledge increase their efficacy related to management of classroom $(r = .654, p = 0 < .05)$.

Table 3.52*Item total correlation of SESQ*

Items	Corrected items total Correlation	Items	Corrected items total Correlation
1	.88*	13	.90*
2	.79*	14	.87*
3	.92*	15	.88*
4	.92*	16	.89*
5	.80*	17	.80*
6	.92*	18	.93*
7	.93*	19	.84*
8	.90*	20	.87*
9	.63*	21	.78*
10	.85*	22	.86*
11	.91*		
12	.88*		

* $p < .05$,

Table 3.52 showed that all items of school effectiveness survey questionnaire were correlated significantly. According to some researchers, the item-total correlations lies within .30 to .70 and can be considered acceptable (de Vaus 2004, Carmines & Zeller, 1974). As table displayed values lies within .63 to .93, all the items appeared to be worth of retention. Correlations among the total scale of SESQ was determined by Statistical Package for Social Sciences (SPSS).

Table 3.53*Correlation between seven factors of school effectiveness mentioned in SESQ*

School effectiveness	SOE	HECL	IL	OSLTTT	CFM	MSPF	RSH
*SOE	1	.740**	.840**	.810**	.670**	.690**	.750**
*HECL		.000	.001	.000	.003	.001	.002
*IL		1	.778**	.830**	.544**	.825**	.454**
			.001	.002	.000	.003	.000
*OSLTOT			1	.770**	.850**	.770**	.604**
				.004	.000	.001	.003
*CCFM				1	.800**	.540**	.590**
					.000	.000	.000
*MSPF					1	.678	.523**
						.007	.009
*RSH						1	.840**
							.000
							1

Note: **Correlation is significant at 0.05, * SOE= Safe and ordered environment, *HECL= high expectation Climate for learning, *IL= Instructional leadership, *OSLTOT= Opportunity for student to learn through time on task, *CCFM= Clear-cut focused mission, *MSPF = monitoring of student progress frequently, *RSH= Relationship of school and home.

Table 3.53 displays that association is noteworthy at (0.05) and all the correlation coefficients between the factors are significant. It also elaborates that relationships of school effectiveness factors with each other are positive and high. Moreover, Table 3.32 shows a statistically significant relationship amongst safe and orderly environment and climate of high expectations for learning, i.e., (r) = 0.740. It concludes that when school provides safe and orderly environment, it creates a climate of high expectations for learning. In general, it appeared ($r = 0.740$, $p = 0 < 0.05$) that as increases in safe and orderly environment correlates with an increase in climate of high expectations for learning occurs. Table 3.53 shows a significant relationship between SOE and instructional leadership, i.e., (r) = .840. It concludes SOE increases IL. In general, it appeared ($r = 0.840$, $p = .01 < 0.05$) that as increases in safe and orderly environment correlates with an increase in instructional leadership. SOE and opportunity for student to learn through time on task is (r) = .810. It concludes that when school provides safe and orderly environment, it

provides opportunity for student to learn through time on task. In general, it appeared ($r = 0.810$, $p = 0 < 0.05$) that an increase in safe and orderly environment will increase OSLTOT. SOE and clear school mission are ($r = .670$); SOE and monitoring of student's progress frequently are ($r = .690$). It concludes that when school provides safe and ordered environment, it supports a clear school mission. In general, it appeared ($r = 0.670$, $p = 0.03 < 0.05$) that as increases in safe and orderly environment will have an increase in CCFM. SOE and relationship of school and home are ($r = .750$) indicating a strong positive relationship. It concludes that when school provides safe and orderly environment, an increase in RSH occurs. In general, it appeared ($r = 0.750$, $p = 0.02 < 0.05$) that increases in safe and orderly environment will have an increase in relationship of school and home, too.

3.9.1.2 Accuracy of Interviews

Horton (2013) stated that the accuracy and uniformity with which a test processes, are what, it claims to measure. Consequently, if an interview is tightly structured with the properties of a questionnaire, reliability can be achieved. For the current research, the concept of trustworthiness found more applicable for semi structured interviews as compared to reliability.

3.9.1.2.1 Trustworthiness: This study considered four criteria presented by Guba (1981) for trustworthiness. These are: (a) credibility in preference to internal validity, (b) dependability in preference to reliability, (c) confirm ability in preference to objectivity, and (d) transferability in preference to external validity.

(a) Credibility: is “how congruent are the findings with reality?” (Merriam, 1998, p. 201). The following provisions were made to promote confidence in the findings connected to the phenomena being studied (Creswell & Creswell, 2018):

(i) Triangulation. According to Gibson (2017), triangulation increases the value of research. However, this study design validating methodological proceedings which increase the scope and consistency of the study. In this research Triangulation was about expansion, how one data set can expand the other?

(ii) Member checking. Two participants, an educational manager and a teacher, provided further detail with respect to their initial responses.

(iii) Clarify the perspective of the researcher. Memo writing, a method of bracketing, was used within both the data collection and analysis stages of phase two (Creswell, 2012). Memos took the form of our experience and the phenomena being studied so as to move beyond the partiality of our previous understandings” (Finlay, 2009, p. 13).

(iv) Present discrepant information. Following the different researchers (e.g. Bloomberg & Volpe, 2016; Creswell & Creswell, 2018), as the researcher, I am obligated to look for variations in the understanding of the phenomena that might challenge the emerging findings.

(v) Tactics to help ensure honesty. Participants had the opportunity to withdraw from the study at any point of time. In other words, participants in the interview sessions would genuinely be willing to contribute ideas to building a common understanding.

(b) Dependability: The researcher followed suggestions of Yin (2014) that to document the research design thereby enabling future researchers to repeat this study. Details include how schools were selected, the number of participants involved, any restrictions as to who can participate, the variety of data collection methods and analysis, and the time period for data collection (Creswell & Creswell, 2018).

(c) Confirmability: The researcher reflected on the process of data collection and interpretation. Through matrix of triangulation results explanations of quantitative and qualitative results was critical according to Creswell & Plano Clark (2018) for confirmability.

(d) Transferability: To address this issue, followed the suggestions of Creswell and Creswell (2018) and researcher use thick, rich description of the findings to convey

the participants. For the purpose use of triangulation in the research would support a higher degree of transferability.

3.10 Data Collection

Data was gathered in two phases. Researcher used data triangulation technique elaborated by Denzin (1970). It involves two types of sources of information to improve validity of this study (Denzin, 1970).

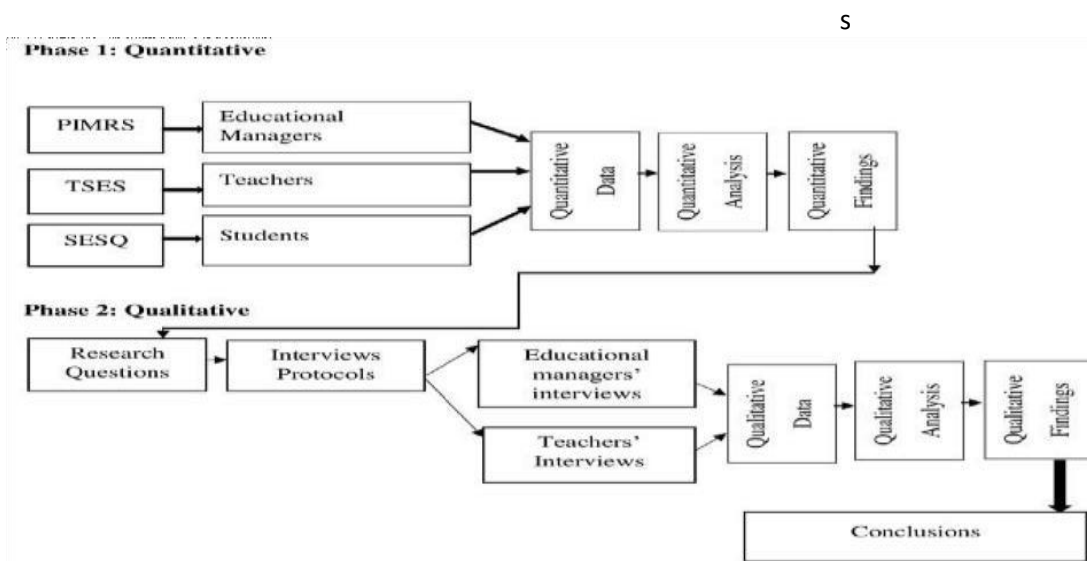
Phase I: Quantitative data collection

The sources are four research questionnaires and interviews. The study procedure was started by ascertaining the perceptions of three study groups such as educational managers, teachers and the students. Groups were followed by in-depth semi structured interviews to get their perspective on IL, TSSE and their effects on SE. The researcher personally visited all the sampled SS in (public & private) sectors. The educational managers of the concerned schools were contacted before the visit to get their willingness. The researcher highlighted the purpose of data collection to each selected educational manager, and they granted permission to visit the classes. The letters from the Dean faculty of National University of Modern Languages (NUML), education department (Appendix, VI) and the office of Chief Executive Education (CEO) Rawalpindi for the permission of data collection (Appendix, VII) were shown to the educational managers of the schools. The purpose of this survey was shared with teachers, and students before the administration of research questionnaires related to them. The terms sense of self-efficacy (SSE) and School effectiveness (SE) were explained to the participants to get good replies. They were familiar that the replies will keep on private, and would be used only for this research. The researcher clarified the participants the prominence of their input to the present investigation. The researcher also informed that the knowledge they would provide will be helpful to rise concerned, and direct improvement of plans intended, to benefit educational managers, teachers and policy makers to manage the educational set-up with which they have to cope with. The

interviews were done by the researcher personally. She had intended the interviews to last for at least 25 minutes. The duration of the interviews ranged from a minimum of 10 to 40 minutes. This was due to some of the participants who wanted to be interviewed for a short time. Figure 3.10 provides a pictorial model used for this descriptive study to collect data.

Figure 3.10

Pictorial Model for mixed method used in the study (created by the researcher)



Phase II: Qualitative data collection

The researcher undertook interviews with the participants. Interviews took place in person. The researcher used empathetic listening and perception checking for discussion assurance (Marshall & Rossman, 2015). The researcher used interviews to deal with unusual circumstances which can affect data collection process (Miles, Huberman & Saldana, 2020). Interviews were conducted at the venue which interviewees personally recommended. During the interview, the researcher tried to study how variables were understood and enacted and were not straight explanations of behaviors. Qualitative characteristics emphasized safety and organization of the data collected. Moreover, IPA also facilitated a safe and long lasting data storing arrangement (Rubin & Rubin, 2012). As an administrator of the investigation data base, the researcher focused on safely keeping the data from the unknowns. The researcher tailored measures recommended by Alase (2016) for data management and storage. The identity of all the participants was secured. Pseudo-

names were used throughout this study; the participants did not allow to record their statements. The researcher did not record any video or audio of the participants while interviewing; therefore, there was no possibility of losing the data. However, accordingly, responses gathered through interviews were noted and analyzed later on. According to figure 3.4, the researcher followed the procedure for data collection described in chapter 3, p. 65. The codes for school educational manager (SSEM) 1 to 15 are SSEM1 to SSEM 15, while the codes for school teachers (SST) 1 to 15 are SST1 to SST15. Whereas, the codes for students (SSS) 1 to 15 are SSS1 to SSS15. Interviews were semi-structured, and interviewer followed up on points of interest to be suitable for Interpretative Phenomenological Analysis (IPA).

3.11 Data Analysis

Data analysis was divided in three phases:

Phase I: Quantitative data analysis

Phase II: Qualitative data analysis

Phase III: Triangulation

Phase I: The quantitative data analysis was designed according to the (8) objectives and (3) research questions of the study. Further related to each research objective, the researcher constructed eight null and alternative hypotheses including (28) sub-hypotheses. This research used descriptive analysis and hypothesis testing. Descriptive analysis was used to describe the research data (Sugiyono, 2015), the descriptive analysis included frequency distribution, calculating percentages, and presenting data through tables. It also included standard deviation (SD) and mean scores. For inferential and descriptive statistics, SPSS package version 23 was used. The t- tests were applied to examine the objectives. Moreover, the hypotheses were tested through Correlation, Linear regression and Multiple Regression Analysis. The significance level was set at (.05) percent to check that a (significant effects) of the study variables.

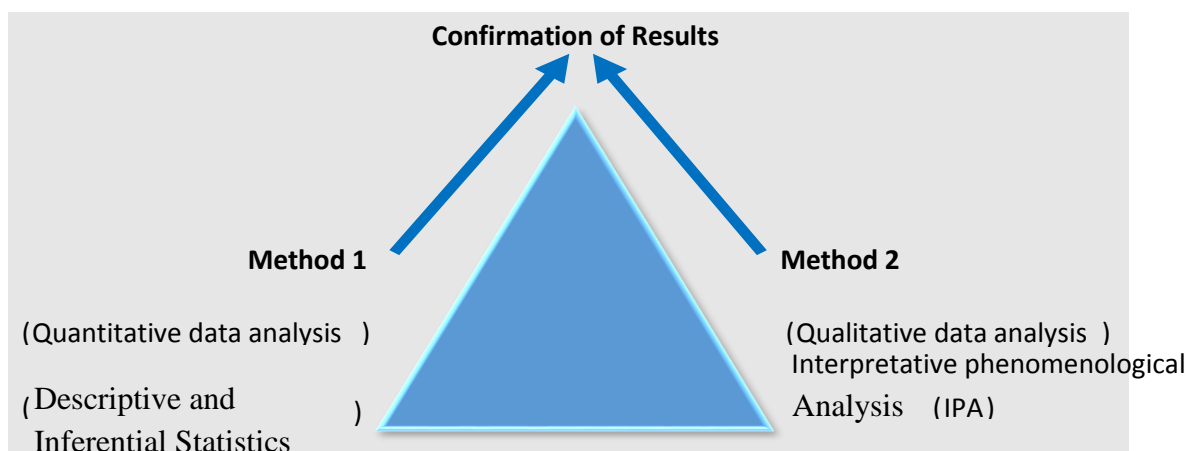
Phase II: The interviews were face-to-face. The researcher did not record the interviews. Notes were taken and all the interviewees were asked to check the accuracy of the transcriptions. The researcher set out to use Interpretative Phenomenological Analysis (Smith et al., 2009) for the in-depth exploration of experiences from the participants together of a smaller demographically homogenous

group (educational managers & teachers) to explore the experiences of the entire group of participants.

The philosophical underpinnings of the research for qualitative phase were interpretative phenomenological approach for IPA. According to Matua (2015) and Sundler et al. (2018) phenomenology allows researchers to understand human experience in and of itself as well as pick up an insight into how to conduct research. The researcher assumed that meaning oriented themes can contribute to robust qualitative research findings. Many investigators in phenomenology hold the view that human beings extract meaning from the live world through personal experiences (Hougan & Edgar, 2020; Gasparyan, 2021). The researcher followed Dahlberg et al. (2008) and played role as observant, attentive and sensitive to the expression of experiences. The researcher does not know the participants' experiences but wants to understand the studied phenomenon in a new light to make invisible aspects of the experience of educational managers regarding instructional leadership and teachers about sense of self-efficacy to strengthen school effectiveness become visible.

Phase III: The researcher applied triangulation for the data analysis. Figure 3.11 represents triangulation for the data analysis.

Figure 3.11
Triangulation for the data analysis



Note: Source: Statisticshowto.com/triangulation. The figure 3.11 described that for the data analysis, the researcher followed two methods: one for quantitative data analysis, the researcher applied inferential statistics by using SPSS version 23, while in the second method, the researcher followed IPA for qualitative data analysis. Data analysis started from a descriptive level to more interpretive one.

Method 1: through descriptive statistics the researcher gathered basic information about data set under study. The reasons to use were to:

- summarize the data
- check the central tendency (Mean) and
- measure the dispersion through standard deviation.

Likewise, as inferential statistics helps to suggest explanations for a phenomenon so it was applied to:

- compare the differences between the groups under study
- check the relationship among variables and their effects within a sample.
- draw conclusions based on extrapolations

Method II: According to Smith, Flowers and Larkin (2009), IPA offers a step by step guide to lead the researcher through dissimilar stages as well as processes. So the current research followed IPA as procedural method to explore effects of educational managers' IL and teachers' SSE on school effectiveness. IPA involves a focus on the individual and then it moves to a more collective understanding. Additionally, they outlined different stages, which the researcher can use to guide the process for data analysis. The stages followed for qualitative data analysis were:

3.11.1 Stages Involved in the Analysis (Smith et al, 2009)

Stage1: Reading and Re-reading (R & RR)

Stage2: Initial noting (IN)

Stage 3: developing the Emerged Themes (DET)

Stage 4: Searching for connections across emergent Themes (SCET)

Stage 5: Move to the next case (MNC)

Stage 6: Looking for patterns across cases (LPAC), (Smith et al, 2009).

3.12 Research Ethics

The participants of the study have right of confidentiality declared by Pyle (2017). All the participants were informed that the information would be confidential and, no harm to the participants“ would be the first priority” (Ryen, 2021). The name of institutions would be deleted from the data. Following the research ethics, the researcher has taken permission from the Chief Executive Officer Education (COE) of Rawalpindi District to collect the data (Appendix, IV) from the public and the private sector secondary level schools located in seven tehsils prior to her visit to the sample institutions. Further an ethical framework needed informed consent from participants of the research. According to Iphofen and Tolich (2018) informed consent is a process for getting permission before collecting data for research purposes. This research used consent forms for (educational managers, teachers & students) and informed them about the benefits and risks of the research as guided by Ryen (2021). The researcher gave consent forms for interviews as well to all participated educational managers and teachers. Therefore, only those participants were included in the study who gave their willingness or who were ready to participate voluntarily. It ensured to get their voluntary informed consent, including the right to withdraw at any time during the research process and to avoid dishonesty. Thirty participants who showed their willingness were interviewed. All interview transcripts were shared with the participants, and they all agreed to the content of the transcripts (Berg & Lune, 2017; Creswell & Poth, 2018). Throughout the current study, due care has been taken. The privacy of the participants has been guaranteed and maintained. In chapter two of his book, Yin (2011) referred to research integrity. He explained that the investigator needs to behave properly and adhere to a code of ethics or ethical standards. The researcher tried to give respect to the participants, and no incentives were provided.

3.13 Delimitations of the Research Study

It was problematic for the scholar to gather data from all secondary level schools located in the province of Punjab, Pakistan due to economic and time

limitations. The delimiting characteristics of the current study which defined the boundaries of the inquiry were taken care of:

- i. The sample consisted of heads of secondary level schools, teachers teaching at secondary level as SST, and the students studying in class 9th and 10th.
- ii. Further sample of the school was limited to public and private sector secondary level schools respectively. The selected schools (Appendix XIV) were allied with Board of Intermediate and Secondary Education (BISE) Rawalpindi.
- iii. The study covered only one Rawalpindi district out of 36 districts of the province of Punjab, Pakistan.
- iv. Only exploratory factor analysis (EFA) was performed for the adapted research instruments (PIMRS, TSES & SESQ).
- v. Selecting convergent mixed method design research and utilizing pragmatism paradigm of research.

There were three main research questions in the study which were analyzed through qualitative methods of analysis. For this purpose, Interpretative Phenomenological Analysis (IPA) was used. These were the research questions:

Table 3.54*Details of statistical test applied for Objectives and related hypotheses*

Objectives: to	Hypotheses	Test applied
To determine educational managers' perception about instructional leadership functions in public and private sector at secondary school level;	Ho ₁ : There is no significant difference in educational managers' instructional leadership functions at secondary school level in the public and private sectors.	t-test
	Ha ₁ : There is significant difference in educational managers' instructional leadership functions at secondary school level in the public and private sectors.	-
	Ho _{1.1} : There is no significant difference in educational managers' instructional leadership (EMIL) functions about defining the school mission at secondary school level in the public and private sector.	t-test
	Ha _{1.1} : There is significant difference in educational managers' instructional leadership (EMIL) functions about defining the school mission at secondary school level in the public and private sector.	-
	Ho _{1.2} : There is no significant difference in educational managers' instructional leadership (EMIL) related to manage program of instruction at secondary school level in the public and private sectors.	t-test

Table 3.54 (continue)*Details of statistical test applied for Objectives and related hypotheses*

Objectives: to	Hypotheses	Test applied
2.To assess teachers' sense of self-efficacy at secondary school level in public and private sector;	Ha _{1.2} :There is significant difference in educational managers' instructional leadership (EMIL) related to manage program of instruction at secondary school level in the public and private sectors.	t-test
	Ho _{1.3} : There is no significant difference in educational managers' instructional leadership (EMIL) about promote a positive climate for school in the public and private sectors,	t-test
	Ha _{1.3} : There is significant difference in educational managers' instructional leadership (EMIL) about promote a positive climate for school in the public and private sectors,	-
	Ho ₂ : There is no significant difference in teachers' sense of self-efficacy at secondary school level in the public and private sectors,	t-test
	Ha ₂ : There is significant difference in teachers' sense of self-efficacy at secondary school level in the public and private sectors,	-
	Ho _{2.1} : There is no significant difference in teachers' sense of self-efficacy (TSSE) in student engagement at secondary school level in the public and private sectors.	t-test
	Ha _{2.1} : There is no significant difference in teachers' sense of self-efficacy (TSSE) in student engagement at secondary school level in the public and private sectors.	-

Table 3.54 (continue)*Details of statistical test applied for Objectives and related hypotheses*

Objectives : to	Hypotheses	Test applied
	Ho _{2.2} : There is no significant difference in teachers' sense of self-efficacy (TSSE) about instructional strategies at secondary school level in the public and private sectors.	t-test
	Ha _{2.2} : There is significant difference in teachers' sense of self-efficacy (TSSE) about instructional strategies at secondary school level in the public and private sectors.	-
	Ho _{2.3} : There is no significant difference in teachers' sense of self-efficacy (TSSE) about classroom management at secondary school level in the public and private sectors.	t-test
	Ha _{2.3} : There is significant difference in teachers' sense of self-efficacy (TSSE) about classroom management at secondary school level in the public and private sectors.	-
3.determine school effectiveness as perceived by the students in public and private sector;	Ho ₃ : There is no significant difference among students' perceptions about school effectiveness.	t-test
	Ha ₃ : There is significant difference among students' perceptions about school effectiveness.	-
	Ho _{3.1} : There is no significant difference among students' perceptions about safe and ordered environment.	t-test
	Ho _{3.1} : There is significant difference among students' perceptions about safe and ordered environment	-

Table 3.54 (continue)*Details of statistical test applied for Objectives and related hypotheses*

Objectives	Hypotheses	Test applied
	Ho _{3.2} : There is no significant difference among students' perceptions about high expectation's climate.	t-test
	Ha _{3.2} : There is significant difference among students' perceptions about high expectation's climate.	-
	Ho _{3.3} : There is no significant difference among students' perceptions about instructional leadership.	t-test
	Ha _{3.3} : There is significant difference among students' perceptions about instructional leadership.	-
	Ho _{3.4} : There is no significant difference among students' perceptions about opportunity for students to learn through time on task.	t-test
	Ha _{3.4} : There is significant difference among students' perceptions about opportunity for students to learn through time on task.	-
	Ho _{3.5} : There is no significant difference among students' perceptions about clear-cut focused mission.	t-test
	Ha _{3.5} : There is significant difference among students' perceptions about clear-cut focused mission.	-
	Ho _{3.6} : There is no significant difference among students' perceptions about monitoring of student progress frequently.	t-test
	Ha _{3.6} : There is significant difference among students' perceptions about monitoring of student progress frequently.	-
	Ho _{3.7} : There is no significant difference among students' perceptions about home school relations.	t-test

Table 3.55 (continue)*Details of statistical test applied for Objectives and related hypotheses*

Objectives : to	Hypotheses	Test applied
4. Determine the relationship among instructional leadership and sense of self-efficacy.	Ha _{3.7} : There is significant difference among students' perceptions about home school relations.	-
	Ho ₄ : There is no significant relationship of instructional leadership and sense of self-efficacy.	Correlation & Linear regression
5. examine the effects of educational managers' Instructional leadership and teachers' sense of self-efficacy on school effectiveness;	Ha ₄ : There is significant relationship of instructional leadership and sense of self-efficacy.	-
	Ho ₅ : There is no significant effects of educational managers' instructional leadership and teachers' sense of self-efficacy on school effectiveness.	Multiple linear regression
6. find out gender differences in educational managers' leadership;	Ha ₅ : There is significant effects of educational managers' instructional leadership and teachers' sense of self-efficacy on school effectiveness.	-
	Ho ₆ : There is no significant gender differences in educational managers' instructional leadership functions.	t-test
	Ha ₆ : There is significant gender differences in educational managers' instructional leadership functions.	-
	Ho _{6.1} : There is no significant differences in educational managers' instructional leadership function of defining school mission in males and females.	t-test
	Ha _{6.1} : There is significant differences in educational managers' instructional leadership function of defining school mission in males and females.	-
	Ho _{6.2} : There is no significant difference among educational managers' instructional leadership about managing instructional program in males and females.	-

Table 3.54 (continue)*Details of statistical test applied for Objectives and related hypotheses*

Objectives : to	Hypotheses	Test applied
	Ha _{6.2} : There is significant difference among educational managers' instructional leadership about managing instructional program in males and females.	t-test
	Ho _{6.3} : There is no significant difference between educational managers' instructional leadership related to promote positive climate for school in males and females.	t-test
	Ha _{6.3} : There is significant difference between educational managers' instructional leadership related to promote positive climate for school in males and females.	t-test
7.investigate gender differences in secondary school teachers' sense of self-efficacy;	Ho ₇ : There is no significant difference among teachers' sense of self-efficacy in males and females at secondary school level in the public and private sector.	t-test
	Ha ₇ : There is significant difference among teachers' sense of self-efficacy in males and females at secondary school level in the public and private sector.	t-test
	Ho _{7.1} : There is no significant difference between teachers' sense of self-efficacy (TSSE) in student engagement in males and females.	t-test
	Ha _{7.1} : There is significant difference between teachers' sense of self-efficacy (TSSE) in student engagement in males and females.	t-test
	Ho _{7.2} : There is no significant difference in teachers' sense of self-efficacy (TSSE) about instructional strategies in males and females.	-
	Ha _{7.2} : There is significant difference in teachers' sense of self-efficacy (TSSE) about instructional strategies in males and females.	t-test

Table 3.54 (continue)*Details of statistical test applied for Objectives and related hypotheses*

Objectives : to	Hypotheses	Test applied
	Ho _{7.3} : There is no significant difference in teachers' sense of self-efficacy (TSSE) about classroom management in males and females.	t-test
	Ha _{7.3} : There is significant difference in teachers' sense of self-efficacy (TSSE) about classroom management in males and females.	
8.find out gender differences in the perceptions of students about school effectiveness	Ho ₈ : There is no significant difference in students' perceptions about school effectiveness (SE).	t-test
	Ha ₈ : There is significant difference in students' perceptions about school effectiveness (SE).	
	Ho _{8.1} : There is no significant difference in students' perceptions about safe and ordered environment.	t-test
	Ha _{8.1} : There is significant difference in students' perceptions about safe and ordered environment.	
	Ho _{8.2} : There is no significant difference in students' perceptions about high expectation's climate.	t-test
	Ha _{8.2} : There is significant difference in students' perceptions about high expectation's climate.	
	Ho _{8.3} : There is no significant difference in students' perceptions about instructional leadership.	t-test
	Ha _{8.3} : There is significant difference in students' perceptions about instructional leadership.	-
	Ho _{8.4} : There is no significant difference in students' perceptions about opportunity for students to learn through time on task.	t-test
	Ha _{8.4} : There is significant difference in students' perceptions about opportunity for students to learn through time on task.	-

Table 3.54 (continue)*Details of statistical test applied for Objectives and related hypotheses*

Objectives : to	Hypotheses	Test applied
	Ho _{8.5} : There is no significant difference in students' perceptions about clear-cut focused mission.	t-test
	Ha _{8.5} : There is significant difference in students' perceptions about clear-cut focused mission.	-
	Ho _{8.6} : There is no significant difference in students' perceptions about monitoring student progress frequently.	t-test
	Ha _{8.6} : There is significant difference in students' perceptions about monitoring student progress frequently.	-
	Ho _{8.7} : There is no significant difference in students' perceptions about home school relation.	t-test
	Ha _{8.7} : There is significant difference in students' perceptions about home school relation.	-

Research Questions

RQ1: How do educational managers perceive their instructional leadership functions?

RQ2: How do teachers perceive their sense of self - efficacy?

RQ3: To what extent educational managers' instructional leadership functions and teachers' sense of self-efficacy effects school effectiveness?

Table 3.55*Research Questions, Corresponding Sources of Data and the Analysis of Data*

Research Questions	Sources of data	Data analysis
RQ1: How do educational managers perceive their instructional leadership functions?		
RQ2: How do teachers' perceive their sense of self-efficacy?	Semi-structured	Interpretative Phenomenological
RQ3: To what extent educational managers' instructional leadership functions and teachers' sense of self-efficacy effects school effectiveness?	Interviews	Analysis (IPA)

3.14 Summary

The chapter presented a thorough explanation of this study's paradigm providing evidence about design, discussion of the philosophical positioning, rationale for selecting the research methodology, and procedure of the study. The participants included the secondary school educational managers', teachers' and the students' from district Rawalpindi of the province of Punjab. Consequently, the instruments for data collection are presented. The chapter also illustrated that after validation, demographic variables were re-ordered. Survey questionnaires were revised to attain clarity, and comfort of accomplishment through shortening questions, changing rating of questions (*always* instead of *almost*, *always* and *never* instead of *almost never*). Before field testing, all instruments were revised and the researcher made some changes with the help and suggestions of the supervisor and panel of experts to design the research instruments according to our regional needs. The supervisor scrutinized the research instruments for their format, representation of dimensions and factors, clarity of items, instruction coherency, and grammar and syntax usage. However, original draft of Educational Managers' Instructional Management Rating Scale (PIMRS) consisted 50 items. Two items related to protect

instructional time (PIT) were found irrelevant to the culture so they were removed. Likewise, the original draft of the TSES consisted of 24 items related to three main dimensions such as efficacy in (engagement of students, instructional strategies and classroom management). Response five related to efficacy in student engagement was not associated, so the item was deleted after the validation and before the pilot-testing. On the other hand, in reviewing each question some difficult terms were changed. Similarly, school effectiveness survey questionnaire consisted of 22 items related to seven factors. All the items were found correct, so were retained. The researcher added demographic variables in the questionnaires by taking consent of the supervisor. These research instruments covered all the research variables. The instruments were also translated from the language experts in Urdu for the convenience of the participants. In addition, pilot-testing and the results derived from piloting were also included in this chapter. The Mixed Method Research (MMR) allowed the researcher to collect extensive data related to study variables. The data collection, analysis and interviewing procedures were also illustrated. This chapter concluded with a review of ethical consideration, issues of trustworthiness, and limitations of the study. Chapter 4 presents the data analysis in detail.

CHAPTER 4

ANALYSIS AND INTERPRETATION OF THE DATA

4.1 Introduction

The concentration of current chapter is to study and interpret the results that were collected through administration of research instruments (questionnaires and interviews) to examine the effects of educational managers' instructional leadership (EMIL) and teachers' sense of self- efficacy (TSSE) on school effectiveness (SE). The study was descriptive in nature. Further, Mixed Method Research (MMR) followed by ex-post facto research design was used. Three data collection research questionnaires (1) (PIMRS, Appendix XVI) for educational managers (EM), (2) (TSES, Appendix, XVII) for secondary school teachers (SSTs), and (3) (SESQ, Appendix XVIII) for secondary school students (SSS) were employed to collect quantitative data. Permissions for using these questionnaires were taken from the developers. The responses were gathered from (72) EM, (365) SSTs, and (400) SSS from secondary level schools of the five selected tehsils of Rawalpindi district of the province of Punjab, Pakistan. Descriptive statistics (percentages) were used to analyze demographic data of the research, whereas inferential statistics were used to test hypotheses. Six of the objectives were studied using independent sample t-test. One objective was analyzed through correlation while, one of the research objectives was studied using multiple linear regression. Whereas to answer the research questions, the researcher applied IPA. Hypotheses were tested to assess EMIL, TSSE and SE in the context of their gender and sectors. Semi-structured interviews with EM, SSTs and students were analyzed using Interpretative Phenomenological Analysis (IPA). This chapter encompassed three phases. These were:

- 1: Quantitative data analysis: This phase consists of six sections (1st to 6th).
- 2: Qualitative data analysis: This phase consists of three sections (7th).
- 3: Triangulation.

Phase one: Section one of this phase shows input rate of the respondents. Section two (a) covers data related to six demographic variables (gender, sector, area, academic and professional qualification, and service experience in years (tables 4.2, 4.3 & 4.4). Section two (b) contains frequency and the percentage of the respondents (table 4.5, 4.6 & 4.7). Section three incorporates the sector wise contrast of the data collected from educational managers on PIMRS, from teachers on TSES, and from students on SESQ. The detailed explanation of these three research questionnaires is given (Table 3.9, chapter, 3). Section four described relationship of independent variables. Section five encompassed analysis of objectives and null hypotheses and deals with effects of IL and TSSE on SE. In section six, gender wise differences/associations between instructional leadership of secondary school educational managers', secondary school teachers' sense of self-efficacy, and secondary school students were analyzed.

Phase two: The section seventh describes the analysis of semi- structure interviews. The qualitative method (Interpretative Phenomenological Analysis (IPA) was used to examine the answers of the research questions. The responses gathered through interviews were coded. Further they were analyzed for common themes and patterns.

Phase three: Defines triangulation of results

4.2 Phase one: Quantitative Data Analysis

4.2.1 Section I: Response rate of survey

In section one, the response rate of educational managers, teachers and students is presented.

Table 4.1

Response rate of the respondents

Designation	Sample Size	Total Return	Useable	%
Educational Managers	72	72	72	100
Teachers	365	365	365	100
Students	400	400	400	100
Total	837	837	837	100

Table 4.1 depicts the response rate of all the selected participants of the survey. As all the respondents contributed eagerly, so the response rate of all the respondents has been 100%.

4.2.2 Section II (a): Descriptive Statistics Analysis

According to Urdan (2016), the data examination methods allow examiners to define data profoundly with numerical tables. Quantitative descriptive analysis carries the characteristic of educational managers, teachers and secondary school level students in the Rawalpindi district, of the province, of Punjab, Pakistan. Data about the participants' contexts for the analysis apprehended in the examination comprised gender, sector, area, academic, and professional educational level and experience.

4.2.2.1 Demographic Characteristics

All the members in the study requested to make information available concerning their experience, gender, sector, area, academic qualification and professional qualification. Survey participants' demographic characteristics are reported in Table 4.2, 4.3, and 4.4 separately.

4.2.2.1.1 Educational Managers' Demographic Characteristics

Table 4.2

Demographic Characteristics of Educational Managers (n = 72)

Demographic Variables	<i>n</i>	<i>%</i>
Gender		
Male	35	48.6
Female	37	51.4
Sector		
Public	32	44.4
Private	40	55.6
Academic Qualification		
M.A	38	52.8
M. Sc	23	31.9
M. Phil	11	15.3

Professional Qualification		
B. Ed	15	20.8
M. Ed	27	37.5
None	30	30
Experience		
Less than 1-5	11	15.3
6-10	20	27.8
11-15	11	15.3
Above 15 years	30	41.7

Note. $N = 720$ ($n = 72$ for each condition). % = reflects percentage of participants responding Principal Instructional Management Rating Scale (PIMRS).

Table 4.2 highlights the demographic variables like sector, gender, academic and professional qualification, and the job experience of the respondents. Further, it shows that, out of 72 participants, 35 demonstrating (48.6%) are males while 37 representatives (51.4 %) are females. It shows that bulk of the respondents are females. This is a, strong sign of the slightly low representation of males at secondary school level education. Furthermore, the majority of the respondents, i.e., 32, exhibit (44.4%) from public sector, whereas 40 represent (55.6 %) from private sector. These fallouts propose that the sample of the private sector is comparatively higher than of public sector educational managers. In terms of their academic qualifications of the respondents which indicates that the majority of the participants, i.e., 38 (52.8%) out of 72 (100%) have an M.A degree. The table further reflects that (37.5 %) of the teacher possess M. Ed degree as their professional qualification, while a small number of respondents hold B. Ed degree (20.8 %), and 30% teachers have no professional qualification. The majority (41.7%) of the respondents' job experience is more than 15 years, whereas (15.3%) respondents' job experience is 1-6 years and less than 1-5 years.

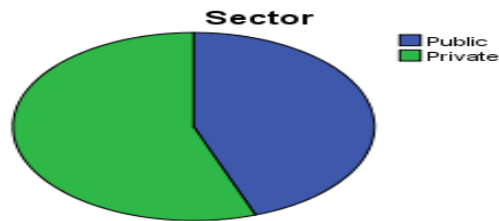
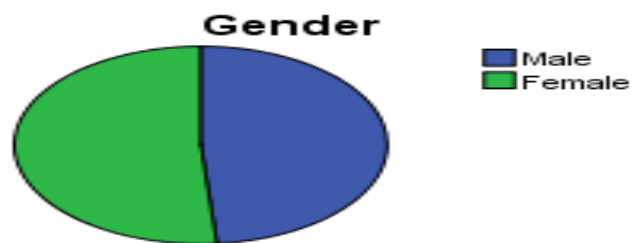
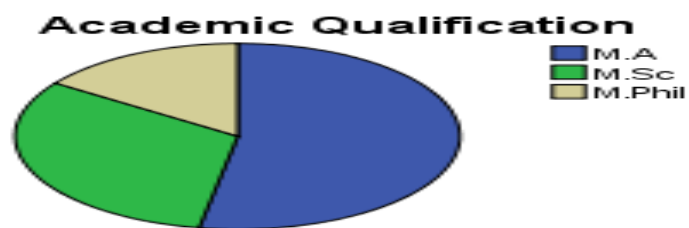
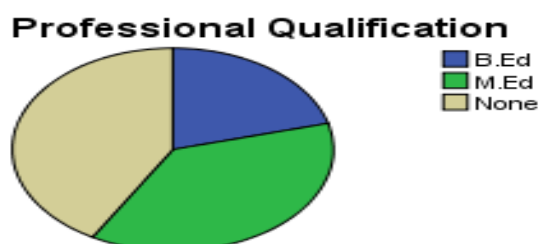
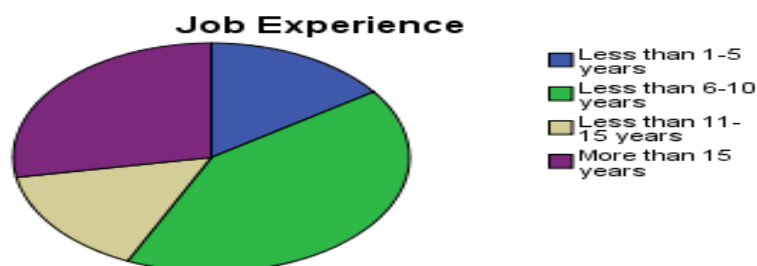
Figure 4.1*Sector wise differences in educational managers***Figure 4.2***Gender wise differences in educational managers***Figure 4.3***Differences in academic qualification of educational managers***Figure 4.4***Differences in professional qualification of educational managers*

Figure 4.5*Differences in job experience educational managers***4.2.2.1.2 Teachers' Demographic Characteristics****Table 4.3***Demographic characteristics of teachers (n= 365)*

Demographic Variables	<i>n</i>	%
Gender		
Male	189	51.8
Female	176	48.2
Sector		
Public	196	53.7
Private	169	46.3
Academic Qualification		
B.A	66	18.1
B. Sc	27	7.4
M.A	155	42.5
M. Sc	86	23.6
M. Phil	31	8.5
Professional Qualification		
B. Ed	160	43.8
M. Ed	143	39.2
None	62	17.0
Experience		
Less than 1-5	93	25.5

6-10	94	25.8
11-15	57	15.6
Above 15 years	121	33.2

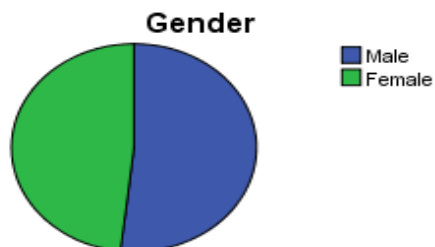
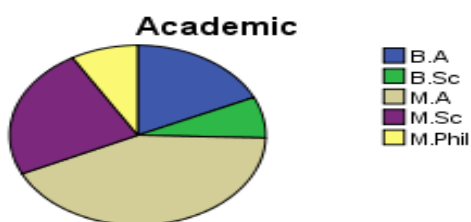
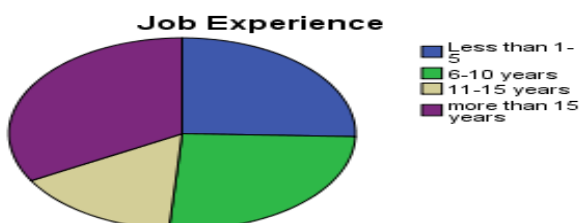
Note. $N = 3650$ ($n = 365$ for each condition). % = reflects percentage of participants responding Teachers' Sense of Self-Efficacy Scale (TSES).

Table (4.3) depicts demographic variables like sector, gender, academic and professional qualification, and the job experience of the respondents. In Table 4.3, out of 365 participants, 189 representing (51.8%) are men, whereas 176 respondents (48.2 %) are women. Here, the greater percentage of male members shows the little depiction of females on secondary school. Furthermore, bulk of the participants 196, constitute (53.7%) the public sector, whereas 169 teachers speak for (46.3) from the private sector. These findings suggest that the study's sample is relatively more from (public) as compared to the private sector. About their academic qualification, the majority of the respondents 155 (42.5%) out of 365 (100%) possess qualification of an M.A (Master of Arts). Likewise, the professional qualification of the respondents shows that most of the teachers possess B. Ed (Bachelor of education) degree 160 (43.8 %), while a small number of respondents have no professional qualification 62 (17%). The majority of the teachers (33.2%) have job experience more than 15 years, while (25.5%) have job experience of less than 1-5 years.

Figure 4.6

Sector wise differences in secondary school teachers



Figure 4.7*Gender wise differences in secondary school teachers***Figure 4.8***difference in professional qualification of secondary school teachers***Figure 4.9***Differences in academic qualification of secondary school teachers***Figure 4.10***Differences in job experience of secondary school teachers*

4.2.2.1.3 Students' Demographic Characteristics

Table 4.4

Demographic Characteristics (n = 400)

Demographic Variables	N	%
Gender		
Male	210	52.5
Female	190	47.5
Sector		
Public	192	48.0
Private	208	52.0

Note: N = (n = 400 for each condition). % = reflects percentage of participants responding School Effectiveness Survey Questionnaire (SESQ).

Table (4.4) shows that the sample consist of 400 students of secondary school level. Males are 210 (52.5%) and females are 190 (47.5 %). On the other hand, the table explains that groups are different in numbers. There are 192 (48 %) respondents from the “public”, and 208 (52%) from the “private” sector secondary schools. Moreover, the study also describes the differences in characteristics of participants with the help of pie chart as well:

Figure 4.11

Sector wise and gender wise differences in secondary school students



(b) 4.2.2 (b) Frequency Distribution for Study Variables:**Table 4.5***Frequency Distribution with respect to “Instructional Leadership”.*

Codes	Items	Never	Seldom	Some Times	Frequently	Always	Mean	Std. Deviation
1	Frame The School Goals (FSG)							
FSG1	Develop a focused set of annual school-wide goals	-	2	-	18	52	4.67	.628
FSG2	Frame the school’s goals in terms of staff responsibilities for meeting them	-	-	8	28	36	4.39	.683
FSG3	Use needs assessment to secure staff input on goal development	-	2	14	22	34	4.06	.785
FSG4	Use data on student performance when developing the school’s academic goals	-	-	-	28	44	4.39	.491
FSG5	Develop goals that are easily understood by teachers in the school	-	-	-	9	63	4.87	.333
2	Communicate The School Goals (CSG)							
CSG1	Communicate the school’s mission effectively to members of the school community	-	2	16	23	31	4.15	.867
CSG2	Discuss the school’s academic goals with teachers at faculty meetings	-	-	-	27	45	4.63	.488
CSG3	Refer to the school’s academic goals when making curricular decisions with teachers	-	2	-	20	50	4.64	.635
CSG4	Ensure that the school’s academic goals are reflected in highly visible displays in the school	-	-	16	12	44	3.94	.625
CSG5	Refer to the school’s goals in forums with students	-	2	18	24	28	4.08	.868
3	Supervise & Evaluate Instruction (SEI)							
SEI1	Ensure that the classroom priorities of teachers are consistent with the goals of the school	-	-	7	36	135	4.41	.918
SEI2	Review student work products when evaluating classroom instruction	-	-	7	139	254	4.56	.704
SEI3	Conduct informal observations in classrooms on a regular basis	-	7	-	30	45	4.38	.917

Table 4.5 (conti.....)

Codes	Items	Never	Seldom	Some Times	Frequently	Always	Mean	Std. Devi
SEI4	Point out specific strength in teachers instructional practices in post observation feed back	-	-	1	16	55	4.68	.629
SEI5	Point out specific weaknesses in teacher instructional practices in post observation feed back	-	-	-	-	23	3.97	.986
4	Coordinate The Curriculum (CC)							
CC1	Make clear who is responsible for coordinating the curriculum across grade levels	1	-	1	33	57	5.28	.662
CC2	Draw upon the results of school-wide testing when making curricular decisions	-	1	7	31	37	4.30	.909
CC3	Monitor the classroom curriculum to see that it covers the school's curriculum objectives	1	7	20	180	194	4.43	.660
CC4	Asses the overlap between the school's curricular objectives and school's achievement tests	-	-	26	4	370	4.55	.748
CC5	Participate actively in the review of curricular materials	5	17	16	38	324	5.40	.964
5	Monitor Student Progress (MSP)							
MSP1	Meet individually with teachers to discuss student progress	2	2	29	39	-	4.40	.867
MSP2	Discuss academic performance results with the faculty to identify curricular strengths and weaknesses	-	-	-	32	40	4.44	.500
MSP3	Use performance measure other than test to assess progress toward school goals	2	2	29	39	-	3.90	1.212
MSP4	Inform teachers of the school's performance results in written form	2	9	28	33	-	4.18	.861
MSP5	Inform students of school's academic progress	6	-	4	11	57	4.74	.556
6	Protect Instructional Time (PIT)							
PIT1	Ensure that students are not called to the office during instructional time	-	2	4	33	33	4.21	1.087
PIT2	Encourage teachers to use instructional time for practicing new skills	-	-	-	17	55	4.76	.428
PIT3	Limit the instruction of co-curricular activities on instructional time	-	-	2	31	39	4.51	.556
7	Maintaining High Visibility (MHV)							
MHV1	Take time to talk informally with students and teachers during recess and breaks	-	2	9	16	45	4.04	.680

Table 4.5 (conti.....)

Codes	Items						Mean	Std. Devi
		Never	Seldom	Some Times	Frequently	Always		
MHV2	Visit classrooms to discuss school issues with teachers and students	-	1	10	29	32	4.28	.755
MHV3	Participate in co-curricular activities	-	2	16	19	35	3.99	.778
MHV4	Cover classes for teachers until a late teacher arrives	-	1	26	19	26	3.88	.821
MHV5	Provide direct instruction to classes	-	3	17	23	29	4.00	.856
8	Provide Incentives For Teachers (PIFT)							
PIFT1	Highlight superior performance by teachers in staff meetings ,newsletters and memos	-	1	20	18	33	4.15	.883
PIFT2	Compliment teachers privately for their efforts	-	-	26	35	41	4.21	.948
PIFT3	Acknowledge teachers' expectational performance by writing memos for their personnel files	-	2	17	24	29	4.04	.830
PIFT4	Reward special efforts by teachers with opportunities for professional recognition	-	8	12	25	27	3.96	.985
PIFT5	Create professional growth opportunities for teachers as a reward for special contributions to the school	-	1	1	10	27	4.31	.762
9	Promote Professional Development (PPD)							
PPD1	Ensure that in-service activities attended by staff are consistent with the school's goals	-	8	1	19	44	4.38	.971
PPD2	Actively support the use in the classroom of skills acquired during in-service training	-	1	9	28	34	4.32	.747
PPD3	Obtain the participation of the whole staff in important in-service activities	-	1	1	23	47	4.28	.562
PPD4	Lead teachers' in-service activities concerned with instruction	-	2	11	28	31	4.22	.809
PPD5	Set aside time a faculty meetings for teachers to share ideas from in-service activities	-	1	2	30	39	4.49	.628
10	Provide Incentives For Learning (PIL)							
PIL1	Recognize students who do superior work with formal rewards	-	-	2	20	50	4.64	.635
PIL2	Use assemblies to honor students for academic-accomplishments	-	-	15	15	42	4.37	.813
PIL3	Recognize superior student achievement by seeing in the-office the students with their work	-	2	17	13	40	4.36	.919
PIL4	Contact parents to communicate improved student-performance or contribution	-	-	-	28	44	4.61	.491
PIL5	Support teachers actively in their recognition and reward-of student contributions to and accomplishments in class	-	7	1	29	35	4.28	.907

Table (4.5) shows the frequency, mean and standard deviation of data for independent variable “educational managers’ instructional leadership”. It was assessed through three dimensions followed by ten functions at five point Likert scale, where 1 is never, 2 seldom, 3 is sometimes, 4 is frequently and 5 is always. Majority of responses is toward agreeing and strongly agree, mean value of each item is also showing response toward A and SA. The standard deviation results are showing that all items are not deviating from mean value. The table also depicts highest mean value (M = 4.87, S.D = .333) in terms of one of the function of first dimension of instructional leadership (define mission of school). Conversely the lowest mean value (M = 3.38, S.D = 1.183) is observed in terms of one function CC of the second dimension of IL (Manage program of instruction).

Table 4.6

Frequency Distribution with respect to “three dimensions and related ten functions of instructional leadership”.

Dimensions	Functions	n	Mean	Std. Deviation
Define mission of school	FSG	72	22.38	2.02
	CSG	72	21.44	2.61
	SEI	72	22.08	2.12
Manage program of instruction	CC	72	20.75	3.89
	MSP	72	21.67	2.32
	PIT	72	13.49	1.45
	MHV	72	20.18	2.05
Promote a positive climate for school	PIFT	72	20.67	2.34
	PPD	72	21.68	2.23
	PIL	72	22.17	2.69
Total		72	206.50	12.08

Note: FSG=frame the school goals, CSG= communicate the school goals, SEI= supervise & evaluate instruction, CC= coordinate the curriculum, MSP= monitor student progress, PIT= protect instructional time, MHV= maintaining high visibility, PIT= provide incentives for teachers, PPD= promote professional development, PIL= provide incentives for learning.

The Table 4.6 shows overall, which highlighted highest mean (M = 22.38, S.D = 2.02) value about function defining school mission. The table also portrays lowest

mean value ($M = 13.49$, $S.D = .33$) in terms of one of the function of 2nd dimension of instructional leadership (managing instructional program). However, in consideration of a five-point scale, all the items related to three dimensions have exhibited a score demonstrating that the educational managers seeming active in Defining School's Mission, Managing the Instructional Program and fostering a Positive School Climate as an instructional leader.

Table 4.7

Frequency Distribution with respect to "Teachers' Sense of Self-efficacy".

Items	NAA		VL		SD		QAB		AGD		Mean	Std. Dev
	1	2	3	4	5	6	7	8	9			
1. Efficacy in Student Engagement (ESE) (How to)												
get through to the most difficult students?	-	3	34	6	85	19	82	56	80	6.61	1.93	
help your students think critically?	-	3	16	17	48	8	100	72	101	7.11	1.78	
motivate students who show low interest in school work?	-	-	14	09	58	37	37	68	147	7.36	1.79	
get students to believe they can do well in school work?	-	-	8	13	29	20	96	69	130	7.49	1.56	
foster student creativity?	1	10	34	10	32	6	87	65	95	6.83	2.04	
improve the understanding of a student who is failing?	3	3	13	10	36	6	68	55	110	7.06	1.81	
assist families in helping their children do well in school?	10	1	28	11	39	56	43	68	109	6.84	2.12	
2.Efficacy in Instructional Strategies (EIS) (How to)												
respond to difficult questions from your students?	8	1	15	4	24	16	60	84	153	7.55	1.88	
gauge student comprehension of what you have taught?	-	3	15	5	41	21	70	67	143	7.43	1.78	
craft good questions for your students?	2	3	10	8	34	42	83	71	112	7.26	1.70	
adjust your lessons to the proper level for individual student?	-	2	7	7	19	48	66	81	135	7.56	1.55	

Table 4.7 (continue)

Items	NAA		VL		SD		QAB		AGD		Mean	Std. Dev
	1	2	3	4	5	6	7	8	9			
use a variety of assessment strategies?	8	1	10	9	29	35	102	82	89	7.13	1.77	
provide an alternative explanation for example when students are confused?	-	1	4	12	18	25	41	118	146	7.80	1.45	
Implement alternative strategies in your classroom	-	9	-	19	-	64	-	149	157	7.90	1.55	
Provide appropriate challenges for very capable students?	-	5	30	10	12	16	49	125	118	7.40	1.89	
3.Efficacy in Classroom Management (ECM) (How to)												
control behavioral problems in the classroom?	1	10	36	3	7	16	42	104	146	7.32	2.00	
make your expectations clear about student behavior?	-	2	18	12	15	65	54	82	117	7.75	1.40	
establish routines to keep activities running smoothly?	2	1	2	12	7	24	75	112	130	7.55	1.81	
get children to follow classroom rules?	1	3	28	2	13	24	34	130	130	7.24	1.66	
calm a student who is disruptive or noisy?	2	2	9	1	49	56	41	99	106	7.44	1.70	
establish a classroom management system with each group of students?	-	11	3	10	19	27	39	77	179	7.15	2.21	
keep a few problem students from ruining an entire lesson?	25	3	12	1	16	31	35	92	150	7.18	1.68	
respond to Non-Cooperative students?	-	25	28	2	15	57	29	68	141	6.99	2.41	

Note: NAA= none at all, VL= very little, SD= some degree, QAB= quite a bit, AGD= a great deal.

Table 4.7 describes the frequency, mean and standard deviation of data for 2nd independent variable “teachers’ sense of self-efficacy”. This variable also examined on three dimensions with 23 items which is measured at five point Likert scale where 1 and 2 is none at all, 3 & 4 is very little, 5 and 6 is some degree, 7 & 8 is quite a bit and 9 is a great deal. Majority of items response is toward agreeing and strongly agree,

mean value of each item is also showing response toward agree and strongly agree. The standard deviation results are showing that all items are not deviating from mean value.

Table 4.8

Frequency Distribution with respect to “three dimensions of teachers’ sense of self-efficacy”.

Codes	Efficacy dimensions	n	Mean	Std. Deviation
ESE	Efficacy in student engagement	365	49.301	9.849
EIS	Efficacy in instructional strategies	365	59.830	9.862
ECM	Efficacy in classroom management	365	58.614	11.698
Total		365	167.745	25.008

Overall results in Table 4.8 demonstrates highest mean ($M = 58.614$, $S.D = 11.698$) value for efficacy in classroom management. The table also represents lowest mean value ($M = 49.301$, $S.D = 9.849$) in terms of efficacy in student engagement.

Table 4.9

Frequency Distribution with respect to “School Effectiveness”.

Codes	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Devi
		1	2	3	4	5		
1	Safe and ordered environment (SOE)							
SOE 1	I am taught disciplinary procedures.	1	7	11	189	192	4.41	.658
SOE 2	School conduct rules are used fairly each day.	4	8	44	192	152	4.20	.788
SOE 3	The students at my school are proud of the school and help the senior students to keep it nice-looking.	38	54	56	129	123	3.61	1.303
SOE 4	Stake holders from all cultures are encouraged to become involved in school activities.	43	37	37	150	133	3.73	1.302
2	High Expectation’s climate (HEC)							
HEC 1	My principal and teachers expect all students to do well and learn.	3	4	19	120	254	4.55	.703
HEC 2	My teachers communicate regularly with my parents and me regarding my achievement.	10	29	67	131	163	4.02	1.045
HEC 3	Teachers expect everyone in class to learn.	6	3	17	112	262	4.55	.747
3	Instructional Leadership (IL)							
IL1	I see my principal in the hallways/assembly area in the morning and afternoon.	63	33	32	116	156	3.67	1.454
IL 2	Teachers provide extra help to slow learners.	17	16	38	126	203	4.21	1.052
IL 3	My principal often visit my classroom.	43	12	45	133	167	3.92	1.271
IL 4	The most important thing for all the students at my school is having good teaching for all.	6	8	22	128	236	4.45	.812

Table 4.9 (continue)

Codes	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Devi
		1	2	3	4	5		
4	Opportunity for student to learn through time on task (OSLTT)							
OSLTT 1	My classes are protected from interruption by other people.	9	26	68	143	154	4.02	1.010
OSLTT 2	I have just the right amount of time to finish my class work /homework.	30	33	26	136	175	3.98	1.229
OSLTT 3	I learn new things and new skills every year.	9	15	21	114	241	4.41	.918
5	Clear Cut focused mission (CFM)							
CCFM 1	The school principal effectively communicate the mission of the school.	22	26	55	124	173	4.00	1.153
CCFM 2	My school's mission is to teach everyone.	7	14	17	138	224	4.40	.864
6	monitoring of student progress frequently (MSPF)							
MSPF 1	Teachers use daily work, projects and test scores to come up with my grade.	8	14	33	163	182	4.24	.895
MSPF 2	I use computers to help me strengthen my skills.	72	66	65	90	107	3.24	1.459
MSPF 3	Teachers use my test grades to evaluate my learning.	13	18	23	130	216	4.39	.993
7	Relationship of School and Home (RSH)							
RSH 1	I often see parents helping with school activities.	29	32	42	98	198	4.01	1.257
RSH 2	My parent(s) feel comfortable talking to my teacher.	9	7	32	145	207	4.33	.872
RSH 3	My parent (s) talk to my teacher about my progress and behavior in school.	4	5	34	97	260	4.51	.785

The 4.9 Table shows the frequency, mean and standard deviation of data for dependent variable "SE". It is measured by twenty-two items and each item is measured at five point Likert scale where 1 is strongly disagree, 2 disagree, 3 is neutral, 4 is agree and 5 is strongly agree. Majority of responses is toward agreeing and strongly agree. The table

also depicts highest mean value ($M = 4.55$, $S.D = 7.47$) in terms of factor high expectation's climate of school effectiveness. On the contrary the lowest mean value ($M = 3.24$, $S.D = 1.459$) is detected for monitoring of student progress frequently.

Table 4.10

Frequency Distribution with respect to "seven factors of school effectiveness".

Codes	Factors	n	Mean	Std. Deviation
SOE	safe & ordered environment	400	15.955	2.6769
HEC	High expectation's climate	400	13.118	1.7382
IL	Instructional leadership	400	16.250	2.9832
OSLTT	opportunity for student to learn through time on task	400	12.408	2.3119
CFM	clear-cut focused mission	400	8.395	1.6495
MSPF	monitoring of student progress frequently	400	11.773	2.3161
RSH	relationship of school and home	400	12.855	2.1869
Total		400	73.875	8.9324

Overall results in Table 4.10 demonstrates highest mean ($M = 16.250$, $S.D = 2.9832$) value for IL. The table also represents lowest mean value ($M = 8.3951$, $S.D = 1.6495$) in terms of CFM.

4.2.3 Section III: Analysis of research objectives and hypotheses

Section III depicted outcomes of descriptive statistics of educational managers, teachers and students at secondary level by calculating mean and standard deviation. It also disclosed significance and effect size. The SPSS (version, 23) was cast-off for statistics examination. Hypotheses were examined at the (0.05) significance level. The researcher calculated the difference of IL, TSSE and SE in public and private sectors through objective no (1, 2 & 3). In this section, the researcher goes with independent sample t-test. Data was collected through research instruments (1) PIMRS (2) TSES and SESQ. This section is consisted of three parts (a) for analysis of PIMRS, (b) for analysis of TSES and (c) for analysis of SESQ.

(a) Analysis of educational managers' instructional leadership functions through (PIMRS):

Educational managers' instructional leadership functions were observed through responses related to the ten functions of IL. These functions represent the three major dimensions of IL. Dimension 1 includes function FSG and CSG. While dimension two consists of functions, SEI, CC and MSP. On the other hand, dimension no 3 comprises functions PIT, MHV, PIFT, PPD and PIL. Data were submitted to an independent sample t-test to ascertain differences. Instructional leadership served as independent and sector served as dependent variable. Views are solicited from secondary school educational managers.

Objective No. 1: To determine educational managers' perceptions about instructional leadership functions in public and private sector at secondary school level;

Ho₁: There is no significant difference in educational managers' perceptions about instructional leadership functions in the public and private sectors at secondary school level.

H_{a1}: There is significant difference in educational managers' perceptions about instructional leadership functions in the public and private sector at secondary school level.

Table 4.11

Comparison of educational managers' instructional leadership (EMIL) in the public and private sector secondary schools.

Functions of (EMIL)	Sector	n	Mean	Std. Deviation	Std. Error Mean	t	P	Cohen's d
FSG	Public	32	22.375	2.524	.446	10.571	.000	2.481
	Private	40	15.425	3.054	.482			
CSG	Public	32	20.500	4.189	.740	8.826	.000	2.103
	Private	40	12.025	3.866	.611			
SEI	Public	32	21.468	3.491	.617	8.458	.000	1.994
	Private	40	14.100	3.888	.614			

CC	Public	32	21.031	3.847	.680	1.074	.286	0.253
	Private	40	20.000	4.284	.677			
MSP	Public	32	22.125	1.979	.349	2.863	.006	0.657
	Private	40	20.150	3.759	.594			
PIT	Public	32	13.468	2.155	.380	4.703	.000	1.079
	Private	40	9.875	4.189	.662			
MHV	Public	32	19.781	3.414	.603	4.865	.000	1.120
	Private	40	14.275	6.055	.957			
PIFT	Public	32	20.437	3.232	.571	4.602	.000	1.068
	Private	40	16.025	4.870	.770			
PPD	Public	32	21.343	3.479	.615	6.381	.000	1.475
	Private	40	14.425	5.647	.892			
PIL	Public	32	21.812	4.153	.734	6.070	.000	1.403
	Private	40	13.925	6.780	1.072			
Total	Public	32	204.34	21.265	3.759	9.173	.000	2.139
	Private	40	150.22	5	28.756	4.546		

Note. $\Rightarrow \rho < .05$. FSG = (Framing the school goals), CSG= (communicate the school goals), SEI= (supervise & evaluate instructions), CC= (co-ordinate curriculum), MSP = (Monitoring student progress), PIT= (protecting instructional time), MHV= (Maintain high visibility), PIFT = (providing incentives for teachers), PPD= (promote professional development)t, PIL= (provide incentives for learning). Dimension 1 includes function FSG and CSG. While dimension two consists of functions, SEI, CC and MSP. On the other hand, dimension three comprises functions PIT, MHV, PIFT, PPD and PIL.

Interpretation: Table (4.11) presents secondary school managers' perceptions about their instructional leadership (IL) functions in its various dimensions.

The Table (4.11) interprets difference in the public and private sector school leaders' IL regarding framing the school goals (FSG), which are seen significant. However, in FSG the public sector educational managers are found better (M= 22.37, S.D = 2.52) than the private sector school educational managers (M = 15.42, S.D = 3.05). The result of a p value is considered statistically significant (p= .000) of 5 % < 0.005. Further, the effect size value of Cohen is (d = 2.5), which suggests a higher practical significance.

Moreover, this Table shows the difference in opinion of the secondary school educational managers of both the sectors regarding communicating the school goals (CSG) function. The results indicate that the managers in the public sector are better in communication with ($M = 20.50$, $S.D = 4.19$) as compared to their private sector counterparts with ($M = 12.03$, $S.D = 3.87$). The outcomes show the value of $p < 0.05$. Additionally, the value of effect size of Cohen ($d = 2.1$) proposes largest applied effect (Table, 4.11).

Furthermore, for the third function of instructional leadership, Table demonstrates educational managers' perceptions regarding their practice in supervising & evaluating instructions (SEI) which are seen significant. In instructional leadership function of SEI, public sector leaders of the school are found better with ($M = 21.47$, $S.D = 3.85$) than the private sector school managers ($M = 14.10$, $S.D = 3.89$). The result is lower than 0.005, which is ($p = .000$) of 5% and that is treated to be statistically significant. Further, Cohen's ($d = 1.9$) effect size value advocates a very large practicable significance (Table 4.11).

Similarly, it is noted in Table 4.11 that educational managers' perceptions regarding coordinating curriculum (CC) are observed significant. However, in instructional leadership function of CC, the public sector school managers are found slightly sound ($M = 21.03$, $S.D = 3.85$) than the private sector school managers ($M = 20.00$, $S.D = 4.28$). The product of a p-value of 5% is greater than 0.005 ($p = .286$) that expresses to be statistically non-significant. Additionally, the effect size value ($d = 0.3$) recommends a very large practical effect.

For next function monitoring, students' progress (MSP) Table 4.11 demonstrates the public sector school managers are slightly better with ($M = 22.13$, $S.D = 1.98$) than the private sector school managers ($M = 20.15$, $S.D = 3.76$). A p-value of 5% is higher than 0.005 that yields a result ($p = .006$) and which is studied to be statistically non-significant. Moreover, effect size, $d = (0.7)$ suggests a very broad operative implication.

In Table 4.11, it is observed for the next function of instructional leadership that secondary school managers perceive positively regarding the function protecting instructional time (PIT). Yet in instructional leadership practice of PIT,

the public sector school managers are found slightly better ($M = 13.47$, $S.D = 2.15$) than the private sector school managers ($M = 9.86$, $S.D = 4.19$). The result of a p-value of 5% is < 0.005 ; it is treated as significant statistically ($p = .000$). In addition, Cohen's d suggests a very considerable applied implication on the basis of the effect size value, i.e., ($d = 1.1$).

As seen in Table 4.11, educational managers' perceptions about maintaining high visibility (MHV) shows that in instructional leadership function of MHV the public sector school managers are slightly better ($M = 19.78$, $S.D = 3.41$) than the private sector school managers ($M = 14.28$, $S.D = 6.05$). The output of a p-value ($p = .000$) at 5 % level of significance is lesser than 0.005 weighed significant statistically. Another result shows that the value of Cohen's $d = (1.2)$ submits a very substantial workable result.

According to Table 4.11, in terms of provision of incentives for teachers (PIFT) in the public sector secondary level schools, managers have strong belief in providing incentives for teachers ($M = 20.44$, $S.D = 3.23$) as compared to the private sector school managers ($M = 16.03$, $S.D = 4.87$). Furthermore, the product of a p-value of 5% is smaller than 0.005 which shows significant difference. Cohen's ($d = 1.1$) value of effect size suggests a very large orderly significance.

Likewise, Table 4.11 demonstrates secondary school managers' perceptions about promoting professional development (PPD). Though the public sector school managers support professional development ($M = 21.34$, $S.D = 3.48$) than the private sector school managers ($M = 14.43$, $S.D = 5.65$). The result of ($d = 1.5$) designates a very broad applied worth. Here is the p-value of 5% which is lower than 0.5 level of significance.

For the last function, Table 4.11 demonstrates secondary school managers' perceptions regarding providing incentives for teachers (PIL). In instructional leadership practice of PIL, the public sector school managers are found slightly better ($M = 21.81$, $S.D = 4.15$) than the private sector school managers ($M = 13.93$, $S.D = 6.78$). The p-value ($p = .000$) of 5% is lower than (0.005), which is calculated to be significant. Consequently, ($d = 1.4$) Cohen's effect size value submits an enormous implicit significance.

Table 4.12*Overall results of sector wise differences in EMs*

Sector	n	Mean	S.D	t	P	Cohen's d	Hypotheses Status
Public	32	204.343	21.265	9.173	.000	2.139	Ho1= Rejected
Private	40	150.225	28.756				Ha1= Accepted

An (independent-sample) t-test used to assess the dissimilarity among sectors. Overall results show that the public sector educational managers are practicing instructional leadership functions which is better with (M= 204.34, S.D = 21.26) as compared to the private sector educational managers with (M = 150.22, S.D = 28.76). It is observed that test is significant $t(72) = 9.17, p = (0.000)$. It shows that the value of p is < 0.05 . So it can be observed from Table 4.5 that the educational managers practice instructional leadership functions significantly better in the public sector than the private sector educational managers. Therefore, the alternative hypothesis H_{a1} : there is significant difference in educational managers' instructional leadership at secondary school level in the public and private sectors, and the related sub-hypotheses ($H_{a1.1}$ - $H_{a1.3}$) were accepted while null hypotheses H_{o1} and related sub hypotheses ($H_{o1.1}$ - $H_{o1.3}$) were rejected. The value of Cohen's d is (2.14), which indicates a large effect size (Table, 4.12).

(b) Analysis of teachers' data collected through Teacher Self-Efficacy Scale (TSES):

Similarly, this study accompanies the perceptions of teachers about their SSE in both the sectors, i.e., public & private. Results are enquired from the secondary school teachers (SST). TSES (Moran & Hoy, 2001) is used for views on three main dimensions of efficacy such as: student engagement, instructional strategies and classroom management. The questionnaire is consisted of seven to eight exact behavioral items involving each dimension. The data is studied by independent sample t-tests. Results are based on the following research objective.

Objective No. 2: To assess teachers' sense of self-efficacy at secondary school level in public and private sector;

H₀₂: There is no significant difference in teachers' sense of self-efficacy at secondary school level in the public and private sector.

H_{a2}: There is significant difference in teachers' sense of self-efficacy at secondary school level in the public and private sector.

Table 4.13

Comparison of teachers' sense of self-efficacy in the public and private sector secondary level schools

Dimensions of TSSE in	Sector	n	Mean	Std. Deviation	t	P (value)	Cohen's d
SE	Public	196	50.597	9.599	6.179	.000	0.646
	Private	169	44.769	8.419			
IS	Public	196	60.403	9.954	4.004	.000	0.420
	Private	169	56.213	9.982			
CM	Public	196	55.464	11.709	1.301	.194	0.136
	Private	169	57.012	10.999			
Total	Public	196	166.464	26.911	3.511	.001	0.364
	Private	169	157.994	18.958			

Note: p < .05. SE = student engagement, IS = instructional strategies, CM = classroom management.

Interpretation: Table 4.13 presents the comparison of public and private sector school teachers on certain dimensions of sense of self-efficacy. The table indicates that the public sector school can manage students with strong SSE (Mean = 95.36; SD = 18.019) than the private sector teachers (Mean = 44.76; SD = 8.41). The finding of a p-value (p .000) of 5% < 0.005 is considered to be significant statistically. Moreover, (d= 0.6) is value of Cohen's effect size, proposing a medium practical significance.

Similarly, in Table 4.13, teachers' perceptions regarding their SSE in instructional strategies is seen energetic. However, the public sector teachers have a strong sense of SSE with (M= 60.40, S.D = 9.95) than the private sector school teachers (M = 50.21, S.D = 9.98). The product of a p-value ($p = .000$), $5\% < 0.005$) is considered to be statistically non-significant. Supplementary, in case of SI effect size value, $d = (0.4)$ offers medium applied effect.

For next dimension of efficacy that is in classroom management, Table 4.13 establishes the private sector school teachers slightly better (M= 57.01, S.D = 10.99) than the public sector school teachers (M = 20.15, S.D = 3.75). The score of a p-value ($p = .13$) which is greater than 0.005 at 5 % level of significance which is considered to be statistically non-significant. Additionally, the effect size value of Cohen ($d = 0.4$) about CM also indicates medium practical significance.

On these dimensions, an independent sample t-test was applied to seek significant variations across the groups of (public & private) both sectors' teachers. The results reveal significant difference in both sectors.

Table 4.14

Overall results of sector wise differences in TSSE

Sector	n	Mean	S.D	t	P value	Cohen's d	Hypothesis status
Public	196	166.46	26.911	3.511	.001	0.364	Ho2 = Rejected
Private	169	157.99	18.958				Ha2= Accepted

Overall results, show that public sector SSTs have relatively higher SSE (Mean= 166.46; SD = 26.91) based on the descriptive scores than their private sector counterparts. On the contrary, the descriptive statistics obtained, as shown in Table (4.12), display, that teachers working in the public sector institutions on average have a better EIS (Mean = 60.40; SD = 9.95) than the private sector equals (Mean = 56.21; SD = 9.98). On the other hand, private school teachers have a slightly higher ECM (Mean = 57.012; SD = 10.999) than the public sector counterparts (Mean = 55.464; SD = 11.709), whereas public sector SSTs have better ESE (Mean = 50.597; SD = 9.599) than their private sector colleagues (Mean= 44.769; SD = 8.419). It is

examined that with respect to TSSE regarding SE, IS and CM, noteworthy differences are found. It is observed that t-test was significant $t(365) = 166.464$, $p = 0.001$ for SSE differences. The value of p is $0.000 < 0.05$. So that it can be observed from Table (4.6) that the SSTs feel a strong SSE in the public sector than the private sector secondary level schools. Therefore, the null hypothesis H_{02} : There is no significant difference in teachers' sense of self-efficacy at secondary school level in the public and private sector, and related sub-hypotheses ($H_{02.1}$ - $H_{02.3}$) were not accepted. While alternative hypotheses H_{a2} and related sub alternative hypotheses ($H_{a2.1}$ - $H_{a2.3}$) were accepted. The value of Cohen's d was (0.36), which indicated a small effect size (Table, 4.14).

(c) Analysis of students' data collected through School Effectiveness Survey Questionnaire (SESQ):

Correspondingly, this study complements the perceptions of students about school effectiveness in Public and private sectors. Outcomes are investigated from the secondary school students of class 9th and 10th. SESQ (Baldwin et al., 1993) is cast-off to collect answers on seven factors: Safe and ordered environment, high expectation's climate, Instructional Leadership, opportunity for student to learn through time on task, clear-cut focused mission, monitoring student progress frequently, Home school relation. The questionnaire is contained different number of items involving each factor. Independent sample t-tests was applied. Results are based on the following research objective.

Objective 3: To determine school effectiveness as perceived by the students in public and private sector at secondary school level;

H_{03} . There is no significant difference among the views of students about school effectiveness (SE) in public and private sector.

H_{a3} . There is significant difference among the views of students about school effectiveness (SE) in public and private sector.

Table 4.15

Comparison of student's perceptions regarding school effectiveness in public and private sector secondary schools.

S.E Factors	Sector	<i>n</i>	Mean	S.D	<i>t</i>	<i>P</i>	Cohen's <i>d</i>																																																																																
SOE	Public	160	13.510	2.416	9.769	.000	0.977																																																																																
	Private	240	15.910	2.497				HEC	Public	160	13.385	1.677	3.225	.001	0.322	Private	240	12.825	1.795	IL	Public	160	15.835	2.902	21.422	.000	2.142	Private	240	10.070	2.463	OSLTT	Public	160	12.110	6.885	25.402	.000	2.541	Private	240	6.885	2.074	CFM	Public	160	3.890	1.299	24.454	.000	2.444	Private	240	7.625	1.726	MSPF	Public	160	7.355	2.168	18.081	.000	1.808	Private	240	11.425	2.331	HSR	Public	160	6.580	2.168	28.333	.000	2.834	Private	240	12.410	2.317	Total	Public	160	61.675	6.020	31.882	.000	3.188
HEC	Public	160	13.385	1.677	3.225	.001	0.322																																																																																
	Private	240	12.825	1.795				IL	Public	160	15.835	2.902	21.422	.000	2.142	Private	240	10.070	2.463	OSLTT	Public	160	12.110	6.885	25.402	.000	2.541	Private	240	6.885	2.074	CFM	Public	160	3.890	1.299	24.454	.000	2.444	Private	240	7.625	1.726	MSPF	Public	160	7.355	2.168	18.081	.000	1.808	Private	240	11.425	2.331	HSR	Public	160	6.580	2.168	28.333	.000	2.834	Private	240	12.410	2.317	Total	Public	160	61.675	6.020	31.882	.000	3.188	Private	240	88.140	10.078								
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	Private	240	88.140	10.078																																																																																			

Note: SOE= Safe and ordered environment, HEC= high expectation's climate, IL= Instructional Leadership, OSLTT= opportunity for student to learn through time on task, CFM= clear-cut focused mission, MSPF= monitoring student progress frequently, HSR= Home school relation.

4.3.1.3.1 Interpretation: Table 4.15 depicts the results of public and private secondary school students' views about various factors of school effectiveness. There is found significant difference in students' views about the first factor of school effectiveness (SE): safe and orderly environment (SOE) where we observe that students of private sector are more confident about SOE factor at their school than public sector secondary school students (public $M= 13.51$, $S. D = 2.416$: private = 15.91 , $S. D = 2.497$). The finding of a p-value ($p .000$) of $5\% < 0.005$ is considered to be significant statistically. Moreover, ($d= 0.9$) is value of Cohen's effect size, proposing a large effect size.

Likewise, in Table 4.15 there is found significant difference in students' views about second factor of school effectiveness. Where we observe that students of public sector are more self-assured about climate of high expectations (HEC) with ($M= 13.385$, $S.D = 1.677$), as compare to their private sector counter parts with ($M= 12.825$, $S. D = 1.795$). The finding of a p-value ($p .000$) of $5\% < 0.005$ is considered to be significant statistically. Moreover, ($d= 0.3$) is value of Cohen's effect size, proposing a small practical significance.

Table 4.13 shows significant differences in the perceptions of students of both the sectors about instructional leadership (IL). The results reveals that students of public sector perceive that they have IL in their schools with ($M= 15.835$, $S.D = 2.902$). While private sector students perceive differently about IL with ($M= 10.070$, $S.D = 2.463$). The finding of a p-value ($p .000$) of $5\% < 0.005$ is considered to be significant statistically. Moreover, ($d= 2.1$) is value of Cohen's effect size, proposing a sizeable practical worth.

Table 4.15 revealed that public sector students perceived that they have opportunity to learn and student time on task (OLSTT) with ($M = 12.110$, $S. D = 6.885$). On the other hand, private sector student's perception with ($M= 6.885$, $S.D = 2.074$) shows they are lacking to have OLSTT. The finding of a p-value ($p .000$) of $5\% < 0.005$ is considered to be significant statistically. Moreover, ($d= 2.5$) is value of Cohen's effect size, proposing a significant applied importance.

In terms of clear school mission (CFM), Table 4.15 portrays that private sector secondary level students perceive them clear about CFM with (M= 7.625, S.D = 1.726). While public sector school students revealed that they are not as much clear about CFM with (M= 3.890, S.D = 1.299). The finding of a p-value (p .000) of 5% < 0.005 is considered to be significant statistically. Moreover, (d= 2.4) is value of Cohen's effect size, proposing a large useful implication.

Table 4.15 demonstrate that private sector students perceive that their progress monitored frequently (MSPF) with (M = 11.425, S.D = 2.331) as compare to their public sector counterparts with (M = 7.355, S.D = 2.168). The finding of a p-value (p .000) of 5% < 0.005 is considered to be significant statistically. Moreover, (d= 1.8) is value of Cohen's effect size, proposing a considerable useful practically.

For home school relation (HSR) Table 4.15 elaborates that private sector institutions focused home school relation as perceived by their students with (M= 12.410, S.D = 2.317). Whereas public sector students perceived that their school do not have strong relationship with their homes with (M= 6.580, S.D = 1.760). The finding of a p-value (p .000) of 5% < 0.005 is considered to be significant statistically. Moreover, (d= 2.8) is value of Cohen's effect size, proposing a substantial applied worth.

Table 4.16

Overall differences in the perception of students' sector wise

Sector	n	Mean	S.D	t	P value	Cohen's d	Hypothesis status
Public	160	61.675	6.020	31.882	.000	0.3.188	Ho3 = Rejected
Private	240	88.140	10.078				Ha3= Accepted

There were 400 respondents. Table 4.15 determines significant differences in public and private sector secondary school level students of class 9th (IX) and 10th (X) regarding school effectiveness. There for the alternative hypotheses H_{a3}. There is significant difference among the views of students about school effectiveness (SE) in public and private sector and the related sub alternative hypotheses H_{a3.1}to H_{a3.7} were

accepted. Private sector students reported that their schools are effective in (SOE) safe and ordered environment; (CFM) clear- cut focused mission; (MSPF) monitoring of student progress frequently, and (HSR) relationship of school and home. The results also determined that there exists significant difference in secondary school level students of class 9th (IX) and 10th (X) regarding (SOE) safe and orderly environment, while public sector students perceive that their schools are effective for (OSLTT) opportunity for students to learn through time on task; (HEC) high expectation's climate; and (IL) instructional leadership. Findings of the present research disclose that public and private secondary level school students of class 9th (IX) and 10th (X) differed significantly in all factors of school effectiveness. Likewise, Cohen's d values described rational of the six factors. While the school effectiveness factor climate of high expectations (HEC) have small effect according to Cohen's d value. According to Table overall analyses disclosed that there was high mean in private sector schools related to SE (M= 88.140, S. D= 10.078) on seven factors of school effectiveness. While public sector school students reported lower mean (M=61.675, S.D = 6.020) on above factors (Table, 4.15). It was concluded that students of private sector secondary level schools were highly agreed with seven factors for school effectiveness. While they show lower level of agreement with seven factors for school effectiveness in public sector. Moreover, the result of a p-value ($p = .000$) of 5% is lower than 0.005 ($p=0.000$) which considered to be statistically significant. Further, Cohen's effect size value ($d = 3.2$) suggests a very large practical significance.

Section IV: Analysis about connection of independent variables

Section IV depicted outcomes of relationship of educational managers' IL and teachers' SSE at secondary level by calculating correlation. The researcher calculated the relationship through objective no (4). In this section, Correlation was applied for the data analysis. Results show that the variables *IL* and *SSE* have a strong, and positive, correlation with each other as $r = .786$. Further, it was observed that correlation is statistically significant between *IL* and *TSSE* such as $\rho = .000$. More, through linear regression analysis it was found the positive effect of *TSSE* on *IL* as

R^2 depicts that the model explains 33% of the variance in IL (Table. 4.17b), so the null hypothesis H_{04} was not accepted.

Objective No. 4: determine the relationship of instructional leadership and sense of self - efficacy;

H_{04} : There is no significant relationship among instructional leadership and teachers' sense of self-efficacy.

H_{a4} : There is significant relationship among instructional leadership sense of self-efficacy

Information Required:

- Two continuous variables (In this case, Instructional Leadership and Sense of Self -Efficacy).

Table 4.17 (a)

Correlation between IL and SSE

Variables	IL	SSE	Hypotheses status
Instructional Leadership (IL)	1	.786*	H_{04} = rejected
		.000	
Sense of Self - Efficacy (SSE)		1	H_{04} = accepted

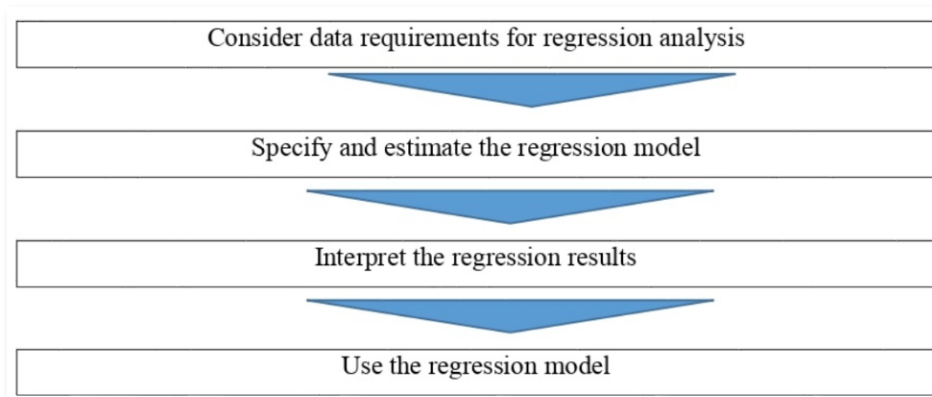
Note: * $p < .05$.

Table 4.17 (a) shows Pearson link amongst the two variables (IV & DV). Where IV = instructional leadership, while DV= Sense of Self- Efficacy. The Table predicted that IL influences SSE which was $r = .786$. The calculated correlation was highest to be significant ($p = .000$) at .05. Pearson product correlation of instructional leadership and sense of self-efficacy was found to be high positive and statistically significant ($r = .786$, $p < .05$). Therefore, H_{04} was not supported. This shows that an increase in instructional leadership of educational managers would lead to a higher sense of self-efficacy in teachers. Consequently, there was no evidence of multicollinearity. Based on these results, it was decided that the data were suitable for regression analysis.

The researcher followed steps for regression analysis:

Fig. 4.12

Steps to conduct a regression analysis



Note: Source, Mooi (2014).

Regression Analysis of Objective: 3

$$H_0: \beta_1 \neq 0$$

In order to determine the predictive power of instructional leadership behaviors over the teachers' sense of self - efficacy perceptions, a linear regression analysis was performed. Instructional leadership was taken as the independent variable, whereas sense of self- efficacy was considered to be the dependent variable. In the interpretation of the regression analysis, standardized β coefficients and t-test results for their significance were considered. The significance level was set at 0.05 and for regression analysis following equation was used to estimate the relationship.

$$Y_i = \beta_0 + \beta_1 X_i + e$$

According to objective 4 the equation can be modified as follows:

$$IL = \beta_0 + \beta_1 (SSE) + e$$

Where

IL: is the dependent variable that is to be predicted

β_0 : is the regression constant, representing a value of IL if there is no relationship

β_1 : is the beta coefficient

SSE: is the value (amount) of SSE

e: represents error terms that simply speaking accounts for all other factors that account variance in the dependent variable.

Table 4.17 (b)

Linear regression analysis of IL and SSE

Hypothesis	Regression Weights	β_1	R^2	F	t	P	Hypotheses
H ₀₄	TSSE→ IL	93.01	.033	13.368	-3.66	.000*	Alternative accepted

Note: *p < 0.05. IL: Instructional Leadership, SSE: Sense of Self -Efficacy

The table 4.17 (b) shows the summary of the findings. The dependent variable SSE was regressed on predicting variable IL to test hypothesis H₀₄. SSE significantly predicted IL, $F(1,364) = 13.368$, $p = .000 < 0.005$, which indicates that the SSE can play a significant role in shaping IL ($b = 93.01$, $p < .005$). These results clearly direct the positive effect of the SSE. Moreover, the $R^2 = .033$ depicts that the model explains 33% of the variance in IL.

Interpretation: A linear regression established that IL statistically, significantly predict SSE, $F(1, 364) = 13.368$, $p = .000$ and IL accounted for 3.3 % of the explained variability in SSE. The regression equation was: predict teachers' sense of self- efficacy = $93.128 - .121 = 93.007$ (SSE). In results adjusted R^2 is less than R^2 value which is in line with Dhakal's (2018) explanation that adjusted R^2 will always be equal or less than R square. Independent variable of this research explains 3.3 % of variability of dependent variable SSE. While, 96.7 (100%- 3.3%) of the variation caused by other factors other than the predictors including in current model. Moreover, value of ($F=13.368$, $p = .000$) < .05 regression model is a good fit of the data. Test tell us that IL ($t = -3.656$, $p = .000 < .05$) have substantial contribution to explaining SSE. Reason for small value of R^2 is that human behavior is actually tough to forecast, a great value of R square is more or less difficult (Frost, 2017). Further, it was clarified by (Dhakal, 2018) that a good model can have a low R square value.

4.2.5 Section V: Analysis related to effect

Effects of educational managers' instructional leadership and TSSE on school effectiveness at secondary school level is identified through objective (4). In this section, the researcher goes with multiple linear regression analysis.

Objective No. 5: To examine the effects of educational managers' instructional leadership functions and teachers' sense of self-efficacy on school effectiveness:

H₀₅: There is no significant effects of educational managers' instructional leadership functions and teachers' sense of self-efficacy on school effectiveness.

H_{a5}: There is significant effects of educational managers' instructional leadership functions and teachers' sense of self-efficacy on school effectiveness.

Table 4.18

Inter-relationship between IL, teachers' SSE, and SE

Variables	IL	SSE	SE
Instructional leadership (IL)	1	.747**	.721**
Sense of Self-Efficacy (SSE)		1	.806**
School Effectiveness (SE)			1

*Note: **p < .05.*

Table 4.18 shows Pearson correlation among the three variables: instructional leadership, sense of self-efficacy and school effectiveness. Educational managers perceive the instructional leadership functions that influence school effectiveness which was $r = .747$. The calculated "r" was highest to be significant ($p = .000$) at (.05), so positive correlation was found between IL, and school effectiveness. The table also depicts the highest and positive important connection among TSSE and school effectiveness as, ($r = .806$, $p = .000$).

After checking correlation among the study variables, the researcher calculated the Multiple Linear Regression to find out the effect of IL practices and SSE on SE. The independent variables were EMIL, TSSE and the dependent variable was SE.

Table 4.19 (a)

Multiple regression model of *instructional leadership (X1) and teachers' sense of self-efficacy (X2) on school effectiveness (Y)*.

R	R ²	Adjusted R ²	Sum of squares	df	Mean Squares	F	sig
.773	.598	.594	10879.147	2	5439.573	157.862	.000
				214			

Table 4.19 (b)

Co-efficient

Model		(B)	(Std. Error)	(β)	(t)	(P)
1	Constant	7.796	6.681		6.444	.000
	IL (X1)	.513	.097	.472	6.418	.000
	SSE (X2)	.370	.026	.340	4.622	.000

a. DV: SE (Y)

b. Predictors: (Constant), IL (instructional leadership) and SSE (sense of self- efficacy).

Table 4.15 (c)

Hypothesis Testing

Hypothesis	Regression Weight	Beta Coefficient	R ²	F	P value	Hypothesis supported
		(R)				
H ₀₅	IL → SE					NO
H _{a5}	SSE → SE	.773	.598	157.862	.000	Yes

It can be observed from Tables 4.19 (a), 4.19 (b) and 4.19 (c) that multiple linear regression model was used to check the effects of EMIL (X1) and TSSE (X2) on SE (Y). It represents the coefficient among the independent and dependent variables. Further, Tables 4.15 (a & b) indicate that independent variables such as educational managers' IL and teachers' SSE significantly affect the dependent variable, i.e., school effectiveness. Moreover, based on multiple regression analysis, (β_0) is 7.796; instructional leadership co-efficient value (β_1) is .513, and the co-efficient of teachers' sense of self-efficacy (β_2) is .370. Subsequently, the regression equation is $\hat{Y} = 7.796 + .513 X_1 + .370 X_2$. Score $\beta = 0.472$, $t = 6.418$, $\rho = (.000) < .05$, this shows that instructional leadership has effects on school effectiveness. It further

outlines that every adding of one score in IL will increase school effectiveness. While score $\beta = .340$, $t = 4.622$, $p = (.000) < .05$ displays that TSSE has significant effect on school effectiveness. It also highlights that increase in teachers' SSE increases school effectiveness. It represents that R^2 value is .598, which explains that independent variables describe 60% effects on the dependent variable. So the alternative hypothesis was accepted.

Interpretation of regression analysis: A multiple linear regression was calculated to foresee school effectiveness centered on instructional leadership and teachers' sense of self-efficacy. A significant regression equation was found ($F(2, 214) = 157.862$, $p = .000 < .05$, with an R^2 of .598. Participants' predicted school effectiveness is equal to $7.796 + .370(\text{TSSE}) + .513(\text{IL}) = 8.679$. Both educational managers' instructional leadership and teachers' sense of self-efficacy were significant predictor of school effectiveness. Results display that EMIL and TSSE positively effects school effectiveness.

4.2.6 Section VI: Gender wise differences between educational managers, teachers and students:

While gathering educational manager's responses regarding gender differences, the study focused on objective no (6). The associated dimensions of instructional leadership are: DMS, MIP, and PPSC. The PIMRS is used for assessment of instructional leadership practices with respect to its major dimensions and related 10 functions i.e: (i) framing the school goals, (ii) communicating school goals, (iii) supervising and evaluating instruction, (iv) coordinating the curriculum, (v) monitoring progress of students, (vi) protecting instructional time, (vii) maintaining high visibility, (viii) providing incentives for teachers, (ix) providing incentives for learners, and (x) promoting professional development. Each function encompasses five questions particular to instructional leadership practice.

Whereas gathering teachers' replies regarding gender differences, the study focused on objective no (7) to investigate gender differences in teachers' SSE in schools at secondary level. TSES is used to find out the major dimensions of teachers' sense of self-efficacy. To attain objective no (7), the survey instrument TSES focused on three dimensions about efficacy in: (i) student engagement, (ii)

instructional strategies, and (iii) classroom management. Through independent sample t-test, collected data is analyzed. The analyses are described here in the context of the two objectives of the research which are related to IL and TSSE. Moreover, hypotheses are made in order to achieve the objectives of the study and to find out the differences in the perceptions of educational managers and teachers. Thus, there are two major hypotheses tailed by six sub-hypotheses.

Similarly, collecting students' answers about differences in gender, this study concentrated on objective no (8) to find out gender differences in students' perceptions about SE in schools at secondary level. SESQ is used to find out the main factors of school effectiveness. To attain objective no (8), the survey questionnaire focused on seven factors about SE: safe and ordered environment, high expectation's climate, instructional leadership, opportunity for student to learn through time on task, clear-cut focused mission, monitoring student progress frequently, and Home school relation. Through independent sample t-test, collected data is analyzed. The analyses are described here in the context of the three objectives of the research which are related to IL, TSSE and SE. Thus, there are three major hypotheses tailed by thirteen sub-hypotheses. Consequently, hypotheses are tested and examined on SPSS version 23.

Objective. No. 6: To find out gender differences in educational managers' instructional leadership functions:

Ho₆: There is no significant difference in educational managers' instructional leadership (EMIL) functions in males and females.

Ha₆: There is significant difference in educational managers' instructional leadership (EMIL) functions in males and females at secondary level school.

Table 4.20

Comparison of educational managers' instructional leadership (EMIL) in male and female secondary schools.

Functions of (EMIL)	Gender	n	Mean	Std. Deviation	Std. Error Mean	t	P	Cohen's d
FSG	Male	35	21.914	3.052	.515			
	Female	37	15.297	2.961	.486	9.328	.000	2.201
CSG	Male	35	20.885	3.428	.579			
	Female	37	10.973	2.565	.421	13.831	.000	3.274
SEI	Male	35	21.942	2.940	.496			
	Female	37	13.054	2.460	.404	13.873	.000	3.279
CC	Male	35	20.685	4.078	.689			
	Female	37	20.243	4.166	.684	.455	.650	0.107
MSP	Male	35	21.485	3.080	.520			
	Female	37	20.594	3.353	.551	1.175	.244	0.277
PIT	Male	35	13.600	1.912	.323			
	Female	37	9.459	4.167	.685	5.466	.000	1.277
MHV	Male	35	20.285	1.775	.300			
	Female	37	13.351	6.142	1.009	6.582	.000	1.534
PIFT	Male	35	20.742	3.099	.523			
	Female	37	15.378	4.566	.750	5.860	.000	1.375
PPD	Male	35	21.257	3.943	.666			
	Female	37	13.945	5.217	.857	6.731	.000	1.581
PIL	Male	35	21.257	5.048	.853			
	Female	37	13.810	6.603	1.085	5.393	.000	1.267
Total	Male	35	204.057	21.701	3.668			
	Female	37	146.108	24.679	4.057	10.595	.000	2.494

Note: FSG = Framing the school goals, CSG= communicating the school goals, SEI= supervising & evaluating instructions, CC= coordinating curriculum, MSP = Monitoring student progress, PIT= protecting instructional time, MHV=Maintaining high visibility, PIFT = providing incentives for

teachers, PPD= promoting professional development, PIL= providing incentives for learners. Dimension 1 includes function FSG and CSG, while dimension no 2 of instructional leadership consists of functions such as SEI, CC and MSP. Moreover, dimension no 3 comprises functions namely: PIT, MHV, PIFT, PPD and PIL.

Interpretation: Table 4.20 presents secondary school managers' perceptions about their instructional leadership (IL) functions in its various dimensions. The table interprets gender differences among school educational managers' IL regarding framing the school goals (FSG) which is seen significant. However, in FSG male educational managers are found better ($M= 21.91$, $S.D = 3.05$) than female educational managers ($M = 15.29$, $S.D = 2.96$). The output of a p-value ($p = .000$) of 5% is less than 0.005 which is found significant. Furthermore, the Cohen's effect size ($d = 2.2$) implies many functional importance.

Further Table 4.20 shows the difference in opinion of the secondary school educational managers of both the genders regarding communicating the school goals (CSG). The results indicate that managers in male schools are better in communication with ($M = 20.88$, $S.D = 3.43$) as compared to their private sector counterparts with ($M = 10.94$, $S.D = 2.56$). Moreover, the effect size of Cohen's value ($d = 3.3$) suggests a very large practical effect. On the other hand, the result of a p-value ($p = .000$) of 5% is lower than 0.005 which is considered to be statistically significant.

Furthermore, for the third function of instructional leadership, Table 4.20 demonstrates significant perceptions of educational managers' regarding supervising & evaluating instructions (SEI). In instructional leadership function of SEI, male managers are found better with ($M= 21.942$, $S.D = 2.940$) than female school managers ($M = 13.054$, $S.D = 2.460$). The outcome of a p-value ($p = .000$) of 5% is < 0.005 , which reflects statistically significant results. Likewise, the effect size value of Cohen ($d = 3.3$) describes a very big applied meaning.

Similarly, it is noted in Table 4.20 that educational managers' perceptions regarding their function coordinating curriculum (CC) is seen non-significant. However, in CC, male school managers are found slightly sound ($M= 20.685$, $S.D = 4.078$), while female school managers are also found similar with ($M = 20.243$, $S.D = 4.166$) to their male counterparts. A p-value of 5% is the by-product which is greater than 0.005 ($p = .654$). It is considered to be no significant statistically. Added

to the results, the value of effect size of Cohen ($d = 0.11$) proposes small useful effect.

For the next function of IL, monitoring student progress (MSP), Table 4.20 demonstrates that male school managers are slightly better with ($M = 21.485$, $S.D = 3.080$) than female school managers ($M = 20.594$, $S.D = 3.353$). The outcome of a p value of $5\% > 0.005$ is ($p = .244$) which depicts it to be statistically non-significant. In addition, the Cohen's value of effect size ($d = 0.28$) exhibits a small applied significance.

In Table 4.20, it is observed for the next function of instructional leadership that secondary school managers perceive positive regarding protecting instructional time (PIT). In PIT, male school managers are found slightly superior ($M = 13.600$, $S.D = 1.912$) to female school managers ($M = 9.459$, $S.D = 4.167$). The calculation of a p -value ($p = .000$) of 5% is lower than 0.005 , which calls it to be statistically significant. Added to this, the value of Cohen's effect size (1.3) displays very large useful implication.

As seen in Table 4.20, that educational managers' perceives they maintain high visibility (MHV). Results shows that in MHV, male school managers are slightly better ($M = 20.285$, $S.D = 1.775$) than female school managers ($M = 13.351$, $S.D = 6.142$). As a consequence, ($p = .000$) the p -value of 5% is lower than 0.005 , which figures out to be statistically significant. Other than this, the $d = 1.4$ which demonstrates very large practical effect.

In terms of provision of incentives for teachers (PIFT), male secondary level school managers have strong belief to provide incentives for teachers with ($M = 20.742$, $S.D = 3.099$) as compared to female school managers ($M = 15.378$, $S.D = 4.566$). The product of a p -value speculates to be statistically significant, and it shows 5% which is lower than 0.005 . Also, Cohen's value of d (1.6) indicates applied importance at a higher level (Table, 4.20).

Likewise, Table 4.20 demonstrates secondary school managers perceive that they promote professional development (PPD). Male school managers support professional development with ($M = 21.257$, $S.D = 3.943$) than female school managers ($M = 13.945$, $S.D = 5.217$). Subsequently, the p -value of 5% is < 0.005

that is found to be statistically significant. More, Cohen's ($d = 1.3$) presents a very great actionable worth.

For last function of IL, Table 4.20 reveals secondary school managers' perceptions about providing incentives for teachers (PIL). In PIL, male school managers are found slightly better ($M = 21.257$, $S.D = 5.048$) than female school managers ($M = 13.810$, $S.D = 6.603$). Consequently, the p-value ($p = .000$) of 5% is < 0.005 which is considered to be statistically significant. Further, d with (1.3) recommends great workable importance.

Table 4.21

Overall differences in the perceptions of Educational managers about IL

Gender	n	Mean	S.D	t	P	Cohen's d	Status of Hypotheses
Male	35	204.057	21.701	10.595	.000	2.494	Ho6= Rejected
Female	37	146.108	24.679				Ha6 = Accepted

Overall results show that male educational managers are practicing instructional leadership functions better with ($M = 204.057$, $S.D = 21.701$) as compared to female educational managers with ($M = 146.108$, $S.D = 24.701$). Correspondingly, an independent (t-test) is used for evaluation of variation among both the genders. It is observed that the test is significant $t(72) = 10.595$, $p = 0.000 < 0.05$. So it can be detected from the Table (4.16) that the educational managers who are competent in instructional leadership (IL) perform significantly in male secondary schools than the female educational managers. Therefore, the hypothesis H_{06} : There is no significant difference in educational managers' instructional leadership (EMIL) functions in males and females was not accepted. Furthermore, all the related sub-hypotheses ($H_{06.1}$ - $H_{06.3}$) were also not accepted. The value of Cohen's d was (2.5), which indicates a large effect size (Table, 4.21).

Objective No. 7: To investigate gender differences in secondary school teachers' sense of self-efficacy:

Ho₇: There is no significant difference among teachers' sense of self-efficacy in males and females.

Ha₇: There is significant difference among teachers' sense of self-efficacy in males and females.

Table 4.22

Comparison of gender differences regarding teachers' SSE in secondary schools

Dimensions of TSSE in	Gender	n	Mean	Std. Deviation	t	P Value	Cohen's d
SE	Male	189	55.222	11.833	1.675	.095	0.175
	Female	176	57.210	10.847			
IS	Male	189	60.449	10.089	3.947	.000	0.413
	Female	176	56.329	9.847			
CM	Male	189	50.730	9.718	6.220	.000	.0649
	Female	176	44.858	8.302			
Total	Male	189	166.402	27.296	3.278	.001	0.341
	Female	176	158.398	18.853			

Note: p < .05 SE = student engagement, IS = instructional strategies, CM = classroom management.

Interpretation: Table 4.22 displays teachers' perceptions regarding their ESE elaborating female teachers are slightly better with (M= 57.21, S.D = 10.84) than male school teachers with (M = 55.22, S.D = 11.83). The result of the p-value of 5% is (p = .095) higher than 0.005 which is considered to be statistically no significant. Furthermore, the product of d (.18) intimates a very considerable functional effect on the behalf of SE.

In Table 4.22, it is observed that male teachers are better than female teachers regarding their efficacy in instructional strategies (IS), (M= 60.44, S.D = 10.08) than

female school teachers ($M = 56.32$, $S.D = 9.84$). Statistics show significant difference with ($p = .000$). Next, the value ($d = .41$) of Cohen's effect size communicates that it signifies a substantial operational significance in the favor of IS.

In terms of classroom management Table (4.22) shows that male teachers at secondary level schools have a strong sense of self-efficacy within ($M= 50.73$, $S.D = 9.71$) as compared to female secondary level school teachers ($M = 44.858$, $S.D = 8.302$). The result of the p-value ($p= 0.000$) of 5% is lower than 0.005 which is considered to be statistically significant. Besides, ($d = .64$) suggests a very immense importance for CM.

Table 4.23

Overall gender differences in teachers' perceptions about TSSE

Gender	n	Mean	S.D	t	P	Cohen's d	Status of Hypotheses
Male	189	166.40	27.296	3.278	.001	0.341	Ho7 = Rejected Ha7= Accepted
Female	176	158.40	18.853				

Overall, the results show that male teachers have a strong SSE for ($M= 166.402$, $S.D = 27.296$) as compared to female teachers in schools ($M = 158.398$, $S.D = 18.853$). An (independent sample) t-test was applied for evaluation of the difference among both the sectors. It is observed that test was significant $t(365) = 3.278$, $p = 0.001$. The value of p 0.000 is < 0.05 , so it can be observed from Table (4.23) that the male teachers' SSE is higher than female. The value of Cohen's d was (0.34), which indicated small effect size (Table, 4.23). So the hypothesis Ho7: There is no significant difference among teachers' sense of self-efficacy in males and females and sub hypotheses Ho7.1 to Ho7.3 were not accepted. Whereas, the alternative hypothesis Ha7: There is significant difference among teachers' sense of self-efficacy in males and females and related sub hypotheses Ho7.1 to Ho7.3 were accepted.

Objective 8: find out gender difference in the perceptions of students regarding school effectiveness;

H₀₈. There is no significant gender difference in the perceptions of students regarding school effectiveness;

H_{a8}. There is significant gender difference in the perceptions of students regarding school effectiveness;

Table 4.24

Comparison of student's perceptions regarding school effectiveness in public and private sector secondary schools.

Factors of SE	Gender	n	Mean	Std. Deviation	t	p-value	Cohen's d
SOE	Male	210	16.223	2.699	2.121	.035	0.212
	Female	190	15.658	2.627			
CHES	Male	210	13.343	1.665	2.748	.006	0.275
	Female	190	12.868	1.787			
IL	Male	210	16.605	2.999	2.517	.012	0.252
	Female	190	15.858	2.923			
OLSTT	Male	210	12.609	2.519	1.843	.066	0.185
	Female	190	12.184	2.043			
CFM	Male	210	8.57	1.674	2.261	.024	0.226
	Female	190	8.200	1.604			
MSPF	Male	210	12.124	2.240	3.227	.001	0.323
	Female	190	11.384	2.342			
HSR	Male	209	13.206	2.096	3.408	.001	0.341
	Female	190	12.468	2.225			
Total	Male	209	75.593	8.765	4.111	.000	0.412
	Female	190	71.984	8.753			

Note: SOE= Safe and ordered environment, HEC= high expectation's climate, IL= Instructional Leadership, OSLTT= opportunity for student to learn through time on task, CFM= clear-cut focused mission, MSPF= monitoring student progress frequently, HSR= Home school relation.

4.3.1.3.1 Interpretation: Table 4.24 depicts the results of male and female secondary school students' views about various factors of school effectiveness. The study found significant difference in students' views about the first factor of school effectiveness (SE): safe and orderly environment (SOE). Male students are more confident about SOE factor at their school than female secondary school students (male, $M= 16.223$, $S. D = 2.699$; female = 15.658 , $S. D = 2.627$). The finding of a p-value ($p .000$) of $5\% < 0.005$ is considered to be significant statistically. Moreover, ($d= 0.2$) is value of Cohen's effect size, suggesting a small effect size.

Equally, in Table 4.24 male students' perceptions about second factor of school effectiveness High expectations' climate were different from female students'. Where we observe that male students are more self-assured about climate of high expectations (HEC) as ($M= 13.343$, $S.D = 1.665$), as compare to female students' ($M= 12.868$, $S. D = 1.787$). A p-value ($p .000$) < 0.005 of 5% shows significant outcomes. Moreover, ($d= 0.3$) is value of Cohen's effect size, recommending a small practical significance.

Table 4.24 shows significant differences in the perceptions of students of both the genders about instructional leadership (IL). Male students perceive that they have IL in their schools ($M= 16.605$, $S.D = 2.999$). While female students perceive differently about IL ($M= 15.858$, $S.D = 2.923$). The finding of a p-value ($p .000$) < 0.005 is considered to be significant statistically. Moreover, ($d= 0.3$) is value of Cohen's effect size, offering a small practical worth.

Table 4.24 revealed that male students have opportunity to learn and student time on task (OLSTT) ($M = 12.609$, $S. D = 2.519$). On the other hand, female student's ($M= 12.184$, $S.D = 2.043$) shows they are lacking to have OLSTT. The finding of a p-value ($p .000$) < 0.005 is considered to be significant statistically. Moreover, ($d= 0.2$) is value of Cohen's effect size, informing a small significant applied importance.

In terms of clear school mission (CFM), Table 4.24 portrays that male students perceive them clear about CFM ($M= 8.57$, $S.D = 1.674$). While female students

revealed that they are not as much clear about CFM ($M= 8.200$, $S.D = 1.604$). The finding of a p-value ($p .000$) < 0.005 is considered to be significant statistically. Moreover, ($d= 0.2$ is value of Cohen's effect size, proposing a small useful implication.

Table 4.24 demonstrate that male students perceive that their progress monitored frequently (MSPF) ($M = 12.124$, $S.D = 2.240$) as compare to female students ($M = 11.384$, $S.D = 2.342$). The finding of a p-value ($p .000$) < 0.005 is considered to be significant statistically. Moreover, ($d= 0.3$) is value of Cohen's effect size, proposing a lesser effect.

For home school relation (HSR), Table 4.24 elaborates that male institutions focused home school relation as perceived by their students ($M= 13.206$, $S.D = 2.096$). Whereas female students perceived that their school do not have strong relationship with their homes ($M= 12.468$, $S.D = 2.223$). A p-value ($p .000$) < 0.005 is considered statistically significant. Moreover, ($d= 0.3$) is value of Cohen's effect size, proposing a slight applied worth.

Table 25

Overall gender differences in the perceptions of students about SE

Gender	n	Mean	S.D	t	P	Cohen's <i>d</i>	Status of Hypotheses
Male	209	75.593	8.765	4.111	.000	0.412	Ho8 = Rejected
Female	190	71.984	8.753				Ha8= Accepted

There were 400 respondents. Table 4.25 determines significant gender differences in secondary school level students of class 9th (IX) and 10th (X) regarding school effectiveness. There for the alternative hypotheses H_{a8} . There are significant gender differences among the views of students about school effectiveness and the related sub alternative hypotheses $H_{a8.1}$ to $H_{a8.7}$ were accepted. Male students reported that their schools are effective safe and ordered environment; clear- cut focused

mission; monitoring of student progress frequently, relationship of school and home; opportunity for students to learn through time on task; high expectation's climate; and (IL) instructional leadership. Findings of the present research disclose that male and female secondary level school students of class 9th (IX) and 10th (X) differed significantly in all factors of school effectiveness. Likewise, Cohen's d values described rational of the seven factors. According to Table overall analyses disclosed that there was high mean in male students related to SE (M= 75.593 S. D= 8.765) on seven factors of school effectiveness. While female school students reported lower mean (M=71.984, S.D = 8.753) on above factors (Table, 4.25). It was concluded that students of male secondary level schools were highly agreed with seven factors for school effectiveness. While female show lower level of agreement with seven factors for school effectiveness. Moreover, the result of a p-value ($p = .000$) is lower than 0.005 ($p=0.000$) which considered to be statistically significant. Further, Cohen's effect size value ($d = 0.4$) suggests a small practical significance. So the alternative hypothesis H_{a8} . There is significant gender difference in the perceptions of students regarding school effectiveness; with all related alternative hypotheses ($H_{08.1} - H_{a8.7}$) were accepted.

4.2.6 Summary

In this chapter, the analysis of quantitative data presented summarized view related to perceptions and regarding the effects of independent variables on dependent variables as:

1. Responses of educational managers regarding instructional leadership, teacher's answers about their sense of self-efficacy and student's answers about school effectiveness were strongly agree in favor of each variable associated with the selected participants.
2. Overall, analysis of PIMRS relative to 10 functions showed that educational managers are practicing instructional leadership at secondary school level in both (public & private) sectors. They perceive that they have ability to perform as instructional leaders. Nonetheless, with variation the public sector

educational managers were found strong in instructional leadership practice as compared to private sector school managers.

3. On the other hand, while comparing gender differences, it was observed that male and female educational managers have approximately the same level of instructional leadership practice in coordinating curriculum with (M= 20.685) for males and (M = 20.243) for females. Likewise, male educational managers scored the same about promoting professional development and protecting instructional time (21.257). Consequently, it was summarized that male educational managers were found better in IL than female school managers.
4. All the research variables namely: instructional leadership, teachers' SSE, and school effectiveness, were positively correlated, with each other. Results also show that instructional leadership and TSSE significantly has an effect on SE.
5. Public sector teachers have a strong SSE as compared to the private sector. Similarly, Male SSTs have a strong SSE. Consequently, public sector teachers' have a high mean on instructional strategies, while males have high mean on IS (60.449). It means the public sector teachers and male teachers use different instructional strategies to strengthen school learning environment.
6. Private sector secondary level students of class 9th and 10th reported that their schools are more effective as compare to public sector schools in selected factors of school effectiveness for this study.
7. Male students perceived that their institutions are effective as compare to female. Moreover, their views were in favor of seven factors of school effectiveness.

4.3 Phase 2: Qualitative Data Analysis

Qualitative research methodology is one of the best practices (Smith et al., 2009). There were three main research questions in the study based on objective 1,

2 and 4, which were analyzed through qualitative method of analysis. For this purpose, interpretative Phenomenological Analysis (IPA) was used. Turpin et al. (1997) suggested that having 6 to 8 interviewees are suitable for analysis in IPA. So that, the researcher selected 15 EM, 15 SSTs and 15 students as sample. This phase was based on six sections:

1. Representation of demographic characteristics of the interviewees.
2. Response rate of the interviewees
3. description of interview schedule
4. IPA for educational managers
5. IPA for teachers
6. IPA for three S (SSEMs, SSTs and SSSs).

4.3.1 Section I: Demographic characteristics of Interviewees' (SSEM, SST, SSS)

Table 4.26

Demographic information for interviewees (Educational Managers and Teachers), sector wise

Codes	Schools' Sector	Experience in the present school	Overall Experience
SSEM1	Public	4	20
SSEM2	-	3	19
SSEM3	-	4	16
SSEM4	-	2	14
SSEM5	-	3	33
SSEM6	-	3	21
SSEM7	-	6	19
SSEM8	-	5	18
SSEM9	-	7	22
SSEM10	Private	5	21
SSEM11	-	3	16
SSEM12	-	2	20
SSEM13	-	2	13
SSEM14	-	4	25
SSEM15	-	2	28
SST1	Public	2	16
SST2	-	8	28
SST3	-	2	35

SST4	-	10	21
SST5	-	2	14
SST6	-	2	10
SST7	-	3	12
SST8	-	2	13
SST9	-	2	19
SST10	Private	4	33
SST11	-	3	35
SST12	-	3	20
SST13	-	20	22
SST14	-	14	16
SSST15	-	18	18

Note. n = 18 for public and n= 12 for private. SSEM= Secondary School Educational Mangers, SST= Secondary School Teachers.

Table 4.27

Demographic information for interviewees (Educational Managers and Teachers)

Gender wise

Codes	Schools' gender	Experience in the present school	Overall Experience
SSEM1	Male	4	20
SSEM2	-	3	19
SSEM3	-	4	16
SSEM4	-	2	14
SSEM5	-	3	33
SSEM6	-	3	21
SSEM7	-	6	19
SSEM8	-	5	18
SSEM9	-	7	22
SSEM10	Female	5	21
SSEM11	-	3	16
SSEM12	-	2	20
SSEM13	-	2	13
SSEM14	-	4	25
SSEM15	-	2	28
SST1	Male	2	16
SST2	-	8	28

SST3	-	2	35
SST4	-	10	21
SST5	-	2	14
SST6	-	2	10
SST7	-	3	12
SST8	-	2	13
SST9	-	2	19
SST10	Female	4	33
SST11	-	3	35
SST12	-	3	20
SST13	-	20	22
SST14	-	14	16
SST15	-	18	18

Note. n = 18 for male and n= 12 for female. SSEM= Secondary School Educational Mangers, SST= Secondary School Teachers.

Table 4.28

Demographic information for interviewees' students (sector wise and gender wise)

Codes	Schools' Sector	Schools' Gender	class
SSS1	Public	male	9 th
SSS2	-	-	-
SSS3	-	-	-
SSS4	-	-	-
SSS5	-	-	10 th
SSS6	-	-	-
SSS7	-	-	-
SSS8	-	-	-
SSS9	-	-	-
SSS10	Private	Female	9 th
SSS11	-	-	-
SSS12	-	-	-
SSS13	-	-	10 th
SSS14	-	-	-
SSS15	-	-	-

Note. n = 18 for public and n= 12 for private. SSS= Secondary School Student

Tables 4.26- 4.28 presents the demographic features of all the interviewees.

4.3.2 Section II: Response rate of the interviewees

Table 4.29

Response rate of the interviewees

Designation	Sample size	Total Interviews Returned	Useable	%
*SSEM	15	15	15	100
**SST	15	15	15	100
***SSS	15	15	15	100
Total	45	45	45	100

Note. *SSEM = Secondary School Educational Managers, *SST = Secondary School teachers & ***SSS = Secondary School student (Pseudo-names of the interviewees).

Table 4.29 displays the response rate of all the interviewees was 100 %, as all the respondents willingly answered the interview questions.

4.3.3 Section III: Description of interview schedule

Table 4.30

Interview schedule (for educational managers, teachers and students)

Codes	Respondents	Duration
SSEM1	Secondary School Educational manager	12 min
SSEM2	-	45 min
SSEM3	-	14 min
SSEM4	-	10 min
SSEM5	-	18 min
SSEM6	-	20 min
SSEM7	-	16 min
SSEM8	-	10 min
SSEM9	-	22 min
SSEM10	-	21 min
SSEM11	-	29 min
SSEM12	-	20 min

SSEM13	-	12 min
SSEM14	-	16 min
SSEM15	-	19 min
SST1	Secondary School teacher	21 min
SST2	-	25 min
SST3	-	18 min
SST4	-	15 min
SST5	-	24 min
SST6	-	20 min
SST7	-	17 min
SST8	-	23 min
SST9	-	22 min
SST10	-	19 min
SST11	-	15 min
SST12	-	12 min
SST13	-	10 min
SST14	-	15 min
SST15	-	14 min
SSS1	Secondary School Student	15 min
SSS2	-	22 min
SSS3	-	12 min
SSS4	-	10 min
SSS5	-	14 min
SSS6	-	15 min
SSS7	-	17 min
SSS8	-	23 min
SSS9	-	22 min
SSS10	-	19 min
SSS11	-	15 min
SSS12	-	12 min

Note. *SSEM = Secondary School Educational Managers, *SST = Secondary School teachers & ***SSS = Secondary School student (Pseudo-names of the interviewees).

Table 4.30 continue.....*Interview schedule (for educational managers, teachers and students)*

Codes	Respondents	Duration
SSS13	-	24 min
SSS14	-	28 min
SSS15	-	25 min

Note. *SSEM = Secondary School Educational Managers, *SST = Secondary School teachers & ***SSS = Secondary School student (Pseudo-names of the interviewees).

Table 4.30 shows that the researcher scheduled interviews for the educational managers and teachers. It also elaborates the timing spent on each interview.

4.3.4 Procedure of the analysis of interviews: The qualitative data was examined in this phase using a process given by Smith et al. (2009, P.110). He stated, “There is not a clear-cut distinction between analysis and writing up. As one begins to write, some themes loom large, others fade, and so this changes the report”. Analyzing interviews responses, the researcher followed Interpretative Phenomenological Analysis. As, Smith & Osborn (2008) highlighted the emphasis on IPA, that it is an in-depth investigation of individual practice and how people observe, assign meaning to and make sense of their experiences. This idea is based on the assumption that people are deeply interested in their surroundings, and constantly reflecting on their experiences in order to comprehend them. In the current study, qualitative data analysis started when the researcher made contact with the first interviewee. According to Pietkiewicz and Smith (2014), investigators should be aware of data they have collected, articulating themes that arise from the collected data and making connection of them with other themes. During the interviews, the researcher tried to check how IL and TSSE was assumed and enacted. Studying the interview responses, the researcher kept an eye on interpretative phenomenological analysis. As an IPA researcher, I studied the data of the study case to case, obtaining thorough understanding about research participants’ experiences. The analysis of interview protocol was based on a six-step approach as given by (Smith et al., 2009):

Stage 1: Reading and re-reading (R & RR)

Stage, 2: Initial noting (IN)

Stage 3: Developing emergent themes, (DET)

Stage 4: Searching for connections across emergent themes (SCET)

Stage 5: Moving to the next case (MNC),

Stage 6: Looking for patterns across cases (LPAC), (Smith et al., 2009).

The evolving analysis entailed shifting, starting emphasis on the person to further collective understanding, as well as moving from a descriptive, to an interpretative level. In Table 4.14, description of the stages (adapted from Smith et al, 2009, p. 82107), is given. It should be noted that in order to understand phenomenon as a whole, the analysis was in fact a repeated procedure with the hermeneutic circle in mind. Smith et al. (2009) phases were made up of various stages involved in data processing and could be used to direct the process in a variety of ways.

Table 4.31

Stages Involved in the Analysis

Stages	Activity
1. Reading and rereading	The process started with the close examination of one protocol, whereas the researcher read and reread the interview protocols one by one. Initial comments were noted with special focus on statements
2. Initial noting	First, the researcher observed the content on an exploratory level; second, she documented important topics and tried to capture their meaning in three ways: <ul style="list-style-type: none"> • concentrated on content • reflected on detailed use of language • moved to additional conceptual understanding
3. Developing emergent themes	Emergent themes were developed through statements

4. Searching for connections across themes	Common links identified through emergent themes; similar themes were noted at this stage; and the emergent themes became subordinate themes
5. Moving to the next case	Continuing protocols were examined using stage no 1 to stage no 4. New themes were established from each case, total were noted.
6. Looking for patterns across case	Researcher searched connections crosswise cases. Separate emergent and subordinate themes remained consistent and were reconfigured.

The method of data analysis was directed through these stages. Analysis began with SEM1, the initial participant, then progressed to SEM2, SEM3, SEM4, and so on. Throughout the procedure, the researcher prudently inspected four steps that often come first entire time, attempted not to miss any. Further, researcher moved to all participants one by one as the analysis progressed. All of the steps started sequentially and were initiated one by one. These wanted to be associated with the data analysis process continuously and simultaneously. Therefore, the researcher was competent to complete the instructions without difficulty.

Stage 1: Reading and re-reading: This iterative procedure allowed the detection of novel data not well-known in initial reading. At this stage, reading through each transcript was involved. The researcher added marginal notes. Rereading facilitated to maintain details given in each transcript, so that researcher can move to the main idea.

Stage 2: Initial Noting: According to Smith et al. (2009), stage 1 and 2, combined logically. These stages involved receiving the original data from participants. Three types of remarks were prepared at this stage: On regarding stage, 3 types of remarks were prepared: descriptive comments, which were restatement of participant's description; linguistic comments, that involved considering the words and terminologies that partaker used; and conceptual comments, which elaborated information from the literature and life experiences. These three types of comments were developed from reading and rereading of textual data of participants' interviews, and two representative tables from interview manuscripts were designed that consisted of three types of comments (Table, 4.31).

Stage 3: Developing Emerging themes: At this stage emergent themes were identified. The comments that had been prepared in previous stages guided three types of comments while checking (1) descriptive, (2) linguistic comments and (3) the original source. The reading of data becomes more interpretative and focused. The researcher developed central themes from the textual data of the participants. Ensuing the guidance of the emerging concepts were envisioned to be brief and compacted, following the instruction of Smith et al. (2009). While expressive enough as well at the same time. Rather than using abstract codes, the researcher focused on the original sources of data from which the themes arose. The Researcher kept the original data on one hand and on the other hand got informed, guided by literature and research questions to be sure that the research questions are answered by these themes.

Stage 4: Searching for connections across themes: The fourth stage elaborated probing for associates across the emerging themes. The emergent topics were first derived from the main study question. These topics were then subdivided in to different superordinate themes. These sup themes were built on the foundations of the subordinate themes, but they were also driven through theoretical knowledge. Subordinate themes from the interviews were organized chronologically under each superordinate subject, so that each one could be traced back to its original interview.

Stage 5: Moving to the next case: was actually repetition of 4 previous stages. One SEM was piloted and was not included in the final analysis. This step repeated what had been done previously for SEM1 and other participants on by one. In addition, for the remaining thirteen participants, the identical superordinate themes identified from SSEM1's example was reprocessed. As a result, rather than finding fresh superordinate for every partaker, subordinate themes of the other participants were combined to form a same superordinate themes. Different themes were ordered under the similar superordinate themes to allow each item to be linked to the next, resulting in a unified theme structure. Each case's component, as well as the total, started off unfinished; with each other, they eventually came together to form a cohesive whole, despite their intimate interrelationships. When there was significant resistance and variations between superordinate themes from a specific participant, the researcher went back to the initial data of the superordinate theme and assessed its validity. Some

previously existing superordinate, and subordinate themes were rejected or changed at this stage. As the study for the next participant progressed, more superordinate themes were included. This was critical for conducting multiple hermeneutic conversations, such as within themes and sources, and between superordinate from diverse sources.

Stage 6: Looking for patterns across case: this stage: elaborated patterns from corner to corner cases, and creating subordinate themes. The researcher intended a table for forming superordinate, group, and subordinate themes. This stage is supportive for preparing findings of the data analysis. At this stage, more focused and detailed analysis is carried out.

4.3.5 Section IV: IPA of Educational Managers'

Q1. As an instructional leader, do you frame and communicate the school goals to teachers, students, parents and members of the school community?

<p><i>Described that have ability as an effective communicator, Ignored teachers feedback, No discussion regarding community's reaction</i></p> <p>SEM</p> <p>Have understanding about framing school goals, have ability to communicate with staff, Discussed significance of monitoring</p>	<p><i>Yes, I <u>frame school goals</u> at the start of our session. I prefer to <u>communicate my school vision, mission and goals</u> with all the stakeholders including, <u>teachers, parents, community</u>. I guide <u>teachers</u> to convey these <u>goals</u> to pupils through their teaching. Through this I feel <u>teachers</u> feel that <u>they are making a difference in their students' lives</u>. Because they know then it is important to the school manager to know <u>what is going on in the classroom</u> and institution consistently. In other words This <u>communication is important</u> in a sense that <u>as an instructional leader I can guide teachers</u> the specific purpose of the institution. On the other hand, <u>teachers</u> know its importance and their limits regarding their performance for school improvement. I share it with community members as in school to <u>create a safe and orderly environment</u>. We need <u>teachers'</u> and students' support to some extent <u>within the school and outside the school</u> as well.</i></p>	<p><i>Understand well instructional leadership, Realized importance of communication, Create safe and orderly environment.</i></p>
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- Frequently used words: —
- Descriptive comments: — underlined
- Conceptual: ◆ Red ink
- Linguist: ◆ Blue ink

Table 4.32

Emergent themes of SEM's transcript (question, 1) n= 15

Code	Frequently used	Linguistic	Conceptual	Emerged themes	Superordinate theme
*SSEM 1-15	Goals Teachers	1.Understand well 2, instructional leadership 3.Realized importance of communication 4, promote safe and orderly environment	1.Have understanding about framing school goals 2.Have ability to communicate with staff 3.Discussed significance of monitoring	1.Frame goals 2.Safe school environment 3.Community involvement 4.Effective communication	Instructional leadership

Note. *SSEM = Secondary School educational manager

Q2. Do you supervise & evaluate instructional methods adopted by the teachers?

Described that having ability as an evaluator, Did not discuss that extra work load can create stress in teachers,

Know how to encourage teachers and students to perform well, Comprehended significance of monitoring,

Yes, I always try to monitor teachers while they are teaching in their classrooms. I wouldd like to be helping my teachers do their teaching task because, I always focused on quality of instruction. I encourage them to use new and innovative teaching strategies and maintain focus for my school with ongoing input. I prefer to increase student achievement through improving teachers' skills. I feel that monitoring instruction is necessary which provides a thought to teacher that their hard work and extra hours are noticed and appreciated.

Concentration on monitoring of instruction, Express positive attitude to subordinates for improvement, Concentrate on appreciation .

Frequently used words: —

Descriptive comments: — underlined

Conceptual: ◆ Red ink

Linguist: ◆ Blue ink

Table 4.33

Emergent themes of SEM's transcript (question, 2) n= 15

Code	Frequently Used	Linguistic	Conceptual	Emerged themes	Superordinate theme
*SSEM 1-15	Always Instruction	1.Concentration on monitoring of instruction 2.Express positive attitude to subordinates for improvement 3.Concentrate on appreciation	1.Know how to encourage teachers and students to perform well, 2.Comprehended significance of monitoring,	1.Monitoring 2.Facilitating 3.Supervising 4.Evaluating 5.Appreciation 6.Positive attitude	Supervision and evaluation

Note. *SSEM = Secondary School educational manager

Q3. Do you coordinate the curriculum implementation with teachers when making curricular implementation decisions?

<p><i>Explained, having ability to coordinate curriculum, Do not explain role of teacher for the purpose, Shared his/ her effort for curriculum implementation.</i></p> <p><i>Explained that have ability to implement curriculum; Plan to coordinate curriculum; Offer clear direction to teachers; Have knowledge how to implement curriculum.</i></p>	<p><i>Yes, I believe when I confer with teachers, I can reinforce them that what I am <u>expecting from them to continue</u>. This helps me and my staff as well to <u>recognize work on areas for improvement</u>. I <u>recognize</u> teachers when they work towards <u>reaching school goals</u> through <u>curriculum implementation</u>. Providing <u>effective coordination</u> to support <u>curriculum implementation</u> open new ideas. During this time, school leader can discuss expectations so <u>teachers who have a clear direction</u> of where they are going and where they have to. They can <u>collaborate with their colleagues</u> to develop plans that will be effective in <u>implementation</u>. So that all the teachers have understanding <u>what is going on in school</u>. It helps them when they <u>grasp their personal, schools' and student's goals</u>. I prefer to coordinate <u>curriculum</u> with them to attain better <u>implementation</u>.</i></p>	<p>Know duties as a curriculum implementer;</p> <p>Provide effective coordination;</p> <p>Collaborate with teachers;</p> <p>Concentrate on curriculum implementation.</p>
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Frequently used words: ———
 Descriptive comments: ——— underlined
 Conceptual: ◆ Red ink
 Linguist: ◆ Blue ink

Table 4.34

Emergent themes of SEM's transcript (question, 3) n= 15

Code	Frequently used	Linguistic	Conceptual	Emergent themes	Superordinate theme
*SSEM 1-15	Recognize Curriculum Implementation	1.Know duties as a curriculum implementer; 2.Provide effective coordination; 3.Collaborate with teachers; 4. Concentrate on curriculum implementation.	1.Explained that have ability to implement curriculum; 2.Plan to coordinate curriculum; 3.Offer clear direction to teachers; 4.Have knowledge how to implement curriculum	1.Reinforcing need 2.Recognition of 3.Coordination 4.Clear direction 5.Collaboration 6.Implementation	Curriculum Coordination

Note. *SSEM = Secondary School educational manager.

Q4. How do you maintain balance in allocating weekly time to your teachers?

Described that having ability to allocate weekly time table, Do not share collaboration from teachers,

Know that teachers have clear direction, Have awareness how to guide teachers, understood worth of time table management

During this I discuss expectations so teachers have clear direction of where they are going. How much time they needed? They can collaborate with their peers to ask for required time for accomplishment of their teaching task. So I always try to cope with their need and allocate them enough time to complete their duties but with balance, as I am accountable for their performances for better results on a right time. I provide urgent feedback to them on their queries. They are required to follow weekly time table.

Know duties as time table manager; Have ability in maintaining balance; Allocate enough time; Provide urgent feedback; Ensure execution of weekly time table;

Frequently used words:

Descriptive comments: underlined

Conceptual: ◆ Red ink

Linguist: ◆ Blue ink

Table 4.35

Emergent themes of SEM's transcript (question, 4) n= 15

Code	Frequently used	Linguistic	Conceptual	Emerged themes	Superordinate theme
*SSEM 1-15	They Their	1.Know duties as time table manager; 2, Have ability in maintaining balance; 3, Allocate enough time; 4.Provide urgent feedback; 5.Ensure execution of weekly time table;	1.Know that teachers have clear direction, 2.Have awareness how to guide teachers, 3.Understood worth of time table management	1.Discussion about expectations 2.clarify directions 3.Assessment of required time 4.Allocating obligatory time 5Accountability	High Expectations for success

Note. *SSEM = Secondary School educational manager.

Q5. How do you monitor student progress at your school?

<p><i>Discussed that having ability of monitoring;</i></p> <p><i>Do not discuss its influence;</i></p> <p><i>Do not share involvement of teachers in this process;</i></p> <p>Have Knowledge how to improve learning process;</p> <p>Plan to facilitate students;</p> <p>Realize importance of monitoring.</p>	<p>Through their note-books, class tests, performance in exams I <u>monitor their progress</u>. While on the other hand, I also keep on focusing teachers' <u>instructional strategies, classroom management</u> and their strategies to <u>manage students</u> in their class. If I see strength, I think I can celebrate it. After that I move forward to next teacher to observe. I think as an <u>instructional leader</u> I should <u>observing teachers performance</u>. It helps me to understand the deficiency. On the behalf of my observation, I further <u>help the teacher so as instructional manager</u> I can <u>facilitate student</u> to learn effectively for <u>better performance</u>. It develops a <u>sense of accountability</u>. It sends a message of expectations within the school. It clears them about the investment of their all efforts by all means in the <u>learning process</u>.</p>	<p>Know how to monitor teachers' performance as an instructional leader;</p> <p>Observed teachers instructional classroom management and student engagement strategies;</p> <p>Develops a sense of accountability.</p>
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Frequently used words: —

Descriptive comments: — underlined

Conceptual: ◆ Red ink

Linguist: ◆ Blue ink

Table 4.36

Emergent themes of SEM's transcript (question, 5) n= 15

Code	Frequently used	Linguistic	Conceptual	Emerged themes	Superordinate theme
*SSEM 1-15	Instructional	1.Know how to monitor teachers' performance as an instructional leader;	1.Have knowledge how improve learning process;	1.Monitor progress 2.Instructional strategies	Monitoring student's progress
		2.Observed teachers instructional, classroom management, and student engagement strategies;	2.Plan to facilitate students;	3.Facilitate student Classroom management	
		3. Develops sense of accountability.	3. Realized importance of monitoring.	4.Manage students 5.Observing performance	
				6.Sense of accountability	

Note. *SSEM = Secondary School educational manager.

Q6. What is your strategy to make yourself visible for staff and students at the beginning and off-time of the school?

<p><i>Explained that having an ability as SL to be visible; Do not share response of teachers and students; Share his/ her effort to create effective school as an individual Do not appreciate staff and teachers.</i></p> <p>Have knowledge how to strengthen teachers' self-efficacy; Plan to create an effective school; Realize the importance of visibility.</p>	<p>I am visible to my staff and students <u>as an active participant</u>. I come on time in school to ensure assembly and other tasks. I say <u>welcome to the students</u>. I realize that being an active participant during <u>collaboration and planning sessions</u> with teachers which can <u>affect their sense of self-efficacy</u>. I also realize that educational managers' <u>visibility at the beginning and off-time</u> has a great impact on school performance. I realize that being <u>visible and accessible</u> to teachers is highly effective. <u>Visibility helps me to provide feedback to teachers on specific activities relating to school discipline</u>. Teachers and students need to know that school leaders have a plan. I realize that my walk and talk should match with each other. Moreover, they also need to know their <u>extra work and effort that both are noticed</u>. I can realize them through my <u>visibility</u> that their good performance, discipline, follow-up of all the rules will be appreciated. I realize it's also <u>necessary for school improvement and success</u>.</p>	<p>Knows duties as instructional leader; Ensure visibility at the time of start and closing of school; Focus on school success.</p>
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Frequently used words: ——

Descriptive comments: —— underline

Conceptual: ◆ Red ink Linguist:

Blue ink: ◆

Table 4.37

Emergent themes of SEM's transcript (question, 6) n= 15

Code	Frequently used	Linguistic	Conceptual	Emerged themes	Superordinate theme
*SSEM 1-15	Describe visible	1.Realized importance of visibility 2.Have knowledge how to strengthen teachers' self-efficacy 3.Plan to create effective school	1.Know duties as instructional leader 2.Ensured visibility at the beginning and close time of school 3.Focus school effectiveness	1.Presence 2.Participation 3.Visible 4.Provide feed back 5.Appreciation 6.School improvement	Visibility

Note. *SSEM = Secondary School educational manager.

Q7. Do you provide incentives to teachers and students?

Explained that having ability to appreciate the tutors and the students
Do not share feelings of student's and teacher's.
Do not discuss initiatives for slow learners
Realize the importance of encouragement.
Have knowledge how to improve learning and performance.
Focus on school effectiveness.

I **tried** to provide them appreciative certificates. I encourage their effort in assembly and staff meetings. Because I **feel** teachers should be organized. I **feel** it helps them to improve their teaching and become better teachers as well. I **feel** incentives enable them to gain confidence. I announce prizes for students who are performing better than others. Their achievement is an asset for school. So I always **tried** to appreciate their success. It strengthen the overall performance of my teachers. I believe in making sure that the teachers know that they are appreciated and I notice the good things that they are doing by complementing them either in person or in an email or note. Moreover, I do that in assembly and in staff meetings as well. I **tried** to offer them increments on their good performance. I always **tried** to offer incentives to students like: fee concession, performance certificates, awards, appraisal certificates, participation certificate and other benefits to improve their interest in learning. The other main focus is to improve my school effectiveness with better performance.

Know the importance of provision of incentives on good performance
 Focus on encouraging behavior
 Ensure appreciation on success
 Offer incentives to students

Frequently used words:

Descriptive comments: underlined

Conceptual: **◆** Red ink Linguist: **◆** Blue ink

Table 4.38

Emergent themes of SEM's transcript (question, 7) n= 15

Code	Frequently used	Linguistic	Conceptual	Emerged themes	Superordinate theme
*SSEM 1-15	Feel Tried Incentives	1.Know importance of provision of incentives on good performance 2.Focus on encouraging behavior 3.Ensure appreciation on success 4.Offer incentives to students	1.Realized importance of encouragement 2.Have knowledge how to improve learning and teacher's performance 3.Focus school effectiveness	1.Appreciation 2.Encouragement 3.Achievement as an asset 4.Improving performance 5.School effectiveness 6.Awards on performance 7.Motivations on learning	Provision of Incentives

Note. *SSEM = Secondary School educational manager.

Q8. Do you promote professional development of teaching staff?

Explained that having ability as instructional leader to promote PD,
Do not share duration of training,
Do not discuss whether teachers are allowed to ask any professional course personally,

Accepting that PD is important for teachers' progress
Have knowledge that professional learning improves school success,
Comprehend the importance of professional development,
Recognize PD is a continuous process

As an instructional leader, I ensure teachers must have necessary professional development. Professional development needs to be on-going job embedded to be most meaningful and beneficial. I think supportive attitude for professional development helps teachers improve and become better. I think trained teachers can transform classroom teaching according to modern era. I also believe that professional training strengthen their skills, knowledge and comprehension. Through this, they can realize importance of professional learning to meet up high expectations for success. Increasing student and school success starts with improving teachers' skills through training. It help to realize teachers feel valued. I appreciate those who are willing to participate such courses. It ultimately reflects positively for school. As an instructional leader, I support my teachers for professional development to reach their potential.

Know duties as a facilitator
Make sure professional development of teachers,
Focus on improvement in teaching,
Support teachers to reach their potential

Frequently used words: —

Descriptive comments: — underlined

Conceptual: ◆ Red ink

Linguist: ◆ Blue ink

Table 4.39

Emergent themes of SEM's transcript (question, 8) n= 15

Code	Frequently used	Linguistic	Conceptual	Emerged themes	Superordinate theme
*SSEM 1-15	Professional Development Teachers	1.Know duties as a facilitator 2.Make sure professional development of teachers, 3.Focus improvement in teaching, 4.Support teachers to reach their potential	1.Accepting that PD is important for teachers' progress, 2.Have knowledge that professional learning improves school effectiveness, 3.Comprehended importance of professional development, 4.Recognized PD is continuous process	1.Ongoing process 2.Beneficial for learner 3.Improve teaching skills 4.Transform classroom teaching 5.Positive reflection for school success	Professional development

Note. *SSEM = Secondary School educational manager.

Table 4.40*Superordinate Themes and Related Subordinate Themes*

Superordinate Theme	Subordinate Theme
Instructional leadership	Keeping focus on school goals
	Positive school environment
	Frame school goals
	Communicating school mission
	Sharing with community
	Communicating
Supervision and evaluation	Monitoring teacher performance
	Evaluate instruction
	Supervise instruction
	Facilitator
	Positive attitude
	Encouragement
Coordination	Coordination of curriculum
	Implementation of curriculum
	Reach school goals through curriculum
	Clear direction
	Reinforcing
	Collaboration
Expectations	Discussion of expectations
	Clear direction
	Balancing time
	Accountability
	Urgent feedback

Note. Superordinate Themes and Related Subordinate Themes

Table 4.40 continue.....*Superordinate Themes and Related Subordinate Themes*

Superordinate Theme	Subordinate Theme
Monitoring progress	Focus Instructional strategies Class room management Manage students Support effective learning Develop sense of accountability
Visibility	Educational manager visibility Administrative presence Participation Providing feed back Follow time table
Incentives	Certification Encouragement Praise Recognition Increments
Professional development	Supportive attitude High expectations for success Participation Teachers training Strengthen skills, knowledge & comprehension

Note. Superordinate Themes and Related Subordinate Themes

As themes started to emerge across and within transcripts, an added table (Table 4.40) was generated to help imagine converged or diverged of themes, but also identified how themes might be connected with research question. The additional table helped to combine the stories of all the respondents. After that common perception was outlier.

Table 4.40 illustrates cross –case analysis to link perceptions back to the research questions, as all each row represents questions from the interview protocol were added and as well as emergent themes.

Table 4.41

Cross-Case Analysis

Interview Questions Do you?	Public sector & Male SSEM	Private sector & Female SSEM	Thoughts Connection
As an instructional leader, frame and communicate the school goals to (teachers, students, parents and members of school community)?	Keeping focus on school goals Positive school environment Frame school goals Communicating school mission Sharing with community.	sharing a brief description of school goals & mission, Framing school goals is only my responsibility and I keep it close Focus Positive school environment No community involvement.	All had perception of instructional leadership Male & Public SEM have strong ability Private & Female reported moderate ability.
Supervise & evaluate instructional methods adopted by teachers?	Monitor teacher performance Evaluate instruction Supervise instruction Facilitator Positive attitude Encourage staff.	Main focus is performance monitoring process is weaker than male side.	Public sector & male EM strongly agree. female and private sector EM perceive at moderate level.
Maintain balance in allocating weekly time to your teachers?	Discussion of expectations Clear direction Balancing time Accountable by department Urgent feedback.	Balance time, not accountable by higher officials, personal control, ready to give feedback but slowly.	Public and male EM maintain well private sector and Female EM are weak in maintaining balance in allocating weekly time to teachers.
Monitor student progress at your school?	Focus Instructional strategies Class room management Manage students Support effective learning Develop sense of accountability	Female educational managers are on same page regarding monitoring student progress.	Public sector & male EM and private sector & female EM are same in MSP.
Strategy to make yourself visible for staff and students at the beginning and off time of the school?	Educational manager visibility Administrative presence Participation Providing feed back Follow time table.	Female role performance is different than male. Perform all the related themes' roles but differently.	Male and public school educational managers are more visible while female and private sector school managers differs from them
Provide incentives for teachers and the students?	Certification Encouragement Praise Recognition Increments.	female school educational managers sometime provide certificate Praise to some extent Recognize efforts of staff somehow.	Perceptions of male & public sector educational managers tells that they are providing incentives more than private sector & female educational managers. So recognition in male EM is greater than female.
Promote professional development of teaching staff?	Supportive attitude High expectations for success Participation Teachers training Strengthen skills, knowledge & comprehension. PD in male is more supportive and stronger.	Female. Promote professional development of teaching staff to some degree.	Male and public sector educational managers were in favor of promoting professional development than private sector and female educational managers.

From table 4.41 eight superordinate themes generated are shown in table 4.33.

Table 4.42

Possible themes

<p>Theme 1: Define and communicate goals</p>	<p>14 out of the 15 educational managers who participated as an interviewee in the study rated this theme as the most significant. They supported this theme by representing SSEM1: <i>“Yes, I frame school goals at the start of our session. I prefer to communicate my school vision, mission and goals with all the stake holders including, teachers, parents, community.....”</i> They additional designated that, with the vision and goals of the school in mind, school leader will be able to guarantee that preparation of their schools effective and in line with the vision of school. The school managers grip the interpretation that if the idea and objectives of the schools are openly well-defined and talked to all staff, and in particular the students, then school effectiveness will improve.</p>
<p>Theme 2: Manage curriculum and instruction</p>	<p>It is the curriculum which includes all the learning areas in the school. Though all participants ranked this theme differently from each other. All interviewee holds the understanding that curriculum and instruction is vital for an effective but all schools. It helps to realize school vision and goals through which students can perform well. One educational manager commented SSEM1: <i>“Yes, I conference with teacher, I can reinforce them that what I am expecting from them. This helps me and my staff to recognize the work on areas of improvement. I recognize teachers when they work towards to reach school goals through curriculum implementation and effective coordination to support curriculum implementation to create new ideas”</i> commented. To sum up the responses of the school managers on this theme, an educational managers who dedicates quality time on monitoring and managing the curriculum and instruction will accomplish school goals and ultimately improved school effectiveness.</p>

Theme 3: Monitor and providing feedback for positive school climate	This theme relates with providing feedback on educational process and student enactment. It also included monitoring of performance. The answers of the educational managers highlighted more or less degree of compatibility about the theme. It also compared the instruction and management of curriculum. The one of school managers' <i>"Through their note books, class tests, performance in exams I monitor teachers progress. While on the other hand I also keep in focus teachers' instructional strategies, classroom management, and their strategies to manage students in their class. If I see strength, I celebrate it. After that I move forward to next teacher to observe. I think as an instructional leader by observing teachers' performance....."</i> In his view, the theme monitor and providing feedback boost teachers' sense of self-efficacy and school effectiveness.
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Analysis of the data focused on the convergent and divergent themes. It was a created a sense of understanding process. This process creates sense of the understandings of the participants' views Changing stages of explanation occurred throughout the procedure.

4.3.5.1 Summary: The purpose of this study was to answer the question "How do educational managers' perceive their instructional leadership functions?" Through this qualitative analysis the researcher sought insight in to the educational manager's understanding of IL functions based on their personal experiences, and perceptions the data involved secondary school level educational mangers who recognized themselves as instructional leader. They also elaborated their ability through engagement in IL activities. The Participants of the study identified that they were engaged in instructional leadership functions in order support teachers and students in teaching and learning process respectively.

4.3.5.2 Writing up results: Through this study the researcher sought to fill the gaps in understanding and practice of educational managers (EM) relating to IL in their service. Data for this study was collected through face to face semi structure interview with the selected interviewees. Interview sessions lasting between '45 to 60' minutes. The question that formed interview included 'how do educational mangers perceive their

instructional leadership functions? The IPA analysis highlighted key findings of this study revealed three themes like theme 1: define and communicating goals, Theme 2: Manage curriculum and instruction, Theme 3: Monitor and providing feedback for positive school climate that were discussed in chapter four. Theme drawn from responses gathered from the educational managers (EM) perceptions and personal experiences were compared to Principal Instructional Management Rating Scale (PIMRS) a frame work developed by Hallinger and Murphy (1985) used for instructional leadership. The study examined interrelationship of educational managers' view about their functions through PIMRS and the experiences that they shared in interview. Overall results demonstrated that educational managers at secondary school level of both the sectors (public and private) and gender (Male & Female) practicing instructional leadership in their schools with certain variations. It was emerged from the analysis of the data that public sector and male educational managers were strong in practicing instructional leadership functions as compare to private school sector and female educational managers. It was also reflected from the data analysis that (public sector & male) educational managers were more convinced that IL functions were more conducive for effectiveness of school than (private sector & female) EMs.

4.3.6 Section V: Analysis of Teachers' interview

Throughout the detailed analysis of interviews, individual sympathetic that was a hermeneutic explanation of teachers' sense of self-efficacy. As follows the definition of TSE used in this study is derived hermeneutically. While defining teachers' self-efficacy is not one of the research questions, how it is defined by the teachers is integral in understanding its sources and its relationship to teacher effectiveness.

4.3.6.1 Section 5: IPA for Teacher's

Q1. How do you manage the most difficult students in the class?

Explained that having SSE to deal with difficult students; Do not share students perceptions; Plan to use different strategies Have knowledge how to deal with difficult students; Realize the importance of professional development

Okay, it enabled myself. It assisted me to finish alike. I was being successful in instruction; nonetheless, I contemplate it also aided the school students because I recognized the students didn't feel that pressure of session with conventional teaching for 45 minutes. Students were intelligent to get approximately something from the session, I think, positively. I consider that teachers ought to vigorously find methods to engage students. I feel it should be a phase of my training.

Have a sense of self efficacy; Felt successful in instruction; Ensured students engagement

Frequently used words: ———
 Descriptive comments: ——— underlined
 Conceptual: ◆ Red ink Linguist: ◆ Blue ink

Table 4.43

Emergent themes from interviewee ST's transcript (question, 1) n= 15

Code	Descriptive	Linguistic	Conceptual	Emergent themes	Superordinate theme
*SST 1-15	Students	1.Have sense of self-efficacy; 2.Felt successful in instruction; 3.Ensured students engagement	1.Plan to use different strategies 2.Have knowledge how to deal with difficult students; 3.Realized importance of professional development	1.Instructionally strong 2.Help students 3.Emphasis on training 4.No work stress	Student engagement

Note. *SST = Secondary School Teachers.

Q2. How do you help your students to think critically?

Knows duties as a teacher, Ensure that students must share their academic problems;

Guide students to think critically; Focus on creativity Appreciate the value of critical thinking and creativity.

There are two illustrations teachers can think of. The writing...While I can respond them, when the teacher started getting online. The teacher reflects on really pushing students advancing their ability to think critically. You understand what I mean? I tried to be humorous with students as they like the comments as well. Through this I feel students recognize a connection with me. Students feel they can learn more in a democratic environment. Students share their academic problems freely with me. I think I try to guide students to take help from their thinking and enhance their creativity to resolve such difficulties.

Recognize the prominence of critical thinking;
Have knowledge how to improve critical thinking in students;
Plan to create a democratic environment.

Frequently used words: ——

Descriptive comments: —— underlined

Conceptual: ◆ Red ink

Linguist: ◆ Blue ink

Table 4.44

Emergent themes from interviewee ST's transcript (question, 2) n= 15

Code	Frequently used	Linguistic	Conceptual	Emerged themes	Superordinate theme
*SST 1-15	Teacher Student	1. Recognized prominence of critical thinking; 2. Have knowledge how to improve critical thinking in students; 3. Plan to create a democratic environment.	1. Guide students to think critically; 2. Focused creativity 3. Appreciated value of critical thinking and creativity.	1. Recognizing connection; 2. Democratic environment; 3. Sharing academic problems; 4. Resolve difficulties.	Critical thinking

Note. *SST = Secondary School Teachers.

Q3. How do you help your students to foster their creativity?

<p><i>Explained that having a sense of self-efficacy to improve creativity,</i></p> <p><i>Do not share students' response,</i></p> <p>Eager to immerse herself in the art and practice of the profession.</p> <p><i>Share teachers' use of different strategies for better learning of students.</i></p> <p>Experiencing a sense of security in planning activities;</p> <p>Influence of teachers' beliefs;</p> <p>Successfully managing tasks and tests;</p> <p>Described TSSE is relevant to teaching activity</p>	<p>Through <u>different activities</u>, I think I developed <u>creativity</u>. I realized them to stop being up-front. I feel I would look around and should <u>create groups for discussion</u>. <u>Through brainstorming</u>, I tried to <u>develope creativity in students</u>. The learners were also guided for <u>sharing ideas</u>. Further, through <u>different curricular activities</u>, I <u>examine their creativity</u>. I think <u>teaching is always an experiment</u>. Generally, I am not afraid to <u>experiment</u> in teaching. I do not feel it messy. I have to <u>deal with doings</u>. I guided them to see the topics, lessons and an idea related to class assignment with <u>different perspectives</u>. I think <u>just memori-ation</u> is not useful for effective learning. They have to work, play and <u>experience for better learning with a variety of activities</u>.</p>	<p>Teachers' personal values were shown;</p> <p>Grouping was positively associated with TSSE;</p> <p>using brainstorming technique;</p> <p>Developing creativity.</p>
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Frequently used words: —

Descriptive comments: — underlined

Conceptual: ◆ Red ink

Linguist: ◆ Blue ink

Table 4.45

Emergent themes from interviewee ST's transcript (question, 3) n= 15

Code	Frequently used	Linguistic	Conceptual	Emerged themes	Superordinate theme
*SST 1-15	Creativity Activities Experiments	1.Experiencing a sense of security in planning activities; 2.Influence of teachers' beliefs; 3.Successfully manage tasks and tests; 4.Described TSSE is relevant to teaching activity	1.Teachers personal values were shown; 2.Grouping was positively associated with TSSE; 3.Used brainstorming technique; 4. Develop creativity.	1.Practice variety of activities; 2.Sharing of ideas; 3.Focus group discussion; 4.See the topic with different perspectives	Developing creativity

Note. *SST = Secondary School Teachers.

Q4. How do you evaluate students' comprehension of what you have taught?

Explain that having a sense of self-efficacy as a teacher; do not share students' feedback. Share effort as a teacher to handle weak students; As a teacher being helpful in improving learning; Expanding all the energy in teaching; Elaborate that students need to be taught and trained; Realize a purpose of evaluation; Plan different evaluation strategies; #have knowledge how to create groups; Realize the importance of done evaluation.

What I was teaching? Should I give them an extension to learn more? If yes, then I would pull back weak students who were having more of a struggle. I made reading groups that did not work so well for me. Then I tried a couple of tricks I planned different evaluation strategies. Grouped students as low, medium and high. Used different evaluative strategies. As evaluation has always been a little trickier for me, I feel still I am going to shape different group stuff. I constantly try to change assignments. I try to make it better. I think I take teaching very seriously. I want to be able to connect with students in the classroom for their and my personal growth and development. I realized how different students were being perceived, especially with papers. Well I need to look at the product that is done. Then I assumed we do not have it before. I suggest student read this phase and we will take test after that. Sometime, a time period like one to three weeks I assigned for evaluation after reading a specific topic, lesson or chapter. It may be that I have been taking six to seven class tests in a year. I think in modern era we are doing so many things on machine that is called computer. I feel sometime we are not evaluating the student learning properly so I started struggling on it to improve it. Similarly I struggle to get reply or information is also important? Is it important that they know about function of heart, or is it more important to find that out? That's why I start to put efforts a little bit more, because I feel we're not focusing on content. In short, I focus on end results. So I assume we do not get through all we have done.

Describe self-reflection as a value; Developing as a teacher from teacher center to learner center; valuing change. Thinks to teach technology (computer) in class.

Frequently used words: —

Descriptive comments: — underlined,

Conceptual: ◆ Red ink,

Linguist: ◆ Blue ink

Table 4.46

Emergent themes from interviewee ST's transcript (question, 1) n= 15

Code	Frequently used	Linguistic	Conceptual	Emerged themes	Superordinate theme
*SST 1-15	Evaluation Strategies Students Important	1.Described self-reflection as a value; 2.Development as a teacher from teacher center to learner center; 3. Valuing change.	1.Plan different evaluation strategies; 2. Have knowledge how to create groups; 3. realized importance of evaluation.	1.Use of different strategies for evaluation; 2.Grouping students; 3.Serious about teaching; 4.Connecting students; 5. Focusing individual differences.	Evaluate comprehension

Note. *SST = Secondary School Teachers.

Q5. How do you manage for students to understand a topic about which they are confused?

Explaining that having ability to create groups of students. Do not share benefits of grouping. Have knowledge to be kind while grouping. Teachers' sense of self-efficacy affects their effectiveness. Reflect on their practice. After reflection they change it. Have a sense of self-efficacy regarding instructional strategies.

I discussed it with my colleagues and we take the step to change our instructional strategies at the same time to cope with the need of students. We observed it's easy to let that group of students in our class who can do it as soon as possible. Then you can guide well those students who are middle achievers and just getting the lesson done. We do not push those students adequately hard. After that we move to those students who are low achievers that never going to get lesson. We expose the lesson to them. Further, we try to let them a little bit success and repeat the lesson again. Expose it again to them, and then you've got the low group that's never going to get the lesson, but you just try to expose it to them. Expose them to it. Try to go back and get them a little bit of success.

know how to shift instructional strategies Focusing on need of learner. Expressing vale of repetition. Feeling that they are reflective practitioners, facilitating their pupils, wishing to continue the effort with students, focusing on learning difficulties

Frequently used words: — Descriptive comments: — underlined

Conceptual: ◆ Red ink Linguist: ◆ Blue ink

Table 4.47

Emergent themes from interviewee ST's transcript (question, 5) n= 15

Code	Frequently used	Linguistic	Conceptual	Emerged themes	Superordinate theme
*SST 1-15	We Students	1.Knows how to shift instructional strategies 2.Focusing need of learner, 3. Expressing vale of repetition. 4. Feels that they are reflective practitioners, 5.facilitate their pupils, 6.wished to continue the effort with students Focus learning difficulties.	1. Have knowledge to be kind while grouping. 2.teachers sense of self-efficacy effects their effectiveness, 3.Reflect on their practice, 4.After reflection they change it, 5. Have sense of self-efficacy regarding instructional strategies.	1.Change strategies 2.Grouping 3.Repeating 4.Focus learner's ability	Shift of instructional strategies

*Note. *SST = Secondary School Teachers*

Q6. How much can you do to adjust your lessons to proper level for individual student?

Explains shifting of small groups procedure, Teacher holds positive attitude, Express strong a sense of self efficacy. *Dealing with small group of students, I observed that it's all about the timing when I reached to the group. Moreover, who is doing what? That's been a phase of my struggle with small group. I realized the need that how I prepare for it all. So, I watched different videos and figured out a slightly diverse strategy. Finally I am eager to try this supplementary strategy. I tried to generate a setting where every student feels counted in the conversation. If a student did not remember information I taught in a previous lesson, I would know how to increase students' retention in the next lesson.* *Quickly express positive expression, Expressing flow of personal confidence, Help students in achievement, Taking risk for academic success.*

Eager to try other strategies, Involve all the learners, Realize the need of adequate time, Vicarious experience provoked through watching video.

Frequently used words: —
 Descriptive comments: — underlined
 Conceptual: ◆ Red ink
 Linguist: ◆ Blue ink

Table 4.48

Emergent themes from interviewee ST's transcript (question, 6) n= 15

Code	Frequent used	Linguistic	Conceptual	Emerged themes	Superordinate theme
*SST 1-15	group	1. Quickly expressed positive expression, 2. Expressing flow of personal confidence, 3. Help students' in achievement, 4. Taking risk for academic success.	1. Eager to try other strategies, 2. Involve all the learners, 3. Realized need of adequate time, 4. Vicarious experience 5. Provoked through watching video.	1. Collaboration 2. Sharing	Adjusting lessons

Note. *SST = Secondary School Teachers.

Q7. How do you handle behavioral problems in classroom?

Describe that teacher I really enjoyed to handle such type of Showed confidence in
knows how the students feel students *in my class while teaching since* managing behavior;
about her/him. 15 years of my teaching experience. I
Receive a positive response really felt to establish a positive *Expressed care for the*
from students persuaded relationship. Then at the end of the year, I *students;*
teachers' confidence. always got a list from different students.
Did not reveal inside of this They felt they are difficult to handle, and *Established positive*
list. they felt innocent. I feel I assured that I *relationship.*
know the techniques to redirect the
student quickly. I differentiated the *Exhibited strong belief to*
instruction many times with the students *handle problematic*
who created a problem for me in everyday *students. Created trust*
teaching. That was so hard. I divided them *in classroom*
in groups. They cannot get lost when I go
them at the table. I came to an
understanding that I had to gradually
relieve the learner. I gently stop
controlling and start up space for struggle
and mistakes. For the purpose, I sent two
or four students on who still did not have
long division. Those higher clusters I was
able to bind.
Express that
creative ability
of teachers can
help in classroom.
Explain that
students were
innocent.
Introduce a
feeling of safety.

Frequently used words: ——— Descriptive comments: ——— underlined
 Conceptual: ◆ Red ink Linguist: ◆ Blue ink

Table 4.49

Emergent themes from interviewee ST's transcript (question, 7) n= 15

Code	Frequently used	Linguistic	Conceptual	Emerged themes	Superordinate theme
*SST 1-15	Students Teaching	1. Showed confidence in managing behavior; 2. Expressed care for the students; 3. Create trust in classroom 4. Establishing positive relationship. 5. Exhibited strong belief to handle problematic students.	1. Realized shift of practice as an effective strategy, 2. Expressed that creative ability of teachers' can help in classroom. 3. Explained that students were innocent. 4. Introduce feeling of safety	1. Encouraging connections 2. Smart in disposition 3. Lack of attentiveness 4. Supportive to each other	Managing behavioral problems

Note. *SST = Secondary School Teachers

Q8. How do you respond to non-cooperative students?

Explained that while teaching difficult students, high efficacious teachers persists. did not provide the detail how organized so, Share the importance of micromanagement.

Confident about teaching ability
teachers' strong self-efficacy exhibit a tendency to plan effectively,
willing to experiment with new methods,
Realize the value of struggle improvement.
Achieve teaching ability through mastery of experience.

"Fine, I recognize I really have a firm control and so I felt equipped. I was prepared for such type of students when they came in classroom. I think students learning should be their responsibility and let them have the freedom. It is not good to maintain tight hold. A short range lesson planning is important for such type of students. As it affects my long range planning. Daily they affect my ability to plan for the whole unit in a day. I think I could micromanage their learning. I feel I have been able to meet and readjust. It has enhanced my confidence to use a variety of struggles for lessons, which I prepared to guide the students' learning through classroom teaching. Certainly, in my classroom I've seen it many times, and even in drastic case that two years ago. I remember I moved that student because, he was so poor in reading. Even nothing at all. When he came into my classroom very first time and I asked him for reading. I got him to identify numerous letters that I identify him wasn't undertaking before. I got him to do some Urdu paragraphs, math questions, English reading but and then.....I remember I moved him....."

Showing a strong sense of self-efficacy
 Less critical to students when they make errors;
 Guide student learning, learned from past experiences,
 Present the history of teachers' past success.
 I recognize to teach a cognitive skill
 encourage a sense of belonging they are in an ideal learning state
 produce a sense of achievement

Frequently used words: ———
 Descriptive comments: ——— underlined
 Conceptual: ◆ Red ink
 Linguist: ◆ Blue ink

Table 4.50

Emergent themes from interviewee ST's transcript (question, 8) n= 15

Code	Frequently used	Linguistic	Conceptual	Emergед themes	Superordinate theme
*SST 1-15	Classroom	1.Showing strong sense of self-efficacy 2.Less critical to students when make errors; 3.Guide student learning, 4.learned from past experiences, 5. Presented history of teacher's past success. 6.recognize to teach a cognitive skill 7.encourages a sense of belonging they are in an ideal learning state 8. produces a sense of achievement	1.Confident about teaching ability 2. teachers' strong self-efficacy exhibit a tendency to plan effectively, 3.Willing to experiment with new methods, 4. Realized value of struggle for improvement. 5. Achieved teaching ability through mastery experience.	1.Attitude of admiration 2.Taught patience 3.Freedom 4.Planning 5.Micromanagement 6.Readjust 7.Struggle 8.Guide	Handling non-cooperative students

Note. *SST = Secondary School Teachers.

Q9. Do you find yourself efficient to get professional development?

<p>Teacher reflects on teaching practices</p> <p>Expressed that teacher is happy with teaching</p> <p>was doubtful about her actions</p> <p>was also facing uncertainties</p> <p>She did not reported any stress and helplessness.</p> <p>Give students multiple chances.</p> <p>Explains that struggle with practice can be a source of burnout and stress</p> <p>Encourages the use of modern instructional strategies;</p> <p>Efficacy changed over time;</p> <p>Reports that teachers with a strong sense of self-efficacy implement their instruction effectively.</p> <p>Appreciated significance of professional development</p>	<p>Professional development increases the quality of teacher. The reality about teaching is that it becomes different every day. But it's our responsibility to ensure that our students are involved. For the purpose, we must use <u>max instructional strategies</u>. If they enjoy their learning, it is our effective teaching. There is a lot of work we have to get done. <u>Teaching must be interesting</u>. Every teacher should always try to make it as fun as he/she can be. I think PD was essential to my success on all subjects. The <u>professional development</u> helped me to focus more and to deal with difficult students. As I already had the ability to handle all types of students, but was concerned to acquire further. I prefer to attend workshops as they provided both <u>master and direct experiences</u> that lead to better understanding about teaching. I think through this drill my personal sense of self-efficacy increases. Individually and collectively, I did not experience to observe others' success. I feel if master teacher uses different methods of teaching during a <u>professional development</u> training course it affects sense of self-efficacy collectively.</p>	<p>Teacher expresses a high sense of self-efficacy</p> <p>Believes in a sense of humor can get the better of it all;</p> <p>enjoys to smile and goes on;</p> <p>Ensuring involvement of students.</p> <p>Emphasizes teaching with fun.</p>
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Frequently used words: —

Descriptive comments: — underlined

Conceptual: ◆ Red ink

Linguist: ◆ Blue ink

Table 4.51

Emergent themes from interviewee STs' transcript (question, 9) n= 15

Code	Frequently used	Linguistic	Conceptual	Emerged themes	Superordinate theme
*SST 1-15	Teaching Professional Development	1. Teacher expressed high sense of self-efficacy 2. Believes with a sense of humor can get the better of it all; 3. Guided to smile and go on; 4. Ensuring involvement of students. 5. Emphasis teaching with fun.	1. Explained that struggle with practice can source of burnout and stress 2. Encouraged use of modern instructional strategies; 3. Efficacy changed over time; 4. Reported that teachers with strong sense of self-efficacy 5. Implement their instruction effectively. 6. Appreciated significance of professional development	1. Identifying difference in every day teaching 2. Involvement of learner 3. Handling different pupils 4. Preferring to attend workshop 5. Need of training courses	Professional development

Note. *SST = Secondary School Teachers.

Table 4.52*Superordinate Themes and Related Subordinate Themes*

Superordinate Theme	Subordinate Theme
Student engagement	<ul style="list-style-type: none"> • Providing opportunity to learn • Aided students • Improving knowledge • Manage pressure of session • Recognize differences
Critical thinking	<ul style="list-style-type: none"> • Recognize connections • Responding • Reflective practice • Democratic environment
Developing creativity	<ul style="list-style-type: none"> • Grouping with levels • Learning from workshop • Changing teaching practices • Work with small groups • Merging internal external factors • Works as reflective practitioner
Evaluate comprehension	<ul style="list-style-type: none"> • Specified topic • Encouraging reading • Evaluating learning • Using computer • Focusing content
Shift of instructional strategies	<ul style="list-style-type: none"> • Grouping • Clustering • Brainstorming • Developing critical thinking • Use of evaluative strategies • Summative assessment • Tested learning outcomes • Shape different group stuff • Assigning extra time to learn

Note. Superordinate Themes and Related Subordinate Themes.

Table 4.52 (continue)

Superordinate Theme	Subordinate Theme
Adjusting lessons	<ul style="list-style-type: none"> • Shifting to small groups • Improving confidence • Taking help from videos • Engaging students
Managing behavioral problems	<ul style="list-style-type: none"> • Continuous cycle of improvement • Self-reflection, • Confidence in teaching • Collaboration with a peers.
Handling none cooperative students	<ul style="list-style-type: none"> • Encouraging sense of belongingness • Fully equipped • Creates trust • Introduce feeling of safety • Produce sense of achievement • Constructive relationship • Compensating
Professional development	<ul style="list-style-type: none"> • Creation • Diagnosing actions • Constructing variation • Discover answers • Continuous cycle of improvement

Note. Superordinate Themes and Related Subordinate Themes

As themes started to emerge across and within transcripts, an added (Table 4.52) was generated to help imagine converged or diverged of themes, but also identified how themes might be connected with research question. The additional table helped to combine the stories of all the respondents. After that common perception was outlier.

Table 4.53*Cross-Case Analysis*

Interview Questions Do you?	Public sector & Male Secondary School Teachers	Private Sector & Female Secondary School Teachers	Thoughts Connection
Q1: Manage the most difficult students in the class?	They realized through shifting instructional practices and providing opportunity to learn they have strong self-efficacy.	They reported they cannot change practice as worked in a controlled environment, but provide opportunity to learn that's why feeling weak sense of self-efficacy.	All had strong sense of self-efficacy, while male & public sector SSTs reported strong sense of self-efficacy as compare to female and private sector SSTs.
Q 2: help your students to think critically?	Through grouping, clustering and brainstorming they develop critical thinking	Main focus is performance monitoring process is weaker than male side	Male and public sector SSTs confidence routed to strong self-efficacy as compare to female and private sector SSTs.
Q 3: help your students to foster their creativity?	Reported strong sense of self-efficacy through reflection, Facilitate their students to learn more.	They do continue effort with students learning difficulties but not so efficiently.	Male & Public sector SSTs reported strong sense of self-efficacy as compare to private sector & female SSTs.
Q 4: evaluate student's comprehension of what you have taught?	Attempt substitute strategies take help from previous experiences.	Try different strategies but do not focus their earlier experiences	Male & Public sector SSTs demonstrate high sense of self-efficacy as compare to private sector & female SSTs.
Q 5: How much can you use variety of instructional strategies?	Their confidence about their sense of self-efficacy was high	Focused differentiated needs of learners, but not confident.	Male & Public sector SSTs were strong in using variety of strategies.
Q 6: How much can you do to adjust your lessons to proper level for individual student?	Teachers value topic but teach class as a whole.	Focus topic and shifting students in small groups Showed strong sense of self-efficacy.	Male & Public sector SSTs perceived they have higher sense of self-efficacy than female teachers.
Q7: How you handle behavioral problems in classroom?	Student are slightly non responsive.	Received positive response from students has increased their sense of self-efficacy.	Male & Public sector SSTs exhibited strong sense of self-efficacy then female and private sector SSTs.
Q 8: How well can you respond to non-cooperative students?	Participants perceived that their students and they are in an ideal learning state.	Responding to slow learners produces a sense of achievement for them.	Both male and female including public and private SSTs perceived that they can handle non cooperative students successfully.
Q 9: find yourself efficient to get professional development?	Respondents followed a continuous cycle of improvement through self-reflection. .	Not facilitated for Professional development (PD)	Male & Public sector SSTs perceived they like to participate in PD activities, while female and private sector SSTs reported differently

Table 4.53 illustrated cross case analysis to link perceptions back to the research questions, as all each row represents questions from the interview protocol were added and as well as emergent themes. From table 4.52 nine superordinate themes guided possible themes showed in table 4.54.

Table 4.54

Possible themes

Theme 1: Student engagement	<p>Teachers who participated as an interviewee in the study rated this theme as the most significant. They supported this theme by representing SST1: <i>“There are two illustrations I can think of. The writing...While I can respond them, when I started getting online. I reflect that really pushed them advancing their ability to think critically. You understand what I mean? I tried to be humorous with them, as they like the comments as well. Through this I feel they recognize a connection with me. They feel they can learn more in a democratic environment. They share their academic problems freely with me. I think I try to guide them to take help from their thinking and enhance their creativity to resolve such difficulties.”</i> SST1 considers that tutors must energetically find methods to engage students, and makes this an essential phase of teacher training. She recognizes the difficulty of the job. She is eager to immerse herself in the art and practice of the profession. Mastery experience as a self-efficacy source can be drawn on to this explanation provided by SST1. In this theme, the participants believe that they are capable of teaching effectively. Despite challenges, whether the challenges are with students or with them. They additional designated that, Indeed, it's been inspirational for them. It facilitated teachers to feel effective in teaching, then again they reflect it also helped the students as with direct instruction. As students did not feel any burden to stay for 45 minutes. Learners were remained capable to learn something out of it. They guess it was fruitful. SST1's providing opportunity to learn is her success in improving student learning. SST1 utilized personal effort with developing critical thinking and creativity to find behaviors that the learners can be engaged with and sense positive in learning the topics. It was observed from the SST1's answers that teacher was so excited on success. This had a strong influence on his/her confidence in her/his teaching. This confidence routed to strong sense of self-efficacy.</p>
Theme 2: Instructional strategies	<p>In this theme teachers talked about their ability of selection and adoption of instructional strategies. They explained that it is the instructional strategies which improve all the learning areas in the school. Though all participants</p>

ranked this theme differently from each other. All interviewee holds the understanding that this variable is vital for not only an effective but all schools. One teacher stated that SST1: *“The reality about teaching is that it become different every day. But it’s our responsibility to ensure that our students are involved. For the purpose we must use new instructional strategies. They can enjoy their learning is our effective teaching. There is a lot of work we have to get done. Teaching must be interesting. Every teacher should always try to make it as fun as they can be.”* It was central for SST1 to build an environment of receipt, sympathy and admiration attitudes in the classroom. It can be concluded from the extract of the response provided by SST1 that as a teacher SST1 has confidence in teaching ability. This efficacy information is mastery experience. SST1 learned from past experiences with constructive and effective learning conditions. One conclusion can be drawn that SST1 followed a continuous cycle of improvement through self-reflection. It was observed that her confidence in teaching increased after collaborating with a peer. Further conclusions can be made are: (1) SST1’s practice of team work and reflective practice. It helps her to get through challenges of teaching. (2) SST1 has high sense of self-efficacy.

Theme 3: Classroom management This theme relates with the idea that teachers consider the class room as a studio where generally they support their students to handle their problems related to learning. Although their students having massive educational challenges, whatever appeared more vital for teachers was to handle disruptive behavior. One of the teacher SST1 reported: *“I really enjoyed to handle such type of students in my class while teaching since 15 years of my teaching experience. I really felt to establish a positive relationship. Then at the end of the year I always got a list from different students. They felt they are difficult to handle, and they felt innocent.”* SST1 described that students had a problematic duration doing any kind of classwork. More pupils had difficulty problems continuing task. They had been same as in was grade second, and were notorious for that. On the other hand, they were smart in disposition. It seemed good that they were supportive to each other. This efficacy information is mastery experience. SST1 learned from past experiences with constructive and effective learning conditions.

Though ST1 shared experience in improving learning of an extreme student from his past teaching experience. What can be inferred is that this was a result that raised for ST1, one inquiry may be in mind might have about student, that how they felt about the teacher and classroom. Therefore, a conclusion that came from this extract is the positive response of ST1 received from the students has pervaded confidence in her. In this extract, what ascends are two adverse perceptions about students. ST1 speaks about students who *“had problem performing in the class”*, yet she counters this with a *“however”* implying that students’ lack of attentiveness is compensated with their *“positive temperament.”* Consequently, what can be surmise is that dealing with students who are behaviorally difficult is more of a challenge working with students whose academic performance is week. It can determine that TS1 consider it as success in teaching if students are pleased and contented in the classroom.

Analysis of the data focused on the convergent and divergent themes. It was a continual process. This process creates sense of the understandings of the participants. Changing stages of explanation occurred throughout the procedure.

4.3.6.2 Summary: The three themes explored participants’ perceptions of their sense of self-efficacy. Additionally, they explained their lived experiences as teachers. Themes explored student engagement. The interpretative sympathetic that appeared from participants’ stories highlights the importance that teachers place on developing students’ affective skills and building positive student- centered environment. Which leads to a positive classroom environment. All fifteen participants were represented by TS1and TS2. It was also explored that positive collaborative practices can increase teachers’ sense of self-efficacy. Moreover, two salient identifications emerged from these themes: First, all the participants trust in their capability to advance pupil knowledge regardless of the diverse expertise heights and stimulating student performances. Second, outer as well as inner sources of efficacy had an influence on participant’s belief regarding their ability to expand learning of student in class about the topic and lesson. Finally, it was also constructed from responses provided by the participants about their belief that they possess the capacity to increase learning for all learners.

4.3.6.3 Writing up the Results: Lastly, a description version of the phenomena was shaped that discovered the skills of each participant and formed a thought of the phenomenon of instructional leadership and teacher's sense of self-efficacy. The first exploration of the most relevant themes presented in the data initiated this phase and worked to explore unique themes for each participant. When data had been collected to support the themes, the researcher told the tale of the participant, exemplifying their interactions and presenting exact illustrations from the transcript that were reflective of the recognized theme. Stages of explanation happened most regularly throughout this phase of the procedure, nonetheless once more, each interpretative statement was strengthened by the participants' personal words. This research was not designed to generalize larger population for the research, but instead it focused on individual perception on small sample. The themes relate to research question: How do teachers perceive their sense of self-efficacy? Theme 1 looks at how teachers' sense of self-efficacy helps them to get through the most difficult students? It searches bases of efficacy originates from participants' insight of their class room setting. In theme 2, teachers' practices and how they deal with none cooperative students, their behavioral problems, and improve their understanding through a shift in practice as source of teachers' sense of self- efficacy. Theme 3: teachers experience related to develop creativity and comprehension through their sense of self-efficacy was explored as source of TSE. This theme discovers the relationship among teachers' sense of self-efficacy and their interest in getting professional development for school effectiveness.

4.3.7 Section VI: IPA for three S (SSEMs, SSTs and SSSs)

This section followed the following stages:

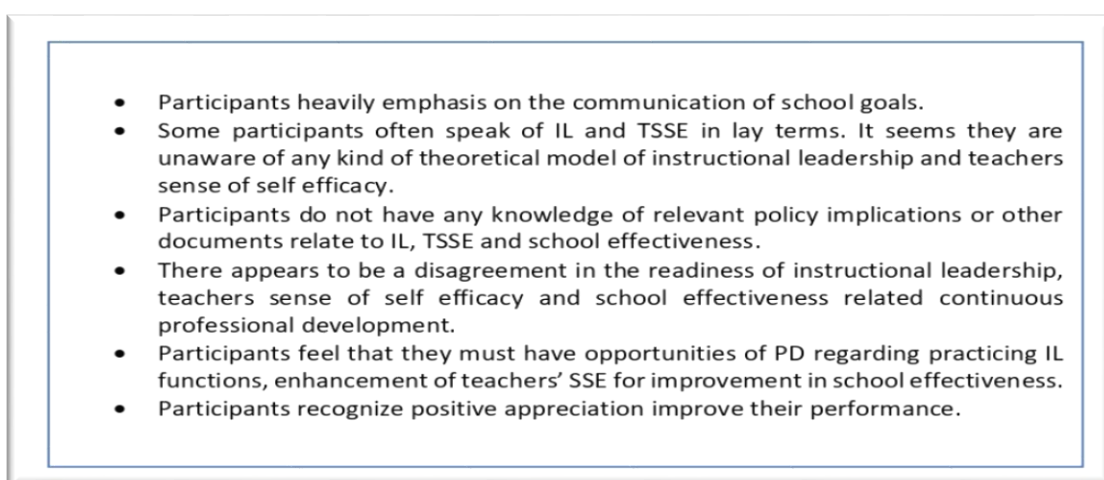
Stage one: Reading and Re-Reading (R & R-R): At this step the researcher met face to face with every interviewee and made them familiar with the study objectives and the proposed framework of the effects of EMIL and TSSE on SE. Hence, they started to express their views and semantics. During the interview the researcher was writing down all information provided by respondents to pave the way for the codification

process (step 2). I manually transcribed each interview when transcription of all interviews was complete, I read each transcripts numerous times.

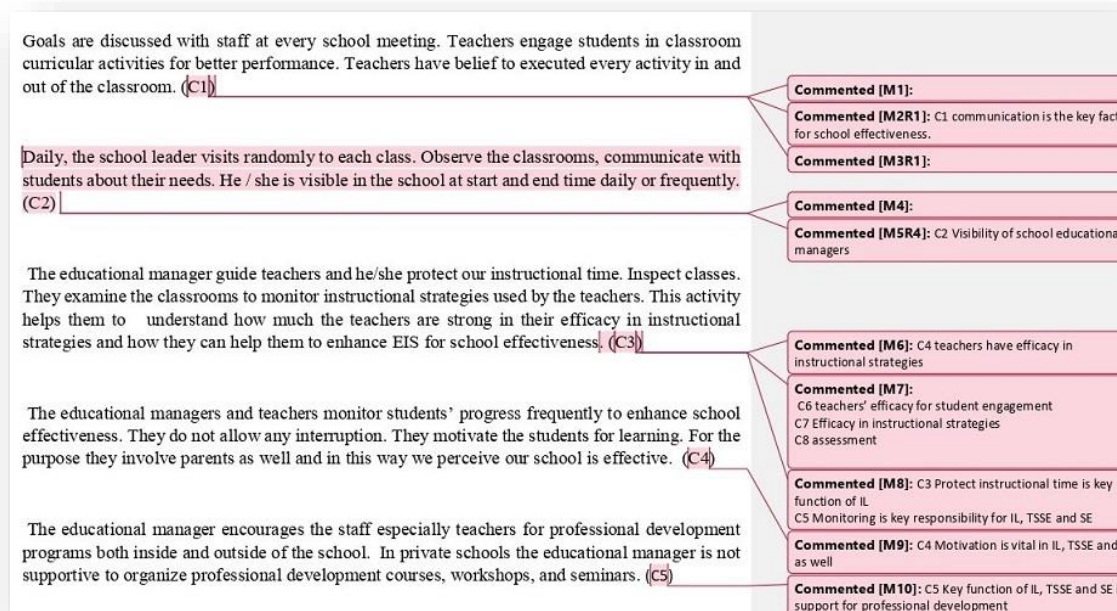
Stage II: Initial Noting (IN): At this point, I took notes. Some preliminary notes made during the early iterations of familiarization with the data can be seen in figure 4.12:

Figure 4.12

Initial noting

- 
- Participants heavily emphasis on the communication of school goals.
 - Some participants often speak of IL and TSSE in lay terms. It seems they are unaware of any kind of theoretical model of instructional leadership and teachers sense of self efficacy.
 - Participants do not have any knowledge of relevant policy implications or other documents relate to IL, TSSE and school effectiveness.
 - There appears to be a disagreement in the readiness of instructional leadership, teachers sense of self efficacy and school effectiveness related continuous professional development.
 - Participants feel that they must have opportunities of PD regarding practicing IL functions, enhancement of teachers' SSE for improvement in school effectiveness.
 - Participants recognize positive appreciation improve their performance.

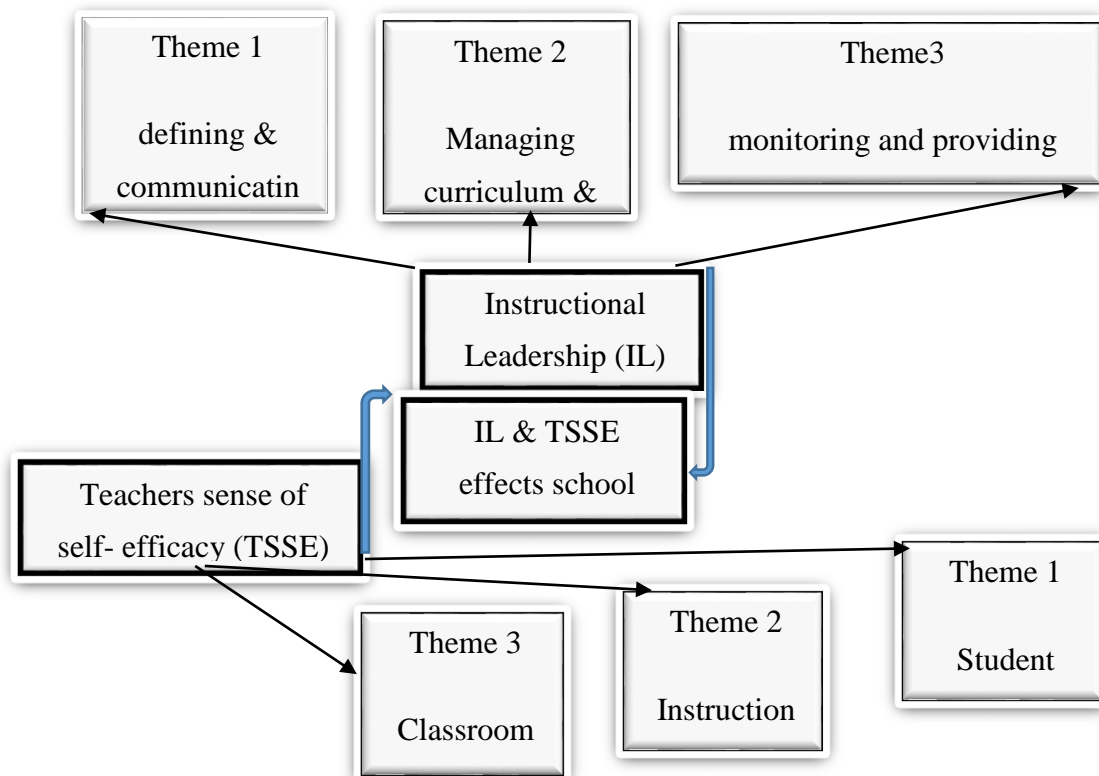
Stag III: Developing emergent themes: This step is undertaken to produce shorthand descriptive or interpretive labels for pieces of information that may be of relevance to the research question(s). The preliminary iteration of noting was conducted using the 'comments' function in Microsoft Word (2016). This allowed codes to be noted in the side margin, while also highlighting the area of text assigned to each respective code. A sample extract of the preliminary coding process of one participant's interview transcript is presented in figure 4.13:

Figure 4.13*Developing emergent themes*

After completing stage 2, the researcher moved to the next stage (3) and start to read, investigate and analyze the data to develop the emergent themes related to the study's variables.

Step IV: Searching for connections across themes: The researcher reviewed all themes in stage (4) searching for connections (SFC), which look relevant to the study frame work and are reliable as well.

Step V: moving to the next case: In the next stage (5) moving to the next case (MNC) the study focused a certain number of themes that describes instructional leadership, teachers' sense of self -efficacy and their effect on school effectiveness in Pakistani context. Notes were written in English on 19 pages and specific code were assigned to every theme. Participants' nominated themes. Frequencies have been calculated for the elected themes. Moreover, based on the data analysis in previous section of interpretative phenomenological analysis the present section developed a mind map for further analysis:

Figure 4.14*Triangulation Mind map*

Note: Triangulation Mind map created by researcher (Sagheer, 2022).

RQ 3. To what extent educational managers' instructional leadership functions and teachers' sense of self-efficacy effects school effectiveness?

Table 4.55

Major Themes from the Perceptions of School educational managers' about (Instructional Leadership)

Sr. no.	Major theme	No. of respondents
1	communicate school goals with staff to create safe and ordered environment	15
2	evaluate classroom instruction to nurture high expectation's climate	15
3	Involve teachers to participate in decision making to accomplish mission of school	15
4	Monitor students' progress frequently	15

5	visibility for school effectiveness	15
6	Appreciate teachers' and students for effective use of instructional time	15
7	Support teachers' for professional growth	15

Table 4.55 shows the major themes emerged from interview of educational managers' regarding instructional leadership functions effects school effectiveness.

Theme 1: communicate the school's goals with staff to create safe and ordered environment

Code of respondent	Major themes	F	%
SSEM	In staff meetings	2	33.4
SSEM	On notice board	2	13.3
SST	Through teaching	2	13.3
SST	Through assemblies	4	26.7
SSS	Through order book	5	13.3

Five out of fifteen respondents said that they communicate the school mission with school staff in meetings, while the four respondents out of fifteen said that they frame and communicate the school's goals through assemblies. Very few (2) respondents said that they communicate the school goal through teaching, notice board, and order book. One SSEM reported:

“I frame the school goals and conveys to the teachers and students through notice boards, in assemblies, and through orders that are in written form by me”.

The participants emphasized the need for educational managers to communicate clearly and effectively with their staff, students as well as with parents and other stakeholders to inform them that school has a clear-cut focused mission to achieve school effectiveness.

one SST stated,

"Operative communication is crucial to instructional leadership. If the educational managers cannot communicate the school goals with us effectively, then we cannot work as a team for the attainment of clear-cut focused mission of the school and accomplish school goals successfully as well for school effectiveness."

One SSS added,

"Communication is about listening and talking too. Educational managers' and teachers need to listen to our ideas and take them into consideration when making decisions."

Nevertheless, all the interviewees conclude that "communication" is crucial component of instructional leadership, so educational manager in schools officially and casually communicate school goals with teachers and students for school effectiveness. Moreover, students emphasized on student-centered teaching and learning. They suggested to add them in decision making process as well.

Theme 2: evaluate classroom instruction to nurture high expectation's climate

Respondents code	Major theme	f	%
SSEM	Through students' academic performance	3	2.0
SST	On the basis of classroom teaching	5	33.4
SST	Follow govt. schedule	2	13.4
SSS	Follow schedule develop by own	1	6.7
SSS	On the basis of weekly tests and homework	4	26.7

Three respondents out of fifteen said that they evaluate classroom instruction on the basis of student's academic performance, some of them answered that they evaluate on the basis of classroom teaching. Very few (1) respondent answered in favor of evaluation on the basis of schedule develop by them.

One SSEM said:

“I recommend the teachers to make file of students’ on the basis of their weekly test records. assess their classroom performance, likewise considered their comprehension to evaluate classroom instruction”.

One SST added

“We have to attain the goals guided by the Government Policy. Moreover, we cannot implement our own ideas”

One SSS added:

“We are evaluated through our class tests, assignments and assigned homework. We think that Instructional leadership supports effective teaching practices for school effectiveness”

All the interviewees concluded that instructional leader evaluation is key function of instructional leadership, through which they support teachers to improve their instructional strategies for successful learning of the students.

Theme 3: Involve teachers to participate in decision making to accomplish mission of school

Respondents code	Major theme	f	%
SSEM	favor teacher’s point of view	4	26.7
SST	reinforce teachers for participation	7	46.7
SSS	Provide effective co-ordination	4	26.7

Four out of fifteen respondents said that they give preference to teacher point of view, while seven respondents reported that they reinforce teachers share ideas and experience about their teaching to take decisions. While four respondents stated that teachers’ participation in decision making strength effective coordination among educational managers’ teachers’ and students.

One SSEM answered:

“If we assume to get 100 % results, we need to provide a favorable environment for teaching and learning not only to teachers but to students as well. We may focus school cleanliness classroom management, and prefer teachers’ point of view to enhance school effectiveness through results”.

One SST said:

“The educational manager in school should not be a manager, but also be a facilitator for us. Teachers and educational managers should work together to ensure that the instructional leadership practices are implemented for school effectiveness. ”

One SSS stated:

“The teachers should be involved in the process of decision making in school. Educational managers should be aware of their instructional leadership functions they are performing. They should also know that IL is being implemented. Teachers should also provide feedback on the effectiveness of the educational leader as instructional.

However, all the respondents concluded that they make sure teachers’ involvement in decision making process. They also highlighted that participation of teachers in decision making is important for effective school.

Theme 4: Monitor students’ progress frequently

Respondents code	Major theme	f	%
SSEM	visit classroom on daily basis	2	13.3
SST	observe students during class	4	26.7
SST	check student progress reports weekly	3	20
SSS	ask question from students during class	6	40

Twelve out of thirty respondents said that they visit classroom on daily basis to assess teachers' classroom instruction, very few (5) respondents said they observe teachers' students and during study hours and give report to educational manager. However, six respondents said that they check teachers' classroom instruction on the basis of student questions they asked from the students during class. Progress reports are also considered as the main source of mentoring. While six respondents said that our educational manager assess the teachers' instructional strategies during class by asking questions from us about the topic under study.

Theme 5: effective use of instructional strategies

Respondents code	Major theme	f	%
SSEM	Depends on teachers strategy	2	13.3
SST	Depends on students interest	4	26.7
SSS	Depends on motivation	9	60

Two respondents reported that use of instructional time depend on teachers' instructional strategies. Four said that some students do not take interest to complete schoolwork projects and do not use instructional time properly. However, they supposed that to accomplish their academic tasks depends on personal interest. While nine reported that to perform well and proper use of instructional time student's need support and motivation from teachers and educational managers.

One SSEM replied:

“Usage of proper instructional strategies for teaching in classroom by teacher is an important factor for effective use of instructional time”. Teachers can evaluate their self- efficacy in instructional strategies through frequent monitoring of student progress.

One SST responded:

“Students do not take interest or share their learning problems so that they cannot use instructional time properly. We observed during frequent monitoring of student progress that it's very rare that students come to class with complete homework assignments. They do not check whether they have done their homework or not”. On

the other hand, careful students know the importance of classroom and assigned activities as homework, so they always come to class with complete work”.

One SSS answered:

“It depends on teachers’ instructional strategy, that how to improve student’s learning through effective use of instructional time, so we can complete our assigned homework. Some teachers motivate us for learning, but some strictly treat us so that we cannot perform well sometime”.

Theme 6: Appreciate teachers’ and students

Code of respondent	Major themes	f	%
SSEM	Shield, medals and positive comments	2	13.3
SST	On accomplishments	2	13.3
SS T	For professional abilities	4	26.7
SSS	Bags, certificates & books	7	13.3

Two out of fifteen respondents said that they appreciate teachers and student through shields, medals and positive comments. While the four respondents out of fifteen said that they awarded bags, certificates and books on their good results. Very few (2) respondents said that they get appreciation on their accomplishments.

One SSEM stated:

“Teachers are frequently measured and monitored while teaching in the classroom. They are valued for their academic and professional abilities. Students are appreciated through positive comments, such as "hardworking". Are placed in their result cards”.

One SST detailed:

“We are appropriately treated and based on our accomplishments. We are valued equally. The SSEM is very connected to us. They speak with us at school and

classroom issues. Outstanding students are recognized in the school during assembly/classroom. Our ACR is filled with positive comments if we perform well”.

One SSS said:

“The head of school is adorable with teachers, and motivates them. The school head bestows shields and medals on good learning and performance in the classroom. We are advised to improve our performance and concentrate on learning. We are recognized, and rewarded with various items such as bags, certificates, and books.”

Theme 7: Support teachers for professional growth for school effectiveness

Code of respondent	Major themes	F	%
SSEM	Follow direction	2	33.4
SST		4	26.7
SSS		9	13.3

Two out of fifteen respondents said for the professional development of the teachers they follow directions of the education department. While the four respondents out of fifteen said that they frame and communicate the school's goals through assemblies. Very few (2) respondents said that they communicate the school goal through teaching, notice board, and order book.

In the words of one SSEM,

“Some teachers in my school have been teaching different courses for the past five years.” Even if the syllabus and curriculum are the same, the student is different. I have to be visible to monitor students’ reading, writing, and listening skills. I am directed to send the teachers for their professional growth according to planned course by the department. We support professional development of teachers as our goal is to improve students’ skills and usage of ICT in classroom teaching”.

SST said:

“We use a variety of instructional strategies to keep students engaged, such as utilizing resources, improving reading and writing, and mathematical concepts. We evaluate their learning through daily, monthly, and annual tests. But, now we feel we need some courses to enhance our teaching capabilities. We need support from our school leaders to attend professional courses”.

SSS described

“Our schools follow the government's syllabus, study plan and timetable. We finish in a semester. We observed rarely that our teachers get training so they can use novel methods to teach the subject and can help the struggling pupils to improve.

Figure 4.15

Mind map for educational managers' instructional leadership

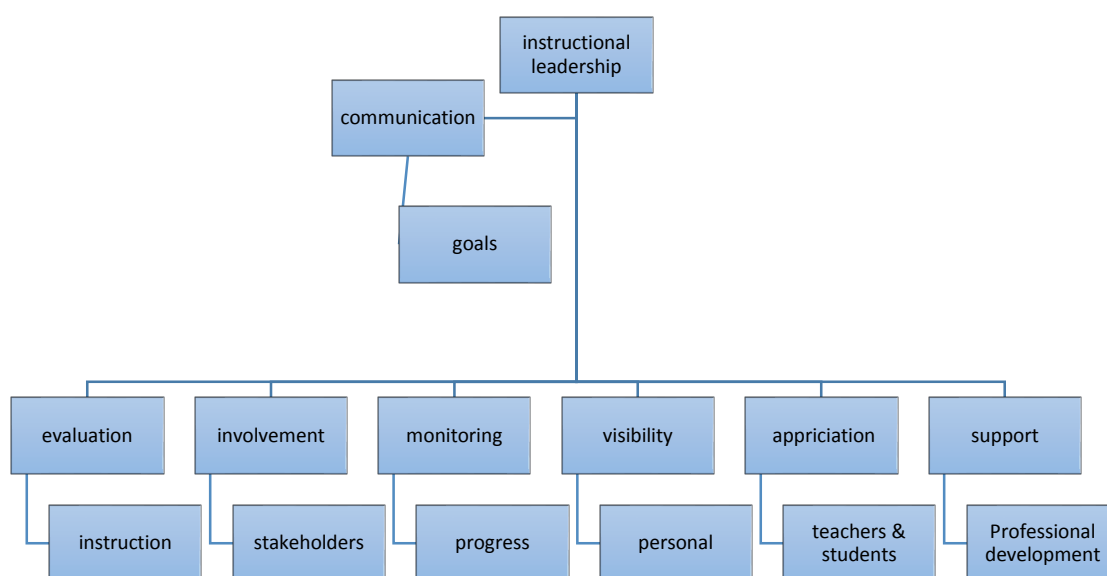


Table 4.56

Skeleton table of IPA for educational managers' Instructional Leadership

Sr. no.	Major theme	Emerged themes
1	communicate school goals with staff to create safe and ordered environment	communication

2	evaluate classroom instruction to nurture high expectation's climate	Evaluation
3	Involve teachers to participate in decision making to accomplish mission of school	Involvement
4	Monitor students' progress frequently	Monitoring
5	Appreciate teachers' and students for effective use of instructional time	Appreciation
6	Support teachers' for professional growth	Support

Table 4.57*Major Themes from the Perceptions of Teachers about sense of self-efficacy*

Sr. no	Major theme	No. of respondents
1	behavior management strategies for safe and ordered environment	15
2	Opportunity to learn	15
3	Monitoring of student's comprehension to cope with high expectation's climate	15
4	providing quick feedback for positive learning climate	15
5	Instructional strategies	15
6	Classroom management	15

The above table shows the major themes conducted from semi - structure interviews of teachers about their sense of self -efficacy.

Theme 1: Behavior management strategies for safe and ordered environment

Respondents code	Major theme	f	%
SSEM	school conduct rules	2	13.3
SST	Control behavioral problems	5	33.3
SSS	Cooperation of senior students	8	53.3

Two respondents said that almost all teachers taught school conduct rules to create safe and ordered environment. While five respondents said that control behavioral

problems of students in the classroom and outside the class is prime responsibility of teachers. They reported that sometimes behavioral problems occur during group activity. However, eight respondents said that students get cooperation from their seniors in group work activity.

SSEM replied:

“Teachers are bound by the policy, so they face difficulty to follow policy. “maar nahi piyaar” is the ground reality of their schools. It has a negative effect on students’ classroom behavior. For the character building of students, sometime punishment is important”.

SST answered:

“I think that good aspect of behavioral management for high expectations’ climate is that brilliant students help average ones to accomplish their classroom and homework assignments. Interaction of students with their seniors create poor noisy classroom environment so, mostly teachers avoided to make groups with seniors and it is not preferable to perform group assignment”.

SSS said:

“Teacher make a group and assign a task. Each group has a senior student. Our interaction with each other highly positive for learning. I think the purpose of group work is to build a cooperative learning skills between us. Our seniors cooperate with us for good performance in the school. We feel comfortable while completing assignments with seniors”.

Theme 2: opportunity to learn

Respondents code	Major theme	Frequency
EMOSS	Common commitment	2
TOSS	Interest	4

Two respondents said that we share common commitment with each other for bringing improvement in teaching learning process for school effectiveness. While four respondents supposed that participation in classroom activities and excitement to learn a lesson shows student's interest. However, nine respondents understood that the students ask questions during a lecture to understand the topic.

SSEM answered:

“Teacher always stimulates the students to ask question. Teachers encourage them to ask without any hesitancy to clear their concepts. The eye contact of students with teachers during lecture confirms that they are focusing on lesson”.

SST replied:

“Almost all students take part in classroom discussion which shows their interest in learning. Every student wants to read a lesson and ask questions to discuss main points with each other. Asking questions shows that they are passionate to learn”.

SSS responded:

“Educational manager and teachers create a positive learning climate in classroom, so that we feel comfortable to seek help from teacher. Teachers individually motivate those students who do not feel comfortable to ask questions or seek help to understand the lecture without any hesitation”.

Theme 3: Monitoring of student's comprehension to cope with high expectation's climate

Respondents code	Major theme	Frequency
SSEM	Share innovative thoughts	4
SST	Discus performance of students	5
SSS	Need assessment	6

The theme describes that four respondents stated that they discuss methods to improve the school. Five respondents said that they always discuss performance of the students through their achievement score. Conversely, six respondents said that need assessment may identified the gaps in current practice to enhance student's comprehension.

SSEM answered:

“Keeping in view high expectations for students’ performance I discuss with teachers’ for the improvement in teaching. In response teachers” shares new ideas according to the present needs to create a positive learning environment for students to enhance school effectiveness”.

SST responded:

“School effectiveness is depending on students’ success, teachers always concern about students” academic achievement, and discuss some ways to improve students results as compare with their previous results” The educational managers’ monitor students’ progress on their daily and previous performance.

SSS Replied:

“Educational managers’ and teachers observe our classroom activities and classroom management arrangement, through which they assess our learning needs and comprehension” my teacher told me that need assessment helps them to enhance their self-efficacy and ultimately it effects school effectiveness”.

Theme 4: providing quick feedback for positive learning climate

Respondents code	Major theme	Frequency
SSEM	In meetings and individual discussion	4
SST	In classroom during lecture	5
SSS	In some way	6

Four respondents reported that educational managers provide quickly their feedback in staff meetings and through individual discussion. Though, five respondents said that they get feedback during lecture in the classroom. While six respondents said that they receive instructional feedback in some way.

SSEM replied:

“I appreciate teachers in front of their student. Sometimes I give feedback in written form. Occasionally, I point out negative and positive aspects of their teaching and students’ learning as well”, I provide feedback to teachers on the basis of their performance.

SSS answered:

“Actually it’s exceptional to get feedback from educational manager. Somehow they give feedback to only those teachers who are not performing well. Mostly we receive orally feedback from EM.”

SSS replied:

“Educational manager of the school visit classroom during lecture. They observe teaching style of the teachers and our response as well. After observation of learning climate, they provide feedback”.

Theme 5: efficacy in instructional strategies

Respondents code	Major theme	Frequency
SSEM	Respond to difficult questions	2
SST	Use of variety of assessment strategy	6
SSS	Implement alternative strategies	7

Two respondents explained that they are lacking involvement of students. As mostly student do not respond difficult questions. Six said teachers use a variety of assessment

to check that students' comprehension. However, seven respondents thought that teachers can adjust lesson to proper level of students through the implementation of alternative strategies.

SSEM responded:

“Respond to difficult questions” is an important factor to complete improve students' comprehension for the successful completion of homework assignments, parents do not have ability to help them. So, students do not show responsibility to accomplish their homework assignments regularly. Teachers' competency to handle problem students and improve their creativity led to school effectiveness”.

SST answered:

“Use of variety of instructional strategies in my daily teaching helped me to help hardworking students. As they know the importance of classroom activities and assigned homework, so they always come to class with complete homework. The competency in use of instructional strategies guide me to perform well for school effectiveness.”

SSS said:

“We passionately work on new idea; we get help from books, use library and discuss with teachers to perform a task very well. Mostly we sense burden to perform a new task. We also feel fear to ask from the teacher in class. But if teachers implement alternative strategies according to our level of understanding it could improve our classroom learning”.

Theme 6: Efficacy in classroom management

Respondents code	Major theme	Frequency
SSEM	Instructional leadership	2
SST	opportunity to learn	3
SST	clear-cut school mission	5
SSS	Seating arrangements	4

Two respondents out of fifteen said that we guided teachers through instructional leadership as they always concerned about students' behavioral management strategies. Three respondents said that providing opportunity to students to learn is useful approach to manage students' disruptive behavior. Five respondents said that they discuss mission of school with students and educational manager suggest those strategies which they applied on their students for classroom management. Four respondents said that seating arrangement is useful strategy to manage classroom.

SSEM responded:

“When student continually create problems then we guided teachers and involve parents to resolve student's behavioral problems. For the purpose we call their parents, and discuss with them. But, without fruitful participation of parents and positive home school relation we can't find the solution to manage the students in classroom who are problematic”.

SST replied:

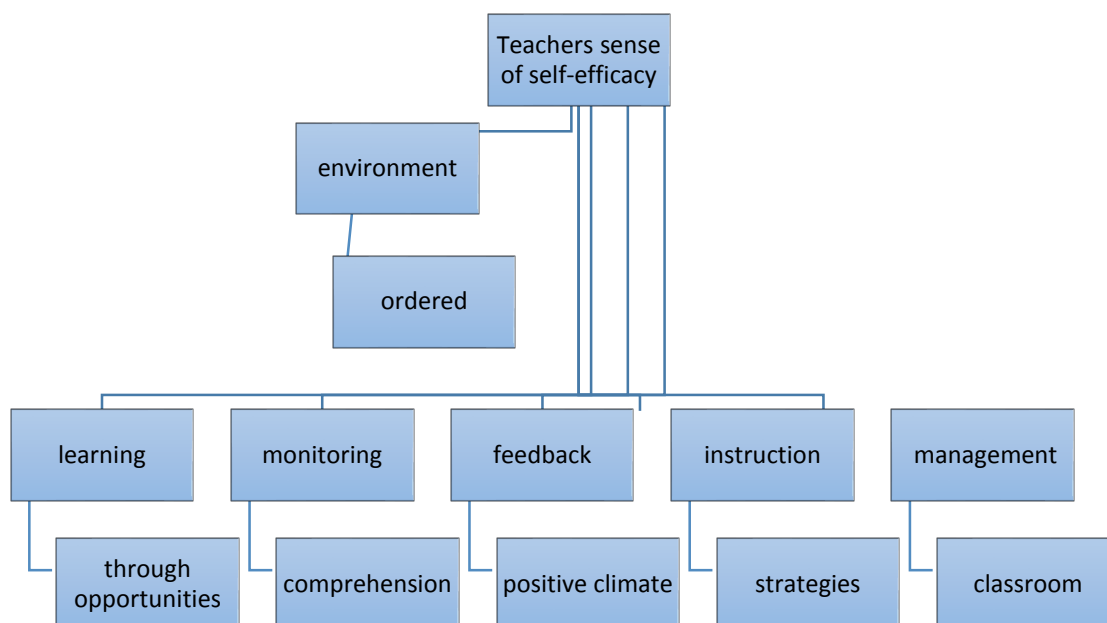
“We recognize very well that some students want incentive and some require strictness. However, teachers prefer motivational strategy to manage behavior”.

SSS answered:

“Some of our class fellows just create behavioral problem in a particular subject, but show manners in other subject, so it may be possible that their behavior depends on the environment of classroom; seating arrangement, teaching style of teacher, and classroom management”.

Figure 4.16

Mind map for teachers' sense of self-efficacy

**Table 4.57**

Skeleton table for IPA of Teachers about sense of self-efficacy

Sr. no	Major theme	Emerged themes
1	behavior management strategies for safe and ordered environment	Ordered environment
2	Opportunity to learn	learning
3	Monitoring of student's comprehension to cope with high expectation's climate	Monitoring
4	providing quick feedback for positive learning climate	Feedback
5	Instructional strategies	Instruction
6	Classroom management	Management

Reflections: A possible constraint of this effort was that the main part of the analysis for both the Quantitative and qualitative were led by the researcher. It might have been better to have separate researchers leading the two analyses, then this may have led to further different results. The study will recommend to consider engaging other

members to those who are wishing to use this dual analysis. However, due to restrictions of time and budget, that was not possible in this study.

4.3 Triangulation of Results

According to Nobel and Heale (2019) in research triangulation is a form of mixing method which is seen as mitigating the weaknesses found in a single method. Initially Heale and Forbes (2013) reported the same views. The first research method was a survey, which was conducted through three research instruments (PIMRS, TSES, & SESQ). The instruments included demographic variables, as well as items related to instructional leadership, teachers' sense of self-efficacy and school effectiveness. The data were analyzed through statistical tests to determine effects of instructional leadership and teachers' sense of self-efficacy on school effectiveness. The second method was semi structured interviews with educational managers and the teachers working in secondary level schools to determine their perceptions about instructional leadership and teachers' sense of self-efficacy. Data from the interviews were analyzed using IPA. Finally, these data were used to support the results of the survey and interviews, representing methodological triangulation (chapter 3, p. 29) of this research study.

Table 4.58

Matrix of Integrated Results for the effect of educational managers' instructional leadership and teachers' sense of self-efficacy on school effectiveness

Quantitative results	Qualitative results	Example quote
When asked about defining school mission the participants placed higher value.	Define and communicate goals. All the educational managers who were the participants of the study reported that they are performing this role.	<i>Participant 25: "Yes I like to formulate school mission. I also share school goals with the staff. I guided them to pattern their teaching to achieve these goals and mission of school for the purpose I always try to create a</i>

		<i>conducive learning environment in the school.....”</i>
When talk about Manage curriculum and managing instructional program the participants placed more value.	instruction interviewees responded positively as they reported through questionnaire.	Participant 16:” <i>yes, I always try to monitor teachers while they are teaching in their classroom. I had like be helping my teachers do their teaching task because, I always focused on quality of instruction..... I feel that monitoring instruction is necessary which provide a thought to teacher that ”</i>
When talk about creating a positive school climate the participants placed higher value.	About Monitoring and providing feedback interviewees reported their perceptions in favor of this role.	Participant 7: <i>“As an instructional leader, I appreciate the teachers to participate in professional development courses. I encourage their efforts in Assembly as an incentive. As an active participant to create a positive school climate I make myself visible to staff and students..... ”</i>

Table 4.58 (Continue.....)

Quantitative Results	Qualitative Results	Example quote
When talk about efficacy in student engagement teachers strongly agreed that they have ability to do so.	Student engagement: interviewees reported that they have strong self- efficacy regarding this dimension.	Participant 9: <i>"I experiencing a variety of emotions in students in the daily classroom teaching I think I was ill prepared to face this problem at the start of session, but then I started to handle most difficult students in the class room as I started managing them properly....."</i>
When discussed efficacy in instructional strategies teachers placed higher value to this dimension.	Instructional strategies: when interviewees were asked about it, they reported that they have strong self of efficacy in instructional strategies.	Participant 12: <i>"I felt lack of confidence in making decision regarding instructional strategies. Further I always try to modify my teaching methods to accommodate students' need. I feel challenged in an increasingly diverse classroom....."</i>
When asked questions related to classroom management teachers of secondary level schools retained more value.	Positive classroom environment: All the interviewees reported strong sense of self- efficacy.	Participant 3: <i>"I do not rely only upon my service experience while creating positive classroom environment. My decisions are based on the knowledge I received from the experiences of my colleagues, my seniors, and from my trainings....."</i>

Note: The researcher integrated quantitative data (collected through two research instruments related to variables instructional leadership and teachers sense of self-

efficacy) and qualitative data (Interviews with educational managers and teachers regarding IL and TSSE) to make available a more comprehensive description of participant's views.

4.4 Summary

The quantitative data was analyzed through SPSS version 23, while the researcher selected analyses of interviews manually as focused in a study conducted by Clarke (2009, p.72) to promote an intimacy by means of data. Overall results showed that educational managers are practicing IL and teachers reported that they have sense of self-efficacy at secondary school level in Rawalpindi district of the province of Punjab Pakistan.

CHAPTER 5

SUMMARY, FINDINGS, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Current research was intended to explore effects of educational managers' instructional leadership, and teachers' sense of self- efficacy on school effectiveness at secondary school level. The study was descriptive with ex-post facto design in nature and used mixed method convergent research with triangulation. The objectives of the study were: to (i) investigate educational managers instructional leadership in public and private sector; (ii) assess teachers' sense of self-efficacy at secondary school level in public and private sector; (iii) determine school effectiveness as perceived by the students in public and private sector at secondary school level; (iv) determine the relationship of instructional leadership and teachers' sense of self-efficacy; (v) examine the effect of educational managers' instructional leadership and teachers' sense of self-efficacy on school effectiveness; (vi) find out gender differences in educational managers' instructional leadership; and (vii) investigate gender differences in secondary school teachers' sense of self-efficacy, and (viii) find out gender difference in the perceptions of students regarding school effectiveness. There were three major research questions how do (1) educational managers' perceive their instructional leadership (IL) functions? and (2) teachers' perceive their sense of self-efficacy? (3) To what extend educational managers' instructional leadership functions and teachers' sense of self-efficacy effects school effectiveness? The population of the study was consisted of secondary school heads (educational managers), teachers and students. The context of the study was five tehsils of district Rawalpindi (Murree, Kahuta, Gujarkhan, Rawalpindi and Texila) Punjab, Pakistan. Main strata of the study were male and female, public and private sector, therefore, proportionate stratified sampling technique was applied for sample selection for

quantitative phase, whereas purposive sampling technique was applied for qualitative phase to select the respondents for the study. Eight null and alternative hypotheses were formulated to achieve the objectives of the study.

Three questionnaires and semi structure interview (SSI) were used for data collection from sample for quantitative phase. PIMRS (Principal Instructional Management Rating Scale) was used to get responses of secondary school educational managers. TSES (Teacher's sense of self-efficacy scale) was employed to find out perspective of teachers regarding their SSE and SESQ (School effectiveness Survey Questionnaire) was used to get responses from the secondary level students. Validity of the questionnaires was checked through experts' opinions and reliability was confirmed from Cronbach Alpha. Whereas SSI were conducted with educational managers and teachers to get information regarding research questions of the study. Permissions were obtained from the questionnaire developers/ authorities before data collection. All the collected data were organized and entered in to a computer software SPSS for analysis in the light of the research objectives of the study. For data analysis, mean, standard deviation, and inferential statistics like Exploratory Factor analysis, t-test, correlation, linear and multiple regression were used through Statistical Package for Social Sciences (SPSS Version, 21). The data collected through SSI was analyze through Interpretative Phenomenological Analysis (IPA).

Major findings emerged from data analysis were: there was significant effect of educational managers' IL practices and TSSE on school effectiveness. Moreover, a significant relationship among IL, teachers' SSE and school effectiveness were observed. It was detected that male EM were strong in (defining mission of school (DMS) and promote positive school climate (PPCS). The results of the study disclosed that there was high mean for male secondary school level managers about IL functions and low mean for female secondary school level managers regarding IL functions. Results of the study disclosed that there was high mean for male SSTs regarding sense of self-efficacy and low for female SSTs about having sense of self-efficacy. The IL functions and SSE were indirectly and directly associated with the factors of school effectiveness such as (1) SOE, (2) HEC, (3) IL, (4) OSLTT, (5) CFM, (6) MSP, and (7) RSH. Overall outcomes of current research can be beneficial for educational administrators, decision makers of secondary education, secondary school heads and

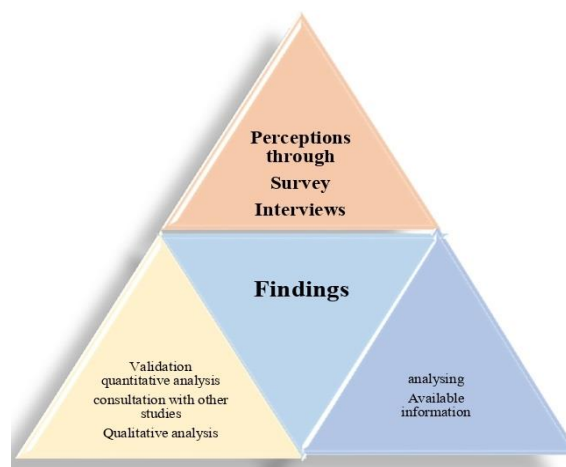
teachers and future researchers to investigate the additional factors of school effectiveness and students' satisfaction about school effectiveness factors.

5.2 Findings

After analysis following findings were drawn. The findings followed three major areas of analysis offered by Carugi (2014) through triangulation, synthesis to interpret the data in a mixed method research (MMR).

Figure 5.1

Three chief zones of triangulation for findings (Carugi, 2014)



Note: Figure above shows that the findings of the study were elicited from the data collected through survey and interviews. In the next step, the researcher used literature search during analysis and compared the findings with the available information. Through comparison of the findings from quantitative and qualitative analysis, the researcher validated the outcomes of this research. The researcher compared QUAN and Qual analysis. First, the quantitative findings were reported, and then qualitative findings were carried out.

Phase I: Quantitative data findings were based on descriptive and inferential statistics.

Phase II: Interpretative phenomenological Analysis (IPA) presented the findings for the qualitative data analysis.

Phase III: Triangulation of findings

Phase I: Findings of research instruments (Descriptive and inferential Statistics)

Findings of the quantitative phase are presented in five sections:

Section I: encompasses findings related to mean differences

Section II: Consist of findings related to the sector wise variances in views of educational managers, SSTs and secondary level students.

Section III: describe findings related to relationship of IL and SSE.

Section IV: Comprise findings related to the effects of IL and SSE on SE.

Section V: Contain findings related to gender wise differences in the perceptions of EM regarding IL, teachers, about SSE, and students' regarding SE.

The total sample size of the study was 837 participants. Among these participants, 10% (84) participated in pilot-testing. The remaining 753 (89.9%) were invited to complete the survey. Participants of pilot-testing were not included in the final study. The total sample was 72 secondary schools' educational managers, 365 secondary school teachers and 400 secondary level students.

Section I: Findings related to mean differences

The average mean score of each of three dimensions of instructional leadership (i: define mission of school, ii: managing instructional program and iii: promoting a positive school climate), dimensions of teacher sense of self-efficacy (I). Student Engagement; (II). Instructional Strategies; and (III). Classroom Management) and seven factors of school effectiveness (1): safe and ordered environment, (2): high expectation's climate, (3): instructional leadership, (4): opportunity for student to learn through time on task, (5): clear-cut focused mission, (6): monitoring of student progress frequently, and (7): relationship of school and home) were calculated to ascertain the educational managers' instructional leadership, teachers' perceptions of their efficacy, and student's views about school effectiveness in relationship to these indicators. The mean scores were produced (Table 4.5- 4.10).

1. All the items related three dimensions of Instructional leadership: define mission of school, manage program of instruction and promote a positive climate for school have exhibited score (M = 206.50, S.D = 12.08) shows that

educational managers were in favor of demonstrating IL (Table, 4.6). All other indicators fell within this range.

2. The responses related to three dimensions: efficacy in student engagement, instructional strategies and classroom management of teachers' SSE (M = 167.75, S.D = 25.01) indicated that teachers had a high sense of efficacy within their daily practice. The average score of each dimension was in favor of a great deal in a nine-point scale (Table, 4.8).
3. Frequency distribution results shown in Table (4.10) regarding school effectiveness showed that students were in favor of all the seven factors: safe and orderly environment, high expectation's climate, instructional leadership, opportunity for student to learn through time on task, clear –cut focused mission, monitoring of student progress frequently, and relationship of school and home (M = 73.88, S.D = 8.93).

Section II: Sector wise differences related findings

In section II the researcher discussed objective-wise findings of the study. This section represents the findings related to sector wise differences.

Objective 1: To determine educational managers' perception about instructional leadership functions in public and private sector at secondary school level;

1. Statistically significant difference among the public and private sector educational managers' (EM) perceptions regarding their functions of instructional leadership. The results showed that t is (72, 9.17), whereas p is = .000 < .05. The public sector educational managers were practicing all the functions of instructional leadership i.e., (M= 204.34, S.D = 21.27) as compared to the private sector educational managers, i.e., (M= 150.22, S.D = 28.76). The results showed that (44.4%; $n = 32$) public sector EM perceived that they are performing instructional leadership functions as compared to their (55.6 %; $n = 40$) private sector colleagues did. So, the null hypothesis (H_{01}) and the related sub-hypotheses ($H_{01.1}$ to $H_{01.3}$) were not accepted (Table 4.12).

2. There was, statistically significant dissimilarity among both sectors (public & private) educational managers' instructional leadership functions regarding framing school goals (FSG) was observed. It is: $t(72, 10.57)$, $p = .000 < .05$. The public sector EM were found better ($M = 22.38$, $S.D = 2.52$) in FSG than the private sector participants, i.e., ($M = 15.43$, $S.D = 3.05$) (Table, 4.11).
3. A significant variance between the public and private sector secondary school managers' (EM) perceptions regarding *communicating school goals* (CSG) such as: $t(72, 8.83)$, $p = .000 < .05$. It displayed that the public sector EM ($M = 20.50$, $S.D = 4.19$) have competency in CSG as compared to the private sector EM ($M = 12.03$, $S.D = 3.87$) (Table, 4.11).
4. There was, statistically significant difference, among the public, and private sector educational managers' perceptions concerning *supervising and evaluating instruction* (SEI) such as $t(72, 8.46)$, $p = .000 < .05$. It was found that the public sector school leaders ($M = 21.47$, $S.D = 3.49$) were better in SEI than private sector EM ($M = 14.10$, $S.D = 3.89$) (Table 4.11).
5. No significant, difference in (public and private) sector educational managers on the subject of *coordinating curriculum* (CC). For instance, $t(72, 1.07)$, $p = .29 > .05$. On the other hand, the public sector EM reported slightly higher mean ($M = 21.03$, $S.D = 3.84$) for CC as compared to the private sector counterparts ($M = 20.00$, $S.D = 4.28$) (Table 4.11).
6. The result described that there was no significant difference in private and public, sectors educational managers about *monitoring student progress* (MSP) as ($t(72, 2.86)$, $p = .06 > .05$). It exhibited that the public sector educational managers were found slightly better with higher mean ($M = 22.12$, $S.D = 1.98$) in MSP than the private sector participants ($M = 20.15$, $S.D = 3.76$) (Table 4.11).
7. There was a statistically significant difference among the public and, private sector educational managers as regards to *protecting instructional time* (PIT) as $t(72, 4.70)$,

$p = .000 < .05$. The public sector EM conveyed that they are better in PIT with ($M = 13.47$, $S.D = 2.15$). On the other hand, the private sector educational managers rated less with ($M = 9.88$, $S.D = 4.19$) on having this practices (Table 4.11).

8. There was statistically significant difference between the public, and private sector secondary school educational managers' (EM) perceptions regarding maintaining *high visibility* (MHV) as $t(72, 4.89)$, $p = .000 < .05$. It was found that the public sector educational managers with ($M = 19.78$, $S.D = 3.41$) had competency in MHV as compared to private sector EM with ($M = 14.28$, $S.D = 6.05$) (Table 4.11).
9. Between the public and private sector, there was statistically significant difference, among educational managers' perceptions concerning *providing incentives for teachers* (PIFT) as an instructional leader in school for instance, $t(72, 4.60)$, $p = .000 < .05$. It was found that the public sector school leaders were better in PIFT ($M = 20.44$, $S.D = 3.23$) as compared to the private sector school managers ($M = 16.03$, $S.D = 4.87$) (Table 4.11).
10. Significant difference, among the public and private, sector EMs as regards to *promoting professional development* (PPD) such as $t(72, 6.38)$, $p = .000 < .05$. The public sector EM were found better in PPD with ($M = 21.34$, $S.D = 3.48$) than the private sector educational managers on PPD with ($M = 14.43$, $S.D = 5.65$) (Table 4.11).
11. Statistically, significant difference, in the public, and private sector educational managers as regards to *providing incentives for learning* (PIL) as $t(72, 6.07)$, $p = .000 < .05$. The public sector EM were better in PIL with ($M = 21.81$, $S.D = 4.15$). Consequently, the private sector educational managers rated less on having this practices ($M = 13.93$, $S.D = 6.78$) (Table 4.11).

Objective 2: To assess teachers' sense of self-efficacy at secondary school level in public and private sector;

1. Results about teachers' SSE at SS level revealed that (53.7 %; n = 196) the public sector teachers reported a strong sense of self-efficacy as compared to (46.3%; n = 169) the private sector teachers. Further, the findings show that overall the public sector SSTs have a strong SSE (M= 166.46, S.D = 26.91) as compared to the private sector teachers (M= 157.99, S.D = 18.96). According to t-test results $t(365, 3.511)$, $p = .001 < .05$, the study, moreover, elaborates the findings of the objective two with respect to three main dimensions of teachers' sense of self-efficacy. So, the null hypothesis H_{02} : and the related sub-hypotheses ($H_{02.1}$ to $H_{02.3}$) were not accepted (Table 4.14).
2. Statistically significant difference between the public and private sector SSTs perceptions regarding their sense of SSE in engaging students (M=50.59, S.D = 9.59). It was found that the public sector teachers have competency in *student engagement* (SE), such as $t(365, 6.18)$, $p = .000 < .05$, as compared to the private sector teachers (M = 44.77, S.D = 8.42) (Table 4.13).
3. Difference between the public and private sector SSTs' perceptions regarding their sense of self-efficacy in *instructional strategies* (IS) was statistically significant. As per $t(365, 4.00)$, $p = .000$. It was found that that the public sector teachers were better (M= 60.40, S.D = 9.95) in IS as compared to the private sector teachers (M = 56.21, S.D = 9.98) (Table 4.13).
4. Not a significant difference between the public and private sector SSTs perceptions regarding their sense of self-efficacy in managing classrooms through t- test. Where $t(365, -1.30)$, $p = .194 > .05$ was found. Consequently, on the basis of mean values, there was a difference among the teachers of both the sectors. It was found that public sector teachers (M= 55.46, S.D = 11.71) have weak competency in classroom management (CM) as compared to private sector teachers (M = 57.01, S.D = 10.99) on the basis of mean scores (Table 4.13).

Objective 3: determine school effectiveness as perceived by the students in public and private sector at secondary school level;

Results about students' perceptions about SE at SS level revealed that (48.0 %; n = 192) the public sector students were less confident about their school's effectiveness as compared to (52.0%; n = 208) the private sector students. Further, the findings show that overall the public sector students were not in the favour of seven factors of school effectiveness (M= 61.675, S.D = 6.020) as compared to the private sector students (M= 88.140, S.D = 10.078). According to t-test results $t(400, 31.882)$, $p = .000 < .05$, the study, moreover, elaborates the findings of the objective three with respect to seven factors of school effectiveness. So, the null hypothesis H_{03} : and the related sub-hypotheses ($H_{03.1}$ to $H_{03.7}$) were not accepted (Table 4.16).

1. Statistically significant difference between the public and private sector students' perceptions regarding *safe and ordered environment*. It was found that the public sector students were perceiving that their school is lacking SOE (M = 13.510, S.D = 2.416), such as $t(9.769)$, $p = .000 < .05$, as compared to the private sector students (M = 15.910, S.D = 2.497), (Table 4.15).
2. Statistically strong and significant difference between the public and private sector students' perceptions regarding high *expectation's climate* (HEC) was observed. As per $t(400, 3.225)$, $p = .001$. It was found that that the public sector schools hold HEC (M= 13.385, S.D = 1.677) as compared to the private sector schools (M = 12.825, S.D = 1.795), (Table 4.15).
3. Significant difference between the public and private sector students' perceptions regarding *instructional leadership* through t- test. Where $t(400, 21.422)$, $p = .000 < .05$ was found. Consequently, on the basis of mean values, there was a difference among the students of both the sectors. It was found that public sector students (M= 15.835, S.D = 2.902) have weak (IL) as compared to private sector students (M = 10.070, S.D = 2.463) on the basis of mean scores (Table 4.15).

4. Significant, difference in (public and private) sector secondary school students (SSS) on the subject of *opportunity for student to learn through time on task* (OLSTT). For instance, $t(400, 25.402)$, $p = .000 < .05$. On the other hand, the public sector SSS reported slightly higher mean ($M = 12.110$, $S.D = 6.885$) for OLSTT as compared to the private sector counterparts ($M = 6.885$, $S.D = 1.299$) (Table 4.15).
5. The result described that there was significant difference in private and public, sectors secondary school students (SSS) about *clearut focused mission* (CFM) as ($400, 24.454$), $p = .000 < .05$. It exhibited that the private sector secondary school students (SSS) were found slightly better with higher mean ($M = 7.625$, $S.D = 1.726$) in CFM than the public sector participants ($M = 3.890$, $S.D = 1.299$), (Table 4.15).
6. There was a statistically significant difference among the public and, private sector secondary school students (SSS) as regards to monitoring student progress frequently (MSPF) as $t(400, 18.081)$, $p = .000 < .05$. The public sector SSS conveyed that they are not monitored frequently ($M = 7.355$, $S.D = 2.168$). On the other hand, the private sector SSS rated more ($M = 11.425$, $S.D = 2.331$) on having this factor of SE (Table 4.15).
7. There was statistically significant difference between the public, and private sector secondary school students (SSS) perceptions regarding *home school relation* (HSR) as $t(400, 4.28.333)$, $p = .000 < .05$. It was found that the public sector schools with ($M = 6.580$, $S.D = 2.168$) have lesser HSR as compared to private sector schools with ($M = 12.410$, $S.D = 2.317$), (Table 4.15).

Section III: Findings related to relationship

Objective 4: determine the relationship of instructional leadership and sense of self -efficacy;

Correlation was applied for the data analysis. Results show that the variables *IL* and *SSE* have a strong, and positive, correlation with each other as $r = .786$. Further, it was observed that correlation is statistically significant between *IL* and *TSSE* such as $\rho = .000$. So, the H_04 , was not accepted (Table, 4.17a). More, through linear regression

analysis it was found the positive effect of SSE on IL as R^2 depicts that the model explains 33% of the variance in IL (Table. 4.17b), so the alternative hypothesis H_{a3} was accepted.

Section IV: findings related to effect

Objective 5: examine the effect of educational managers' instructional leadership and teachers' sense of self-efficacy on school effectiveness;

Multiple linear regression was applied for the data analysis. In analysis, *school effectiveness* was used as the dependent variable and *instructional leadership with teachers' self-efficacy* as the independent variables. A significant regression equation was found with an R^2 of .773. Both instructional leadership and teachers' sense of self-efficacy were significant predictor of school effectiveness and added significant prediction $.000 < .05$. So, the alternative hypothesis H_{a5} was accepted (Tables, 4.19, a, b & c).

Section V: findings related to gender wise differences

Objective 6: find out gender differences in educational managers' instructional leadership;

1. There was statistically significant difference among male and female school managers regarding 3 dimensions of IL: DFM), MIP, and PPSC. As t was (72, 4.06), $p = .000 < .05$, Male managers (EM) were found better ($M = 204.05$, $S.D = 21.70$) than female participants ($M = 146.11$, $S.D = 24.68$). So, the null hypothesis H_{o5} and related sub-hypotheses ($H_{o 5.1}$ to $H_{o 5.3}$) were not accepted (Table 4.21).
2. Significant difference in gender regarding *framing the school goals* (FSG) of instructional leadership. As t was (72, 9.33), $p = .000 < .05$, male managers (EM) were found better with ($M = 21.91$, $S.D = 3.05$) than female participants ($M = 15.29$, $S.D = 2.96$), (Table 4.20).

3. There was statistically significant difference between, male and female secondary school leaders' insights regarding their IL practices in *communicating school goals* (CSG) as t was (72, 13.83), $p = .000 < .05$. It was found that male EM (M = 20.89, S.D = 3.43) have competency in CSG as compared to female EM (M = 10.29, S.D = 2.57) (Table, 4.20).
4. There was, statistically significant difference among male and female educational managers' insights concerning practices of *supervising and evaluating instruction* (SEI) as t was (72, 13.87), $p = .000 < .05$. It was found that that male school leaders (M = 21.94, S.D = 2.94) were better in SEI as compared to female (M = 13.05, S.D = 2.46) school managers (Table 4.20).
5. There was statistically non-significant difference, amongst male and female EM about *coordinating curriculum* (CC) as t was (72, .455), $p = .000 < .05$. On the other hand, it was observed that male (M= 20.69, S.D = 4.08) and female EM (M = 20.24, S.D = 4.17) reported the same on having practices of CC (Table 4.20).
6. There was not statistically significant difference in male and female educational managers about *monitoring student progress* (MSP) as t was (72, 1.18), $p = .000 < .05$. It was found that male (M= 21.49, S.D = 3.08) and female (M = 20.59, S.D = 3.35) EM stand equal relating to this practices of MSP (Table 4.20).
7. There was statistically, significant, difference between male, and female educational managers regarding *protecting instructional time* (PIT) as t was (72, 5.47), $p = .000 < .05$. Male EM (M = 13.60, S.D = 1.91) conveyed that they are better in PIT; on the other hand, female educational managers (M = 9.45, S.D = 4.17) rated less on having this practice (Table 4.20).
8. Male and female secondary school educational managers' perceptions regarding their IL practices in *maintaining high visibility* (MHV) have statistically significant difference. Such as t was (72, 6.58), $p = .000 < .05$. It was found that

male EM ($M = 20.29$, $S.D = 1.78$) had competency in MHV as compared to female EM ($M = 13.35$, $S.D = 6.14$) (Table 4.20).

9. Significant difference between perceptions of female and male educational managers' concerning their practices related to *providing incentives for teachers* (PIFT) as t was (72, 5.86), $p = .000 < .05$. It was found that that public sector school leaders were better in PIFT with ($M = 20.74$, $S.D = 3.09$) as compared to the private sector school managers with ($M = 15.38$, $S.D = 4.57$) (Table 4.20).
10. Statistically significant gender differences between male and female educational managers regarding *promoting professional development* (PPD) were seen. For instance, t was (72, 6.73), $p = .000 < .05$. Male educational managers conveyed that they were better in PPD with ($M = 21.26$, $S.D = 3.94$); on the other hand, female educational managers rated less with ($M = 13.95$, $S.D = 5.22$) on having this practices (Table 4.20).
11. There was statistically significant difference among the gender of educational managers regarding *providing incentives for learning* (PIL) as t was (72, 5.39), $p = .000 < .05$. Male (EM) conveyed that they were better in PIL with ($M = 21.26$, $S.D = 5.05$), but female educational managers rated less ($M = 13.81$, $S.D = 6.61$) on having this practice (Table 4.20).

Objective 7: investigate gender differences in secondary school teachers' sense of self-efficacy;

1. In this study, the TSSE was comprehended in the areas of efficacy regarding *student engagement*, *classroom management* and *instructional strategies*. The study found, there is significant difference in teachers' SSE in males and females at secondary school level. The findings showed that (51.8 %; $n = 189$) male teachers perceived better in having the sense of self-efficacy than (48.2 %; $n = 176$) female teachers. Further, Table 4.23 shows significant differences in the gender of teachers as t was

(365, 3.278), $p = .001 < .05$. It reflects that overall male SSTs are strong in their sense of self-efficacy ($M = 166.40$, $S.D = 27.29$) as compared to their female colleagues with ($M = 158.39$, $S.D = 18.85$). So, the null hypothesis H_{o6} and related sub-hypotheses ($H_{o6.1}$ to $H_{o6.3}$) were not accepted (Table 4.23).

2. No gender differences of secondary schools' teachers' perceptions regarding their sense of self-efficacy in SE were observed. As t was (365, -1.68), $p = .095 > .05$. The study found that female participants had a higher sense of SE ($M = 57.21$, $S.D = 11.83$) regarding *student engagement* than male counterparts ($M = 55.22$, $S.D = 10.84$) (Table 4.22).
3. There was significant difference among female and male SST's perceptions regarding their sense of self-efficacy and *instructional strategies* (IS) as t was (365, 3.947), $p = .000 < .001$. The study reported that male teachers have higher mean score ($M = 60.45$, $S.D = 10.09$) than their female counterparts ($M = 56.73$, $S.D = 9.85$) (Table 4.22).
4. There was statistically significant difference between male and female SSTs perceptions regarding SSE in *classrooms management* as t was (365, 6.22), $p = .000 < .001$. The study found male participants better with ($M = 50.73$, $S.D = 9.72$) in *classroom management* (CM) as compared to their female counterparts with ($M = 44.86$, $S.D = 8.30$) (Table 4.22).

Objective 8: find out gender difference in the perceptions of students regarding school effectiveness;

Results about students' perceptions regarding SE at SS level revealed that (52.5 %; $n = 210$) male students were less confident about their school's effectiveness as compared to (47.5%; $n = 190$) female students. Further, the findings show that overall male students were in the favour of seven factors of school effectiveness ($M = 75.593$, $S.D = 8.765$) as compared to the female students ($M = 71.984$, $S.D = 10.8753$). According to t -test results $t(400, 4.111)$, $p = .000 < .05$, the study, moreover, elaborates the findings of the objective eight with respect to seven factors of school effectiveness.

So, the null hypothesis Ho8: and the related sub-hypotheses (Ho8.1 to Ho8.7) were not accepted (Table 4.25).

1. Significant gender differences of secondary school students' perceptions about *safe and ordered environment* were observed. As, t was (400, 2.121), $p = .035 < .05$. It was found that male students were perceiving that their school have SOE ($M = 16.223$, $S.D = 2.2.699$) as compared to female students ($M = 15.658$, $S.D = 2.627$), (Table 4.24).
2. No gender differences of secondary school students' perceptions about *high expectation's climate* were observed. As t was (400, 2.748), $p = .006 > .05$. The study found that female participants were not in favpur of HEC ($M = 12.868$, $S.D = 1.787$) than male counterparts ($M = 13.343$, $S.D = 1.665$), (Table 4.24).
3. Significant gender difference between male and female secondary school students' perceptions regarding instructional leadership through t - test were detected. Where t (400, 2.517), $p = .012 < .05$ was found. Consequently, on the basis of mean values, there was a slightly small difference among the students of both the genders. It was found that male students ($M = 16.605$, $S.D = 2.999$) have IL by educational manager in their schools as compared to female students ($M = 15.858$, $S.D = 2.923$) on the basis of mean scores (Table 4.24).
4. No significant, difference in (male and female) secondary school students (SSS) on the subject of *opportunity for student to learn through time on task* (OLSTT). For instance, t (400, 1.843), $p = .066 > .05$. On the other hand, male SSS reported slightly higher mean ($M = 12.609$, $S.D = 2.519$) for OLSTT as compared to female counterparts ($M = 12.184$, $S.D = 2.043$), (Table 4.24).
5. The result described that there was significant difference in male and female, sectors secondary school students (SSS) about *clear cut focused mission* (CFM) as (400, 2.261), $p = .024 < .05$. It exhibited that male secondary school students (SSS)

were found slightly better with a considerably higher mean ($M = 8.570$, $S.D = 1.674$) in CFM than the female participants ($M = 8.200$, $S.D = 1.604$), (Table 4.24).

6. There was a statistically strong and significant difference among the male and, female secondary school students (SSS) as regards to *monitoring student progress frequently* (MSPF) as $t(400, 3.227)$, $p = .000 < .05$. The female SSS conveyed that they are not monitored frequently ($M = 11.384$, $S.D = 2.342$). On the other hand, the male SSS rated more ($M = 12.124$, $S.D = 2.240$) on having this factor of SE (Table 4.24).
7. There was statistically significant difference between the male, and female secondary school students (SSS) perceptions regarding *home school relation* (HSR) as $t(400, 3.408)$, $p = .000 < .05$. It was found that the male schools with ($M = 13.206$, $S.D = 2.096$) have strong HSR as compared to female schools with ($M = 12.468$, $S.D = 2.225$), (Table 4.24).

Phase II: Qualitative findings

Qualitative research is a type of research that explores and provides deeper insights into real-world problems. Instead of collecting numerical data points. QUAL research can help expand and deepen understanding of data or results obtained from quantitative analysis (Moser & Korstjens, 2017). Through Interpretative Phenomenological Analysis (IPA), the researcher explored the lived experiences of fifteen male and female secondary level school educational managers (SSEM1-SSEM15), fifteen teachers (SST1-SST15) and 15 secondary school students (SSS). Each selected educational manager, teacher and student participated in a semi-structured interview. These interviews were led by the scholar. Venue for interview was decided by the interviewees. The interviews sought to address the RQ for study such as: (1) how do educational managers' perceive their instructional leadership functions? This part explores the findings in relation to instructional leadership. This part also discusses that how findings confirm and contradict with the RQ. The second question was: (2) how do teachers perceive their sense of self-efficacy? This part explores the

findings in relation to sense of self-efficacy. Further the findings related to RQ (3) to what extent educational managers' instructional leadership and teachers' sense of self-efficacy effects school effectiveness were also discussed.

Three themes emerged from the participants' response through interview for instructional leadership. These themes were:

Theme 1: defining and communicating goals.

Theme 2: managing curriculum and instruction.

Theme 3: Monitoring and providing feedback.

Theme 1: defining and communicating goals

“Defining and communicating goals” was described as one of the themes emerging in the data. 15 participants commented on the “Defining and communicating goals” associated from various standpoints. SSEM1 with a perception of practicing instructional leadership role described that a school becomes effective if the educational managers perform IL in their respective institutions and SSEM5 with realizing their responsibilities as instructional leader.

SSEM1:

“My role as an educational manager holds different responsibilities. First and foremost, I am the instructional leader. For the school I am a safe environment, and responsible for parent involvement. I am discipline. I am mission of school. I am office management. I’m high expectation environment. I am an opportunity for student to learn. Just multiple roles that I play. And am often facilitator, sometimes counselor. It’s just everything.”

SSEM5:

“I would like to share that what makes me feel good. That’s what I want my teachers, student and their parents to think that I’m not the educational manager, I am the instructional leader and whenever I can I write that down on paper. It’s also make me comfortable if they feel free to accept the goals I derived for school effectiveness”

The participants emphasized that they are practicing instructional leadership for defining and communicating goals that improve school effectiveness.

Theme 2: managing curriculum and instruction

SSEM4:

“I visit classrooms to monitor how teachers are busy to engage the students successfully. I also observe that teacher have enough information about the topic under study, providing time to students for learning, asking questions and supporting them to understand the topic. Frankly speaking I strictly monitor their instructional strategies as I am responsible for school effectiveness.”

SSEM9:

“I believe that when a teacher has difficulty in teaching a topic or subject they need guidance. I also focus when my teacher isn’t comfortable, it’s about providing support to that teacher. I instruct them to teach in a variety of ways to make sure that every student must learn. I trust that my teacher has the tools they need to deliver the curriculum the best it can be delivered.”

Theme 3: Monitoring and providing feedback

SSEM3:

“I believe Monitoring, reviewing data, assessing not only the students but also the teacher, doing observations, just making sure through quick feed back again that pupils are getting the best opportunities for learning through time on task enhance effectiveness of my school. Moreover, being visible is also part of my role as instructional leader.”

SSEM8:

“I encourage my teachers to participate professional development courses managed by the department in QUAID for the staff. I frequently visit classrooms, and observe teaching as these are not formal observations but I’m going to give my teachers feedback on what I observed. And the teachers generally really open to it because I think they want to be better at what they do”.

The second question focused TSSE. The part explored findings about teachers' SSE. Three themes emerged from the participants' response through semi structured interview for teachers. These themes were:

Theme 1: Student Engagement

Theme II: Instructional strategies

Theme III: Classroom Management

Theme 1: student engagement

Student Engagement" was described as one of the themes emerging in the data. 15 participants commented on the "Student Engagement" associated from various standpoints. ST3 with a feeling of self-efficacy stressed that a lesson becomes very effective if the learners are involved in it and SST7 with a feeling of self-confidence and happiness was skillful in realizing it.

SST3:

"I try very hard and manage to engage the students successfully by providing them enough information, time for learning, monitoring their progress regarding understanding of the topic under study with the help of different questions and supporting them to understand the topic as well as choosing something interesting enough to get their attention."

SST7:

"I can involve all the learners in my topic. When they are engaged and talk to each other about the content, a lesson goes indeed well and this makes me happy. I feel proud of myself because I am doing something right for the school effectiveness through sense of self-efficacy in student engagement."

The participants including emphasized that they have sense of self-efficacy for student engagement that facilitates learning and teaching experiences. At the same time, they know how to cope with problems of student engagement while teaching.

Theme 2: Instructional Strategies

For the second theme SST2 reported high sense of self-efficacy about the use of instructional strategies based on the awareness of students' individualities and difficulties. SST9 also supported the theme.

SST2:

"... to be truthful, I know correctly how to apply appropriate instructional strategies in classroom teaching. I put myself in the place of my students. So, I learn how to use these strategies more clearly." I also endeavor to answer the questions by myself.

SST9:

"I try to use different teaching strategies. I believe that I'm really successful in using teaching strategies according to levels, interests, and expectations of my student in every kind of classroom to make the lesson more efficient."

As revealed in the statements, participants described that they have sense of self-efficacy for instructional strategies and they know that modified instruction is of great importance in order to achieve efficacy in instructional strategies not only for the success of students but also for school effectiveness.

Theme 3: Classroom Management.

The third theme that emerged as a result of IPA of interviewees' was identified as "Classroom Management." SST5 stated that the objective was to set the tone of the class straight away according to the vision and mission of school for safe and orderly environment through in-class rules and policies to adhere to.

SST5:

"I believe it's important to maintain a boundary with students in terms of teacher-student and relationships with their parents as well. I am enormously cooperative to students of my class. I deal with them like my own children. I mean this way I can personally establish a bond with my students and try to solve their learning problems effectively."

SST11:

“I can manage my classroom considerably better in terms of behavior. I establish the rules for a positive classroom environment on the first day. Before I start to teach, I firstly establish a supportive and friendly relationship with my pupils for a democratic classroom. It works effectively and all of the learners are focused on completing their classwork. I push my students to do their work in class attentively. My students behave nicely. They always follow the rules. They are not allowed to misbehave in the class. I am aware of every student’s needs.”

It can be concluded that interviewees were aware of the use of different methods of class control and they have sense of self-efficacy in classroom management.

Two themes emerged from the participants’ response through interview for effects of educational managers’ instructional leadership and teachers’ sense of self efficacy on school effectiveness. These themes were:

Theme 1: EMs instructional leadership effects school effectiveness.

Theme 2: teachers’ sense of self efficacy effects school effectiveness.

Theme 1: EMs instructional leadership effects school effectiveness.**SSEM13:**

“I as Instructional leader ensure that everything is working effectively to make the school goals for learning optimal. I also communicate school vision, mission and goals to teachers, students and their parents. I use school notice board which is visible to all in the entrance area to write school goal.”

SSEM11:

“In order to ensure that you have a school that is moving students, you as the administrator must be well versed across all areas of curriculum, instruction and assessment.... stay current of pedagogy, that helps me to become a better

leader and also to instill in my teachers those kinds of things that they need to understand how children learn. I believe that teaching and learning is at the basis of..., that it's the umbrella that ensures that all of these pieces fit together"

SSEM15:

"I arrange occasionally a critical friends group meeting with the staff. There are 15 teachers in my school that meet here once a month for one hour and we really talk about how to be a reflective learner..." I advise the teachers to introduce the topic, explain it, be present in classroom to communicate with students about their difficulties that it's all my feedback to them."

SSS9:

"The school educational manager gives certificates and encouraging comments on good performance of teachers in the classroom. Our teachers are advised to concentrate on their instructional strategies. The ACR of those teachers who excel in their class is filled with constructive remarks. Our educational manager also gives prizes to us (e.g. Uniforms, bags, fee consesion, and other awards). In PTM, our progress report is shared with our parents. Our educational manager and teachers have strong relation with our parents. They also focused to provide us a safe and ordered environment. They expect that we should produce better results for school effectiveness".

Theme 2: teachers' sense of self efficacy effects school effectiveness.

SST12:

"When my students are not interested in the lesson, I talk to them and learn what the problem is. By doing so, I sometimes can find solutions for them to be involved in the course. I can effectively engage the students in the lesson. Additionally, to achieve student engagement, I encourage them and try a variety of methods or resources seeing their interests."

SST10:

"I am good at using altered methods of teaching, which aids me to plan courses effectively, and I can say that I continuously manage to do it. I think all the students in the class have diversity in learning, where you teach the same course

using several methods, have so far been the most affected. Namely, different kinds of coursework, instructional methods, and assessment techniques to each student work well.”

SST14:

“I think I am a teacher whom my students can ask questions easily without any hesitation. I mean I am approachable to them. I can communicate well with my students. They feel comfortable to make wishes. I mean I’m this kind of a teacher who can help them. It’s important to have some fun in between lessons to. I can easily make the learning environment enjoyable.”

SSS12:

“In our school educational managers’ and teachers’ follow the syllabus and study plan of government. They follow a timetable. We learn all compulsory and elective subjects rapidly. Our teachers use new instructional strategies to teach the subject. They made daily, monthly, and annual assessments and our school educational manager’s monitor frequently our progress frequently. Our teachers’ helped excellent and stressed learners. Our teachers can manage the class effectively. They engage us in classroom activities as well.”

The study's qualitative findings related to RQ3 showed that the all the interviewees were in favor of the emerged themes and they believe that instructional leadership by educational manager and teachers’ SSE effects school effectiveness.

Phase III: Triangulation of Findings

1. Qualitative findings complement the quantitative results by revealing that all the fifteen participants were well aware of their functions of *defining and communicating goals*. They stated that they frame school goals. They shared them with teachers, and community members as well. They reported that with the vision and goals of the school in mind, educational managers were able to assure school as an effective institution and working in line with the vision of school (Table 4.58).

2. Similar to the quantitative results, the qualitative findings showed that participants hold the understanding that curriculum and instruction were vital for an effective school. All the respondents were in favor of this theme. This study found that *managing curriculum and instruction* helps to accomplish school goals and ultimately improve school effectiveness (Table 4.58).
3. Matching with quantitative findings, the qualitative findings revealed that *theme three* was related with *providing feedback on educational process*. It also included monitoring of performance of the students. All the participants agreed that the school monitoring and providing feedback boost the effectiveness of school (Table 4.58).
4. The qualitative findings complement the quantitative results by revealing that all teachers who participated in interviews in the study supported the theme related to student engagement in theme number one. They provided time for learning to students. They tried to develop critical thinking in students. The study found that teachers can engage students successfully. This finding shows that teachers, have a robust SSE around engagement and their performance strengthening school effectiveness (Table 4.58).
5. Matching with quantitative findings, the qualitative findings revealed that in theme number two, teachers talk about the selection and use of instructional strategies. They explained that instructional strategies improve learning in all areas in the school. They perceive that through this belief that they have competency in the selection and use of instructional strategies they were supporting school effectiveness. The study found that it helps the teachers to get through challenges of teaching, and teachers possess a strong SSE about IS (Table 4.58).
6. Similar to the quantitative results, the qualitative findings of the study found in theme number three that teachers consider it as success in teaching if students are contented in the classroom. They support their student and handle their problems related to learning through a positive classroom environment. Teachers reported they learn from their past experiences. All the participants

were in favor that they know how to manage classroom and to have skills of management. Furthermore, it can be deduced from the comments made by the participant teachers for the theme “*Positive classroom environment*” that managing challenging students, interacting socially with them, teaching achievement, and skill development on the teaching profession are the main domains for which the participants may have varying expectations about their own self-efficacy. In reality, these important areas seem to be essential for effective schooling. The participants in the study have sense of self-efficacy for classroom management and knew how to utilize various forms of class control (Table 4.58).

7. Similar to the quantitative results, the qualitative all the participants were in favor that educational managers’ instructional leadership in certain specific areas: defining school mission, manage instructional program and promote a positive school climate and teachers’ sense of self- efficacy in three dimensions: engaging students, use of different instructional strategies and classroom management effects school effectiveness (Table 4.58).

5.3 Discussion

The study aimed to find out instructional leadership of school EM, teachers’ beliefs about their sense of SSE and their effect on school effectiveness. It was a mixed method research with ex-post-facto design. Triangulation method was applied. The sample of the study was 72 school managers, 365 teachers and 400 students of the five tehsils of Rawalpindi district of the province of Punjab, Pakistan. Overall, participants of the study were 837. Quantitative data was gathered through three instruments (PIMRS, TSES & SESQ). Consequently, two interviews were also used for qualitative data collection (one for educational managers, second for teachers). This section described discussion related to both data sets.

5.3.1 Discussion of quantitative findings

First objective of this research was to examine educational managers’ instructional leadership functions at secondary school level in the public and private

sectors. The objective was achieved through t-test applying on collected data from the respondents. Results of the study shows that EM of both the sectors perceived that they are practicing instructional leadership functions in their schools respectively. There was no any single school EM who reported that he/she was not practicing IL. Results of the present study are consistent with the study of Craig (2021) where they found EM perform their role as instructional leader. Ahmad, Ali and Sewani (2021) agreed for the significant and positive effect of instructional leadership behaviors of educational managers on teacher professional development. Hallinger et al., (2020) claims that educational managers frame the school mission as instructional leader. Turkoglu and Cansoy (2018) reported significance of instructional leadership only for the collaborative culture. In their study Saeed, Khan and Khan (2018) expressed their agreement regarding function of frequent monitoring of students on regular basis. Santikaya and Erdogan (2016) claims that educational managers exhibited instructional leadership more frequently in the dimensions of setting and communicating goals. In contrast the present study stressed three key roles of educational managers as instructional leader. A systematic review of various studies on instructional leadership (e.g Liu et al., 2020; Bal, 2019; Yagmur, 2018; Hallinger, 2018; Epstein, 2018; Pinter, 2017; Urick & Bowers, 2017; Nguyen & Yap, 2017; Yasin et al., 2017; Hallinger et al., 2017; Liu, Hallinger & Feng, 2016; Boston et al., 2016; Berebitsky & Colby, 2016; Wang & Degol, 2016; Li, Hallinger & Walker; 2016) witnessed that educational managers are instructional leaders in schools. Similar results were found from another research in Malaysia (Ismail et al., 2018) and China (Liu & Hallinger, 2018). In both the studies (Hallinger & Murphy, 1985) model was used. These studies' results revealed a significant positive effect of instructional leadership of educational managers on monitoring student progress and teacher professional development. Current study participants expressed similar views. The study did not find consensus with Park (2016) who insisted that educational managers need to offer effective systems for incentives or punishment to motivate teachers, so his results are not in conformity with the outcomes of this study. Through the objective one the researcher re-visited the three main dimensions IL, which has provided an opportunity to take stock and to re-evaluate what we know, categorically, about instructional leadership. The present study participants suggested that this field is now

in a much stronger empirical position than in 2018. For those scholars entering the field there is a great deal of certainty about what is empirically known and huge potential for future studies that venture deeper into the concept, performance and consequences of instructional leadership in schools.

The second objective of the study was to explore teachers' SSE at secondary school level. This objective was tested through t-test applying on collected data from the respondents. The study found that the perceptions of teachers in both sectors (Public & Private) were significantly different. The public sector school teachers have a higher SSE than private. Recently, the study of Lazarides et al., (2020) as well as Buric and Kim (2020) expressed their agreement with the current research. They found positive relationships between teacher self-efficacy and their self-reported instructional quality and engagement. The current research contradicted with the study of Erdem and Baysen (2020), which focuses on the self-efficacy of secondary school teachers. They found that school teachers had lower self- efficacy. The study of Wilhelm and Berebitsky (2019) also seems in agreement with the present study as the found strong self-efficacy in teachers. Findings of this research are contrary to outcomes of Zamir et al. (2017) who reported that the private school teachers, have developed SSE in contrast with their public sector counterparts. The participants of current study express their views in the favor of public sector secondary school teachers. In the same context, Ahmed, Khan and Rehman (2015) conducted a comparative study to investigate the sense of teacher efficacy between male and female school teachers and found that female teachers have better self-efficacy skills than male teachers. A significant mean difference was found in the male and female teacher self-efficacy. The responses of the participants of this study are contradict to Ahmed et al. Moreover, Saks (2019) found that self-efficacy is a vital factor which can influence the level of engagement, which is in consonance with current research. It is in consonance with Schwab (2019) as he examined teachers' self-efficacy to control behavioral disorders in students as a variable. Previous studies such as (Ismail, 2019; Sadeghi & Khezrlou, 2016) expressed their agreement with the current study. There seems no consensus with the studies Brown, Myers and Collins, (2021) and Sehgal, (2016). The findings of the study are in line with Bay (2020), Celik (2019), Ozcelik (2019), Semerci and Balat (2018), Gunes (2016), Bozbas (2015), Basar (2014), who reported

importance of efficacy in classroom management. Study revealed that female perceived themselves competent in student engagement as compare to men. This study provided valuable information regarding teachers' sense of self-efficacy. District and secondary school teachers, state entities, and corresponding policy makers may consider this information for planning of professional learning for school teacher skill development to attain school effectiveness. The findings of Jabeen and Khan (2022) are aligned with the current study as they indicated that the teachers had a strong understanding of teacher efficacy and practiced teacher efficacy behaviors associated with improving the teaching and learning process in Pakistani context.

The objective three described the perceptions of students about school effectiveness. The study found difference among student's perceptions regarding school effectiveness factors in public and private sector. These findings are aligned with Trujillo (2013), Hallinger (2011) and Ramberg et al. (2018). Moreover, the findings are also inline with Velasquez et al. (2013), Ertesvåg and Roland (2015), Scheerens (2016), Låftman et al. (2017).

The objective four described that IL has a strong and positive relationship with SSE. The researcher applied correlation and linear regression applying on collected data from the respondents to test the hypotheses related to the objective. The study of Liu and Hallinger (2018) also seems in accordance with the present study where it was observed that instructional leadership practices of school leaders, specifically those related to managing instruction as well as the supervision and evaluation of instruction, coordinating curriculum, and monitoring student progress were predictors of teachers' self-efficacy. Hussain, Ahmad and Batool (2018) indicated that educational managers as instructional leader support creativity, innovation and practice of new skills in the classroom. Ahmad, Sewani and Ali (2021) revealed that the perceptions of teachers regarding their heads instructional approaches, as an instructional resources provider, feedback on teaching and learning, and visible presence have a significant and substantial effect on teachers' SSE. The study of Cansoy and Parlar (2018) revealed positive and significant relationships between school instructional leadership and teacher self-efficacy. Goddard et al., (2015) reported that instructional leadership is significantly and positively related to teacher self-efficacy. The current study

participants expressed strong relationship among IL and TSSE. They showed consensus with the study of (Duyar et al., 2013). They found a positive and significant relationship between educational managers' leadership and teacher self-efficacy perceptions. They suggested EM can contribute to positive teacher efficacy by engaging in activities such as direct supervision of instruction, in order to improve teaching practices. Another study in the field, showing that there is a significant relationship between the teacher self-efficacy and instructional leadership (Rew, 2013). Consistently, researcher have provided evidence that principals' instructional leadership is an important predictor of teachers' self-efficacy perceptions (Calik et al., 2012). The participants of current research also showed their same apprehensions. Moreover, a study by Hallinger, Hosseingholizadeh, Hashemi, and Kouhsari (2017) who studied a moderate positive relationship between instructional leadership and collective teacher efficacy, hinting at the need to look for relationships between them. The present study was also in agreement with Bellibaş and Liu (2017), as they showed a strong and positive connection between educational managers' perceived instructional leadership practice and the self-efficacy of teachers. In a recent mixed method study of Pearce (2017) educational managers considered visibility as a factor that affects teacher efficacy most. The present study participants suggested that the educational managers can create environments in which they can develop communication with teachers to increase teachers' self-efficacy beliefs. Hence the present study favored for teachers can provide support for EM in preparing instructional environments which could be suitable for the purposes of school effectiveness. The EMs can contribute to positive teacher efficacy by engaging in activities such as direct supervision of instruction, in order to improve teaching practices. Previous literature also revealed that instructional leadership is associated with teachers' self-efficacy (Bellibaş & Liu, 2017; Cansoy & Parlar, 2018; Çalık et al., 2012; Liu et al., 2021). However, this finding is consistent with previous literature (Duyar et al., 2013; Liu & Hallinger, 2018). Instructional leadership practices, mainly focusing on improving teaching, help teachers feel more confident about their teaching (Liu et al., 2021). Dilekçi, & Limon (2022). Their findings indicated statistically significant relationships between instructional leadership and teachers' self-efficacy.

The objective five considered, the effect of educational managers' IL functions and TSSE on school effectiveness. Multiple Linear Regression analysis, were applied to collect data from the respondents. Participants of the present study expressed their views that instructional leadership and teachers' sense of self-efficacy both have significant effect on school effectiveness. There seems no consensus with the study of Lack (2018), who claims that there was no correlation between school climate and teacher efficacy. In contrast, Hassan, Ahmed and Boon (2018) agreed with the notion that IL affects SE. In their study Hassan, Ahmed and Boon, 2018 agreed with the notion that IL affects SE. Their study covers only two variables (IL & SE) of this study and indicated an agreement for these two variables. The present study participants added teachers' SSE with instructional leadership of EM. Findings of meta-analysis (Tan at al., 2020), are also along the lines. They described the effect of instructional leadership regarding institution's results and school climate. But TSSE was missing their analysis. Sisman (2016) reported the effect of instructional leadership on some functions of school effectiveness like school climate. Findings of Parlar, Turkoglu and Cansoy (2021) reported instructional leadership practices are significantly related to a collaborative school climate. Hence there is need to add other school effectiveness factors which have been discussed in the current research. Though results of this research are aligned with the findings of (Ghavifekr et al., 2019), Si-Rajab et al., (2019), Gray (2018), Chiedozie and Victor (2017), Emin Turkoglu et al. (2017), are consistent with the current research. However, the relationship between instructional leadership and teacher self-efficacy for school effectiveness has remained unexamined. Previous studies indicated that there is a healthy and positive relationship between IL & SE, and IL & TSSE. However, researcher found no studies involving these three variables (IL, TSSE & SE) together. Findings are aligned with results of Ghavifekr et al., (2019), Si-Rajab et al., (2019), Hassan, Ahmed and Boon (2018), Chiedozie and Victor (2017) all agreed with the notion that instructional leadership effects school effectiveness.

Results of the sixth objective of this research stated significant difference in gender of educational managers' perceptions about instructional leadership functions. The study revealed that male educational managers are strongly performing IL functions as compared to female educational leaders. Shaked et al. (2018) female

educational managers relied on their instructional experiences and knowledge whereas the male EMs in their study relied on formal authority. Their findings are contradicting with the current research. The findings of this research are consistent with Hallinger et al. (2016), and Hallinger et al. (2017), such as they acknowledged gender differences in instructional leadership practices of female and male as an EM. There seems no consensus with the studies of (e.g Mannan et al, 2019; Shaked, Glanz & Gross, 2018). There seems no consensus with the study of Nguyen, Hallinger, and Chen (2018), they found that the primary school educational managers were exercising instructional leadership at high level. Moreover, evidence indicated stronger instructional leadership from the female educational managers, though the pattern was not strong. Shaked, Gross, and Glanz (2017) claims that female educational managers gave the impression to have better instructive expertise and paid more attention to relationships. The present study participants showed no unanimity with them. In a meta-analytic study on the differences between males and females in instructional leadership by Hallinger, Dongyu, and Wang (2016), it was discovered that gender had a “small but statistically significant effect” on instructional leadership, favoring females. Their findings are not interconnected with the results of the current research as the participants of this study responded in favor of male counterparts regarding IL. When comparing men and women in the context of instructional leadership the current study contradicted with the study of Hallinger, Li, and Wang (2016). They have indicated a small but statistically significant gender effect, with female educational manager consistently obtaining higher ratings on instructional leadership when compared with their male counterparts. The findings are similar to Alameen et al. (2015) who found that insignificant sum of women can form the vision and mission for the school.

The seventh objective concerned with the investigation of gender differences in TSSE at SS level. Commencing the results presented in Table 4.22, the outcomes discovered that teachers mostly have a higher efficacy in instructional strategies than the student engagement and classroom management dimensions of self-efficacy. This finding is similar to some research studies (e.g, Sevgi et al. 2021; Bay, 2020, Celik 2019, Ozcelik, 2019; Semerci & Balat, 2018; Gunes, 2016) who report the importance of efficacy in classroom management. In relations to teachers’ SSE conclusions related to gender differences showed a higher mean score for male counterparts. Leshai (2017)

Findings revealed a significant difference between male and female teachers on student engagement and classroom management where male teachers were likely to be significantly better in classroom management and student engagement than female teachers. This finding is also similar to Sarfo & Amankwah, 2015; Butucha, 2013). They indicated that there were significant gender differences in self-efficacy in classroom management with males having higher scores than females. The result of the current study was contrary to Okeny and Enyi (2015), and Nejati et al. (2014) who found that there was no significant difference between males and females on teachers' SE. The current study further reported that male teachers are better than female in classroom management. The findings of this study indicated that male maintained strong SSE as compared to female teachers. The views of Ahmad, Khan, and Rehman (2015) were seen in disagreement with the present research. They reported that female teachers have higher self-efficacy than males on efficacy to influence classroom management, instructional strategies students, engagement subscales. Through variance analysis of L. Shoulders, & Krei (2015) we can see not significant gender differences. The present research was not found in consensus with Atta, Ahmad and Ali (2012). They observed female teachers' secondary schools have better self-efficacy than male teachers. Same results were shown by previous research done by Shazadi, Khatoon, Shamsa and Hassan (2011). They observed significant difference in the self-efficacy of secondary school male and female teachers. Mean scores of female teachers was higher than male teachers on self-efficacy scale. Which showed unanimity with the views of this research's participants. The participants of the current research urged that in future research that further explores the effect of gender on TSSE at different level of schools can inform what administrators can do to foster sense of self-efficacy and how induction programs can best support new teachers.

The eighth objective concerned with the examination of gender differences in students' perceptions about school effectiveness at SS level. The results presented in Table (4.24), the outcomes discovered that male schools were effective as compare to female secondary level schools. The findings of the study were inline with the study of Saleem and Naseem (2013). They found gender differences in the perception of students about school effectiveness. These results were consistent with the findings of some previous researches (e.g. Brookover, 1979; Edmonds, 1979; Rutter, 1979). A

research study by Day and Leitch' (2007) supported the findings of current research, who reported that continuous professional development aids to enhance school effectiveness.

5.3.2 Discussion for qualitative findings

The review found very few qualitative studies of instructional leadership, and those that existed, tended toward broad description, rather than deep analysis. More robust descriptions of instructional leadership practices are still required to illuminate exactly how this approach to leading schools (Harris and Jones 2017). The qualitative articles (Jamelaa and Jainabee, 2012; Jamilah and Yusof, 2011; Mariani et al. 2016; Salleh et al. 2007) all considered the relationship between instructional leadership and school performance. Ghavifekr et al. (2015) concluded that educational managers demonstrated the following personal dimensions when practicing instructional leadership; (a) professional leadership; (b) shared mission and clear goals; (c) continuous monitoring of teachers' progress; and (d) professional growth of the teachers.

The findings are in line with a mixed method study by Orakci, Göksu and Karagöz (2023) that teachers' self-efficacy levels were high, and they felt self-efficient in their teaching. A mixed method research by Gale et al., (2021) supported the findings of current research. Earlier in a phenomenological investigation Norton (2013) supported the findings of teachers' sense of self-efficacy. The study participants suggested that Furthermore, in order to cultivate higher teacher self-efficacy, administrative staff and teachers should provide a forum for positive discussions, utilize anonymous teacher surveys and student surveys on teachers, and conduct more one-on-one discussions with the teachers. In interviews teachers have described feeling more capable after seeing a colleague teach well, particularly when they gained pedagogical knowledge from the experience (Palmer, 2011; Chong & Kong, 2012). The findings were not in line with Morris et al. (2017) who suggested that lack of SSE may be due to the difficulty of recalling something that is ongoing rather than a more salient event. In both surveys and interviews, female teachers in the study were more likely than male teachers to describe physiological and affective states that influenced their sense of efficacy.

5.3.2 Triangulation of Discussion

Both quantitative findings and qualitative findings complemented each other for three dimensions of instructional leadership (define school mission, manage instructional program and promote a positive school climate) with three emerged themes from the QUAL data set (Theme 1: defining and communicating goals, Theme 2: managing curriculum and instruction, and Theme 3: Monitoring and providing feedback). Moreover, findings about teachers' SSE. Three themes emerged from the participants' (Theme 1: student engagement, Theme 2: instructional strategies, Theme 3: Positive classroom environment) complemented the results deduced from quantitative data set about three dimensions of TSSE (efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management). During literature review the researcher did not find any study who supported the findings of this research as the combination of these three variables in a single study is the novelty of this research.

The study also uncovered that teacher self-efficacy significantly discriminates through gender. Duban and Gokcakan (2012) findings were dissimilar to the current study. Likewise, in a mixed method research Ekinici et al. (2014) also found no gender differences in the sense of self-efficacy in teachers. Whereas there exist studies with different findings (e.g. Yalçın, 2011; Kurt & Ekici, 2012; Arpacı & Birhanlı, 2013) revealing that teacher self-efficacy significantly separates in favor of female teachers. While, Morgil et al., 2004 were in favor of male teachers. The study revealed that teachers' sense of self-efficacy perceptions are similar in terms of the school effectiveness.

5.4 Conclusions

From results of the present research, conclusions were drawn and divided into two phases: Phase (I) reports (conclusions based on quantitative data analysis) and results of Phase II describe (conclusions founded on qualitative data analysis). The study concluded:

Phase I: Quantitative conclusions

Based on the test results, M-PIMRS, M-TSES and M-SESQ can be used to assess instructional leadership of educational managers, teacher sense of self-efficacy and school effectiveness in the Pakistani region. Reason is as in the current research EFA was performed to modify all adapted research instruments according to the context of this research.

From findings, of objective one it was concluded that all the educational managers were practicing instructional leadership functions in their schools. Nonetheless, the public sector school educational managers were found better than the private sector educational managers in IL functions. It may be the reason that the public sector educational managers have maximum opportunities of professional training as compared to the private sector educational managers. In addition, the public sector educational managers were appointed on certain selection criteria of educational and professional qualification and job experience, whereas the private sector educational managers do not have any selection criteria of educational qualification and job experience. They are generally the owner of the school or they may be some trustworthy individuals of the school owners. It was concluded that almost all the educational managers at secondary school level in both the sectors demonstrated IL practices, in their schools respectively. However, public and private sectors were the same in CC and MSP. The reason for being on CC and MSP at the same level can be that curriculum coordination and monitoring students' progress are generally the routine activities which continue in all educational institutions whether they are public or private institutions.

Results of Objective two concluded that the public sector school teachers were found strong in their sense of self-efficacy than the private sector school teachers. It may be the reason that in the public sector teachers' recruitment procedure is very strict and is based on some merit criteria. Another possibility is that in the public sector teachers have to get professional competency through certain professional development trainings. They learn in pre-service trainings how to manage and control the learners. The public appear to be more qualified as compared to the private sector school SSTs. As, teachers in public sector receive higher salary which increases their

motivation and satisfaction level and conversely affect their sense of self-efficacy. From outcomes of objective three it was concluded that there is an acceptable and significant association among instructional leadership and teachers' sense of self-efficacy. This relationship was found out through correlation. When an educational manager enacts as directive, supportive, visible and as a facilitator, consequently, he/she improves teachers sense of self-efficacy which leads to school effectiveness. Every aspect of IL is counted for TSSE.

The objective three described the perceptions of students about school effectiveness. It was concluded that private sector students perceived their school are effective as compare to public sector schools. The reason may be that in private sector school educational managers' may take initiatives quickly according to the need and requirement of the era for school effectiveness, but in public sector schools educational managers' follow government instructions. Another reason may be the difference in funds allocation process.

On the basis of correlation, the study concluded for the objective four that instructional leadership and sense of self -efficacy have positive relationship with each other. The reason may be that educational managers are supposed to be incharge of the curriculum, staff motivation, and capacity building in addition to the quality of teaching and learning. Likewise, teachers' sense of self-efficacy is the teachers' confidence in his or her competence to plan and carry out the actions necessary to complete a given teaching task. So both are focusing teaching and learning process and work for its improvement.

Results of objective five based on t-test concluded that there is a significant effect of educational managers' IL and teachers' SSE on school effectiveness. This research finds out the effect through multiple linear regression analysis. Educational managers who practice instructional leadership with special focus on mission of school, instructional strategies program and promotion of positive learning climate improves school effectiveness through collaboration of teachers. While teachers who possess a strong SSE can perform effectively. Such teachers can deal with disruptive behavior of the students. They can successfully cope with their daily teaching tasks due to their beliefs about their teaching skills and knowledge. Teachers with a strong

SSE have an ability of facing challenges related to job, can manage discipline problems well. Particularly, the teachers, who show concern for the improvement in the learning of their students and value their own expertise in instructional strategies of what and how they are teaching, can profit in terms of sense of self-efficacy.

Outcomes of objective six concluded significant differences in gender about educational managers' IL practices. Males were better than females in certain functions of instructional leadership such as: (1) FSG, (2) CSG, (3) SEI, (4) MSP, (5) PIL, (6) MHV, (7) PIT, and (8) PPD. The reason may be that males were generally interested in strategic tasks, supervision, evaluation, monitoring, time management, public dealing, designing incentives schemes, inspiring followers for good performance and creating professional development opportunities and certain tasks like that, whereas it was observed that females do not have interest in such tasks. Likewise, male and female educational managers were perceiving that they both are equally (9) coordinating the curriculum (CC) and are slightly different in (10) monitoring student progress (MSP). So, the results related to function CC and MSP were no significant. It was concluded that male educational managers perceived that they are practicing IL better than female EM. Male school managers stereotypically were stronger in overall knowledge than female SM. They knew an excessive deal about secondary education. Moreover, they were very interested in moving up to the administrative hierarchy.

Findings of objective seven concluded that there were significant gender differences in teachers regarding their SSE. Overall results of the study depict that male teachers have a strong sense SE as compared to female counterparts. The reason is that males remain self-efficacious regarding their teaching skills, even when facing disruptive behavior from students. They always look for innovative methods to overcome such kind of disruption in the class. Another reason for this difference may exist due to motherly household tasks such as: maternity leave, and every day jobs of kids. So that, they could not get extra-time, which is basic requirement to prepare innovative teaching skills as well as strategies. It was also concluded that the less use of technology females is reluctant to learn the current IS and CM skills with the use of ICT.

Results of objective seven concluded adequate gender differences in student engagement. Female teachers have strong SSE in SE than male colleagues. It is assumed that this difference may occur due to emotional concerns of female teachers towards their student as compare to male. They easily can notice and understand, when a pupil is not effectively engaged in learning process. Further, added reason is that females have mother like feelings, so they can better understand the problems of students at the time of their learning.

Findings of objective eight concluded that there were significant gender differences in students' perceptions regarding school effectiveness. Overall results of the study portray that male schools are effective as compared to female secondary level schools in some various factors of school effectiveness. The reason may be that male educational managers' participating in instructional leadership functions actively. They also establishing guidelines for teachers to improve their instructional straties. They also work for the provision of safe and ordered environment. Another reason may be that male are stronger than female in decision making and are more at comfortable with their interdependence and are eager to try new things and take risk to improve their school's effectiveness.

Phase II: Qualitative conclusions

Through Interpretative Phenomenolo gical Analysis (IPA), the researcher explored the lived experiences of fifteen educational managers (SSEM1-SSEM15), fifteen teachers (SST1-SST15), and fifteen secondary school students (SSS1-SSS15). They participated in semi structured interview. These interviews were conducted by the researcher personally. Venue of interview was decided by the interviewees. The interview sought to address objective no.1, 2 and 4 followed by three research questions.

Question 1: How do educational managers perceive their instructional leadership functions?

The data gathered through semi-structured interviews suggests that educational managers' express different views regarding their practices as instructional leaders.

Overall, the responses showed that male and public sector school educational managers perform instructional leadership functions in their schools respectively. Based on IPA analysis, the researcher inferred three superordinate themes for instructional leadership namely: (1) defining, and communicating goals, (2) managing curriculum, and instruction, and (3) monitoring, and providing feedback for positive school climate. According to the inferred theme number 1, educational managers define and communicate goals effectively and reported that through defining and communicating goals of the school, they were able to assure school as an effective institution. According to the inferred theme number 2, it is concluded that educational managers can also manage curriculum and instruction and it helps to accomplish school goals and ultimately improve SE. Theme number 3 highlights that educational managers monitor the performance of teachers and students frequently on strict basis and provide feedback on immediate basis which boost the effectiveness of school. The reason is that they are responsible for safe and orderly environment. Moreover, they are accountable for their annual performance for promotion. The findings are in line with Liu et al. (2020), Ghavifekr et al. (2019), Demerath (2018), Chiedozie and Victor (2017), Ngugen and Yap (2017), Yasin et al. (2017). Results are also in line with (Si- Rajab et al., 2019) and (Hassan et al., 2018).

Question 2: How do teachers perceive their sense of self- efficacy?

The public sector and male school's educational managers are strong in their SSE. For TSSE, three superordinate themes: (1) student engagement, (2) instructional strategy, (3) classroom management were inferred. The findings showed the all the fifteen SSTs were positive in their perceptions regarding their sense of self-efficacy with regard to some variations. In theme one which is student engagement teachers are competent to engage the students. According to theme two which is related to instructional strategies, teachers reported that they have a strong SSE. Its reason might possibly certified courses, teachers learn the use of different instructional strategies which build their sense of self-efficacy. Moreover, theme three indicates that school tutors hold higher SSE regarding classroom management. Findings are similar to Orakcı, Göksu and Karagöz (2023), Smith (2022), Saeed, Farooq and Muhammad

(2022), Akram & Ghazanfer (2014), Moturi (2014), Butucha (2013), Bilali (2013), and contrary to Tison et al. (2011).

Q3: To what extent educational managers' instructional leadership functions and teachers' sense of self-efficacy effects school effectiveness?

Two themes (EMIL effects SE and TSSE effects SE) were emerged through interpretative phenomenological analysis. These themes support quantitative result. All the respondents reported that their instructional leadership functions like (developing and communicating school goals), (Managing curriculum and instruction), (Monitoring and providing feedback for positive school climate) effects school effectiveness. Moreover, the interviewees reported that Teachers sense of self-efficacy effects school effectiveness by engaging students in classroom, using different assessment and instructional strategies, motivating non-cooperative students for learning and engaging them in the classroom. Findings are alike to Shahzad and Noureen (2017); Gale, Alemdar, Cappelli and Morris (2021); Kılınç, Koşar, Er and Öğdem (2016), and Chong and Kong, 2012). The findings are contradicting to Cansoy, Parlar and Kılınç (2017). The findings are also dissimilar to Sarıçam and Sakız (2017). An earlier study by Savaş, Bozgeyik and Eser (2014) also presented contradict findings.

Phase III: Triangulation (mixing of QUAN and QUAL conclusions)

Although the results of the current research are not generalized in all the districts of the province of Punjab, yet this study provides an empirical evidence for the decision makers, policy developers and researchers across the country that IL and SSE of teachers are significant variables for improvement in school effectiveness. Overall, the results including quantitative and qualitative data conclude that the IL functions of educational managers and teachers' sense of SE collectively provide input for school effectiveness. The results of this research have some practical implications as well. The findings propose that district education officers and school management may pay attention to both IL and TSSE. Subsequently, these variables have the potential to positively influence effectiveness of a school through providing safe and orderly environment, climate of high

expectations, success of students, providing opportunity to students for learning, assigning proper time for task to students, clearly focusing on the mission of school, regularly checking of student progress and most importantly creating a positive and strong relationship between school and home.

5.5 Recommendations

Keeping in view the findings and conclusions gained through statistical analysis of data of the present research, the researcher suggests certain following recommendations:

1. From demographic analysis it was found out that educational manager of private SS had lower academic and professional qualification and experience as compared to public sector educational managers. Therefore, it is suggested that the government agencies like Private Educational Institutions Regulatory Authority (PIRA) may take some measures to guide private school administration / owners regarding appointment criteria of EM like academic and professional qualification and professional experience to accomplish their duties as instructional leader.
2. School Education Department of Government of Punjab may take some measures to guide private school administration regarding provision of professional training of educational managers in certain dimensions of instructional leadership like promote a positive defining school mission, managing instructional program, and pr .school climate
3. School Education Department of Government of the province of Punjab may arrange training for school educational managers in how to coordinate curriculum to teachers and how to monitor students' progress.
4. Instructional leadership functions can be further strengthen through development of training modules for educational managers on regular basis.
5. Owners/ administration of private schools may arrange practical training sessions for teachers to improve their sense of self-efficacy in areas of student engagement, instructional strategies and classroom management.

6. Likewise, practical training modules can be developed about how to increase self-efficacy of secondary school teachers (SSTs) and such training can be organized on regular basis to increase self-efficacy of teachers.
7. Teacher training institutes may arrange trainings for public sector secondary school's teacher education program course work on school effectiveness factors.
8. Review and refine curriculum to ensure the incorporation of the school effectiveness factors into curriculum for the improvement of public sector schools.
9. Technology in education can be a helpful tool to increase the use of instructional strategies and classroom management techniques for effective engagement of students. Therefore, it is recommended that educational managers of both the sectors (Public & Private) may support teachers for the application of ICT in classroom teaching.
10. In 21st century today's students are learners of 21st century, in future we can bring them to learning through improvement in teachers' sense of self-efficacy (TSSE) in the use of technology in classroom teaching.
11. As present studies on school effectiveness focus on the teacher, head teacher and students, there is a need for future studies to consider the views of school effectiveness factors from the perceptions of other stakeholders' parents, educational authorities, and local community in this area of educational research for the improvement of female and public sector school at all levels (primary to higher secondary).
12. Review and refine curriculum to ensure the incorporation of the school effectiveness factors into curriculum for the improvement of public sector schools.

13. It is recommended that in further studies it can be observed that the necessity of coherence among policy, programs, implementation and professional development may contribute to develop relationship among IL, TSSE and school effectiveness at higher secondary level.
14. The School Education Department of Punjab may conduct trainings especially for female educational managers related to the functions of instructional leadership.
15. Education Department of Punjab may enhance the female secondary school teachers (SSTs) sense of self-efficacy through some incentives, encouragement to participate in professional development courses based on certain areas like: student engagement, instructional strategies and classroom management.

5.6 Future Recommendations

1. The same study can be replicated at larger scale by using observation as a tool to analyze the variables of the present study at secondary schools.
2. Another study can be conducted to cross-check teachers' perceptions about their managers' as instructional leaders and managers' perceptions about their teachers' sense of self-efficacy.
3. The same study can be replicated by utilizing the data from respondents from secondary schools located in rural and urban areas and secondary schools having co-education system.
4. In future, a research can be carried out to include secondary schools affiliated with other BISEs.
5. The study indicates a requirement for explore gender variable for students' preferences about school effectiveness on same level in Pakistan.
6. A longitudinal research can be carried out to observe certain various factors to observe the various factors of school effectiveness like safe and ordered environment, high expectation's climate, and opportunity for student to learn through time on task, clear-cut focused mission, frequent monitoring of students' progress, and relationship of school and home.

7. Similarly, the future research may be conducted in other provinces of Pakistan about the instructional leadership and teachers' beliefs about their sense of self-efficacy which effects school effectiveness.
8. The current study assessed IL through PIMRS. Other instructional leadership scales can be applied to explore the perceptions of educational managers on certain aspects of instructional leadership.
9. Future researchers can investigate certain other factors of school effectiveness like facilities, emotional intelligence of SSTs, use of information and communication technologies in teaching and learning, teachers' belief about lifelong learning for their professional development, and academic achievements of students at secondary school level.
10. Future researchers may concentrate on digital principal instructional leadership model based on three important behaviors namely supporting online learning, decreasing problems of home- based learning proactively, and manage virtual schools.
11. The shift from face-to-face instruction to distant instruction requires effective instructional leadership on the part of educational manager to design effective distance learning through the use of ICTs. For the purpose, to ensure the quality of instruction, educational manager can be creative and innovative to improve instructional quality with the help of digital gadgets to give excellent service for teachers and students for school effectiveness.
12. Online instruction has become current practices for operating schools. In online schooling, the instructional aspect of educational management assumed a digital form intended to make sure effective online educational practices and student learning from a distance.
13. In future schools will be led by the digital environment so the secondary school educational managers' may reflect on their current knowledge and confidence to act as digital instructional leaders.

5.7 Limitations of the study

Current research had certain limitations, due to time and certain other constraints. These limitations are mentioned below:

1. The researcher collected the data for current study about educational managers' instructional leadership through questionnaires (self-reported) data and interviews. The observational tool was not used to analyze the situations.
2. Cross-check of data regarding teachers' perception about their managers' instructional leadership and managers' perception about their TSSE with other districts could not remain assessed.
3. The current study collected the data from secondary schools affiliated with board of Intermediate and Secondary Education (BISE) Rawalpindi (Pakistan) and respondents from other BISE were not included in the study.
4. Rural and urban data was not utilized.
5. The present study did not observe various factors affecting secondary schools' effectiveness; it only assessed two factors of school effectiveness e.g. managers' IL & teachers' SSE.
6. Confirmatory factor analysis (CFA) of the research instruments was not performed.

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Appendix I

TOPIC APPROVAL LETTER



NATIONAL UNIVERSITY OF MODERN LANGUAGES
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF EDUCATION

ML.1-4/2018/Edu

Dated: 15-05-2018

To: **UZMA SAGHEER,**
672-PHD/EDU/S17

Subject: **APPROVAL OF PHD THESIS TOPIC AND SUPERVISOR**

1. Reference Academic Branch's Notification No. ML.6-2/18-Syl/ Acad dated 11th May 2018, the Faculty Board of Studies has approved the following vide its meeting held on 24th & 25th of April 2018.

a. **Supervisor's Name & Designation**

Prof. Dr. Sufiana Khatoon Malik,
Dean F.S.S, NUML, Islamabad.

Co-Supervisor Name & Designation:

Dr. Farkhanda Tabassum,
Assistant Professor, Department of Education
NUML, Islamabad

b. **Topic of Thesis**


"Effects of Educational Managers' Instructional Leadership and Teachers Sense of Self-Efficacy on School Effectiveness."

2. You may carry out research on the given topic under the guidance of your Supervisor and submit the thesis for further evaluation within the stipulated time. It is inform you that your thesis should be submit within described period by Dec 2021 positively for further necessary action please.

3. As per policy of NUML, all MPhil/PhD thesis are to be run on Turnitin by QEC of NUML before being sent for evaluation. The university shall not take any responsibility for high similarity resulting due to thesis run from own sources.

4. Thesis are to be prepared strictly on NUML's format that can be had from MPhil & PhD Coordinator, Department of Education.

Telephone No: 051-9265100-110 Ext: 2090
E-mail: atkhalil@numl.edu.pk


Dr. Hukam Dad Malik
Head,
Department of Education

Cc to:
Dean F.S.S / Supervisor
Dr. Farkhanda Tabassum (Co-Supervisor)


22-05-18

Appendix II

UNIVERSITY SUPPORT LETTER

National University of Modern Languages
Sector H-9, P.O. Shaigan, Islamabad
Tel : 092-051-9265100-09 Fax: 092-051-9265076
Email: info@numl.edu.pk
Web: www.numl.edu.pk

Date: 23-05-2018

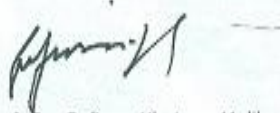
Ref. No. ML.1-2/2018-FSS

TO WHOM IT MAY CONCERN

It is to certify that Ms. Uzma Sagheer Janjua d/o Mr. Muhammad Sagheer, Reg. No.672-PhD/Edu/S17 is enrolled in the PhD Programme in the discipline of Education, Faculty of Social Sciences, at this University.

With a view to facilitating the candidate in gathering data for her research, you are requested to kindly provide her desired information pertaining to your organization, publications/relevant training and development material etc.

We take this opportunity to assure you that this research is a purely academic activity and the information provided by your organization will be used for research purposes only.


 Prof. Dr. Sufiana Khatoon Malik
 Dean, Faculty of Social Sciences

AD(A)
 issue her letter
 to gather data
 for research.
 Jeyb
 26/5/2018

GJ
 26/5

Appendix III

REQUEST FOR VALIDATION OF RESEARCH INSTRUMENT



ML.1-2/2018-FSS

Ref. No. _____

National University of Modern Languages

Sector H-9, P.O. Shaigan, Islamabad

Tel : 092-051-9265100-09 Fax: 092-051-9265076

Email: info@numl.edu.pk

Web: www.numl.edu.pk

25-05-2018

Date: _____

To: Prof. Dr. Brg (R) Allah Bakhsh Malik.

Ex-HoD Education Department.

NUML Islamabad.

Assalam o Alaikum,

Uzma Sagheer PhD research scholar is going to conduct the study on Instructional Leadership. She has got permission for using following three questionnaires:

1. The principal instructional management rating scale (PIMRS) developed by Dr. Philip Hallinger (1982).
2. Mohidol University Thailand, teacher's sense of self efficacy scale long form (TSES) developed by Tschannen, M & Woolfolk .A (2001), Ohio State University.
3. School effectiveness survey questionnaire (SESQ) developed by Lee Baldwin, Coney, Fardig & Thomas (1993).

You are hereby requested to validate questionnaires in perspective of objectives of her study and theoretical frame work.

You can further identify or suggest improvements in these questionnaires. your kind cooperation will be appreciated.

OK. All the instruments seem to be comprehensive and valid

Prof. Dr. Sufiana Khatoon Malik

Dean (FSS)

29/5/18

Appendix IV**REQUEST FOR PROVISION OF POPULATION LISTS**

Office of the
Chief Executive officer (EDU)
Rawalpindi

Dated: April 05, 2018

Subject: Provision of Population Lists (District Rawalpindi)

Dear CEO

I Ms.Uzma Sagheer Ph.D. scholar, Education Department, National University of Modern Languages, Islamabad, Pakistan. As part of my doctoral program at the University, I am conducting research on instructional leadership. The purpose of this research is to identify specific instructional leadership practices of secondary school educational managers/principals. I hereby venture to request for the provision of related data (number of all public and private sector secondary level schools, educational managers, teachers and the students) in Rawalpindi District.

Your input is invaluable to this project.

Sincerely,



Uzma Sagheer Janjua (Reg # 672-PhD/Edu/S17)

PhD, Scholar

National University of Modern Languages

Islamabad, Pakistan

Appendix VI

**SAMPLE SIZE VERIFICATION FROM CHIEF EXECUTIVE OFFICER
(CEO) RAWALPINDI DISTRICT**

Dr.Tariq Mehmood Qazi
C.E.O Rawalpindi District
Office of the
District Education Authority
CITY DISTRICT GOVERNMENT
RAWALPINDI

May 26, 2018

Dear Uzma Sagheer,

As C.E.O Rawalpindi district I am providing you summary of the following headings for the year 2018.

1. Public & Private sector male and female secondary level schools in urban and rural areas of seven tehsils of Rawalpindi district.
2. Total number of teachers who are performing their duties as SST at secondary level schools in public sector schools in urban and rural areas of seven tehsils of Rawalpindi district.
3. Total number of the principals /educational managers' according to your research topic serving in public sector secondary level schools located in urban and rural areas of seven tehsils of Rawalpindi district.

Total No. of Public Sector Schools

Tehsil	No of Boys High Schools		No of Girls High Schools	
	Rural	Urban	Rural	Urban
Murree	19	02	15	01
Kotli Sattian	12	0	17	0
Kahuta	18	01	11	01
Kallar Syedan	20	0	19	0
Gujar Khan	42	03	36	02
Texila	09	04	05	02
Rawalpindi	48	21	28	51
Total	168	31	131	57
Grand Total		199	387	188

Total No. of Private Sector Schools

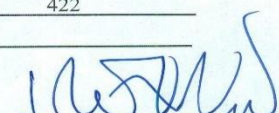
Tehsil	No of Boys High Schools		No of Girls High Schools	
	Rural	Urban	Rural	Urban
Murree	13	04	09	07
Kotli Sattian	01	0	03	0
Kahuta	09	02	05	06
Kallar Syedan	09	01	12	0
Gujar Khan	23	04	30	05
Texila	09	03	10	03
Rawalpindi	30	100	24	100
Total	94	114	93	121
Grand Total	208		214	
	422			

Total No. of Secondary School Level Teachers

Tehsil	No of Public Sector Teachers	
	Male	Female
Murree	108	92
Kotli Sattian	70	70
Kahuta	92	75
Kallar Syedan	90	85
Gujar Khan	235	207
Texila	55	41
Rawalpindi	410	337
Total	1060	907
Grand Total	1967	

Total No. Of School Heads/Educational Managers

Tehsil	No of Public Sector Heads		No of Private Sector Heads	
	Male	Female	Rural	Urban
Murree	21	16	17	16
Kotli Sattian	12	17	01	03
Kahuta	19	12	11	11
Kallar Syedan	20	19	10	12
Gujar Khan	45	38	27	35
Texila	69	79	12	13
Rawalpindi	13	07	130	124
Total	199	188	208	214
Grand Total	387		422	
	809			


 Chief Executive officer (Edu)
 Chief Executive Office (Edu)
 District Education Authority
 Rawalpindi

Appendix VII (a)

VALIDITY CERTIFICATE (I)



CERTIFICATE OF RESEARCH TOOL VALIDATION

This is to certify that the following research instruments (sr.no-1-3) adapted by Ms.Uzma Sagheer Ph.D. scholar, Education Department, National University of Modern Languages, Islamabad, Pakistan for her PhD thesis topic “Effect of educational managers instructional leadership and teachers sense of self efficacy on school effectiveness” are according to the objectives of the research .They assure adequate construct and content validity. Therefore following mentioned instruments can be used for current study for data collection.

1. The Principal Instructional Leadership Management Rating Scale (**PIMRS**) developed by Dr. Phillip Hallinger (1982), TSDF Chair Professor of Leadership, College of Management, Mohidol University, Thailand. (To be filled in by Secondary School Heads).
2. Teachers Sense of Self efficacy Scale (**TSES**) long form developed by Megan Tschannen –Moran College of William, Mary and Anita Woolfolk Hoy, PhD Professor Emerita (2001) .The Ohio State University. (To be filled in by the secondary school level teachers).
3. School Effectiveness survey Questionnaire (**SESQ**) student version developed by Lee Baldwin (1993), Ph.D., Associate Professor, School of Teaching, Learning, and Leadership College of Education and Human Performance, University of Central Florida. (To be filled in by the secondary school level students).

Allah Bakhsh Malik
Prof. Dr. Brg (R) Allah Bakhsh Malik

Ex-Head of the Department, Education Department
National University of Modern Languages, Islamabad

Dated: 29-5-2018

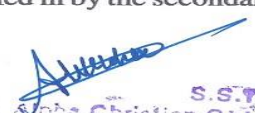
Appendix VII (b)

VALIDITY CERTIFICATE (II)

CERTIFICATE FOR RESEARCH TOOL VALIDATION

This is to certify that the following research instruments (sr no. 1-3) adapted by Ms.Uzma Sagheer Ph.D. scholar, Education Department, National University of Modern Languages, Islamabad, for her PhD thesis topic “Effects of educational managers’ instructional leadership and teachers’ sense of self efficacy on school effectiveness” are according to the objectives of the research. They assure adequate construct and content validity. Therefore following mentioned instruments can be used for current study for data collection. The detail of these instruments (sr. no, 1-3) is as given below.

13. The Principal Instructional Management Rating Scale (**PIMRS**) developed by Phillip Hallinger (1982), TSDP Chair Professor of Leadership, College of Management, Mohidol University, Thailand. (To be filled in by secondary school educational managers).
14. Teachers Self efficacy Scale (**TSES**) long form developed by Megan Tschannen –Moran College of William, Mary and Anita Woolfolk Hoy, PhD Professor Emerita (2001). The Ohio State University. (To be filled in by the secondary school teachers).
15. School Effectiveness Survey Questionnaire (**SESQ**) student version developed by Lee Baldwin (1993), Ph.D. Associate Professor, School of Teaching, Learning, and Leadership College of Education and Human Performance, University of Central Florida. (To be filled in by the secondary school level students).


 Govt. S.S.T.
 Alpha Christian Girls
 High School, Rawalpindi
 Dated: 18-06-2018

Forwarded to:

- Supervisor (Prof. Dr. Sufiana Khatoon Malik), Dean, Faculty of Social Sciences, National University of Modern Languages, Islamabad.
- Researcher (Uzma Sagheer Janjua), PhD scholar, Education Department, National University of Modern Languages, Islamabad.

Appendix VII (c)

VALIDITY CERTIFICATE (III)

CERTIFICATE FOR RESEARCH TOOL VALIDATION

This is to certify that the following research instruments (sr no. 1-3) adapted by Ms. Uzma Sagheer Ph.D. scholar, Education Department, National University of Modern Languages, Islamabad, for her PhD thesis topic "Effects of educational managers' instructional leadership and teachers' sense of self efficacy on school effectiveness" are according to the objectives of the research. They assure adequate construct and content validity. Therefore following mentioned instruments can be used for current study for data collection. The detail of these instruments (sr. no. 1-3) is as given below.

13. The Principal Instructional Management Rating Scale (**PIMRS**) developed by Phillip Hallinger (1982), TSDF Chair Professor of Leadership, College of Management, Mohidol University, Thailand. (To be filled in by secondary school educational managers).
14. Teachers Self efficacy Scale (**TSES**) long form developed by Megan Tschannen –Moran College of William, Mary and Anita Woolfolk Hoy, PhD Professor Emerita (2001). The Ohio State University. (To be filled in by the secondary school teachers).
15. School Effectiveness Survey Questionnaire (**SESQ**) student version developed by Lee Baldwin (1993), Ph.D. Associate Professor, School of Teaching, Learning, and Leadership College of Education and Human Performance, University of Central Florida. (To be filled in by the secondary school level students).

Ex. DEO (WEE) Rawalpindi, Head of the
Institution (Govt. Girls High School Rawal Bhatta)
Forwarded to: Rawalpindi city

Dr. Palak Naz

Dated: 18-06-2018

- Supervisor (Prof. Dr. Sufiana Khatoon Malik), Dean, Faculty of Social Sciences, National University of Modern Languages, Islamabad.
- Researcher (Uzma Sagheer Janjua), PhD scholar, Education Department, National University of Modern Languages, Islamabad.

Appendix VII (d)**VALIDITY CERTIFICATE (IV)****CERTIFICATE FOR RESEARCH TOOL VALIDATION**

This is to certify that the following research instruments (sr no. 1-3) adapted by Ms.Uzma Sagheer Ph.D. scholar, Education Department, National University of Modern Languages, Islamabad, for her PhD thesis topic “Effects of educational managers’ instructional leadership and teachers’ sense of self efficacy on school effectiveness” are according to the objectives of the research. They assure adequate construct and content validity. Therefore following mentioned instruments can be used for current study for data collection. The detail of these instruments (sr. no, 1-3) is as given below.

13. The Principal Instructional Management Rating Scale (**PIMRS**) developed by Phillip Hallinger (1982), TSDF Chair Professor of Leadership, College of Management, Mohidol University, Thailand. (To be filled in by secondary school educational managers).
14. Teachers Self efficacy Scale (**TSES**) long form developed by Megan Tschannen –Moran College of William, Mary and Anita Woolfolk Hoy, PhD Professor Emerita (2001). The Ohio State University. (To be filled in by the secondary school teachers).
15. School Effectiveness Survey Questionnaire (**SESQ**) student version developed by Lee Baldwin (1993), Ph.D. Associate Professor, School of Teaching, Learning, and Leadership College of Education and Human Performance, University of Central Florida. (To be filled in by the secondary school level students).



Dated: 18-06-2018

Forwarded to:

- Supervisor (Prof. Dr. Sufiana Khatoon Malik), Dean, Faculty of Social Sciences, National University of Modern Languages, Islamabad.
- Researcher (Uzma Sagheer Janjua), PhD scholar, Education Department, National University of Modern Languages, Islamabad.

Appendix VII (e)

VALIDITY CERTIFICATE (V)

CERTIFICATE FOR RESEARCH TOOL VALIDATION

This is to certify that the language and the concepts of the following research instruments (sr no. 1-3) adapted by Ms.Uzma Sagheer Ph.D. scholar, Education Department, National University of Modern Languages, Islamabad, for her PhD thesis topic “Effects of educational managers’ instructional leadership and teachers’ sense of self efficacy on school effectiveness” are understandable for the target population and items are appropriate for current research focus. The instruments assure adequate construct and content validity. Therefore following mentioned instruments can be used for current study for data collection. The detail of these instruments (sr. no, 1-3) is as given below.

4. The Principal Instructional Management Rating Scale (**PIMRS**) developed by Phillip Hallinger (1982), TSDF Chair Professor of Leadership, College of Management, Mohidol University, Thailand. (To be filled in by secondary school educational managers).
5. Teachers Self efficacy Scale (**TSES**) long form developed by Megan Tschannen –Moran College of William, Mary and Anita Woolfolk Hoy, PhD Professor Emerita (2001). The Ohio State University. (To be filled in by the secondary school teachers).
6. School Effectiveness Survey Questionnaire (**SESQ**) student version developed by Lee Baldwin (1993), Ph.D. Associate Professor, School of Teaching, Learning, and Leadership College of Education and Human Performance, University of Central Florida. (To be filled in by the secondary school level students).


Language Expert (English)

Mrs. Nujba Mirza

M.A (TEFL)

Ex. AEO Rawalpindi city & Head of the institution in a public sector organization

Dated: 9-06-2018

Forwarded to:

- Supervisor (Prof. Dr. Sufiana Khatoon Malik), Dean, Faculty of Social Sciences, National University of Modern Languages, Islamabad.
- Researcher (Uzma Sagheer Janjua), PhD scholar, Education Department, National University of Modern Languages, Islamabad.

Appendix VII (f)**VALIDITY CERTIFICATE (VII)****CERTIFICATE FOR RESEARCH TOOL VALIDATION**

This is to certify that the following research instruments (sr no. 1-3) adapted by Ms.Uzma Sagheer Ph.D. scholar, Education Department, National University of Modern Languages, Islamabad, for her PhD thesis topic “Effects of educational managers’ instructional leadership and teachers’ sense of self efficacy on school effectiveness” are according to the objectives of the research. They assure adequate construct and content validity. Therefore following mentioned instruments can be used for current study for data collection. The detail of these instruments (sr. no, 1-3) is as given below.

1. The Principal Instructional Management Rating Scale (**PIMRS**) developed by Phillip Hallinger (1982), TSDF Chair Professor of Leadership, College of Management, Mohidol University, Thailand. (To be filled in by secondary school educational managers).
2. Teachers Self efficacy Scale (**TSES**) long form developed by Megan Tschannen –Moran College of William, Mary and Anita Woolfolk Hoy, PhD Professor Emerita (2001). The Ohio State University. (To be filled in by the secondary school teachers).
3. School Effectiveness Survey Questionnaire (**SESQ**) student version developed by Lee Baldwin (1993), Ph.D. Associate Professor, School of Teaching, Learning, and Leadership College of Education and Human Performance, University of Central Florida. (To be filled in by the secondary school level students).


Mrs. Nujbat Mirza

M.A (TEFL), M.A (Islamite) & M.A (History)

Ex. AEO Rawalpindi city & Head of the institution in a public sector organization

Dated: 7-06-2018


Forwarded to:

- Supervisor (Prof. Dr. Sufiana Khatoon Malik), Dean, Faculty of Social Sciences, National University of Modern Languages, Islamabad.
- Researcher (Uzma Sagheer Janjua), PhD scholar, Education Department, National University of Modern Languages, Islamabad.

Appendix VII (g)**VALIDITY CERTIFICATE (VIII)****CERTIFICATE FOR RESEARCH TOOL VALIDATION**

This is to certify that the following research instruments (sr no. 1-3) adapted by Ms.Uzma Sagheer Ph.D. scholar, Education Department, National University of Modern Languages, Islamabad, for her PhD thesis topic “Effects of educational managers’ instructional leadership and teachers’ sense of self efficacy on school effectiveness” are according to the objectives of the research. They assure adequate construct and content validity. Therefore following mentioned instruments can be used for current study for data collection. The detail of these instruments (sr. no, 1-3) is as given below.

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14. Teachers Self efficacy Scale (**TSES**) long form developed by Megan Tschannen –Moran College of William, Mary and Anita Woolfolk Hoy, PhD Professor Emerita (2001). The Ohio State University. (To be filled in by the secondary school teachers).
15. School Effectiveness Survey Questionnaire (**SESQ**) student version developed by Lee Baldwin (1993), Ph.D. Associate Professor, School of Teaching, Learning, and Leadership College of Education and Human Performance, University of Central Florida. (To be filled in by the secondary school level students).


 Govt. Alpha Christian Girls
 High School, Rawalpindi
 Dated: 13-08-2018

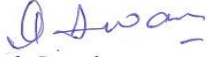
Forwarded to:

- Supervisor (Prof. Dr. Sufiana Khatoon Malik), Dean, Faculty of Social Sciences, National University of Modern Languages, Islamabad.
- Researcher (Uzma Sagheer Janjua), PhD scholar, Education Department, National University of Modern Languages, Islamabad.

Appendix VII (h)**VALIDITY CERTIFICATE (VII)****CERTIFICATE FOR RESEARCH TOOL VALIDATION**

This is to certify that the following research instruments (sr no. 1-3) adapted by Ms.Uzma Sagheer Ph.D. scholar, Education Department, National University of Modern Languages, Islamabad, for her PhD thesis topic “Effects of educational managers’ instructional leadership and teachers’ sense of self efficacy on school effectiveness” are according to the objectives of the research. They assure adequate construct and content validity. Therefore following mentioned instruments can be used for current study for data collection. The detail of these instruments (sr. no, 1-3) is as given below.

7. The Principal Instructional Management Rating Scale (**PIMRS**) developed by Phillip Hallinger (1982), TSDF Chair Professor of Leadership, College of Management, Mohidol University, Thailand. (To be filled in by secondary school educational managers).
8. Teachers Self efficacy Scale (**TSES**) long form developed by Megan Tschannen –Moran College of William, Mary and Anita Woolfolk Hoy, PhD Professor Emerita (2001). The Ohio State University. (To be filled in by the secondary school teachers).
9. School Effectiveness Survey Questionnaire (**SESQ**) student version developed by Lee Baldwin (1993), Ph.D. Associate Professor, School of Teaching, Learning, and Leadership College of Education and Human Performance, University of Central Florida. (To be filled in by the secondary school level students).


Dr. Farah Javed
Ph.D (Education)

Ex. DEO (WEE) Rawalpindi district & Head of the institution in a public sector organization

Dated: 12-06-2018

Forwarded to:

- Supervisor (Prof. Dr. Sufiana Khatoon Malik), Dean, Faculty of Social Sciences, National University of Modern Languages, Islamabad.
- Researcher (Uzma Sagheer Janjua), PhD scholar, Education Department, National University of Modern Languages, Islamabad.

Appendix VIII (a)

**PERMISSION TO GATHER DATA FROM CEO RAWALPINDI
(SUPERVISOR COPY)**



No. 3581 /G-I

OFFICE OF THE
CHIEF EXECUTIVE OFFICER
DISTRICT EDUCATION AUTHORITY
RAWALPINDI

Dated: 31/5 2018

Subject:- **PERMISSION TO GATHER DATA FOR RESEARCH PURPOSE.**

Under reference letter No.ML.1-2/2018-FSS dted 23-05-2018 of Prof.Dr.Sufina Khatoon Malik,Dean Faculty of Social Science National University of Modern Languges Sector H-9 P.O Shaigan Islamabad, permission is hereby accorded to facilitate the scholar in gathering date for her research.You are requested to provide desire information pertaining to orginazation, publications/relevant training and development material etc.in favour of Mst.Uzma Sagheer Janjua D/O Muhammad Sagheer scholar enrolled of Ph.D programme in the discipline of Education .Faculty of Social Science in National University of Modern Languages Sector H-9 P.O Shaigan Islamabad under Reg.No.672-Ph.D/Edu/S17.

Chief Executive Officer
District Education Authority
Rawalpindi

No. & Date Even.

- Copy forwarded for information & n/action to:-
- 1 ✓ Prof.Dr.Sufina Khatoon Malik,Dean Faculty of Social Science National University of Modern Languges Sector H-9 P.O Shaigan Islamabad w/r to his office letter No.ML.1-2/2018 FSS dated 23-05-2018 for information.
 - 2 Mst.Uzma Sagheer Janjua D/O Muhammad Sagheer scholar enrolled of Ph.D programme in the discipline of Education .Faculty of Social Science in National University of Modern Languages Sector H-9 P.O Shaigan Islamabad.


 Chief Executive Officer
 District Education Authority
 Rawalpindi

Appendix VIII (b)

**PERMISSION TO GATHER DATA FROM CEO RAWALPINDI
(STUDENT'S COPY)**



No. 3581 /G-I

OFFICE OF THE
CHIEF EXECUTIVE OFFICER
DISTRICT EDUCATION AUTHORITY
RAWALPINDI

Dated: 31/5 2018

Subject:- **PERMISSION TO GATHER DATA FOR RESEARCH PURPOSE.**

Under reference letter No.ML.1-2/2018-FSS dtd 23-05-2018 of Prof.Dr.Sufina Khatoon Malik,Dean Faculty of Social Science National University of Modern Languages Sector H-9 P.O Shaigan Islamabad, permission is hereby accorded to facilitate the scholar in gathering data for her research.You are requested to provide desired information pertaining to organization, publications/relevant training and development material etc.in favour of Mst.Uzma Sagheer Janjua D/O Muhammad Sagheer scholar enrolled of Ph.D programme in the discipline of Education .Faculty of Social Science in National University of Modern Languages Sector H-9 P.O Shaigan Islamabad under Reg.No.672-Ph.D/Edu/S17.

Chief Executive Officer
District Education Authority
Rawalpindi

No. & Date Even.

- Copy forwarded for information & n/action to:-
- 1 Prof.Dr.Sufina Khatoon Malik,Dean Faculty of Social Science National University of Modern Languages Sector H-9 P.O Shaigan Islamabad w/r to his office letter No.ML.1-2/2018 FSS dated 23-05-2018 for information.
 - 2 Mst.Uzma Sagheer Janjua D/O Muhammad Sagheer scholar enrolled of Ph.D programme in the discipline of Education .Faculty of Social Science in National University of Modern Languages Sector H-9 P.O Shaigan Islamabad.

Chief Executive Officer
District Education Authority
Rawalpindi

ppendix IX

**CERTIFICATE FROM EDUCATION DEPARTMENT FOR DATA
COLLECTIO**



ML.1-2/2018-FSS

Ref. No. _____

National University of Modern Languages

Sector H-9, P.O. Shaigan, Islamabad

Tel : 092-051-9265100-09 Fax: 092-051-9265076

Email: info@numl.edu.pk

Web: www.numl.edu.pk
05-10-2018

Date: _____

TO WHOM IT MAY CONCERN

It is to certify that Ms. Uzma Sagheer Janjua d/o Mr. Muhammad Sagheer, Reg. No.672-PhD/Edu/S17 is enrolled in the PhD Programme in the discipline of Education, Faculty of Social Sciences, at this University.

With a view to facilitating the candidate in gathering data for her research, you are requested to kindly provide her desired information pertaining to your organization, publications/relevant training and development material etc.

We take this opportunity to assure you that this research is a purely academic activity and the information provided by your organization will be used for research purposes only.

Prof. Dr. Sufiana Khatoon Malik
Dean, Faculty of Social Sciences

04/10/2018

0331-5235967

Appendix X (a)**LETTER OF INVITATION TO EDUCATIONAL MANAGERS**

THESIS TITLE: ‘Effects of Educational Managers Instructional Leadership and Teachers Sense of Self Efficacy on School Effectiveness

Dear Educational manager,

I am a Doctor of Philosophy (PhD) scholar at the Education department of the faculty of social sciences at the National University of Modern Languages Islamabad. As part of my PhD studies, I am undertaking a research title is given above. I am writing to seek your permission to collect data for this study in your school and to involve you as a participant in the research. This study hopes to involve participants (educational manager, teachers who are working as SST and students studying at secondary level) from your school and the methods used to collect data are a questionnaire and interviews.

- The participants will be asked to complete a questionnaire, at their convenience, with adequate response time given and collected by the researcher. The participants will be interviewed once, in-person, one-on-one, for approximately forty minutes.
- The interviews, with the participants’ permission, will be audio-recorded (If they will permit) and transcribed to provide a full and accurate verbatim record. The time commitment for each participant is expected to be approximately forty minutes.
- The anonymity and confidentiality of the participants’ responses will be protected to the fullest possible extent, within the limits of the law. The names and contact details of the participants will be kept in a password-protected computer file separate from any data that they have provided.
- The school and the participants will be referred to by pseudonyms and we will remove any references to personal information that might allow someone to guess their identity.
- Participating in this research project is completely voluntary. The school and the participants can withdraw from this project at any stage or to withdraw any

unprocessed data supplied without prejudice. There are no known or anticipated risks to the school or to the participants in this survey.

- If you would like to participate, please indicate that you have read and understood this information by signing the accompanying consent form and returning it to the researcher. If you have chosen not to participate, thank you for your time in reading this information.
- If you require any further information to assist you in reaching a decision about participation, or have any concerns, please do not hesitate to contact either of the principal supervisor or the researcher.
- I very much look forward to speaking with you and thank you for your assistance in this study.

Yours sincerely,



Uzma Sagheer

PhD Scholar

National University of Modern Languages Islamabad, Pakistan

Enclosures (2)

1. Approval Letter from EDO (DEE) Rawalpindi
2. Letter of Consent

Appendix X (b)**LETTER OF INVITATION TO TEACHERS**

THESIS TITLE: ‘Effects of Educational Managers Instructional Leadership and Teachers Sense of Self Efficacy on School Effectiveness

Dear Teachers,

I am a Doctor of Philosophy (PhD) scholar at the Education department of the faculty of social sciences at the National University of Modern Languages Islamabad. As part of my PhD studies, I am undertaking a research title is given above. I am writing to involve you as a participant in the research.

You will be asked to complete a questionnaire, at your convenience, with adequate response time given and collected by the researcher. You as a participant will be interviewed once, in-person, one-on-one, for approximately forty minutes.

- The interviews, will be audio-recorded (If you will permit) and transcribed to provide a full and accurate verbatim record. The time commitment is expected to be approximately forty minutes.
- The anonymity and confidentiality of your responses will be protected to the fullest possible extent, within the limits of the law. Your names and contact details will be kept in a password-protected computer file separate from any data that you have provided.
- The school and you will be referred to by pseudonyms and we will remove any references to personal information that might allow someone to guess their identity.
- Participating in this research project is completely voluntary. You can withdraw from this project at any stage or to withdraw any unprocessed data supplied without prejudice. There are no known or anticipated risks to the participants in this survey.
- If you would like to participate, please indicate that you have read and understood this information by signing the accompanying consent form and

returning it to the researcher. If you have chosen not to participate, thank you for your time in reading this information.

- If you require any further information to assist you in reaching a decision about participation, or have any concerns, please do not hesitate to contact either of the principal supervisor or the researcher.
- I very much look forward to speaking with you and thank you for your support in this study.

Yours sincerely,



Uzma Sagheer

PhD Scholar

National University of Modern Languages Islamabad, Pakistan

Enclosures (2)

1. Approval Letter from EDO (DEE) Rawalpindi

2. Letter of Consent

Appendix X(c)**LETTER OF INVITATION TO STUDENTS**

THESIS TITLE: ‘Effects of Educational Managers Instructional Leadership and Teachers Sense of Self Efficacy on School Effectiveness

Dear students,

I am a Doctor of Philosophy (PhD) scholar at the Education department of the faculty of social sciences at the National University of Modern Languages Islamabad. As part of my PhD studies, I am undertaking a research title is given above. I am writing to involve you as a participant in the research. You will be asked to complete a questionnaire, at your convenience, with adequate response time given and collected by the researcher.

- The anonymity and confidentiality of your responses will be protected to the fullest possible extent.
- Participating in this research project is completely voluntary. You can withdraw from this project at any stage.

If you require any further information to assist you in reaching a decision about participation, or have any concerns, please do not hesitate to contact the researcher.

- I very much look forward to speaking with you and thank you for your participation in this study.

Yours sincerely,



Uzma Sagheer

PhD Scholar

National University of Modern Languages Islamabad, Pakistan

Appendix XIII (a)

SURVEY CERTIFICATE (I)


OFFICE OF THE HEAD MISTRESS
GOVT. GIRLS HIGH SCHOOL
 KHAYABAN-E-SIR SYED SECTOR -1 RAWALPINDI. PH: 4833910

Ref No. 4435 Date 08-10-2019

TO WHOM IT MAY CONCERN

It is certified that miss Uzma Sagheer Janjua D/O Muhammad Sagheer Janjua visited the school, consulted the Principal, Teachers and the students of secondary level. She collected the responses as research scholar of Phd.

K-1 08/10/2019
 SR.HM
 GGHS KHAYABAN-E-SIRSYED SEC-I
 RAWALPINDI

Appendix XIII (b)

SURVEY CERTIFICATE (II)



Office of the Senior Headmistress

GOVT. ZEENAT SIKANDRIA GIRLS HIGH SCHOOL

Millat Colony, Rawalpindi. Ph: 051-5704995

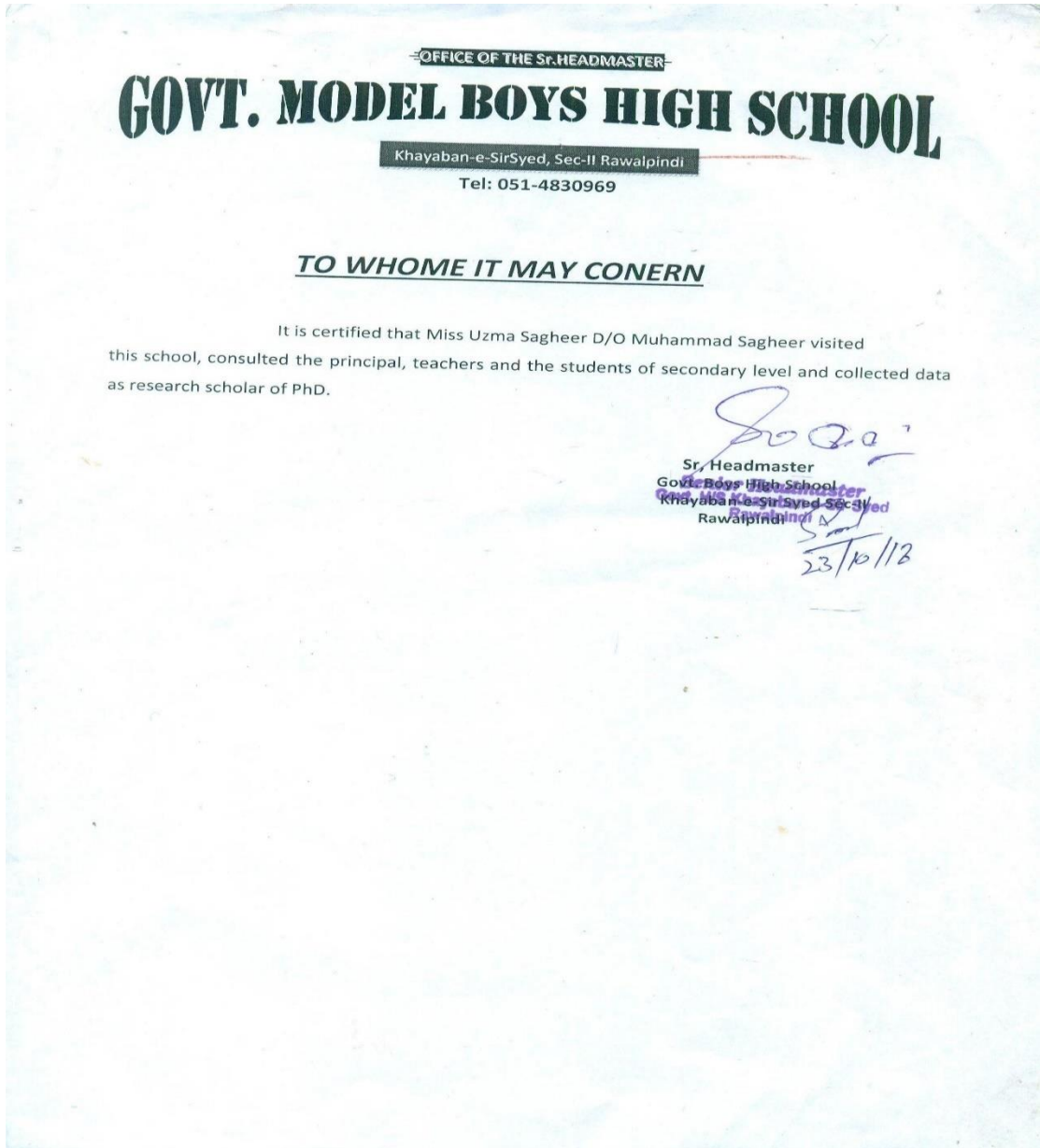
Ref: Grs/4964Date: 10th Oct, 2019TO WHOME IT MAY CONCERN

It is to certify that Miss Uzma Sagheer Janjua D/O Muhammad Sagheer Janjua has visited the institution as Ph. D research scholar. She consulted the Principal, teachers and the students of secondary level. She collected the data with the permission and willingness of all the respondents.

Faizun Nisreen
 Senior Headmistress
 Govt. Zeenat Sikandria Girls High School
 Millat Colony, Rawalpindi
 10-19

Appendix XIII (c)

SURVEY CERTIFICATE (III)



Appendix XIII (d)**SURVEY CERTIFICATE (IV)**

OFFICE OF THE HEADMASTER GOVT. FAIZ UL
ISLAM HIGH SCHOOL NO.1, TRUNK BAZAR
RAWALPINDI

TO WHOM IT MAY CONCERN

It is certified that Miss Uzma Sagheer D/O Muhammad Sagheer visited this school on 24/10/2018, consulted the principal, teachers and students of secondary level and collected data as research scholar of Ph.D.


Head Master

Govt Faiz-ul-Islam High School No.1
Trunk Bazar Rawalpindi

Appendix XIV

STUDENTS' POPULATION RECEIVED FROM BISER

	BOARD OF INTERMEDIATE & SECONDARY EDUCATION, RAWALPINDI															VI
	SALIENT FEATURES OF RESULT SECONDARY SCHOOL CERTIFICATE ANNUAL EXAMINATION 2017															
	ENROLLE D	CANCELL ED	APPEAR D	U/M/ETC	PASSED	A+	A	B	C	D	E	MISC. CASES	PASS %AGE	FAILED	ABSENT	
ALL CANDIDATES	122515	32	121505	39	94402	14673	18297	26559	24839	9766	268	176	77.72	26888	978	
MALE	68097	19	67394	37	48615	5705	7782	13202	14806	6900	220	137	72.18	18605	684	
FEMALE	54418	13	54111	2	45787	8968	10515	13357	10033	2866	48	39	84.62	8283	294	
TOTAL REGULAR CANDIDATES	88500	4	88145	14	75401	14160	16566	22077	17935	4623	40	0	85.56	12730	351	
MALE	45993	1	45788	14	37493	5544	7048	10946	10680	3242	33	0	81.91	8281	204	
FEMALE	42507	3	42357	0	37908	8616	9518	11131	7255	1381	7	0	89.5	4449	147	
TOTAL REGULAR SCIENCE GROUP	63337	4	63151	14	56156	13393	13454	15985	11293	2026	5	0	88.94	6981	182	
MALE	37447	1	37323	14	32111	5524	6800	9797	8261	1724	5	0	86.07	5198	123	
FEMALE	25890	3	25828	0	24045	7869	6654	6188	3032	302	0	0	93.1	1783	59	
TOTAL REGULAR GENERAL GROUP	25163	0	24994	0	19245	767	3112	6092	6642	2597	35	0	77	5749	169	
MALE	8546	0	8465	0	5382	20	248	1149	2419	1518	28	0	63.58	3083	81	
FEMALE	16617	0	16529	0	13863	747	2864	4943	4223	1079	7	0	83.87	2666	88	
TOTAL PRIVATE CANDIDATES	34015	28	33360	25	19001	513	1731	4482	6904	5143	228	176	57	14158	627	
MALE	22104	18	21606	23	11122	161	734	2256	4126	3658	187	137	51.53	10324	480	
FEMALE	11911	10	11754	2	7879	352	997	2226	2778	1485	41	39	67.04	3834	147	
TOTAL PRIVATE SCIENCE GROUP	17498	14	17162	17	9788	336	1019	2624	3485	2239	85	88	57.09	7269	322	
MALE	13095	9	12818	16	6858	121	560	1700	2555	1843	79	70	53.57	5874	268	
FEMALE	4403	5	4344	1	2930	215	459	924	930	396	6	18	67.46	1395	54	
TOTAL PRIVATE GENERAL GROUP	16425	14	16109	8	9209	177	711	1857	3418	2903	143	11	57.2	6881	302	
MALE	8936	9	8718	7	4261	40	174	555	1570	1814	108	7	48.92	4443	209	
FEMALE	7489	5	7391	1	4948	137	537	1302	1848	1089	35	4	66.96	2438	93	

Appendix XV (a)

QUESTIONNAIRE FOR EDUCATIONAL MANAGERS**PRINCIPAL INSTRUCTIONAL MANAGEMENT RATING SCALE****(PIMRS)****Part I**

Please provide the following information

(A) Tehsil name

(B) Your school name

(C) Sector : Public Private

(D) Area : Rural Urban

(E) Gender : Male Female

(F) Qualification: Academic Professional

(G) Job Experience

Less than 1-5

Less than 6-10

Less than 11-15

More than 15 years

Part II

Read each statement carefully and circle the number that best fits the specific job behavior as you are practicing in the school. For the response to each statement:

5 represents Always
 4 represents frequently
 3 represents Sometimes
 2 represents Seldom
 1 represents Never

Educational Managers' Instructional Leadership: It means to define school mission and manage educational programs effectively.

		Never	Seldom	Sometimes	Frequently	Always
FRAME THE SCHOOL GOALS (FSG)						
FSG1	Develop a focused set of annual school-wide goals.	1	2	3	4	5
FSG2	Frame the school's goals in terms of staff responsibilities for meeting them.	1	2	3	4	5
FSG3	Use needs assessment to secure staff input on goal development.	1	2	3	4	5
FSG4	Use data on student performance when developing the school's academic goals.	1	2	3	4	5
FSG5	Develop goals that are easily understood by teachers in the school.	1	2	3	4	5
COMMUNICATE THE SCHOOL GOALS (CSG)						
CSG1	Communicate the school's mission effectively to members of the school community.	1	2	3	4	5
CSG2	Discuss the school's academic goals with teachers at faculty meetings.	1	2	3	4	5
CSG3	Refer to the school's academic goals when making curricular decisions with teachers.	1	2	3	4	5
CSG4	Ensure that the school's academic goals are reflected in highly visible displays in the school.	1	2	3	4	5
CSG5	Refer to the school's goals in forums with students.	1	2	3	4	5
SUPERVISE & EVALUATE INSTRUCTION (SEI)						
SEI 1	Ensure that the classroom priorities of teachers are consistent with the goals of the school.	1	2	3	4	5
SEI 2	Review student work products when evaluating classroom instruction.	1	2	3	4	5
SEI 3	Conduct informal observations in classrooms on a regular basis.	1	2	3	4	5
SEI 4	Point out specific strengths in teacher's instructional practices in post-observation feedback.	1	2	3	4	5
SEI 5	Point out specific weaknesses in teacher instructional practices in post-observation feedback.	1	2	3	4	5
COORDINATE THE CURRICULUM (CC)						
CC 1	Make clear who is responsible for coordinating the curriculum across grade levels.	1	2	3	4	5
CC 2	Draw upon the results of school-wide testing when making curricular decisions.	1	2	3	4	5
CC 3	Monitor the classroom curriculum to see that it covers the school's curriculum objectives.	1	2	3	4	5
CC 4	Assess the overlap between the school's curricular objectives and the school's achievement tests.	1	2	3	4	5
CC 5	Participate actively in the review of curricular materials.	1	2	3	4	5

	Never	Seldom	Sometimes	Frequently	Always
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MONITOR STUDENT PROGRESS (MSP)

MSP 1	Meet individually with teachers to discuss student progress.	1	2	3	4	5
MSP 2	Discuss academic performance results with the faculty to identify curricular strengths and weaknesses.	1	2	3	4	5
MSP 3	Use performance measure other than test to assess progress toward school goals.	1	2	3	4	5
MSP 4	Inform teachers of the school's performance results in written form.	1	2	3	4	5
MSP 5	Inform students of school's academic progress.	1	2	3	4	5

PROTECT INSTRUCTIONAL TIME (PIT)

PIT 1	Ensure that students are not called to the office during instructional time.	1	2	3	4	5
PIT 2	Encourage teachers to use instructional time for practicing new skills.	1	2	3	4	5
PIT 3	Limit the instruction of co-curricular activities on instructional time.	1	2	3	4	5

MAINTAINING HIGH VISIBILITY (MHV)

MHV1	Take time to talk informally with students and teachers during recess and breaks.	1	2	3	4	5
MHV2	Visit classrooms to discuss school issues with teachers and students.	1	2	3	4	5
MHV3	Participate in co-curricular activities.	1	2	3	4	5
MHV4	Cover classes for teachers until a late teacher arrives.	1	2	3	4	5
MHV5	Provide direct instruction to classes.	1	2	3	4	5

PROVIDE INCENTIVES FOR TEACHERS (PIFT)

PIFT 1	Highlight superior performance by teachers in staff meetings, newsletters and memos.	1	2	3	4	5
PIFT 2	Compliment teachers privately for their efforts.	1	2	3	4	5
PIFT 3	Acknowledge teachers' expectational performance by writing memos for their personnel files.	1	2	3	4	5
PIFT 4	Reward special efforts by teachers with opportunities for professional recognition.	1	2	3	4	5
PIFT 5	Create professional growth opportunities for teachers as a reward for special contributions to the school.	1	2	3	4	5

		Never	Seldom	Sometimes	Frequently	Always
PROMOTE PROFESSIONAL DEVELOPMENT (PPD)						
PPD 1	Ensure that in-service activities attended by staff are consistent with the school's goals.	1	2	3	4	5
PPD 2	Actively support the use in the classroom of skills acquired during in-service training.	1	2	3	4	5
PPD 3	Obtain the participation of the whole staff in important in-service activities.	1	2	3	4	5
PPD 4	Lead teachers' in-service activities concerned with instruction.	1	2	3	4	5
PPD 5	Set aside time a faculty meetings for teachers to share ideas from in-service activities.	1	2	3	4	5
PROVIDE INCENTIVES FOR LEARNING (PIL)						
PIL 1	Recognize students who do superior work with formal rewards.	1	2	3	4	5
PIL 2	Use assemblies to honor students for academic accomplishments.	1	2	3	4	5
PIL 3	Recognize superior student achievement by seeing in the office the students with their work.	1	2	3	4	5
PIL 4	Contact parents to communicate improved student performance or contributions.	1	2	3	4	5
PIL 5	Support teachers actively in their recognition and reward of student contributions to and accomplishments in class.	1	2	3	4	5

Appendix XV (b)

تعلیمی مینیجرز کے لیے تحقیقی آلہ
پرنسپل انسٹرکشنل مینجمنٹ ریٹنگ اسکیل -

(PIMRS)

حصہ اول

براہ کرم درج ذیل معلومات فراہم کریں۔

تحصیل کا نام

آپ کے سکول کا نام

<input type="text"/>	پرائیویٹ -	<input type="text"/>	سیکٹر: پبلک
<input type="text"/>	شہری	<input type="text"/>	علاقہ: دیہی
<input type="text"/>	عورت	<input type="text"/>	جنس: م
<input type="text"/>	پروفیشنل	<input type="text"/>	اہلیت: اکیڈ

ملازمت کا تجربہ:

15 سال سے زیادہ	11-15 سال	6-10 سال	1-5 سے کم
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حصہ دوم

نوٹ: آپ کے جوابات خفیہ ہیں۔

ہر ایک بیان کو غور سے پڑھیں اور اس نمبر پر دائرہ لگائیں جو آپ کے اسکول میں پریکٹس کرتے ہوئے مخصوص ملازمت کے رویے کے مطابق ہو۔ ہر بیان کے جواب کے لیے:

5 ہمیشہ کی نمائندگی کرتا ہے۔

4 اکثر سے نمائندگی کرتا ہے۔

3 کبھی کبھی کی نمائندگی کرتا ہے۔

2 ساذ و نادر ہی کی نمائندگی کرتا ہے۔

1 کبھی نہیں کی نمائندگی کرتا ہے۔

تعلیمی مینیجرز کی تدریسی قیادت: اس کا مطلب ہے اسکول کے مہتمن کی تعریف کرنا اور تعلیمی پروگراموں کا مؤثر طریقے سے انتظام کرنا۔

بہشہ	کڑت سے	کبھی کبھی	مکمل طور	کبھی نہیں	
					ایف ایس جی اسکول کے اہداف کو طے کریں۔
۱	۲	۳	۴	۵	اسکول بھر کے سالانہ اہداف کا ایک مرکوز سیٹ تیار کریں۔
۱	۲	۳	۴	۵	اسکول کے اہداف کو عملے کی ذمہ داریوں کے لحاظ سے ان سے ملنے کے لیے وضع کریں۔
۱	۲	۳	۴	۵	اہداف کی ترقی پر عملے کے ان پٹ کو محفوظ بنانے کے لیے ضروریات کی تشخیص کا استعمال کریں۔
۱	۲	۳	۴	۵	اسکول کے تعلیمی اہداف کو تیار کرتے وقت طلباء کی کارکردگی پر ڈیٹا استعمال کریں۔
۱	۲	۳	۴	۵	ایسے اہداف تیار کریں جو اسکول میں اساتذہ آسانی سے سمجھ سکیں
					سی ایس جی اسکول کے اہداف کی بات چیت کریں
۱	۲	۳	۴	۵	اسکول کے مشن کو اسکول کمیونٹی کے ممبران تک مؤثر طریقے سے بتائیں
۱	۲	۳	۴	۵	فیکلٹی میٹنگز میں اساتذہ کے ساتھ اسکول کے تعلیمی اہداف پر تبادلہ خیال کریں۔
۱	۲	۳	۴	۵	اساتذہ کے ساتھ نصابی فیصلے کرتے وقت اسکول کے تعلیمی اہداف کا حوالہ دیں۔
۱	۲	۳	۴	۵	اس بات کو یقینی بنائیں کہ اسکول کے تعلیمی اہداف اسکول میں انتہائی نظر آنے والے ٹیسٹوں میں جھلک رہے ہیں۔
۱	۲	۳	۴	۵	طلباء کے ساتھ فورمز میں اسکول کے اہداف کا حوالہ دیں۔
					ایس ای آئی نگرانی اور تشخیص کی ہدایات -
۱	۲	۳	۴	۵	اس بات کو یقینی بنائیں کہ اساتذہ کی کلاس روم کی ترجیحات اسکول کے اہداف سے ہم آہنگ ہوں۔
۱	۲	۳	۴	۵	کلاس روم کی ہدایات کا جائزہ لیتے وقت طلباء کے کام کی مصنوعات کا جائزہ لیں۔
۱	۲	۳	۴	۵	کلاس رومز میں باقاعدگی سے غیر رسمی مشاہدات کریں۔
۱	۲	۳	۴	۵	پوسٹ - مشاہداتی تاثرات میں استاد کے تدریسی طریقوں کی مخصوص طاقتوں کی نشاندہی کریں۔
۱	۲	۳	۴	۵	مشاہدہ کے بعد کے تاثرات میں اساتذہ کے تدریسی طریقوں میں مخصوص کمزوریوں کی نشاندہی کریں۔
					سی سی نصاب کو مربوط کریں -
۱	۲	۳	۴	۵	واضح کریں کہ گریڈ لیول پر نصاب کو مربوط کرنے کا ذمہ دار کون ہے۔
۱	۲	۳	۴	۵	نصابی فیصلے کرتے وقت پورے اسکول کی جانچ کے نتائج کو اپنی طرف متوجہ کریں۔
۱	۲	۳	۴	۵	کلاس روم کے نصاب کی نگرانی کریں کہ یہ اسکول کے نصاب کے مقاصد کا لحاظ کرتا ہے۔

بہت سے	کثرت سے	کبھی کبھی	مکمل طور پر	کبھی نہیں		
۱	۲	۳	۴	۵	اسکول کے نصابی اہداف اور اسکول کے حصولی ٹیسٹ کے درمیان اوور لاپ کا اندازہ لگائیں۔	سی سی (۴)
۱	۲	۳	۴	۵	نصابی مواد کے جائزے میں بڑھ چڑھ کر حصہ لیں۔	سی سی (۵)
					طالب علم کی پیشرفت کی نگرانی کریں۔	ایم ایس پی
۱	۲	۳	۴	۵	طلباء کی ترقی پر بات کرنے کے لیے اساتذہ سے انفرادی طور پر ملاقات کریں۔	ایم ایس پی (۱)
۱	۲	۳	۴	۵	نصابی قوتوں اور کمزوریوں کی نشاندہی کرنے کے لیے فیکلٹی کے ساتھ تعلیمی کارکردگی کے نتائج پر تبادلہ خیال کریں۔	ایم ایس پی (۲)
۱	۲	۳	۴	۵	اسکول کے اہداف کی طرف پیشرفت کا اندازہ لگانے کے لیے ٹیسٹ کے علاوہ کارکردگی کا پیمانہ استعمال کریں۔	ایم ایس پی (۳)
۱	۲	۳	۴	۵	اساتذہ کو تحریری شکل میں اسکول کی کارکردگی کے نتائج سے آگاہ کریں۔	ایم ایس پی (۴)
۱	۲	۳	۴	۵	طلباء کو اسکول کی تعلیمی ترقی سے آگاہ کریں۔	ایم ایس پی (۵)
					تدریسی وقت کی حفاظت کریں۔	پی آئی ٹی
۱	۲	۳	۴	۵	اس بات کو یقینی بنائیں کہ طلباء کو تدریسی وقت کے دوران دفتر میں نہیں بلایا جاتا ہے۔	پی آئی ٹی (۱)
۱	۲	۳	۴	۵	اساتذہ کی حوصلہ افزائی کریں کہ وہ نئی مہارتوں کی مشق کے لیے تدریسی وقت استعمال کریں۔	پی آئی ٹی (۲)
۱	۲	۳	۴	۵	ہم نصابی سرگرمیوں کی ہدایات کو تدریسی وقت پر محدود رکھیں	پی آئی ٹی (۳)
					اعلیٰ نظر آنا برقرار رکھنا	ایم ایچ وی
۱	۲	۳	۴	۵	چھٹیوں اور وقفوں کے دوران طلباء اور اساتذہ کے ساتھ غیر رسمی بات کرنے کے لیے وقت نکالیں۔	ایم ایچ وی (۱)
۱	۲	۳	۴	۵	اساتذہ اور طلباء کے ساتھ اسکول کے مسائل پر تبادلہ خیال کرنے کے لیے کلاس رومز کا دورہ کریں۔	ایم ایچ وی (۲)
۱	۲	۳	۴	۵	ہم نصابی سرگرمیوں میں حصہ لیں۔	ایم ایچ وی (۳)
۱	۲	۳	۴	۵	دیر سے استاد کے آنے تک اساتذہ کے لیے کلاسز کا احاطہ کریں۔	ایم ایچ وی (۴)
۱	۲	۳	۴	۵	کلاسوں کو براہ راست ہدایات فراہم کریں۔	ایم ایچ وی (۵)
					اساتذہ کے لیے مراعات فراہم کریں۔	پی آئی ایف ٹی
۱	۲	۳	۴	۵	اسٹاف میٹنگز، نیوز لیٹرز اور میمو میں اساتذہ کی اعلیٰ کارکردگی کو نمایاں کریں۔	پی آئی ایف ٹی (۱)
۱	۲	۳	۴	۵	اساتذہ کو ان کی کوششوں کے لیے نجی طور پر داد دیں۔	پی آئی ایف ٹی (۲)

بہیشہ	کثرت سے	کبھی کبھی	مکمل طور پر	کبھی نہیں		
۱	۲	۳	۴	۵	اساتذہ کی پرسنل فائلوں کے لیے میمو لکھ کر ان کی متوقع کارکردگی کو تسلیم کریں۔	پی آئی ایف ٹی (۳)
۱	۲	۳	۴	۵	پیشہ ورانہ شناخت کے مواقع کے ساتھ اساتذہ کی خصوصی کوششوں کو انعام دیں۔	پی آئی ایف ٹی (۴)
۱	۲	۳	۴	۵	اسکول میں خصوصی شراکت کے انعام کے طور پر اساتذہ کے لیے پیشہ ورانہ ترقی کے مواقع پیدا کریں۔	پی آئی ایف ٹی (۵)
					پیشہ ورانہ ترقی کو فروغ دیں۔	پی پی ڈی
۱	۲	۳	۴	۵	اس بات کو یقینی بنائیں کہ عملہ کی حاضری کے دوران سروس کی سرگرمیاں اسکول کے اہداف سے ہم آہنگ ہوں۔	پی پی ڈی (۱)
۱	۲	۳	۴	۵	سروس میں تربیت کے دوران حاصل کی گئی مہارتوں کے کلاس روم میں استعمال میں فعال طور پر مدد کریں۔	پی پی ڈی (۲)
۱	۲	۳	۴	۵	سروس کے اندر اہم سرگرمیوں میں پورے عملے کی شرکت حاصل کریں۔	پی پی ڈی (۳)
۱	۲	۳	۴	۵	تدریس سے متعلق اساتذہ کی دوران سروس سرگرمیوں کی رہنمائی کریں۔	پی پی ڈی (۴)
۱	۲	۳	۴	۵	اساتذہ کے لیے فیکلٹی میٹنگز کے لیے وقت مختص کریں تاکہ ان سروس سرگرمیوں سے خیالات کا تبادلہ کیا جا سکے۔	پی پی ڈی (۵)
					سیکھنے کے لیے مراعات فراہم کریں۔	پی آئی ایل
۱	۲	۳	۴	۵	باضابطہ انعامات کے ساتھ اعلیٰ کام کرنے والے طلباء کو پہچانیں۔	پی آئی ایل (۱)
۱	۲	۳	۴	۵	تعلیمی کامیابیوں کے لیے طلباء کو اعزاز دینے کے لیے اسمبلیوں کا استعمال کریں۔	پی آئی ایل (۲)
۱	۲	۳	۴	۵	دفتر میں طلباء کو ان کے کام کے ساتھ دیکھ کر طالب علم کی اعلیٰ کامیابیوں کو پہچانیں۔	پی آئی ایل (۳)
۱	۲	۳	۴	۵	طالب علم کی بہتر کارکردگی یا شراکت کے بارے میں بات کرنے کے لیے والدین سے رابطہ کریں۔	پی آئی ایل (۴)
۱	۲	۳	۴	۵	کلاس میں طلباء کے تعاون اور کامیابیوں کے اعتراف اور انعام میں اساتذہ کی فعال طور پر مدد کریں۔	پی آئی ایل (۵)

Appendix XV (c)

Permission letter to use Principal Instructional Management Rating Scale

(PIMRS)

From The Prime Author (Phillip Hallinger)

Dr. Philip Hallinger
199/43 Sukhumvit Soi 8
Bangkok, 10110, Thailand
hallinger@gmail.com

February 4, 2018

Uzma Janjua

Dear Uzma:

As copyright holder and publisher, you have my permission as publisher to use the *Principal Instructional Management Rating Scale (PIMRS)* in your research study. In using the scale, you may make unlimited copies of any of the four forms of the PIMRS during 2018 (only).

Please note the following conditions of use:

1. This authorization extends only to the use of the PIMRS for research purposes, not for general school district use of the instrument for evaluation or staff development purposes.
2. This is a single-use purchase for the author's graduate research
3. *The user agrees to send a soft copy (pdf) of the completed study and the raw data set in Excel or SPSS to the publisher upon completion of the research.*
4. The user has permission to make minor adaptations to scale as necessary for the research.

Sincerely,



Professor Philip Hallinger

Appendix XVI (a)

QUESTIONNAIRE FOR TEACHERS**Teacher Sense of Self Efficacy Scale****(TSES)****Part I**

Please provide the following information

(A) Tehsil name -----

(B) Your school name -----

(C) Designation -----

(D) Sector : Public Private

(E) Area : Rural Urban

(F) Gender: Male Female

(G) Qualification Academic Professional

(H) Job Experience,

Less than 1-5	6 - 10 years	11- 15 years	More than 15 years
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Part II

Note: Your answers are confidential.

Directions: Please indicate your opinion about each of the questions below by marking any one of the nine responses in the columns on the right side, ranging from (1) “None at all” to (9) “A Great Deal” as each represents a degree on the continuum.

Teachers’ sense of self efficacy: It means teachers’ beliefs about to engaging the students through appropriate instructional strategies and to manage the class room.

		None at all	Very Little	Some Degree	Quite A Bit	A Great Deal				
Efficacy in student Engagement (ESE)										
ESE 1	How much can you do to get through to the most difficult students?	1	2	3	4	5	6	7	8	9
ESE 2	How much can you do to help your students think critically?	1	2	3	4	5	6	7	8	9
ESE 3	How much can you do to motivate students who show low interest in school work?	1	2	3	4	5	6	7	8	9
ESE 4	How much can you do to get students to believe they can do well in school work?	1	2	3	4	5	6	7	8	9
ESE 5	How much can you do to foster student creativity?	1	2	3	4	5	6	7	8	9
ESE 6	How much can you do to improve the understanding of a student who is failing?	1	2	3	4	5	6	7	8	9
ESE 7	How much can you assist families in helping their children do well in school?	1	2	3	4	5		7	8	9
Efficacy in Instructional Strategies (EIS)										
EIS 1	How well can you respond to difficult questions from your students?	1	2	3	4	5	6	7	8	9
EIS 2	How much can you gauge student comprehension of what you have taught?	1	2	3	4	5	6	7	8	9
EIS 3	To what extent can you craft good questions for your students?	1	2	3	4	5	6	7	8	9
EIS 4	How much can you do to adjust your lessons to the proper level for individual student?	1	2	3	4	5	6	7	8	9
EIS 5	How much can you use a variety of assessment strategies?	1	2	3	4	5	6	7	8	9
EIS 6	To what extent can you provide an alternative explanation for example when students are confused?	1	2	3	4	5	6	7	8	9
EIS 7	How well can you implement alternative strategies in your classroom?	1	2	3	4	5	6	7	8	9
EIS 8	How well can you provide appropriate challenges for very capable students?	1	2	3	4	5	6	7	8	9

		None at all	Very Little	Some Degree	Quite A Bit	A Great Deal				
Efficacy in Classroom Management (ECM)										
ECM1	How much can you do to control behavioral problems in the classroom?	1	2	3	4	5	6	7	8	9
ECM2	To what extent can you make your expectations clear about student behavior?	1	2	3	4	5	6	7	8	9
ECM3	How well can you establish routines to keep activities running smoothly?	1	2	3	4	5	6	7	8	9
ECM4	How much can you do to get children to follow classroom rules?	1	2	3	4	5	6	7	8	9
ECM5	How much can you do to calm a student who is disruptive or noisy?	1	2	3	4	5	6	7	8	9
ECM6	How well can you establish a classroom management system with each group of students?	1	2	3	4	5	6	7	8	9
ECM7	How well can you keep a few problem students from ruining an entire lesson?	1	2	3	4	5	6	7	8	9
ECM8	How well can you respond to non-cooperative students?	1	2	3	4	5	6	7	8	9

Appendix XVI (b)

اساتذہ کے لیے تحقیقی آلہ
ٹیچر سیلف ایفیفیسی کا احساس اسکیل

(TSES)

حصہ اول

براہ کرم درج ذیل معلومات فراہم کریں۔

تحصیل کا نام -----

آپ کے اسکول کا نام -----

عہدہ -----

- پرائیویٹ
 شہری
 عورت
 پروفیشنل

- (a) سیکٹر: پبلک
 (b) علاقہ: دیہی
 (c) جنس: مرد
 (d) قابلیت: اکیڈمک
(e) ملازمت کا تجربہ

15 سال سے زیادہ

15-11 سال

10 - 6 سال

5-1 سے کم

حصہ دوم

نوٹ: آپ کے جوابات خفیہ ہیں۔

ہدایات: براہ کرم نیچے دینے گئے ہر سوال کے بارے میں اپنی رائے کو دائیں طرف کے کالموں میں نو جوابات میں سے کسی ایک پر نشان لگا کر بتائیں، جن میں (1) "بالکل کوئی نہیں" سے لے کر (9) "ایک زبردست ڈیل" جیسا کہ ہر ایک تسلسل پر ایک ڈگری کی نمائندگی کرتا ہے۔

اساتذہ کا خود افادیت کا احساس: اس کا مطلب ہے مناسب تدریسی حکمت عملیوں کا استعمال کرتے اور کلاس روم کا نظم و نسق کرتے ہوئے طلباء کو شامل کرنے کے بارے میں اساتذہ کا یقین۔

ایک زبردست ڈیل	کافی تھوڑا سا	کچھ ٹگری	بہت کم	کوئی بھی نہیں						
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	طالب علم کی مشغولیت میں افادیت
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	آپ مشکل ترین طلباء تک پہنچنے کے لیے کتنا کر سکتے ہیں؟
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	(۱)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	کیا آپ اپنے طلباء کی تنقیدی سوچ میں مدد کرنے کے لیے کچھ کر سکتے ہیں؟
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	(۲)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	کیا آپ اسکول کے کام میں کم دلچسپی ظاہر کرنے والے طلباء کی حوصلہ افزائی کے
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	(۳)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	لیے کچھ کر سکتے ہیں؟
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	کیا آپ طلباء کو یہ یقین دلا سکتے ہیں کہ وہ اسکول کے کام میں اچھی کارکردگی کا
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	(۴)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	مظاہرہ کر سکتے ہیں؟
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	کیا آپ طالب علم کی تخلیقی صلاحیتوں کو فروغ دینے کے لیے کچھ کر سکتے ہیں؟
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	(۵)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	کیا آپ فیل ہونے والے طالب علم کی سمجھ کو بہتر بنانے کے لیے کچھ
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	(۶)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	آپ اپنے بچوں کو اسکول میں اچھی کارکردگی دکھانے میں خاندانوں کی کتنی مدد
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	(۷)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	کر سکتے ہیں؟
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	تدریسی حکمت عملیوں میں افادیت ای آئی ایس
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	پ اپنے طالب علموں کے مشکل سوالوں کا کتنی اچھی طرح سے جواب دے
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	(۱)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	سکتے ہیں۔
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	آپ نے جو کچھ پڑھایا ہے اس کے بارے میں آپ طالب علم کی فہم کا کتنا
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	(۲)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	اندازہ لگا سکتے ہیں؟
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	آپ اپنے طلباء کے لیے کس حد تک اچھے سوالات تیار کر سکتے ہیں؟
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	(۳)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	آپ اپنے اسباق کو انفرادی طالب علم کے لیے مناسب سطح پر ایڈجسٹ کرنے
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	(۴)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	کے لیے کتنا کر سکتے ہیں؟
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	آپ مختلف تشخیصی حکمت عملیوں کا کتنا استعمال کر سکتے ہیں؟
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	(۵)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	آپ کس حد تک متبادل وضاحت فراہم کر سکتے ہیں مثال کے طور پر جب
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	(۶)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	طلباء الجھن میں ہوں؟
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	آپ اپنی کلاس روم میں متبادل حکمت عملی کو کتنی اچھی طرح سے نافذ کر
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	(۷)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	سکتے ہیں؟
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	آپ بہت قابل طلباء کے لیے کس حد تک مناسب چیلنجز فراہم کر سکتے ہیں؟
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای ایس ای	(۸)

ایک زیر دست قیل	کافی تھوڑا سا	کچھ ٹگری	بہت کم	کوئی بھی نہیں						
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای سی ایم	کلاس روم مینجمنٹ میں افادیت
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای سی ایم	آپ کلاس روم میں رویے کے مسائل کو کنٹرول کرنے کے لیے کتنا کر سکتے ہیں؟ (۱)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای سی ایم	طالب علم کے رویے کے بارے میں آپ اپنی توقعات کو کس حد تک واضح کر سکتے ہیں؟ (۲)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای سی ایم	سرگرمیوں کو آسانی سے چلانے کے لیے آپ کتنی اچھی طرح سے معمولات قائم کر سکتے ہیں؟ (۳)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای سی ایم	آپ بچوں کو کلاس روم کے اصولوں پر عمل کرنے کے لیے کتنا کر سکتے ہیں؟ (۴)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای سی ایم	آپ کسی ایسے طالب علم کو پرسکون کرنے کے لیے کتنا کر سکتے ہیں جو خلل ڈالنے یا شور مچانے والا ہو؟ (۵)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای سی ایم	آپ طالب علموں کے ہر گروپ کے ساتھ کلاس روم مینجمنٹ سسٹم کو کتنی اچھی طرح سے قائم کر سکتے ہیں؟ (۶)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای سی ایم	آپ طلبہ کے چند مسائل کو کس حد تک برقرار رکھ سکتے ہیں جو پورے اسباق کو برباد کر دیتے ہیں؟ (۷)
۹	۸	۷	۶	۵	۴	۳	۲	۱	ای سی ایم	آپ غیر تعاون کرنے والے طلباء کو کتنا اچھا جواب دے سکتے ہیں؟ (۸)

Appendix XVI (c)**Permission letter to use Teachers' Self –efficacy Scale (TSES)****From the Prime Author (Woolfolk Hoy)****College of Education & Human Ecology**

Department of Educational Studies
Anita Woolfolk Hoy
7655 Pebble Creek Circle
Unit 301
Naples, FL 34108

Dear Uzma Janjua:

You are welcome to use and adapt the TSES in your research. This website might be helpful to you:

<http://u.osu.edu/hoy.17/research/instruments/>

Best wishes in your work.

Cordially,

A handwritten signature in black ink that reads "Anita Woolfolk Hoy".

Professor Emerita
Educational Psychology

Appendix XVI (d)**Permission letter to use Teachers' Self –efficacy Scale****From the Prime Author (Moran)****William & Mary
School of Education**

MEGAN TSCHANNEN-MORAN, PHD
PROFESSOR OF EDUCATIONAL LEADERSHIP

April 20, 2018

Uzma,

You have my permission to use the Teacher Sense of Efficacy Scale (formerly called the Ohio State Teacher Sense of Efficacy Scale), which I developed with Anita Woolfolk Hoy, in your research. You can find a copy of the measure and scoring directions on my web site at <http://wmpeople.wm.edu/site/page/mxtsch> . Please use the following as the proper citation:

Tschannen-Moran, M & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783-805.

I will also attach directions you can follow to access my password protected web site, where you can find the supporting references for this measure as well as other articles I have written on this and related topics.

I would love to receive a brief summary of your results.

All the best,

Megan Tschannen-Moran
The College of William and Mary
School of Education

Appendix XVII (a)

**SCHOOL EFFECTIVENESS SURVEY QUESTIONNAIRE
(SESQ)**

**FOR STUDENTS
Part I**

Please provide the following information

(A) Tehsil name

(B) Your school name

(C) Gender: Male Female

(D) Area : Rural Urban

(E) Sector : Public Private

This survey is designed to gather information that may be used to make your school better. The survey measures how you, as a student, view your school in relation to 7 important areas as follows:

1. **Safe and Orderly Environment** states that how a school promotes a fear free school environment which promotes conducive learning.
2. **Climate of High Expectations for Success** describes that how the school stimulates the environment for teachers and students to be at their best.
3. **Instructional Leadership** describes the aptitude school heads as instructional leader to promote positive school climate.
4. **Opportunity to Learn and Student Time on Task** elaborates that students are adequately facilitated by the school with learning materials and ensures the time for effective learning.
5. **Clear and Focused Mission** pertains that school has very clear mission to be effective.
6. **Frequent Monitoring of Student Progress** defines how the teachers continuously assess student learning to provide them feedback for further improvement.
7. **Home-School Relations** describes that how the school establishes link with parents to improve student performance

INSTRUCTIONS

- Read each statement carefully and respond based on how **you** feel.
- Use the following scale when responding to each item:

①
Strongly Disagree
②
Disagree
③
Neutral
④
Agree
⑤
Strongly Agree

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Safe and ordered environment (SOE)					
SOE 1	I am taught how to behave at my school.	1	2	3	4	5
SOE 2	School conduct rules are used fairly each day.	1	2	3	4	5
SOE 3	The adults and students at my school are proud of the school and help to keep it nice-looking.	1	2	3	4	5
SOE 4	Everyone, no matter who they are, is encouraged to become involved in school activities.	1	2	3	4	5
2	High expectation's climate (HEC)					
CHES1	My principal, and teachers expect all students to do well and learn.	1	2	3	4	5
CHES 2	My teachers talk to my parents and me often about how I am doing with my school work.	1	2	3	4	5
CHES 3	Teachers expect everyone in class to learn.	1	2	3	4	5
3	Instructional leadership (IL)					
IL 1	I see my principal in the hallways in the morning and afternoon.	1	2	3	4	5
IL 2	Teachers see when someone doesn't understand what is being taught and make plans to provide extra help.	1	2	3	4	5
IL 3	My principal often visit my classrooms.	1	2	3	4	5
IL 4	The most important thing for all the students at my school is having good teaching for all.	1	2	3	4	5
4	Opportunity for student to learn through time on task (OSLTT)					
OLSTT 1	My classes do not have many interruptions by other people.	1	2	3	4	5
OLSTT 2	I have right amount of time to finish my work.	1	2	3	4	5
OLSTT 3	I learn new things and new skills every year.	1	2	3	4	5
5	Clear –cut focused mission (CFM)					
CFM 1	I know the mission of my school is because my principal tell me and I see it posted throughout the school.	1	2	3	4	5
CFM 2	My school's mission is to teach everyone, no matter who they are.	1	2	3	4	5

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
6	Monitoring of student progress frequently (MSPF)					
FMSP 1	Teachers use daily work, projects and test scores to come up with my grade.	1	2	3	4	5
FMSP 2	I use computers to help me strengthen my skills.	1	2	3	4	5
FMSP 3	Teachers use my test grades to see my progress	1	2	3	4	5
7	Relationship of school and home (RSH)					
HSR 1	I often see parents helping with school activities.	1	2	3	4	5
HSR 2	My parent(s) feel comfortable talking to my teacher.	1	2	3	4	5
HSR 3	My parent(s) talk to my teacher about my behavior in school.	1	2	3	4	5

Appendix XVII (b)

اسکول کی موثریت کے سروے کا تحقیقی آلہ
طلباء کے لیے

براہ کرم درج ذیل معلومات فراہم کریں۔

تحصیل کا نام.....

آپ کے اسکول کا نام.....

جنس: مرد عورت
سیکٹر: پبلک پرائیویٹ

یہ سروے معلومات اکٹھا کرنے کے لیے ڈیزائن کیا گیا ہے جو آپ کے اسکول کو بہتر بنانے کے لیے استعمال کی جا سکتی ہے۔ سروے اس بات کی پیمائش کرتا ہے کہ آپ بحیثیت طالب علم اپنے اسکول کو 7 اہم شعبوں کے حوالے سے مندرجہ ذیل طور پر دیکھتے ہیں:

۱. محفوظ اور منظم ماحول بتاتا ہے کہ ایک اسکول کس طرح خوف سے پاک اسکول کے ماحول کو فروغ دیتا ہے جو سازگار تعلیم کو فروغ دیتا ہے۔ -

۲. کامیابی کے لیے اعلیٰ توقعات کی آب و ہوا بیان کرتی ہے کہ اسکول کس طرح اساتذہ اور طلبہ کے لیے ماحول کو اپنے بہترین ہونے کے لیے متحرک کرتا ہے۔

۳. تدریسی قیادت اسکول کے مثبت ماحول کو فروغ دینے کے لیے قابلیت اسکول کے سربراہوں کو تدریسی رہنما کے طور پر بیان کرتی ہے۔ -

۴. سیکھنے کا موقع اور ٹاسک پر طالب علم کا وقت اس بات کی وضاحت کرتا ہے کہ طلباء کو اسکول کی طرف سے سیکھنے کے مواد کے ساتھ مناسب طریقے سے سہولت فراہم کی جاتی ہے اور مؤثر طریقے سے سیکھنے کے لیے وقت کو یقینی بناتا ہے۔ -

۵. واضح اور فوکسڈ مشن کا تعلق ہے کہ اسکول کے موثر ہونے کے لیے بہت واضح مشن ہے۔ -

۶. طلباء کی پیشرفت کی بار بار نگرانی اس بات کی وضاحت کرتی ہے کہ اساتذہ کس طرح طالب علم کی تعلیم کا مسلسل جائزہ لیتے ہیں تاکہ انہیں مزید بہتری کے لیے فیڈ بیک فراہم کیا جا سکے۔ -

۷. بوم-اسکول کے تعلقات بیان کرتے ہیں کہ اسکول کس طرح طالب علم کی کارکردگی کو بہتر بنانے کے لیے والدین کے ساتھ روابط قائم کرتا ہے

ہدایات -

• ہر بیان کو غور سے پڑھیں اور آپ کیسا محسوس کرتے ہیں اس کی بنیاد پر جواب دیں۔ -
ہر آئٹم کا جواب دیتے وقت درج ذیل پیمانہ استعمال کریں:

(ایک) بہت زیادہ اختلاف (دو) اختلاف کرنا (تین) غیر جانبدار (چار) متفق (پانچ) پوری طرح سے متفق

پوری طرح سے متفق	متفق	غیر جانبدار	اختلاف کرنا	بہت زیادہ اختلاف	
					ایس او ای
					محفوظ اور ترتیب شدہ ماحول
۵	۴	۴	۲	۱	مجھے اپنے اسکول میں سکھایا جاتا ہے کہ کیسے برتاؤ کرنا ہے۔
۵	۴	۴	۲	۱	اسکول کے طرز عمل کے اصول ہر روز مناسب طریقے سے استعمال کیے جاتے ہیں۔
۵	۴	۴	۲	۱	میرے اسکول کے بڑوں اور طلباء کو اسکول پر فخر ہے اور وہ اسے خوبصورت رکھنے میں مدد کرتے ہیں۔
۵	۴	۳	۲	۱	ہر کسی کو، چاہے وہ کوئی بھی ہو، اسکول کی سرگرمیوں میں شامل ہونے کی ترغیب دی جاتی ہے۔
					زیادہ توقعات کی آب و ہوا
۵	۴	۳	۲	۱	میرے پرنسپل، اور اساتذہ توقع کرتے ہیں کہ تمام طلباء اچھی کارکردگی کا مظاہرہ کریں اور سیکھیں۔
۵	۴	۳	۲	۱	میرے اساتذہ اکثر میرے والدین اور مجھ سے اس بارے میں بات کرتے ہیں کہ میں اپنے اسکول کے کام کے ساتھ کیا کر رہا ہوں۔
۵	۴	۳	۲	۱	اساتذہ کلاس میں ہر ایک سے سیکھنے کی توقع کرتے ہیں۔
					آئی ایل
۵	۴	۳	۲	۱	میں اپنے پرنسپل کو صبح اور دوپہر میں دالانوں میں دیکھتا ہوں۔
۵	۴	۳	۲	۱	اساتذہ دیکھتے ہیں جب کوئی سمجھ نہیں پاتا کہ کیا پڑھایا جا رہا ہے اور اضافی مدد فراہم کرنے کا منصوبہ بناتے ہیں۔
۵	۴	۳	۲	۱	میرے پرنسپل اکثر میرے کلاس رومز کا دورہ کرتے ہیں۔
۵	۴	۳	۲	۱	میرے اسکول کے تمام طلباء کے لیے سب سے اہم چیز سب کے لیے اچھی تعلیم ہے۔
					طالب علم کے لیے کام کے وقت سیکھنے کا موقع
۵	۴	۳	۲	۱	میری کلاسوں میں دوسرے لوگوں کی طرف سے زیادہ رکاوٹیں نہیں ہوتی ہیں۔
۵	۴	۳	۲	۱	میرے پاس اپنا کام ختم کرنے کے لیے مناسب وقت ہے۔
۵	۴	۳	۲	۱	میں ہر سال نئی چیزیں اور نئی مہارتیں سیکھتا ہوں۔
					او ایل ایس ٹی ٹی

پوری طرح سے منفق	منفق	غیر جانبدار	اختلاف کرنا	بہت زیادہ اختلاف		
						سی ایف ایم
						کلیر کٹ فوکسڈ مشن
۵	۴	۳	۲	۱	میں اپنے اسکول کا مشن جانتا ہوں کیونکہ میرے پرنسپل نے مجھے بتایا اور میں اسے پورے اسکول میں پوسٹ کیا ہوا دیکھتا ہوں۔	۱
۵	۴	۳	۲	۱	میرے اسکول کا مشن ہر کسی کو پڑھانا ہے، چاہے وہ کوئی بھی ہو۔	۲
						ایم ایس پی ایف
						طالب علم کی ترقی کی کثرت سے نگرانی کرنا
۵	۴	۳	۲	۱	اساتذہ میرے گریڈ کے ساتھ آنے کے لیے روزانہ کے کام، پروجیکٹ اور ٹیسٹ کے اسکور استعمال کرتے ہیں۔	۱
۵	۴	۳	۲	۱	میں اپنی صلاحیتوں کو مضبوط کرنے کے لیے کمپیوٹر استعمال کرتا ہوں۔	۲
۵	۴	۳	۲	۱	اساتذہ میری ترقی کو دیکھنے کے لیے میرے ٹیسٹ کے درجات کا استعمال کرتے ہیں۔	۳
						آر ایس ایچ
						اسکول اور گھر کا رشتہ
۵	۴	۳	۲	۱	میں اکثر والدین کو اسکول کی سرگرمیوں میں مدد کرتے دیکھتا ہوں۔	۱
۵	۴	۳	۲	۱	میرے والدین میرے استاد سے بات کرنے میں آرام محسوس کرتے ہیں۔	۲
۵	۴	۳	۲	۱	میرے والدین میرے استاد سے اسکول میں میرے رویے کے بارے میں بات کرتے ہیں۔	۳

Appendix XVII (c)**Permission letter to use School Effectiveness Survey Questionnaire from the
prime Author**

School of Teaching, Learning & Leadership

April 3, 2018

Uzma Sagheer Janjua
NUML (Islamabad)
Pakistan

This letter is to inform you that you have permission to use the school effectiveness surveys that were sent to you. You are welcome to use them for your dissertation and any related research projects. However, this permission does not apply to any commercial or for-profit use of the surveys.

If you have any further questions, please let me know.

Best wishes and good luck with your study.

Sincerely,

Lee Baldwin, Ph.D.

Lee Baldwin, Ph.D.
Associate Professor
Educational Leadership

Appendix XVIII (a)

LIST OF TOTAL NO. OF PUBLIC SECTOR URBAN (BOYS)

HIGH SCHOOLS IN DISTRICT RAWALPIND

S.NO.	Name of School	Tehsil	Total No. of Schools
		Murree	02
1	GBHS Murree		
2	GBHS Kashmiri Bazar		
		Kotli Sattian	0
	NIL		
		Kahuta	01
1	GBHS Kahuta		
	NIL	Kallar syedan	0
		Gujarkhan	02
1	GBHS Islamia Gujar Khan		
2	GBHS Qadria :Gujar Khan		
		Taxila	2
1	GBHS HIT		
2	GBHS Taleem-ul-Quran		
		Rawalpindi	39
1	GBHS Faizul Islam No .2 , Shakrial		
2	GBHS Gharibabad		
3	GBHS AOC Morgah		
4	GBHS Dhamial		
5	GBHS Elliot High School Morgah		
6	GBHS Dhoke Girja		
7	GBHS New Islamia Model Carriage Factory		
8	GBHS Madrissa Millia Islamia		
9	GBHS Islamia No .2. Circular Road		
10	GBHS Khatyaban-e-Sir Syed		
11	GBHS Taleem-Ul-Quran Quaidabad		
12	GBHS Khayaban-e-Sir Syed Sector 4-B		
13	GBHS Khayaban-e-Sir Syed Sector III		
14	GBHS Zia –Ul-Aloom Raja Bazaar		

- 15 GBHS Simla Islamia Nimak Mandi
- 16 GBHS Faiz-ul -Islam No.1 Trunk Bazaar
- 17 GBHS Islamia No.3 Ratta Amral
- 18 GBHS Muslim No.2.Saidpuri Gate
- 19 GBHS D.A.V College Road
- 20 GBHS Islamia No.4
- 21 GBHS Dhoke Chiragh Din
- 22 GBHS Pehlvi Faizabad
- 23 GBHS Abbasi Afandi Colony
- 24 GBHS Comp Dhoke Kashmirian
- 25 GBHS Zari Farm
- 26 GBHS MC Amar Pura
- 27 GBHS MC Central Model Millat Colony
- 28 GBHS MC Ratta Amral
- 29 GBHS MC Satellite Town
- 30 GBHS MC Moti Bazar
- 31 GBHS Dhama Syedan
- 32 GBHS Gangal (Gulzar-e-Quaid)
- 33 GBHS Aziz National
- 34 GBHS Public Academy
- 35 GBHS Chungi No 22
- 36 GBHS Kohinoor
- 37 GBHS Tech Bhatta
- 38 GBHS Modern 2nd Shift Kohinoor
- 39 GBHS Naseerabad

Appendix XVIII (a, 2)

**LIST OF TOTAL NO. OF PUBLIC SECTOR RURAL (BOYS) HIGH SCHOOLS IN
DISTRICT RAWALPINDI**

Name of School	Tehsil	Total No. of Schools
	Murree	19
GBHS Bann		
GBHS Phaphril		
GBHS Chakka Bagwal		
GBHS Manga		
GBHS Phagwari		
GBHS Darya Gali		
GBHS Ghora Gali		
GBHS Mohra syedan		
GBHS Rawat		
GBHS Gulehra Gali		
GBHS Saneoh		
GBHS Sehr Bagla		
GBHS Kakrahi		
GBHS Angoori		
GBHS Samli Tajjal		
GBHS Potha		
GBHS Gehl		
GBHS Aliot		
GBHS Bhanati		
	Kotli Sattian	12
GBHS Surba		
GBHS Dheer Kot Sattian		
GBHS Waghla		
GBHS Biaga		
GBHS Chalawara		
GBHS Karore		
GBHS Thoon		
GBHS Bagga		
GBHS Anwali		
GBHS Kotli Sattian		
GBHS Darnioan		
GBHS Kahuti		
	Kahuta	18
GBHS Salamber		
GBHS Thoha Khalsa		
GBHS Hothla		
GBHS Beor		
GBHS Hanesar		
GBHS Sehr		
GBHS Barohi		
GBHS Narar		
GBHS Sore		
GBHS Punjar		

GBHS Matore
 GBHS Dobern Khurd
 GBHS Salgran
 GBHS Lehri
 GBHS Dokhali
 GBHS Batala
 GBHS Samblah
 GBHS Mowara

Kallar syedan 20

GBHS Sir Suba Shah
 GBHS Kanoha
 GBHS Dhamali
 GBHS Banahal
 GBHS Bagh Jameri
 GBHS Doberan Kalan
 GBHS Kahlian Sihalian
 GBHS Nalla Musalmana
 GBHS Pind Benso
 GBHS Takal
 GBHS Phalina
 GBHS Kallar Syedan
 GBHS Bhakral
 GBHS Bhalakher
 GBHS Dera Khalsa
 GBHS Arazi
 GBHS Mangloora
 GBHS Gakhar Admal
 GBHS Chanam
 GBHS Darkali Sher Shahi

Gujarkhan 43

GBHS Jero Rattial
 GBHS Mohra Noori
 GBHS Kaniat Khalil
 GBHS Daryala Segon
 GBHS Sasral
 GBHS Missa Kaswal
 GBHS Dara kial
 GBHS Dora Budhal
 GBHS Jand Najjar
 GBHS Bhadana
 GBHS Thathi
 GBHS Qazian
 GBHS Gulyana
 GBHS Kanger
 GBHS Changa Maira
 GBHS Changa Bangial
 GBHS Mirza Kambali
 GBHS Darkata
 GBHS Sahang
 GBHS Mandra
 GBHS Dhoong
 GBHS Thekrian

GBHS Sarwar Shaheed Sanghori		
GBHS Karunb Baloch		
GBHS Narali		
GBHS Raman		
GBHS Thirjial Kalan		
GBHS Darkali Khurd		
GBHS Bhatta		
GBHS Machia		
GBHS Mahander		
GBHS Dhoke Pinnah		
GBHS Kalam Awan		
GBHS Harnal		
GBHSShaheed Nadeem-ur-Rehman Anjum Sukho		
GBHS Jatli		
GBHS Daultala		
GBHS Kazmia Syed		
GBHS Hamid Jhangi		
GBHS Naban Janjua		
GBHS Bhair Kalyal		
GBHS Dera Muslim		
GBHS Pind Bala		
	Taxila	08
GBHS Usman Khatter		
GBHS Wannu		
GBHS Texila		
GBHS Khurram Paracha		
GBHS Bhallar Top		
GBHS Thatha Khalil		
GBHS Wah Village		
GBHS Garhi Afghana		
	Rawalpindi	30
GBHS Maira Mohra		
GBHS Mahuta Mohra		
GBHS Tatral		
GBHS Ghora Bartha		
GBHS Dhanda		
GBHS Bhall		
GBHS Kharaken		
GBHS Jabber Dervesh		
GBHS Jhatta Hatial		
GBHS Banda		
GBHS Pind Jhatla		
GBHS Takhat Pari		
GBHS Chak Beli Khan		
GBHS Mohra Darogha		
GBHS Nakrali		
GBHS Rupper Kalan		
GBHS Chak Amral		
GBHS Ranial		
GBHS Trahia		
GBHS Maira Kalan		
GBHS Gangawala		

GBHS Chahan
GBHS Sihal
GBHS Dhalla
GBHS Dhadumber
GBHS Chakri
GBHS Karahi
GBHS Pind Nasrala
GBHS Mial
GBHS Adiala

Appendix XVIII (b)

**LIST OF TOTAL URBAN (GIRLS) PUBLIC SECTOR HIGH SCHOOLS IN
DISTRICT RAWALPINDI AS PER RECORD OF DEO OFFICE**

Name of School	Tehsil	Total No. of Schools
	Murree	1
GGHS Murree City		
	Kotli Sattian	0
NIL		
	Kahuta	1
GGHS Kahuta		
	Kallar syedan	1
GGHS Sir Suba Shah		
	Gujarkhan	2
GG M.C Gujar Khan High School		
GGHS No.1 Gujar Khan		
	Taxila	1
GGHS Taxila		
	Rawalpindi	53
GGHS MC Ratta Amral		
GGHS MC Talab Pukhta		
GGHS MC Teli Mohalla		
GGHS MC Model Satellite Town		
GGHS Khayaban-e-Sir Syed Sector III		
GGHS Dhoke Hassu		
GGHS Modern Asghar Mall		
GGHS Pak Islamia No.3		
GGHS Khadija		
GGHS F.Block Satellite Town		
GGHS Khayaban-e-SirSyed Sector 1		
GGHS Liaqat Bangish Colony		
GGHS Zia –ul-Haq Colony		
GGHS Khayaban-e-Sir Syed Sector II		
GGHS Safdarabad		
GGHS Pakistan Sarafa Bazar		

GGHS Westridge No.3
GGHS Muslim Murree Road
GGHS Alpha Christian
GGHS MC Nia Mohalla
GGHS No.4 Mohan Pura
GGHS Pakistan Millad Nagar
GGHS Ratta Amral
GGHS Pak Islamia No.1 Jhangi Mohalla
GGHS Hazara Colony
GGHS Zeenat Sikanderia
GGHS Joher Memorial
GGHS Usmania
GGHS PAF Base Chaklala
GGHS Arya Mohalla
GGHS Jhanda Chichi
GGHS MC Amar Pura
GGHS Muslim Town
GGHS Simla Islamia B.Block S/Town
GGHS Pindora
GGHS Noor Islamia
GGHS Magistrate Colony
GGHS No.2 Band Khana Road
GGHS Madrisa –tul-Binnat Afandi Colony
GGHS Dhamial
GGHS Gharibabad
GGHS Gangal (Gulzar-e-Quaid)
GGHS Dhama Syedan
GGHS Morgah (ARL)
GGHS Tench Bhatta
GGHS Liaqat Mughalabad
GGHS Dheri Hassanabad
GGHS Sher Zaman Colony Tulsa Road
GGHS N.2 Anwar-ul-Islam Burf Khana Chowk
GGHS Dhok Jumma Gulistan Colony
GGHS Kohinoor

Appendix XVIII (b, 2)

LIST OF RURAL (GIRLS) HIGH SCHOOLS IN DISTRICT RAWALPINDI

Name of school	Tehsil	Total No. of schools
	Murree	15
GGHS Bann		
GGHS Ausia		
GGHS Hoker Keri		
GGHS Monasi		
GGHS Chitra Donga		
GGHS Charhan		
GGHS Bhamrot Syedan		
GGHS Samli Tajjal		
GGHS Aliot		
GGHS Angoori		
GGHS Rawat		
GGHS Dewal Bandi		
GGHS Sangseri		
GGHS Potha		
GGHS Musyari		
	Kotli Sattian	17
GGHS Kallan Baasand		
GGHS Lehtrar		
GGHS Karore		
GGHS Mirza pur		
GGHS Dheer Kot Sattian		
GGHS Bhattian		
GGHS Waghla		
GGHS Mohri		
GGHS Kuthian		
GGHS Phophandi		
GGHS Darnioan		
GGHS Bhan Seri		
GGHS Chajjana		
GGHS Chowki Barhad		
GGHS Thoon		
GGHS Kotli Sattian		
GGHS Biaga		
	Kahuta	11
GGHS Balaria		
GGHS Thoha Khalsa		
GGHS Beor		
GGHS Narar Moreen		
GGHS Sehr		
GGHS Nara		

GGHS Punjar
 GGHS Dobern Khurd
 GGHS Hothla
 GGHS Loona
 GGHS Mowara

Kallar syedan

19

GGHS Saintha
 GGHS Mamyam
 GGHS Sathwani
 GGHS Sir Suba Shah
 GGHS Doberan Kalan
 GGHS Kahlian
 GGHS Nalla Musalmana (Janoobi)
 GGHS Kallarian
 GGHS Takal
 GGHS Arazi
 GGHS Kanoha No.1 Kallar Syedan
 GGHS Kallar Syedan
 GGHS Bhalakher
 GGHS Chanam
 GGHS Nothia
 GGHS Chamba Karpal
 GGHS Mohra Banni
 GGHS Saroha
 GGHS Treel

Gujarkhan

36

GGHS Devi
 GGHS Mohra Noori
 GGHS Bhatta
 GGHS Kauntrila
 GGHS Sasral
 GGHS Bhagana
 GGHS Mohra Burj
 GGHS Jhanda
 GGHS Jand Najjar
 GGHS Malote Pakhral
 GGHS Thathi
 GGHS Qazian
 GGHS Gulyana
 GGHS Manghote
 GGHS Dhoke Awan
 GGHS Changa Bangial
 GGHS Miana Mohra
 GGHS Raman
 GGHS Sahang
 GGHS Mandra
 GGHS Dhoong
 GGHS Mahander No.1 Gujar Khan

GGHS Sarwar Shaheed Sanghori		
GGHS Jhungal		
GGHS Sukho		
GGHS Usman Zada Adra		
GGHS Bajnial		
GGHS Kalam Awan		
GGHS Jatli		
GGHS Daultala		
GGHS Syed		
GGHS Hamid Jhangi		
GGHS Chullo Chakral		
GGHS Data Bhat		
GGHS Arzi Hasnal		
GGHS Machia		
	Taxila	04
GGHS Wahdat Colony Taxila		
GGHS Thatha Khalil		
GGHS Wah Village		
GGHS Garhi Afghana		
GGHS Gillani Model Wah Cantt		
	Rawalpindi	29
GGHS Gorakh Pur		
GGHS Dhalla		
GGHS Kolian Hameed		
GGHS Bijnial Rwp		
GGHS Dhanda		
GGHS Bhal		
GGHS Rajar		
GGHS Dhulial		
GGHS Saroba		
GGHS Chakri		
GGHS Pind Jhatla		
GGHS Takhat Pari		
GGHS Chak Beli Khan		
GGHS Mohra Darogha		
GGHS Rupper Kalan		
GGHS Chak Amral		
GGHS Mari Danishmandan		
GGHS Kuri Khuda Bux		
GGHS Sihal		
GGHS Dhalla		
GGHS Girja		
GGHS Kotla		
GGHS Ranotra		
GGHS Ghogra		
GGHS Mial		
GGHS Adhwal		
GGHS Maira Kalan		

Appendix XIX**DEMOGRAPHIC SHEET**

Please provide the following information

(A) Tehsil name -----

(B) Your school name -----

(C) Designation -----

(D) Sector : Public Private

(E) Area : Rural Urban

(F) Gender: Male Female

(G) Qualification Academic Professional

(H) Job Experience,

Less than 1-5	6 - 10 years	11- 15 years	More than 15 years
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Appendix XX (a)**EDUCATIONAL MANAGER'S INTERVIEW**

“Effects of Educational Managers’ Instructional Leadership and Teachers Sense of Self Efficacy on School Effectiveness”

Uzma Sagheer, Principal Investigator

Interviewer: I know you answered these when you responded to the survey, however, for the interview questions...

Educational manager: Sure, no problem.

Interviewer: (reads and, highlighting educational manager’s response).

INTERVIEW QUESTIONS

Interviewer: Okay, we will now go to the questions. There are only eight questions. Please consider educational manager’s instructional leadership behaviors, the things you do, that are used to improve school effectiveness as you answer and elaborate on these questions.

Question 1: As an instructional leader, do you frame and communicate the school goals to all stake holders (teachers, students, parents and community members)?

Question 2: As an instructional leader, do you supervise & evaluate instructional methods adopted by teachers?

Question 3: As an instructional leader, do you coordinate the curriculum implementation with teachers when making curricular implementation decisions?

Question 4: As an instructional leader, how do you maintain balance in allocating weekly time to your teachers?

Question 5: As an instructional leader, how you monitor student’s progress at your school?

Question 6: As an instructional leader, what is your strategy to make yourself visible for staff and students at the beginning and off time of the school?

Question 7: As an instructional leader do you provide incentives for teachers and the students?

Question 8: As an instructional leader do you promote professional development of teaching staff?

Appendix XX (b)

تعلیمی مینیجرز کے لیے انٹرویو

عظمیٰ صغیر، پرنسپل انویسٹی گیٹر

انٹرویو لینے والا: میں جانتا ہوں کہ جب آپ نے سروے کا جواب دیا تو آپ نے ان کا جواب دیا، تاہم، انٹرویو کے سوالات کے لیے...

تعلیمی مینیجر: بالکل، کوئی مسئلہ نہیں۔

انٹرویو لینے والا: (پڑھتا ہے اور، تعلیمی مینیجر کے جواب کو نمایاں کرتا ہے)

انٹرویو کے سوالات

انٹرویو لینے والا: ٹھیک ہے، اب ہم سوالات کی طرف جائیں گے۔ صرف آٹھ سوالات ہیں۔ برائے مہربانی تعلیمی مینیجر کے تدریسی قیادت کے طرز عمل پر غور کریں، وہ کام جو آپ کرتے ہیں، ان سوالات کے جوابات اور تفصیل اسکول کی تاثیر کو بہتر بنانے کے لیے استعمال کیے جائیں گے

سوال ۱: ایک تدریسی رہنما کے طور پر، کیا آپ اسکول کے اہداف کو تمام اسٹیک ہولڈرز (اساتذہ، طلباء، والدین اور کمیونٹی ممبران) تک پہنچاتے ہیں؟

سوال ۲: ایک تدریسی رہنما کے طور پر، کیا آپ اساتذہ کے اختیار کردہ تدریسی طریقوں کی نگرانی اور جائزہ لیتے ہیں؟

سوال ۳: ایک تدریسی رہنما کے طور پر، کیا آپ نصاب کے نفاذ کے فیصلے کرتے وقت اساتذہ کے ساتھ نصاب کے نفاذ کو مربوط کرتے ہیں؟

سوال ۴: ایک تدریسی رہنما کے طور پر، آپ اپنے اساتذہ کو ہفتہ وار وقت مختص کرنے میں توازن کیسے برقرار رکھتے ہیں؟

سوال ۵: ایک تدریسی رہنما کے طور پر، آپ اپنے اسکول میں طالب علم کی ترقی کی نگرانی کیسے کرتے ہیں؟

سوال ۶: ایک انسٹرکشنل لیڈر کے طور پر، آپ کی حکمت عملی کیا ہے کہ آپ اسکول کے شروع اور چھٹی کے وقت اپنے آپ کو عملے اور طلباء کے لیے دکھائی دیں؟

سوال ۷: کیا آپ ایک تدریسی رہنما کے طور پر اساتذہ اور طلباء کے لیے مراعات فراہم کرتے ہیں؟

سوال ۸: کیا آپ ایک تدریسی رہنما کے طور پر تدریسی عملے کی پیشہ ورانہ ترقی کو فروغ دیتے ہیں؟

Appendix XXI (a)**INTERVIEW FOR TEACHERS**

Effects of Educational Managers' Instructional Leadership and Teachers Sense of Self Efficacy on School Effectiveness

Uzma Sagheer, Principal Investigator

Interviewer: I know you answered these when you responded to the survey, however, for the interview questions...

Teachers: Sure, no problem.

Interviewer: (read and highlighting teacher's response).

INTERVIEW QUESTIONS

Interviewer: Okay, we will now go to the questions. There are only eight questions. Please consider your efficacy in student engagement, instructional strategies and classroom management, the things you do, that are used to improve school effectiveness as you answer and elaborate on these questions.

Question 1: Do you have efficacy to get through the most difficult students?

Question 2: Do you help your students think critically?

Question 3: Do you help your students to foster their creativity?

Question 4: Do you evaluate student's comprehension of what you have thought?

Question 5: How much can you use variety of instructional strategies?

Question 6: How much can you do to adjust your lessons to proper level for individual student?

Question 7: How you handle behavioral problems in classroom?

Question 8: How well can you respond to none cooperative students?

Question 9: Do you find yourself efficient to get professional development?

Appendix XXI (b)

اساتذہ کے لیے انٹرویو

عظمیٰ صغیر، پرنسپل انویسٹی گیٹر

انٹرویو لینے والا: میں جانتا ہوں کہ جب آپ نے سروے کا جواب دیا تو آپ نے ان کا جواب دیا، تاہم، انٹرویو کے سوالات کے لیے...

اساتذہ: بالکل، کوئی مسئلہ نہیں۔

انٹرویو لینے والا: (پڑھتا ہے اور، تعلیمی مینیجر کے جواب کو نمایاں کرتا ہے)

انٹرویو کے سوالات

سوال ۱: کیا آپ کے پاس انتہائی مشکل طلباء سے گزرنے کی صلاحیت ہے؟

سوال ۲: کیا آپ اپنے طلباء کی تنقیدی سوچ میں مدد کرتے ہیں؟

سوال ۳: کیا آپ اپنے طلباء کی تخلیقی صلاحیتوں کو پروان چڑھانے میں مدد کرتے ہیں؟

سوال ۴: کیا آپ طالب علم کی سمجھ کا اندازہ لگاتے ہیں کہ آپ نے کیا سوچا ہے؟ -

سوال ۵: آپ مختلف تدریسی حکمت عملیوں کا کتنا استعمال کر سکتے ہیں؟

سوال ۶: آپ اپنے اسباق کو انفرادی طالب علم کے لیے مناسب سطح پر ایڈجسٹ کرنے کے لیے کتنا کر سکتے ہیں؟ -

سوال ۷: آپ کلاس روم میں رویے کے مسائل کو کیسے نبھاتے ہیں؟

سوال ۸: آپ کسی عدم تعاون کرنیے والے طالب علم کو کتنا اچھا جواب دے سکتے ہیں؟

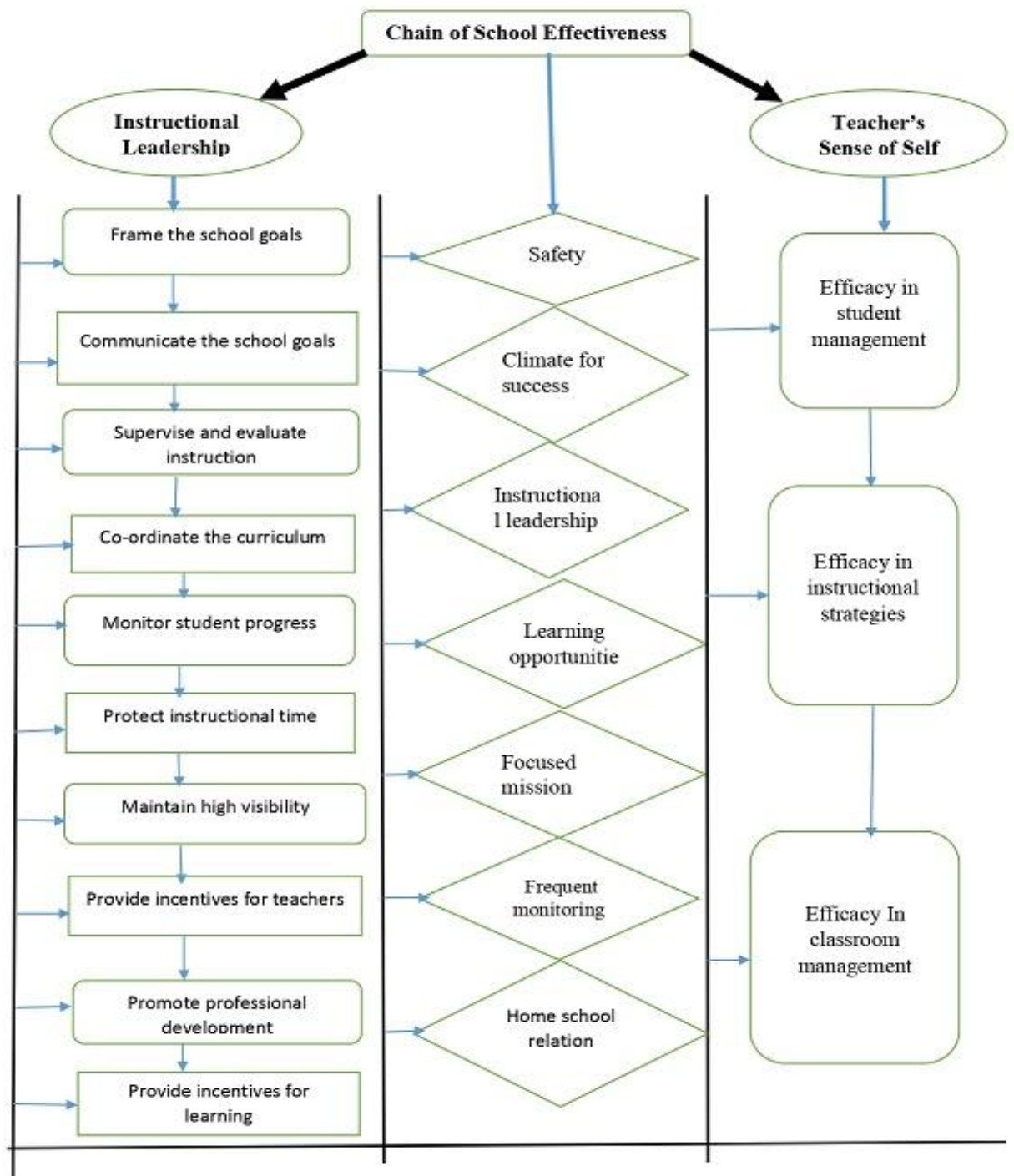
سوال ۹: کیا آپ اپنے آپ کو پیشہ ورانہ ترقی حاصل کرنے کے لیے موثر سمجھتے ہیں؟ -

Appendix XXII

AN OVER VIEW OF DATA COLLECTION INSTRUMENTS

(TSES)	(PIMRS)	(SESQ)
Teachers Sense Of Self Efficacy Scale	Principals Instructional Management Rating Scale	School Effectiveness Survey Questionnaire
Created by Moran and Hoy (2001) Have got permission (Long form) 23 items 9-point Scale	Created by Hallinger, P. (1985) Have got permission to use 48 items 5-point scale	Created by Baldwin et al. (1993) Have got permission 22 items 5 point scale
<p>Three dimensions</p> <ul style="list-style-type: none"> • Efficacy in student engagement • Efficacy In instructional Strategies • Efficacy in class room management 	<p>10 functions</p> <ul style="list-style-type: none"> • Frame the school goals • Communicate the school goals • Supervise & evaluate instruction • Co-ordinate the curriculum • Monitor student progress • Protect instructional time • Maintain high visibility • Provide incentives for teachers • Promote professional development • Provide incentives for learning 	<p>7 factors</p> <ul style="list-style-type: none"> • Safety • High expectations • Instructional leadership • learning • clear mission • Monitoring • Relation with home

Appendix XXIII



Appendix XXIV



Report on Annual School Census 2017-18

Programme Monitoring & Implementation Unit Punjab Education Sector Reform Programme Government of the Punjab

Schools

Page | 28

District Name	Higher Secondary			Secondary			Elementary			Primary			Masjid Maktab			Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Okara	7	5	12	109	77	186	108	178	284	528	501	1,029	51	6	57	803	765	1,568
Pakpattan	6	4	10	54	34	88	70	84	164	345	303	648	3	-	3	478	425	903
Rahimyar Khan	10	12	22	135	87	222	191	180	381	1,014	1,193	2,207	188	8	194	1,536	1,490	3,026
Rajanpur	8	4	12	44	25	69	52	33	85	563	426	989	-	-	-	667	488	1,155
Rawalpindi	22	18	40	199	189	388	128	173	301	526	672	1,198	-	-	-	875	1,052	1,927
Sahiwal	13	19	32	103	87	190	109	173	282	369	330	699	-	-	-	594	609	1,203
Sargodha	20	22	42	137	157	294	155	213	368	623	677	1,300	8	-	8	943	1,069	2,012
Sheikhpura	7	11	18	79	74	153	103	151	254	562	412	974	18	2	20	789	650	1,439
Siakot	9	21	30	99	139	238	107	180	287	473	978	1,451	-	-	-	688	1,318	2,006
T.T.Singh	5	10	15	84	108	192	101	185	286	359	342	701	14	-	14	563	645	1,208
Vehari	13	10	23	80	82	162	108	178	286	560	479	1,039	-	-	-	761	749	1,510
Grand Total	351	368	719	3,489	3,163	6,662	3,556	4,724	8,280	17,109	16,962	36,091	606	36	642	25,121	27,273	52,394

Table 20: District and Level-wise Schools

Appendix XXVI

PERMISSION TO USE AN EXISTING VALIDATION RUBRIC FOR EXPERT PANEL (VREP)

January 9, 2021

To: uzma janjua <janjuauzma2014@yahoo.com>

Thank you for your request for permission to use VREP in your research study. I am willing to allow you to reproduce the instrument as outlined in your letter at no charge with the following understanding:

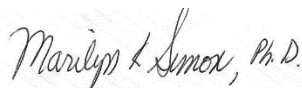
- You will use this survey only for your research study and will not sell or use it with any compensated management/curriculum development activities.
- You will include the copyright statement on all copies of the instrument.
- You will send your research study and one copy of reports, articles, and the like that make use of this survey data promptly to our attention.

If these are acceptable terms and conditions, please indicate so by signing one copy of this letter and returning it to me.

Best wishes with your study.

Sincerely,

Marilyn K. Simon, Ph.D



Signature

More information can be found in Simon and Goes's Dissertation and Scholarly Research: Recipes for Success, 2018 edition.

<http://www.dissertationrecipes.com/>

I understand these conditions and agree to abide by these terms and conditions.

Signed:



Expected date of publication:

Not SureM./

Appendix XXVII

Triangulation of Findings

Q1. How do educational managers perceive their instructional leadership functions?

Dimensions	Themes	Triangulation of results
Define mission of school	Defining and Communicating goals.	All the participants reported that through defining and communicating goals of the school, they were able to assure school as an effective institution.
Manage program of instruction	Managing curriculum and instruction.	This study found that managing curriculum and instructional program helps to accomplish school goals and ultimately improve school effectiveness.
Promote a positive school climate	Monitoring and providing feedback for positive school climate	All the participants agreed that the promotion of positive school climate through monitoring and providing feedback boost the effectiveness of school.

Q2. How do teachers perceive their sense of self efficacy?

Dimensions	Themes	Triangulation of results
Efficacy in Student engagement	Student engagement,	This finding shows that teachers, have a strong Sense of self Efficacy (SSE) around engagement of students and their performance strengthening school effectiveness.
Efficacy in Instructional strategies	Instructional strategies,	Findings revealed efficacy in instructional strategies helps the teachers to get through challenges of teaching, and teachers possess a strong sense of self efficacy (SSE) about instructional strategies.
Efficacy in classroom management	Classroom management.	The participants in the study reported that they knew how to manage the classroom.

Q3. To what extent educational managers' instructional leadership functions and teachers' sense of self efficacy effects school effectiveness?

Variables	Themes	Triangulation of results
Educational managers Instructional leadership	Instructional Leadership effects school effectiveness	All the respondents reported that their instructional leadership functions like (developing and communicating school goals), (Managing curriculum and instruction), (Monitoring and providing feedback for positive school climate) effects school effectiveness.
Teachers' sense of self efficacy	Teachers' Sense of Self - Efficacy effects school effectiveness	Teachers sense of self efficacy effects school effectiveness by engaging students in classroom, using different assessment and instructional strategies, motivating non-cooperative students for learning and engaging them in the classroom.

Appendix XXVIII

STAFF STATEMENT PROVIDED BY SCHOOL FOR SAMPLE SELECTION

STAFF STATEMENT OF GOVT. GIRLS HIGH SCHOOL DOBERAN KALLAN Month: SEPTEMBER 2017
:gghs.doberankalan@gmail.com

EMAIL Address

Emiscode:-37370040 U.C Name:- Doberan Kallan U.C #-:29 markaz:-Kallar Syedan Teh:-Kallar syedan Distt.:-Rawalpindi PP# 02 NA#: -52 School Phone #-:0513 573097



Sl No	Name / F Name/cnic #/ Mobil No	Design/ BPS	Date of Birth & Domicile Distt	Qualification		Date of 1st Appointment AS PST/EST/SST/SS		Name of first joining station With Post	Date of 1st Regular Grade as SST/EST/PST	Date of Present Regular Grade as SST/EST/PST	Slected/ Promotee	Date Of Joining Rawalpindi district AND Name of School/Office	Transferred From which School (Distt.)	Date Of joining present post	Date Of joining present School	OPEN DIS ABLE MIN ORITY	Degrees Verified Yes/No	Personal Pay No as per Pay Slip	GPF AC NO BANK A/C NO AND NAME OF BANK	Home Address AND E.Male Address.
				Academic	Professional	Regular	Contract													
PRINCIPAL/HM																				
1	vacant	H/M/17	NILL	NILL	NILL	NILL	NILL	NILL	NILL	NILL	NILL	NILL	NILL	NILL	NILL	NILL	NILL	NILL	NILL	NILL
SECONDARY SECTION																				
2	Shahida shabeen D/O Akhtar Husvan 37402-9290064 8/0300550/4440	SST/16	19/08/1958 RWP	B.A	B.Ed	13/05/1981 EST (G)	G.GHS MALA SHUMALI	11/05/1981 EST (G)	8/2/1887 SST (Art)	PROMOTE E			8/2/1887 SST (Art)	22/12/1999 SST (Art)	open	yes	30250445	EDU/043821/7365-9 /HABIB BANK LIMITED, (DARKALI/KALAR, RAWALPINDI)	Vill. Mohra Heeran, P.O. Choa khalsa	
3	Isha Yaqoob D/O Matanmad Yaqoob 37402-6012413-8/03475107017	SST CS/16	6/2/1986 RWP	M.A/ MCS	M.Ed	10/11/2009 SSE (CS)	G.GHS DOBERAN KALLAN/SSE I CS	10/9/2011 SSE CS	10/9/2011/S ST CS	SELECTEE			10/11/2009 SSE (CS)	10/11/2009 SSE (CS)	open	yes	31386535	EDU/RWP/60510/1000212 /M.C.B. / (CHOHA KHALSA, Kallar Syedan RAWALPINDI)	VILL & P O CHOHA KHALSA	
4	MARYAM HIBI D/O AMIR ZAUL 37402-003624-0/03434805576	SSE BIA TH/16	24/09/1990 RWP	M.PHI LJM	B.Ed	15/04/2014 SSE (M)	G.GHS DOBERAN KALLAN/SSE M	N/A	N/A	SELECTEE			15/04/2014 SSE (M)	15/04/2014 SSE (M)	open	yes	31635535	NOT AFFECTED; / THE BANK OF PUNJAB BR KALLAR SYEDAN RWP, RAWALPINDI	VILL CHOHA P O KALLAR SYEDAN	
ELEMENTRY SECTION																				

Appendix XXIX

STAFF STATEMENT PROVIDED BY SCHOOL FOR SAMPLE SELECTION

High Section

Sl. NO	Name / F Name/cnic # / Mobil No	DESIG /BPS	Date of birth/ Domicil	EDUCATION		Date of 1st appointment As PST/EST/SST/SS	Name of 1st joining Station with Post	Date of 1st regular grade as SST/EST/PST	Date of PRESENT regular grade as SST/EST/PST	Selectee/ Promotee	Date of joining in District RawalPindi and name of school/office	Transferred From which school/ Distt	Date Of joining present post/Pr.SSS.SS.SST.	Date of joining in present school	Open/Dis ability/mi nority	Degrees/certificates verified Yes or Not	Personal No as per pay slip	GPF A/C No & Bank A/C NO AND Name of Bank	Home address and mail address
				ACADEMIC	PROFESSIONAL														
1	Nama Rasul Malik D/O Ghulam Rasool Malik 61101-7919667-8 (0336-5286679)	HM BPS 17	11-09-1989	MSC BOTANY MPhil Paras & protection	B Ed	14-04-17 (Inbusiness)	GGHS SATHWANI/AS HM	N/A	N/A	Sel	N/A	N/A	14-04-17 (Inbusiness)	14-04-17 (Inbusiness)	Open	YES	3190744	24947000116001 HBL I-D MARKAZ BRANCH ISLAMABAD	H#143, 4#18, 1- Islamabad (info@piston@gmail.com)
2	Yasmin Akhtar D/O Muhammad Sheerif 37407-6992779-8 (0301-5067119)	SST (SC) BPS 16	03-03-73 Rawalpindi Punjab	BSC MA HIST	MED	08-10-02 SST(SC)	GGHS SATHWANI/AS SST(SC)	19-10-2009 SST(SC)	19-10-2009 SST(SC)	Sel	N/A	N/A	08-10-02 SST(SC)	09-10-02 SST(SC)	Open	YES	3072291	3255-2/NBP Khalid Sathwani SST(SC)	Vill Bhrilla PO Jocka Tehsil Kalbar Distt Rawalpindi (gghs.sathwani@gmail.com)
3	Aida Saba D/O Muhammad Zameer 37402-5095307-0 (0334-5200230)	SST (CS) BPS 16	01-12-86 Rawalpindi Punjab	MBA MCS - MA M Ed	MA EDU	10-11-09 SST(CS)	GGHS SATHWANI/AS SST(CS)	10-09-2011 SST(CS)	10-09-2011 SST(CS)	Sel	N/A	N/A	10-11-09 SST(CS)	10-11-09 SST(CS)	Open	YES	3129804	69247 141-5- new Khalid SST(CS)	Vill SAROHA, PO & Tehsil Kalbar Distt Rawalpindi (gghs.sathwani@gmail.com)
4	Noten Pervez D/O Pervez Akhtar 37402-488955-6 (0302-9169384)	SST (ARTS) BPS 16	07-10-83 Rawalpindi Punjab	MA ENG	MED	23-11-09 SST(A)	GGHS SATHWANI/AS SST(A)	10-09-2011 SST(A)	10-09-2011 SST(A)	Sel	N/A	N/A	23-11-09 SST(A)	23-11-09 SST(A)	Open	YES	3138259	69248 / 2005-5 NBP Khalid SST(A)	Vill Ghora PO & Tehsil Kalbar Distt Rawalpindi (gghs.sathwani@gmail.com)
5	MUHAMMAD SHER KHAN 37402-9861510-2 (0307-8585368)	SSE (ENG) BPS 16	22-08-89 Rawalpindi Punjab	MA ENG	BE D	23-7-16 SSE(ENG)	GGHS SATHWANI/AS SSE(ENG)	—	—	Sel	N/A	N/A	23-7-16 SSE(ENG)	23-7-16 SSE(ENG)	Open	YES	3170263	09197900 159603 HBL MANGOLA	VILL & P.O SAGRAMA, TEHSIL KALBAR SYEDNANWAP (munirahabib@gmail.com)
6	TOOBA LATIF D/O ABDUL LATIF 61101-6865633-6 (0336-5166492)	SSE (MATHS) BPS 16	08-01-89 Rawalpindi Punjab	MSC MATHS	BE D	23-7-16 SSE(MATHS)	GGHS SATHWANI/AS SSE(MATHS)	—	—	Sel	N/A	N/A	23-7-16 SSE(MATHS)	23-7-16 SSE(MATHS)	Open	YES	3170253	0009679 00262703 HBL	FLATRA BLOCK 11-3-3-181 ISLAMABAD (info@veemini@gmail.com)

TEHSIL SAROHA
Distt Rawalpindi
Ghulam Rasool Malik

STAFF STATEMENT OF GOVT. GIRLS HIGH CHAK SATHWANI SCHOOL RAWALPINDI, MONTH SEP 2017 gghs.sathwani@gmail.com
EMIS CODE: 37370045 MARKAZ: : KALLAR SYEDAN TEHSIL:KALLAR SYEDAN DISTRICT :RAWALPINDI,NA NO: 50 PP NO: 02 UC NAME:KANOHA UC NO:28