EFFECT OF GOAL ORIENTATION ON SCIENCE STUDENTS' ACADEMIC ACHIEVEMENT AT SECONDARY SCHOOL LEVEL

By

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NATIONAL UNIVERSITY OF MODERN LANGUAGES, ISLAMABAD

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Candidate of Master of Philosophy at National University of Modern Languages do hereby declare that the thesis "effect of goal orientation on science students' academic achievement at secondary level "submitted by me in partial fulfilment of M.Phil. Degree, is my original work, and has not been submitted or published earlier. I also solemnly declare that it should not, in future, be submitted by me for obtaining any other degree from this or any other university or institution.

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DEDICATION

***This thesis is dedicated to my beloved parents
who have always been my source of
inspiration and have continually provided me
with their moral, emotional, spiritual and
financial support.***

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ABBREVIATIONS

Achievement Goal Orientation	AGO
Goal Orientation	GO
Mastery Goal Orientation	MGO
Mastery Goal	MG
Mastery Approach Goal	MAG
Mastery Avoidance Goal	MAG
Performance Goal	PG
Performance Approach Goal	PAv.G
Performance Avoidance Goal	PAv.G
Work Avoidance	WA
Work Avoidance Goal	WAG

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ABSTRACT

Thesis Title: Effect of Goal Orientation on Science Students' Academic Achievement at Secondary School Level

The main aim of the study was to determine the effect of goal orientation on science students' academic achievement at secondary school level. The second and third objectives of the study were to compare the science students' goal orientation with respect to gender and educational sectors respectively. The population of the study was 1682 (male and female) secondary school science students from both public and private schools. A stratified random sampling technique was used and 400 secondary school science students were chosen as a sample of the study. The population was divided into two major strata based on gender i-e., (male and female) and educational sectors i-e., (public and private). Goal orientation assessment scale, developed by Was (2006) was adapted for data collection. Inferential statistics including t-test and linear regression was used to compute results. The results of the study revealed that goal orientation had a positive effect on academic achievement. Regarding gender wise comparison, male students were found more mastery goal orientated while female students were more performance goal oriented. With respect educational sector wise comparison, public school students were more mastery goal oriented whereas; private school students were more performance avoidant goal oriented. It is recommended that stakeholders may create an encouraging environment that is helpful for enhancing personal psychological factors in students.

CHAPTER-1

INTRODUCTION

Previous studies have examined goal orientation with the range of variables. However, very few researchers studied the association flanked by goal orientation (GO) and academic success. The current study is lengthened to study the effect of Goal Orientation on Science Students' Academic Success at Secondary School Level (SSL). The following section contends with introduction of the study. The section below gives an over view of study through discussing background of the study, theoretical framework, rational importance of the study and problem statement, objectives and study hypothesis.

Over the last periods in the field of educational psychology the success box specifically achievement goal theory (AGT) crop up as the focus of many empirical studies. Achievement goal orientation (AGO) is a feature of motivation. Motivation has wide range of aspects such as inner and external inspiration or goal orientations (Ryan & Deci, 2000; Elliot & McGregor, 2001). Pintrich & Schunk (2002) stated motivation as a fundamental factor for explaining students' academic success. Pintrich and Schunk (2002) defined "motivation as a manner through which goal-directed assignments can be prompted and continued". Motivated students make more effort to perform certain task, they like to do challenging things, more enthusiastic, and stay driven when they come across any difficulties and indulge in finding a solution for it, which results in success as higher academic achievement. To describe learners' motivation researchers developed many models, concepts and theories. AGT is one of the basic theories that has been regularly used to define learners'

engagement in a various learning task (Elliot, 1999)

AGT due to its impact on students' knowledge and presentation has been the focus of several educational studies. According to Harackiewicz (2010) achievement goal is a cognitive representation for accomplishment of competence-related targets either by approaching or avoiding end. A combined frame of beliefs affection and influences that brings out the intent of a behavior and presented by various means of approaching, engaging and reacting to success task (Ames, 1992). Normally, GO is expressed as the learners' details or efforts for completing a task (Liu, 2006) that stimulates their activities, responses, and inspiration for learning (Shim & Ryan, 2005). Various quantitative explorations were conducted on achievement-orientation theories. Ames (1992) stated in the primary explorations, orientation of goals of learners was categorized into two main groups: mastery goals (MG) and performance goals (PG). Where MG were defined through mastery of certain task, progress in capability, test task, and interest, while PG were related to obtaining good grades, appreciation, and incentives from others (Elliot, 2000). In late 19th century studies, another goal orientation i.e. work avoidant orientation was most inconvenient to mastering new knowledge and positive study outcomes (Meece, Blumenfield, & Hoyle, 1988; Duda & Nicholls, 1992; Archer, 1994).

Mastery goals (MG) focus on rising capability, individual progression, more modified learning, and becoming skilled at the situation. MG are related with more adjustable learning results such as resolution at the time of failure, selecting difficult assignments, working on systematic handling approaches, and internal incentives (Peer, 2007). With respect to personal growth and self- realization Kaplan (2010) stated that such learners are more attracted towards learning new knowledge, enthusiastic to do more hard work, and defy difficult tasks whereas, PG are associated with getting good grades and more external incentives than internal ones (Harackiewicz, 2000). MGO, also known as learning and task-orientated goals (Peer, 2007) which are centered on emerging capability, individual progression, more modified learning, and becoming skilled at the situation. Individuals holding mastery goal orientation, demonstrate achievement success through becoming skilled at the task, acquiring new information, knowledge and skills, and advancement in recent performance (Ames, 1992). Individuals holding PG orientation consider acquiring

new knowledge and expertise as means to show skills and ability to enhance the dignity (Kaplan, 2010). These learners focus on external appreciation, and aim at outstanding concrete performance (Canfield, 2010). Three main types of frameworks exist among those three types while for MG only dichotomous framework shows reliable results, although the results for PG were found varied. Elliot found empirical indication to support their recommendation and consequently, suggested a trichotomous framework in which performance goals (PG) were divided into two groups i.e. performance approach goal (PAG) and performance avoidance goals (PAvG), whereas MG was kept the same.

Alongside mastery and performance goals, Dowson and Mclnerney (2001) defined work avoidant goal (WAG) as a significant feature of learning inspiration. Mainly work-avoidant orientation comprehends a lot of work lessen approaches. Students' with this orientation do not give any importance to effort and hard work, opposite to mastery goal-oriented students' and contrasting to performance-approach oriented learners; these learners do not want to displays their competence. Precisely, learners holding work avoidant orientation are focused to complete their assignment or course with less hard work or effort.

Researchers along with achievement goal thinkers documented dichotomous framework of achievement goals in which two forms of goals were grouped. First group includes skills, ability and capability developing goals, whereas, another group comprised of the goals that show capability or avoid showing the deficiency of skill or talent (Elliot, 2005). The particular goal groups were known as mastery and performance targets (Dweck, 1986). Whereas, Nicholls (1984) named these two forms of goals as "task and ego-involvement" targets, while (Ames, 1987; Archer, 1988) stated MG and PG congruently (Dweck & Leggett, 1988) suggested individuals react in a framework which develops as a result of chasing their goals. Dweck & Leggett (1988) stated mastery goals as a framework describing knowledge and mastery of information while frameworks explaining the capability, or skills of individuals were termed as performance goals (PG).

Elliot & McGregor (2001) described the fact about the mastery goals deliberate, in two recent frameworks that were dichotomous and trichotomous framework, which were not the blend of mastery approach goal (MAG), and mastery

avoidant goal (MAvG); fairly reveal only approach goals (MAG). Moreover, in the meantime, Elliot (1999) suggested that there was not sufficient need of mastery avoidance goals; hence, the trichotomous model became the leading conceptual standpoint of AGT. In an afterward review of this theory, Elliot (2011) described that within MG and PG concepts there are concerns regarding three basic things (task, self, and others) and described that these orientations of goals are very difficult to be reflected as separate concepts. Hence, Elliot et al. (2011) suggested a 3 (task, self, others) x 2 (approach vs. avoidant) model outline for goal orientation (GO). Although the recommended 3 x 2 framework is persuasive, still it requires to be evaluated with strong deal of experiential data. For the mentioned details, another framework selected as the ground for the present study in which three main goals including mastery, performance (performance approach and performance avoidance) and work avoidant goals were taken. The present study is targeted at discovering the connection between secondary school students' academic success in the science subject area through motivational beliefs.

In several studies on goal theory, mastery goal orientation showed significance impact on school performance (Midgley et al., 2000; Martin, 2007; Siderdis and Kaplan 2011; Roussel, Elliot & Feltman, 2011; Geta 2012; Phan 2014; Ng'ang'a, Mwaura, & Dinga, 2018). Performance goal orientation showed a reverse effect on acquisition of skills and positive study results (Dseth, & Sandal 2014; Roussel, Elliot & Feltman, 2011; Ng'ang'a, Mwaura, & Dinga, 2018; Hulleman & Harackiewicz, 2010; Midgley et al., 2000; Dseth, Danielsen & Sandal 2012; Ismail, 2010). Examiners have discovered the blending of MG and PAG with weak PAvG associated with substantial study results (Bouffard, Vezeau, & Bordeleau 1998; Luo et al., 2011; Schwinger et.al., 2016). Some other researches prove that WAvGs are utmost inconvenient to learning and positive study results (Archer, 1994; Duda & Nicholls, 1992; Meece, Blumenfield, & Hoyle, 1988). Wolters (2003) in his initial studies, among all other goal orientations work avoidant orientation is found as strongest forecaster of academic delay. Later in his studies, Wolters (2003) found work avoidant orientation as well as negative self-efficacy as direct predictor of delay while, Elliot (1999) defined work-avoidance goal an actual dearth of a success goal in an educational realm.

1.1   BACKGROUND OF THE STUDY

The academic success of students' is related to a number of psychological variables such as motivation, stress, test anxiety, self-efficacy, in positive or negative ways. In educational psychology, achievement goal theory emerges as the predictor of educational achievement. Previous studies have examined goal orientation with a range of variables. However, very few researchers studied the association flanked by goal orientation and academic success. Therefore, the current study is targeted at investigating the association between academic achievement and goal orientation of secondary school students.

1.2   RATIONALE OF THE STUDY

Relevant to the present study, achievement goal orientation can predict a number of achievement related outcomes (Phan, 2014). Although studies done in developed countries shows that personal variable like stress and anxiety, self-efficacy, motivation level etc, may explain academic achievement, there is a dearth of local studies on how achievement goal orientation relates with academic achievement especially at secondary school level. Therefore, the current researcher explored the association between science students' goal orientation and their academic achievement at secondary school level. The results of the study will offer insights on how adaptation of achievement goals at secondary school level provide learners knowledge that can be integrated within classrooms to bring about most suitable forms of learning. The current study let to see the sights of these associations.

1.3   STATEMENT OF THE PROBLEM

Students' enters learning situations with different levels of motivation and goal structures and vary widely on how they adapt the learning situation. Their goal structure highly contributes to define their academic achievement. Educators need to understand students' goal structure to build classroom environment that motivate students to succeed.

A major research gap was found for studying goal orientation of secondary school students. During this stage understanding students' goal structure is utmost

important for their better academic achievement and helping them in better carrier selection. Also gender differences with regards to their goal orientation remain unfolded. Studying specifically four goals including mastery, performance approach, performance avoidant and work avoidant is needed to improve the understanding of learner's success motivation, which would affect their learning and achievement.

The study is targeted to lengthen recent researches through goal orientation outline to explore the effect of goal orientation on science students' academic achievement at secondary school level. This view has inference for learners' and policy makers that have inspiration on students' academic achievement.

1.4   RESEARCH OBJECTIVES

The key objectives of the study are:

1. To examine science students' goal orientation (a part of motivational beliefs) at secondary school level.
2. To compare science students' goal orientation beliefs with respect to demographic variables that is gender.
3. To compare science students' goal orientation beliefs between public and private sectors at secondary school level.
4. To examine the effect of goal orientation beliefs on science students' academic achievement at secondary school level.

1.5   NULL HYPOTHESES

1. There exists no significant difference between male and female students' regarding their goal orientation beliefs at secondary school level.
2. There exists no significant difference between achievement goal orientation beliefs of public and private school science students at secondary school level.

1.6   CONCEPTUAL FRAMEWORK

The current study is based on goal orientation variable. The conceptual structure adapted for the current study set out to examine four achievement goal orientations into separate categories that are mastery, performance approach,

performance avoidant and work avoidant orientation. The framework adapted for the study was provided by Was (2006) in his study with the title academic achievement goal orientation taking another look. This framework was developed by combining two frameworks by Elliot (1999) and Harackiewicz (2000). Elliot (1999) was based on difference between performance approach and performance avoidant along with a group of mastery goal while the other framework given by Harackiewicz (2000) was based on mastery and performance along with work avoidant as a final group. Thus, in the current study combining these two frameworks result into three main goal orientations including mastery, performance and work avoidant goal. Further performance goals were grouped into two more goals that are performance approach and performance avoidant goals. Therefore, the four main goal orientations include MG orientation, PAG orientation, PAvG orientation, and WAG orientation.
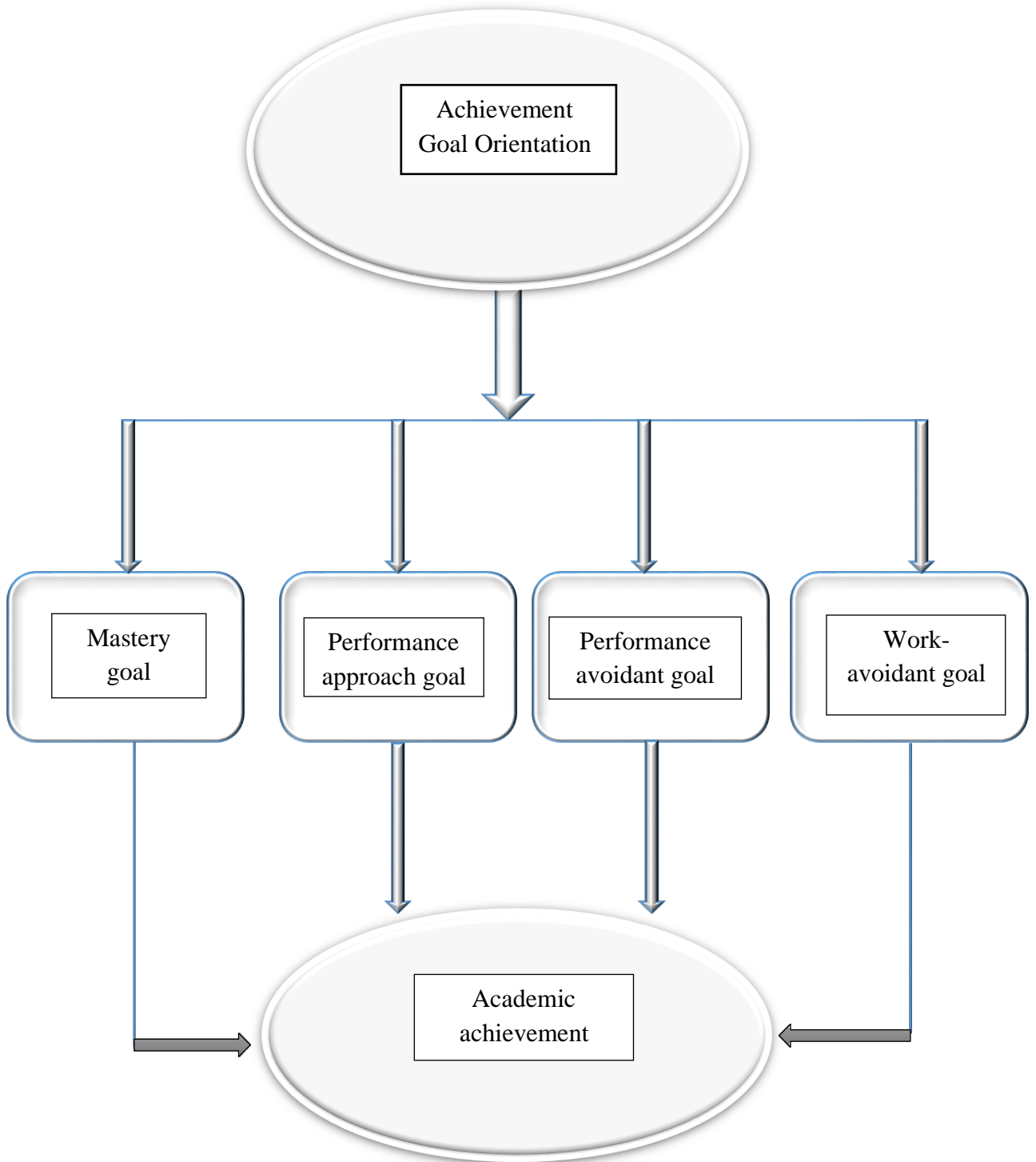
Fig 1.1 Conceptual framework of the study

1.7 SIGNIFICANCE OF THE STUDY

The study would be beneficial for society by highlighting the importance of goal orientation in the learners' life. Study findings will aid novelty to educators, policy makers and curriculum-developing authorities to understand students' goal orientations, so that teachers and educators can be equipped with essential teaching skills that enrich learners' motivation for learning. Through understanding the goal orientations of students, teachers can predict the scale of students' success and school administrators can better assess the need of counseling, guidance and training regarding students' educational barriers. It will be cooperated for parents and teachers to be aware of the factors involved in affecting the education of children. It will aid learners' to set goals for better academic achievement through understanding the importance of goal orientation in their life. It will lay the ground for the future researchers by highlighting the factors involved in the subject. It will be helpful for school administrators and teachers to know main orientation of Pakistani students' and which type of orientation is better for goal achievement, which in turn help teachers to prepare class activities to enhance students' achievement. The goal orientation not only applies to the educational grounds, but also has the eminent effect in various fields, including business, in which predictions can be done regarding the success and behavior of subordinates. The current study will also be beneficial for curriculum designers through providing empirical evidences on goal orientation in different context; they can integrate advantageous learning content and activities, which can be helpful for development of more influential goals among students at secondary school level. It will also help policy makers by highlighting an important element of students' life, whose implications within the secondary school level can benefit learners with more understanding and academic achievement.

1.8 OPERATIONAL DEFINITIONS

1.8.1 Goals

Goals can be expressed as an end towards which efforts could be done. Goals are generally cognitive representations of possibly reachable challenges. These are outlines, which learners strive to achieve.

1.8.2   Achievement goal orientation

Achievement goal orientation is a feature of motivation and is expressed as a combined frame of beliefs values and reasons that brings out the intent of a behavior and presented by various means of approaching, engaging and evading to achievement task.

It represents individuals' behavior in learning situation that brings out positive or negative approach towards completion of activity. It explains learners' value, hard work or efforts in a learning situation that stimulates their motivation for learning. Goal orientation expresses reasons of students' engagement in any learning situation.

1.8.3   Mastery goal

It is referred as a learning drive for attaining more knowledge with an emphasis on enhancing and mastering skills. In mastery goal, significance is linked to development of new skill and knowledge. Mastery oriented students are more active in learning new knowledge and put greater effort into the learning process.

1.8.4   Performance approach goal

It is based on estimating skills and abilities in comparison with others. PG lead learners to strive for seeming content or to abstain from showing themselves incompetent when contrasted with others. Learners' with this approach are more concerned with how others see their ability. These people want to generate credit about their high talent or want to express themselves high ability learner.

1.8.6   Performance avoidance goal

It is referred as an insensitive success orientation as it decreases learners' inner enthusiasm and motivation. Students' holding performance avoidance orientation believes that they are skill deficient as compared to others. These students' avoid, presenting little ability, and are linked with fears of showing their achievement publicly as it may certify their skill deficiency.

1.8.7   Work avoidant goal

Work avoidant goal orientation is related with a lot of work escaping or work escaping strategies. Students' with this orientation do not give any importance to hard work and effort; these students' do not want to displays their competence. Precisely, learners holding work avoidant orientation are focused to complete their assignment or course with giving less hard work or effort.

1.2 METHODOLOGY

1.2.1   Research approach

The present study is grounded on quantitative approach. This study mainly contains statistical information for the explanation of study results and drawing conclusions. Researchers choose this methodology since it is used for highlighting the issue through creating mathematical information or information which can be transform into practical data. It utilizes quantifiable data to close realities and uncover distinctive research patterns. Researcher was keen on gathering the data in organized structured way using quantitative approach.

In this descriptive survey, comparative approach was adopted to observe the difference of goal orientation beliefs amid male and female public and private school students. The researcher conducted surveys by performing personal visits to the target area, and gathered data. The researcher compared secondary school science students' goal orientation on the basis of gender and educational schools.

1.2.2   Population

The population of the study includes all 10th class science students' from tehsil Havelian enrolled in Board of Secondary and Elementary Education Abbottabad. According available statistical gazette records 2018 there were 1682 10th class science students' in Tehsil Havelian BISE (ATD)

1.2.3   Sampling Technique

Stratified random sampling was adopted and applied for drawing sample for the study. The population was divided into four major strata on the basis of gender (male and female) and educational sectors (public and private). Accordingly, for these groups stratified random sampling was used.

1.2.4   Sample

The sample of the study includes 24% of population that is 400 respondents. The sample includes both gender respondents from both educational sectors. The questionnaire was distributed among 400 secondary school science students. The response rate was 100%

1.2.5   Data collection tool

The data was collected with an adapted questionnaire of Christopher Was (2006) and rated on five-point Likert scale ranging (5) strongly disagree, (4) disagree, (3) uncertain, (2) agree and (1) strongly agree. The questionnaire was divided into four sub parts containing 34 question items measuring four different goal orientation beliefs individually. The tool items were changed by experts in the field of education carefully.

1.2.6   Data analysis

The statistical techniques were applied on gathered data for analysis. Statistical techniques include independent sample t-test, correlation, and regression.

Table 1.1

Description of data analysis

Sr. No	Research Objectives	Hypothesis	Statistical Analysis
1	To examine science students' goal orientation (a part of motivational beliefs) at secondary school level.		Mean scores
2	To compare the science students' goal orientation beliefs with respect to demographic variables that is gender.	There exists no significant difference between male and female students' regarding their goal Orientation beliefs.	Independent sample t test
3	To compare science students' goal orientation beliefs between public and private sectors at secondary school level.	There exists no significant difference between public and private school students with respect to their goal orientation beliefs.	Independent sample t test
4	To examine the effect of goal orientation beliefs on science students' academic achievement at secondary school level.		Regression

1.3 DELIMITATION

The students' sample in this study was not fully representative of all schools therefore; results can only be applied to secondary school students. The study is focused to examine learners' goal orientation in Tehsil Havelian district Abbottabad which can differ with surrounding and socio-economic background in various geographical regions. The study is delimited to ten public and private schools of Tehsil Havelian district Abbottabad. Learners' goal orientation can vary in various subjects during different educational stages the present study has been enclosed to examine only science subjects at secondary school level. The study has been enclosed to measure learners' goal orientation through closed ended questionnaire. The study is restricted to examine academic achievement of students' through goal orientation only and not focused to examine other variables that could also have enabler or barrier effect on academic achievement.

CHAPTER-2

LITERATURE REVIEW

2.1   ACHIEVEMENT GOAL ORIENTATION

Along with many other factors of Academic accomplishments, achievement goal orientation is one of them. It is a feature of motivation. Motivation has many different aspects such as inner and external motivation (Ryan and Deci 2000) and goal orientation (Elliot & McGregor, 2001). With advancement in educational psychology, the theory of achievement goal orientation has been continual to develop (Elliot, 2005). In achievement motivation theory, role of goals has become an important feature.

Goals can be expressed as an end towards which efforts could be done. The particular aims an individual set, decides the individual experience in regards to both achievement and failure of the task in which one locks in. Due to the connection between goal and students' performance Was (2006) stated goals as "that which a learner challenges to achieve". Goals can also be stated as possibly reachable cognitive representation. They are not attributing in the feeling of personality characteristics, rather cognitive presentations that show dependability or stability, just as comparative sensitivity (Pintrich, 2000). Research scholars have occupied with endeavors to decide the sorts of goals that could be beneficial enough for understudies and which goals upshot in cognitive as well as affective techniques and practices which clue learner's achievement. Kaplan and Maehr (2007) GO alludes to the reasons of engagement in any the learning task. Recent researchers discussed the idea precisely and propose various models that include different definition of goals (Elliot, et al., 2011; Fishbach, & Ferguson, 2007).

GO is expressed by the learners' details and efforts for completing an assignment (Pei- Hsieh, et al., 2006) that stimulates learners' activities, responses, or inspiration in terms of learning (Shim & Ryan, 2005). Goal on the base of mastery and performance orientation can also be defined by students' definition of ability, capability, skill achievement and failure disappointment (Bouffard, et al., 2011). Success is view of anything with focused on leaving behind peers for performance goals as well as self-fulfillment for mastery goals (Bouffard et al., 2011). The literature supports the fact that learners may have multiple goals. That is, an individual learner can at once have different goals, including forthcoming life goals, social goals, individuals goals for well-being, and mastery goals (Daniels, et al., 2008; Pintrich, 2000; Luo, Paris, Hogan, & Luo, 2011; Mansfield, 2012; Tuominen-Soini, Salmela-Aro, & Niemivirta, 2012). De la Fuente Arias, (2004) explains educational aims reasons of an educational nature that learners use to manage ones classroom conduct.

Achievement Goal Theory due to its impact on students learning and presentation of learning has been the focus of many studies in education. AG according to Hulleman, et al., (2010) is a cognitive representation for accomplishment of competence-related targets either by approaching or by avoiding end. This description contrasts with the original achievement motivation meanings as it includes both mastery and performance sides distinctly in place of comprising a distinct achievement aspect (Hulleman 2010). Achievement goals may be a combined frame of beliefs, affection and influences that bring out the intent of a behavior and resented by various means of approaching, engaging and answering to success task. (Ames 1992). GO researcher stated achievement aims as a reason of once engagement in any learning situation. A person's competency and performance aims at representing a person's competency by outdoing others (Bouffard et al., 2011). In achievement goal theory, in order to do difficult task learners set two groups of goals that are MG and PG. Few success goals thinkers approve the initial description of the success goals theory where the mastery goals were considered as the better achievement earner (Kaplan & Middleton, 2001). Furthermore, some researchers are in favor of new definitions of achievement goal theory where not only mastery goals but multiple goals are advocated for promotion of academic accomplishment (Elliot & McGregor, 2001).

Rahman (2017) defined goal orientation as a factor of success inspiration that touches achievement in numerous grounds and relates it to ability, success and struggle, (Lawson, 2005). Types of goal orientations include MG and PG orientations. Mastery and PG areas can be distinguished by learners' outlook, aptitude and success or failure (Bouffard et sal., 2011). Achievement can be defined for 'mastery goals' by actualization' and for 'performance goals' by leaving peers behind (Senko et al. 2011). An important feature of goal theory enunciated by Dweck (1986) is that mastery goals are developed through learner's hard work whereas, for the 'performance goal' ability is a fixed article. The major difference between these goals is that 'mastery goal' centers around learning the material and focusing the jobs while those who believe in 'performance goal' are worried about exhibiting their capacity and execution as estimated by their relative remaining to others' accomplishments. Besides conferring a goal, they can also adopt or escape the goal they are completing. In the achievement goal theory, two goals are designed that are master goals and performance goals and their influences on education and experience of individuals have been largely discovered. Mastery goals were named as "task goals" while performance goal as "ego goals". Maehr (1983- 1984) described achievement goals by the supposition that can be different among learners, while Ames (1992) explained achievement goals by strong and weak outlines of intellect, effect, and conduct which can be aroused by the acceptance of a specific achievement goal. (Ames, 1992; Dweck & Leggett, 1988) described success goals as MG and PG orientations. Elliot & Harackiewicz, (1996) established relationship between mastery goals and intrinsic incentive, while extrinsic incentives are likely to describe performance goals.

While interrelating the goals, MGs are found in a positively association with internal motivation whereas, PG as positively connected with external inspiration and support. Learners with MG are intended to acquire knowledge, capability and skills, whereas learners with performance are more likely to show their skills expertise to others (Ames, 1992; Archer, 1994). In contrary, learners acquiring performance goals are perplexed when come across challenging tasks, escape difficult events, and have less internally enthusiastic (Ames, 1992b; Dweck, 1986; Nicholls, 1984). Hence, with advancement in single success element for inspiration, the 'early achievement inspiration researchers' strongly believed in approach and avoidance (Hulleman, Schrager, Bodmann, & Harakiewicz, 2010).

2.2   MASTERY GOAL ORIENTATION

In the previous literature, MG expressed as simply a proper way to deal with enhancing knowledge, expending self-adequacy, struggle, and determination just as the aim introduction that fosters the utilization of increasingly powerful cognitive and cognitive approaches as well. He elucidates that learners have particular directions towards specific type of objectives. The overwhelming hypothetical way to deal with goals direction in educational situations is one that recognizes mastery and performance orientations. Researchers have likewise utilized terms for example, educational objectives (Dweck, 1987) and activity -centric objectives (Nicholls, 1984) to mastery goals beliefs. Nicholls and Miller (1984) enunciated, the task included students, as students with focus on being expert in a task needing to be done but not comparing self with others.

Peer (2007) MGO, also known as learning and task orientated goals, which focused on emerging capability, individual progression, more modified learning, and become skilled at the situation. Individuals holding mastery goal orientation demonstrate achievement, success through becoming skilled at the task, acquiring novel information, knowledge and skills, and advancement in recent performance (Ames, 1992). With respect to personal growth and self-realization, Kaplan et al. (2010) stated such learners are more attracted in exploring new knowledge, zealous to do more hard work, and defy difficult tasks. These individuals for increasing their knowledge assume hard tasks, hence linked positively to learning, studying and acquiring skills. Such learners consider mistakes as horizon of learning and are likely to involve others asking for advice and help. They set reasonably exciting targets, respond to failure appropriately, and accept concerns for learning. These learners take learning as treasure, assume learning as a continuous and incessant process, graph their own performance than likening it to others, effort more, and try new things that early they were unknown to organize.

Students' receptive to learning or mastery objectives show more adherences to hard tasks and are bound to ascribe achievement and inability to inner manageable grounds. Learners with learning objectives are additionally bound to indicate tendencies for challenges and educational challenges accepting (Ames, 1992). Dupeyrat and Marine (2005) describes that adults in proceeding with training courses

with MG, had a positive outcome on learning products, while performance objectives holders had negative learning products. At the point where a learner is receptive to MGO hard work seems as adding to progress also, not a mean of capacity. At the point when focused toward MG learners view success inspiration as gaining some new useful knowledge or completing task that needs to be done.

Mastery goals revolve around the reason learning for not only achieving new learning but also emphasis on improving and achieving abilities. Furthermore, setting mastery objective, significance is to grow new abilities and information. Stressing upon approach, self-effort for acquisition of knowledge is appreciated, and the accomplishment of mastery is viewed as half-way dependent on hard work (Ames & Archer, 1988). Research has shown that mastery goal holders are more open to chase difficult assignment, have an optimistic view of learning conditions and also display an adaptive attribution (Ames et.al, 1977; Dweck, 1988; Elliot & Dweck, 1988; Nicholls, Patashnick & Nolen, 1985). This orientation holder is more zealous and devotes more power to learning process, which results in improved performance. For example, in an adult-based study, Ford et.al. (1998) examined the character of personal differences with several variables including achievement goals, learning strategies, and more difficult decision management task. The examiner expresses mastery goals in a significant correlation with meta-cognitive events of the learners, which are significantly connected to performance with a change in task.

Learners acquiring mastery goals are more likely to continue when come across difficult events, strive for difficult inspiring assignments, and are internally enthusiastic (Ames, 1992; Dweck, 1986; Nicholls, 1984). Mastery goals are associated with an optimistic and reliable set of results including putting more efforts to studying materials, with holding knowledge and information for a long time, the positive opinion of self-efficacy, and suitable helping behaviors (Gerhardt & Brown, 2006). The findings of many more explorations throw lights on the individual holding mastery goals accept deep learning approaches or expansion procedure in learning parallel to this individual holding performance goals are linked with surface strategy or practice procedure in learning (Bandalos, Finney, & Geske, 2003). In contrast with two students holding performance the mastery goal holders like challenging task to progress themselves, they are hard working towards education and use of operative

educational plans, and hence possess strong positive outlooks to school, and occupy high self-efficacy (Mattern et al., 2005). According to many theorists, in the stated learning context, mastery goals are intermixing and flexible while performance goals are not (Pintrich, & Schunk, 2000). Conversely, modern researches on achievement goals, find uneven mostly with performance goals but mastery objectives highlight a strong connection with deep level handling, while performance goals were found associated with both outward and inward (Chan & Chan, 2005).

To explain the connection between 'target goals' and 'school success of learners' various findings of empirical studies were also reported such as setting aims and goals while accomplishing certain tasks, also related to inspiration for finishing the task and insight of an adequate conduct. Reception of response in the form of feedback has been positively associated with learning success and inherent inspiration. Mastery goals pay more emphasis on knowing and achieving the task for personal success and improvement (Ames, 1992; Dweck & Leggett, 1988).

Elliot (1999) examined the measure of MG introduction as approach and avoidance groups. Mastery approach (MA) introduction drives one that go to finish the task so as to build learning and mastery avoidance and (Mav) introduction makes one stay away from achievement of a task because of the feeling that individual is not prepared to perform effectively for finishing the assignment. Brophy (2005) expressed that learners with MA introduction show their focus on mastery, yet share the assignment by means of evading slip-ups, a strategic distance from slip-ups, disappointments, or lessening of existing capabilities. There are very few quantitative proofs with respect to the effect of Mav goals which in turn are hard to recognize the type of avoidance orientation beliefs from PAvG orientation.

A second division Elliot (1999) implied in MG orientation is that task referential and past referential orientations. Elliot did not broadly expound in the explanation of mastery past referential orientation. He specified past referent arranged learner utilize previous presentation as an extent of accomplishment, moreover, a measure by means of which one set certain targets. Though mastery task referential introduction alludes to estimating one's capability as indicated through finishing or completely comprehending the task that needs to be done, hence, past referential objectives are estimated by whether individual has enhanced his performance or has

additionally built up one's abilities or knowledge. Learners can explain this overview as intra- individual challenge. In contrary, learners acquiring performance goals are projected to slightly stick out when come across challenging tasks, escape difficult events, and have less internally enthusiastic (Ames, 1992b; Dweck, 1986; Nicholls, 1984).

Some explorations pointed the nature of PG as non-accommodative (Urdan, 2004); although, few more studies uncovered the association through positive link to learning products, recommending need of more empirical studies to define beneficial and the disadvantageous context of performance goals with learning environment (Midgley, Kaplan & Middleton, 2001). Lau and Lee (2006) concluded from their study that learners pursuing both MGO and PAG are more beneficial than those who chased single goal.

2.3   PERFORMANCE GOAL ORIENTATION

Performance goals depend on estimating ability in contrast with others. As opposed to learners with a MG orientation, learners sensitive towards PG orientation are progressively well suited to end up disappointed and apologetic in case of failure to increasingly outer factors, for example, good fortune, assignment difficulty, and uncontrollable factory that is lack of skills (Dweck, 1986).

Individuals with performance goal orientation are curious about how others see their capabilities. These people want to get admiration for their high talent or want to express themselves as high ability learner. Such learners are more concerned with superficially variables like high percentage, doing jobs by doing some homework, and giving good performance than others. These individuals consider acquiring new learning and expertise as means to show skill and ability to enhance the dignity (Ames, 1992; Kaplan & Flum, 2010). Their aptitude for external appreciation and outstanding concrete performance aims at learning new skills (Canfield & Zastavker, 2010). They avoid social contrast Cheung (2008) seeing others carrying out certain tasks and attempt to do their task well. The purpose is that such learners cannot judge their success until judging it with the effort of other learners around (Dinc, 2010). These learners put more effort to complete to get more success scores and are unwilling to aid others. They stop doing effort if they do not

get positive external feedback. Learners with performance-oriented goals are concerned with winning as they relate their success results with victory.

A few scientists have examined ways in which performance goals stimuli greater accomplishment (Brophy, 2005). This perspective on goal theory splits performance approach and performance avoidance objectives. Somuncuoglo and Yildirim (1999) stated that learners who have performance approach view their own self as holding an extraordinary deal of capacity and desire to compare themselves with the performance of others around, henceforth showing their talent. Some researchers have portrayed a comparable introduction and have marked this introduction as ego-social orientation. Somuncuology and Yildirim (1999) expressed that inner-self-social introduction shows that some individuals demonstrate advanced scores and beating others through performing for picking up approval and improve one's self-respect. Nicholls (1984) expressed that learners with ego involved possess more self-viability and try to validate their capability in contrast to others who are ego excluded display less self-efficacy abstain from showing their capability.

PAvG headed towards escaping and avoiding, presenting little ability, and are linked with academic fears. Niemivirta et al. (2012) stated these objectives are bound for escaping from the displaying of dearth of competence. Dinc (2010) related this goal with avoiding poor performance of a task than others. Performance-avoidance orientation strategy is measured as an insensitive success orientation as it decreases learners' internal enthusiasm (Byrne, 2011). Learners' with this orientation fear from presenting their ability deficiency in comparison to their peers (Wolters, 2004). Kaplan et al. (2010) argued in their study that students' might have numerous success targets of different degrees. While reporting different goals, learners' may be demonstrating different level of mastery goals or performance goals. Students' holding Performance avoidance orientations see themselves as capacity-lacking and try to avoid showing to their success publically that would certify their skill deficiency. Exactly those learners' consider them as a skill deficient concerning limit and focus on fixed and unchanging concept of intelligence. These students' every now and again ground their sentiment of ability on their recent stage and not ever actually develop a sentiment of self-viability.

In order to guarantee their competence, they initiate to avoid procedures that

cause disappointment. These methods join less diligent work, keeping up a vital to stay away from academic assignments, setting optimistically high or low targets, showing them not to care. Disregarding the way these individuals get these self-impairing goals, their subsequent disappointment is in this manner credited to lack of ability. These students' recognize that their disappointment as the product of absence of abilities.

2.4   WORK AVOIDANT GOAL ORIENTATION

In a study on middle school students' Dowson and Mcinerney (2001) defined WAG orientation as a significant feature of learning inspiration. Mainly this orientation was related to a lot of work mitigation approaches. Students' with this orientation do not give any importance to hard work and effort, opposite to MG oriented learners and PAG oriented students' who do not want to displays their competence. Precisely, learners holding work avoidant orientation focus to complete their assignment or course with giving less hard work or effort.

Not a significant amount of studies has so far been done in work-avoidant context. Though the studies based on goal orientation provide proofs that WAG orientations are the utmost inappropriate to educational setting or success products (Meece, Blumenfield, & Hoyle, 1988; Duda & Nicholls, 1992; Archer, 1994). Wolters (2003) in his initial studies, among all other goal orientations work avoidant orientation is found as strongest forecaster of academic delay. Later in his studies, Wolters found work avoidant orientation as well as negative self-efficacy as direct predictor of delay. Even though Elliot (1999) defined WAG found orientation as a deficiency of AGO in educational setting.

Performance-avoidance varies from work-avoidance and avoidance raised educational distancing (Meece, Blumenfeld, and Hoyle, 1988; Patashnick and Nolen, 1985, Nolen, 1988) where failure ,effort and success is seen as finishing the assignment with less hard work (Brophy, 1983; Nicholls, 1989). Early researchers share the result on animals, which concluded as wild life creature like to give less exertion to acquire an objective. Tolman (1932) find the connection between exertion and inspiration in his code of less hard work. This rule expressed that to give two rewards of equivalent esteem a wild life creature will pick the one, which involves

minimal exertion to get. Hull (1943) detailed alike guideline, the principle of minimum exertion, when various social arrangements result in equal amount of support, the animal will systematically pick the conduct that requires minimal amount of support to acquire the reinforcement.

2.5   MOTIVATION AND ACHIEVEMENT MOTIVATION

Schunk and Mullen (2013) described motivation as a means for beginning and continuity of goal focused activities. In educational situations, the focus of research is on success motivation. Rendering to Elliot & Church (1997) success drive is validate once a learner tries to be skilled for something. This explanation is same with Brophy's "motivation to learn," which refer to not only for meet the requirements, but purposeful involvement in educational assignments for acquisition of new knowledge or expertise.

Social scientists are always in search of defining and measuring success motivation. Primary finding of many studies proposed that achievement motivation is the results of nature, characters, necessities, or drives (Weiner, 2013; Schunk, Pintrich & Meece 2008). The trait or necessity approach elucidates that achievement motivation is intent by distinctive characters or individuals shared by people but differ in strength. It was understood that the learners with more success features or drive would be more inspired towards success. A well-known theorist Abraham Maslow in (1954) developed a hierarchy of needs. Maslow, classified needs in five-group hierarchy: physiological, protection, communal, esteem, and self-actualization. Individuals can only move to other needs after fulfillment of first need that is physiological needs (related with fundaments of life including food, water, etc.) Inside educational institution the classroom, protection needs are fulfilled by on the condition of strong and harmless surroundings with a concerned teacher. For meeting communal needs peer participation is the prime manner, which is a best way for supportive learning team-based events. Meeting esteem needs involves teacher's aide to shape learners' self-confidence in educational responsibilities and know their accomplishments. While self-actualization normally discusses to the self-fulfillment feel of an individual after successfully finishing an assignment. Maslow's ladder of necessities argues that if essentials are not content at respective stage, achievement motivation and educational presentation may possibly dissatisfied. Along with focus

on motivation, theories researchers intended to find the extent of learner's self-regulation.

A self-regulated learner is those who use both motivation and learning approaches. All students vary from each other with respect to their behavior, meta cognition, and motivation to participate in their own learning. To attain some specific goal a learner who purposefully develops his or her judgments, emotions and actions is called a self-regulated learner Self-regulated learner (Zeidner, Boekarts & Pintrich 2000). A process of self-monitoring also includes the representation of precise behavioral approaches as management of time and structural approaches. Other elements of self-regulated learning are the self-derive approaches the learning carries to the mission. Zimmerman's (2000) presented a model based on three phases in the Self-regulated learning process: (1) forethought (involves processes that pave the way to any work to get start), (2) performance control (include all process occurs throughout learning workout), and (3) self-reflection (includes process that occurs after completion of learning or performance). Pintrich et al. (2000, 2003) have found that actual and non-actual self-regulated beginners differ in both determination and ability. Specifically, the team finds out the degree to which individuals find a task motivating, essential, and appreciated is linked with the usage of self-activated learning approaches (Pintrich & De Groot, 1990; Pintrich & Schunk, 2002). Censure of this model is that people can move forward for meeting a higher need even with fulfillment of their earlier needs. Alongside this theory many other theorists emphasize on the power of the needs that develop an inspired behavior. Deci and Ryan (2000) in self-determination theory stated that learners look for involvements that help them to meet their basic requirements and identities. According to this theory, all people have important psychological desires for ability, independence, and affiliation. Ability includes the necessity to interact effectively in social and educational setting (Elliot & Dweck, 2005).

Hence, a pupil's desire for ability is satisfied when they have enough knowledge to successfully attain desired educational or learning products (Skinner & Belmont, 1993). The theory refers independence as the degree of learner's skills as the base for action. An independent student observes the academic assignment in the context of his or her comforts, aims ,or career prospective .Learners satisfy their

essential for independence when students practice choice in defining their own conduct (Assor et al., 2002). The next element of the theory is affiliation, which discusses the desire for social connection or relatedness to other people (Connell & Wellborn, 1991).Therefore, the extent to which a pupil notice the educational setting encounters their psychological requirements for capability, independence, and affiliation (Deci & Ryan, 2000).

2.6   LEARNERS COMMITMENT AND MOTIVATION FOR LEARNING

According to Lawson (2013) learner's commitment is of basic significance in the present competitive surroundings. Furthermore, engagement of the learner is an active process and that early school achievement improves learner's engagement in school through increasing self-confidence. In their model, educators set up the models for commitment by connecting learners, figuring out how to do so in a particular setting. They propose that learners' behavior for commitment is closely connected to their drive and expertise. The settings for commitment and conducts to commitment lead to learners' demonstrations of commitment. Students' commitment could be considered as the nature of individual's involvement in an assignment, which could move from gross-root level to persuade and key handling (Gurthrie et.al., 2004).

Learner's commitment is bound to happen where a learner esteems the learning assignment. Eccles and Wingfield (2002) depict four kinds of assignment esteems: utility value, accomplishment value, inherent value and cost. Utility esteem brings up to the conviction of an assignment is related to individuals upcoming objectives. Accomplishment value talks about the level of significance the student puts on an assignment for affirming or disconfirming center parts of one's self-construction or character. Inherent value is characterized through the dimension of the learner's advantage or satisfaction for an undertaking. At last, the assignment estimation of expense is the cost or negative ramifications for taking part in a task. In an ongoing report, Johnson and Sinatra (2013) investigated the connection among task esteems, commitment, and change in the concept. Hundred and sixty-six colleges' understudies were arbitrarily allotted one assignment among two activity esteem learning situation (utility and achievement) and a switch situation.

The researcher structured the investigation to think about the degree to incited

task esteems which would result in various degrees of commitment and reasonable change when members read a negation message about the common cold. Investigating further, the scientists found factually important contrasts amongst the members in the task esteem and control conditions on apparent commitment, just as reasonable change. Members in the utility condition appraised their commitment as expressively greater than those of comparisons. However, members in the utility state demonstrated the most noteworthy level of applied change. The convenience of task esteem acceptances for encouraging commitment and applied change is examined. This hypothesis on observed task esteem was originated from expectancy-value hypothesis and crafted by Eccles and Wigfield (1995, 2002). Educators are empowered to just get some information about the degree to which they find the assignment fascinating, helpful, also, value their means and energy. While undertaking esteem, it is additionally essential to inquire investigate the degree to which they figure they will be fruitful. Desires for success are convictions in most contemporary outlines of inspiration, and are associated with understudies' study objectives, one's worth convictions, enthusiasm for an assignment, and the reasons understudies give for why they take part in any task.

2.7   THEORY OF INTELLIGENCE

Beliefs about one's intellect could identify as concerns of motivation. For about 4 decades, (Dweck and Leggett, 1988; Elliot and Dweck, 2005; Dweck 2012) has examined students' perceptions about the roots of intelligence. The model describes and differentiates between two views as a root of intelligence: Incremental (developmental outlook) and entity (fixe doubt look).

Research has discovered proofs that a few students embrace a "development outlook" of intelligence, which means they see intelligence as a flexible feature that either change after some time or could be created through hard work (Bempechat, 1983). Interestingly, a few students hold to a "fixed outlook" in which they hold a view that intelligence is an acquired quality, which cannot be controlled. Learners holding a development mentality are bound to continue at the point when the task moves toward becoming trouble and they are bound to seek help in case of difficult task as compared to learner with a settled mentality (Dweck, 2012; Dweck and Leggett 1988; Elliot & Dweck, 2005). One precedent is the mounting-group of

research uncovering Dweck's study is especially pertinent to understanding women diligence and achievement in STEM (science, innovation building and Maths) disciplines. Learners from both high schools and colleges, a development attitude fills in as strong cushion and shields young girls and women with their impact of the generally held generalization about young girls that they are not on a par with young men at math and science (Great, Aronson & Inzlicht, 2003, 2012; Good, Rattan & Dweck, 2012). Dweck (2012) keeps on suggesting that any push to enable students to receive a development outlook needs to incorporate an evaluation of learner's goal orientation.

Nicholls (1978) stated that young children and adults hold different views of intelligence as he found young children with four and five years of age hold developmental outlook and perceive intelligence as an infinite ability and that hard work and struggle for acquisition of success increasing aptitude. Whereas, a little older child is that belongs to second grade believes that intelligence does not bound to change, and they start believing intelligence as a static and finite ability. Regarding multiple concepts about intelligence among young children and adults, children do not have same beliefs of intelligence as adults (Dweck 1999; Dweck and Leggett 1988). Young children consider intelligence as a feature of effort particularly they think that the more effort they put in work the smarter they will be. This belief of intelligence leads young age learners to react in a different way to failure and hold a changed perception of association between hard work and skill. Remarkably, it has also been stated that views or beliefs about intellect are free from one's talent. High as well as low ability individuals can hold fixed outlook of intelligence (Kaplan & Maehr, 1999; Green and Miller 1996; harakiewicz, Barron, Tauer, Carter & Elliot, 2000).

2.8   COMPETENCE AND ACHIEVEMENT

Apparent capability is theorized as the cognitive segment of self-idea that is the way acceptable to a learner's sense in learning (Marsh, Craven & Debus, 1999). Marsh and colleagues have exhibited a common connection among the feeling of capability and accomplishment results (Marsh & Craven, 2006). Apparent ability in educational setting is defined as a strong analyst of educational presentation and it is frequently seen more grounded than students' genuine capacity in the particular

assignment (Pajares & Schunk, 2002). Thus, theorists have accentuated the improvement of learners' feeling of capability as an indispensable objective in numerous educational settings (Craven, Marsh & Burnett, 2003; Marsh & Craven, 2006). It has likewise been shown that a high-self about ability promotes objectives, anticipations, ways of dealing with stress, and practices that encourage profitable success and work encounters in the long run (Sommer & Baumeister, 2002).

Researchers have recommended that learners' accomplishment is identified with their inspiration and self-perception (Craven et.al., 2003; Marsh & Craven, 2006; Mcinerney & Ali, 2006). Research has exhibited that understudies' inspiration and perception may have critical impact on fundamental school results which include accomplishment results (Craven et.al, 2003; Mcinerney et.al., 2001). Academic perception exhibited not exclusively to be an indicator of academic success (Marsh, 1990; Marsh and Shavelson 1985), yet it additionally has common effect and logical results associations with educational accomplishment (Marsh and Craven 2006). That is, an expansion in scholastic self-idea prompts an increment in educational success and the other way around. Besides, educational self-idea has an interceding impact on other instructive results. Subsequently, it is imperative to upgrade both scholarly self-idea and educational success to get enduring desirable results as both are commonly strengthening (Marsh and Martin 2011). Thus, we may anticipate that understudies' feeling of fitness would emphatically foresee educational success.

2.9   GOAL ORIENTATION AND ACADEMIC ACHIEVEMENT

A huge number of researchers all around the globe have shared their findings on academic goal orientation as strong analysts of educational achievement for secondary school students. A Finnish study based on transition faced by learners during changeover from comprehensive school to higher secondary education discussed that mastery goal-oriented students found highly involved in learning and found their school work more interesting (Tuominen-Soini et al., 2012). In Spain, another study based on academic performance of first-year secondary school students stated that goal orientation is a direct predictor of effort, where effort is a direct forecaster of academic achievement (Perez, 2012). A path examination of secondary school students in Norway, concluded basic needs as a strong predictor of MG and self- efficacy and both mastery aims and self-efficacy strong positive predictors of

achievement level (Diseth, 2012). In Australia, a study based on focus group interviews stated that learners chase multiple goals, connected to four main groups: including forthcoming life goals, achievement goals, societal goals, and individual life and future goals display an important connection to adolescents' school motivation (Mansfield, 2012). Moreover, multivariate path analyses of junior high school students showed that individual specific, challenging goals are significantly associated to academic achievement (Martin, 2012). Another study of Austrian cities on secondary school learners aged 14-16 years showed that performance-approach goals are indirect predictor of social-oriented achievement motivation (Abd-El-Fattah, 2011).

LAI (2006) intended to test an operational model focused on the connections among various AG orientation and educational approaches and accomplishments of high school learners of Hong Kong. The researcher found PAG strongly and clearly linked with educational success while MG showed no noteworthy effect on educational success. This connection is reasonable when we reflect the sense of PAG and MG. Learners with PAG likely to show their capability with their performance in measurements and assessments. These students take on one of the deep or surface approach and in some cases, adopt both of the approaches as these plans help them to attain better outcomes.

Unlike PAvG the result of the study shows the small scale of path factor, which point out the connection was not strong. Alongside the, learners with MG aims to progress their capability, understanding in knowledge, learning and supremacy of capabilities than showing their skill to others, afterwards learners with MG intend to accept the deep level strategy, which aid school success, hence not a noteworthy level, depending upon the nature of measurement or evaluating tasks. Results shows internally enthusiastic students probably accept the deep learning strategy and are less intended to choose surface learning strategy. Unlikely, individuals with PAvG are probably not internally enthusiastic and are more intended to use surface strategy.

Gutman (2006) found in his study on African American students, MG possibly more prominent in defining attainment and motivation in mathematics in comparison with PG during high school transformation stage. Some other explorations display no connection between mastery goals and educational success, in

its place PG are found associated with educational success or assessment outcomes (Elliot et al., 1996). Therefore, PGs are not constantly maladjusted to learning context and lead to success. Afterwards, some researchers mistrusted the rationality of the traditional dichotomous concept to enlighten all aspects of learning. The researchers suggested PG should be divided into two distinct targets labeled as PAG and PAvG. Consequently, the dichotomous concept of model converted to a trichotomous goal outline (Elliot, 1999; Harackiewicz, Barron & Elliot, 1998; Harackiewicz, Baron & Pintrich, 2002). Parallel to this, MG also be converted into two boxes, the PAG and MAvG, but the tetrachotomous goal model has not often been tried and verified. However, many researchers focus on dichotomy model (Roedel, Schraw & Plake, 1994) not ample researches conducted on trichotomous concept and the researches carried out mostly in North America, but the conclusions are stated on non-Western areas together with Chinese culture. Amongst researches on trichotomous model, undergo to prepare measuring scales to test and find out these objectives (Finney, Piper & Baron, 2004; Midgley et.al., 2001). To examine their effect on learning, investigating the connection of targets with different aspects, like perseverance, learning approaches, determination and success the mostly cited literatures is related to the work of Elliott and team, (Wolters et al., 2004). Studies on trichotomous model by Elliott (1999) concluded MA in a positive connection with deep processing, PAG as a confident interpreter of surface processing and exam presentation, while PAvG as positive indicator of superficial level-handling and destructive indicator of profound level processing and exam presentation. Even though converting performance targets into PAG and PAvG are sufficient to explain the results associated with PG, many studies papers have produced effects concerning the advantageous and disadvantageous results of following PAG (Urdan, 2004). This advocates the requirement of more research studies to explore the connection of PAG and PAvG and in contrast with the impact of the MG in individual learning.

Midgley (2001) advocated that the advantages of PAG are not equally applicable to all learners because of varying cultural traits for learners in the chase and concerns of PAG this box has not be sufficiently investigated (Urdan, 2004).

Higher degree of skill is associated with mastery goal orientation, which indicates the position of mastery goal in learner success. (Lin, Hung & Lin, 2006).

Moreover, (Mattern, 2005) found a noteworthy difference of learner success, between MGO holders and high PGO holders. Lawson (2005) argues that MG, PAvG with the collaboration of WAG orientation shows more rate of occurrence but these are found unrelated to success. Linnenbrink (2005) observed PAG disadvantageous for success while MGs were found helpful. Abd-El-Fattah (2006) found learner's performance strategy and MG as important indicators to display students' success chased by parental participation at home and school, along with PAvG. Achievement motivation is meaningfully associated with academic success (Awan et al., 2011). Patricia et al. (2011) declared important connection between goal orientations and Chemistry results, outcomes and state positive relation between MAG orientation as and performance. (Moshtaghi, 2012) concluded in his study that MA and PAG orientations as positive predictor of achievement, whereas PAvG orientation was found as pessimistic indicator of academic success.

2.10   MASTERY GOAL AND ACHIEVEMENT

According to Merriman (2012) MGs were found in positive association with success in absence of result response and negatively associated with success in its existence, whereas the PG orientation was optimistically linked with success regardless of result response.

Mastery objectives are adoptive to education with small magnitude show helpful relationship with deep strategy and academic success whereas, PAG orientations are also significantly connected with positive educational outcomes. PAvGs are related with weak study outcomes as they are maladaptive and found directly related with surface strategy. The enrichment of inherent motivation along with mastery and performance-approach targets will ease acquisition of deep learning approaches, which are beneficial for learning as they give out constructive academic outcomes. On the basis of previous findings Kwok Wai Chan, (2012) stated that teachers should intensify learners' motivation through curiosity and giving difficult task situations for learning improvement and acceptance of deep approach with understanding, among all individuals. He suggested that in order to tackle maladaptive outcome of performance-avoidance goals lecturing should be designed to evade making social contrasts and judgments. Kitsantas, Steen & Huie, (2009) selected eighty-one learners for their study on goal orientation of elementary

students' educational success. The findings on the basis on gender differences showed no noteworthy differences in any variable of study. Mattern (2005) conducted a comparative study on achievement outlines of learners. With 143 learners, among male and female population, the study revealed best performance the group holding strong mastery goal orientation, better performance the group holding strong goal orientation and worst performance by the class with weak MGO and PAG orientation, holding weak mastery but strong performance-approach.

Rahman (2017) concluded that the learners have various goals orientation. Learners holding high PAG orientation show high achievement in a performance test in comparison to learners with less PAG orientation. Learners with more PAvG orientation achieved more than Learners with less PAvG orientation. Some gender variations were also detected in test results as female students showed high score performance in test than male students holding the similar goal orientation. The researcher recommended that the teachers could offer meaningful task for learners to raise their enthusiasm and inspire them for learning. As the study found PAvG orientation associated with maladjusted learning performs, therefore PAvG orientations can be mitigated through effort.

Salili and Lai (2003) suggested that students' goal orientation can be defined by circumstantial and situational aspects. Many studies explained that they are associated with various background variables, from wider ones that are racial principles of education (Hau and Ho 2008) to more precise ones that are institutes and schoolrooms climate (Lau and Lee 2008; Urdan 2004; Urdan et al., 1998). However, there are very few researches examining the link between cultural changeability and learners' goal orientations in achievement situation. The published literature offers indication for the effects of GO on individuals' learning and academic attainment. Learners holding MAG orientation show self-directed learning, which supplements their educational achievement (Blackwell et al., 2007).

However, individuals with performance-approach and performance-avoidance targets involve judgments distinct to learning or feelings about absconding from learning, which shows harmful effects on educational outcomes (Brophy 2004; Button 1996; Deshon and Gillespie 2005; Kanfer and Ackerman 1996). Many researchers have also concluded PAG orientation specifically while not automatically

having adverse effects on educational success (Harackiewicz and Sansone 1991; Payne et.al, 2007). However, studies have recommended that achievement situation moves learners' enthusiasm and learning for example increases high level success settings and minimizes inspiration (Amrein and Berliner 2003).

Chen (2015) in his study on association between perceived parenthood and educational outcomes concluded that learners frame their goal orientations according to their understanding of parenting styles, which affect their academic outcomes. Person's goal orientation turns as a facilitator to define connections between authoritative bringing up and academic outcomes of learners. Learners holding perception of authoritative parenting were found strongly associated with mastery goals, and hence present students' academic achievement positively. Students holding perception of both authoritative and authoritarian parenting styles are focused to outperform others as they have high parental expectations. Both of these parenting styles may apparently promote the strong and weak aspects of performance-approach goals and come up with individuals' academic outcomes. In few studies based on Western population concluded learners holding mastery goals and self-reliance are associated with more democratic, rational, and Independence Supporting parenting styles. Students having more demanding and strict parents are found related with PG orientation (Gonzalez et.al., 2001, 2002; Hoang, 2007).

Kwok Wai Chan (2012) summarized his investigation of Inherent Motivation, Success Goals, Learning Approaches and Educational Success for Hong Kong Students by stating that academic achievement is influenced by adoption of deep strategy, which is acquired by inherent motivation in terms of challenge and curiosity. However, independent mastery does not have constructive effects over the acceptance of deep approach. Independent mastery works with the mastery targets on profound strategy and academic success. However, the inherent motivation as mediator effect learning strategies and academic succeed over MG, PAG and PAvG orientations. Patricia (2011) declared important connection between goal orientations and Chemistry results, outcomes and stated positive relation between MAG orientation and performance. (Moshtaghi, 2012) concluded in his study that MA and PAG orientations as positive predictor of achievement, whereas PAvG orientation was found as pessimistic indicator of academic success.

2.11   WORK AVOIDANT GOAL AND ACHIEVEMENT

King & Mclnerney, (2014) intended to explain work avoidance goal that was chiefly ignored the achievement goal context. The study empirically supports for the hypothetical difference between success and work avoidance goals. Societal support and implied concepts of intelligence are adjacent analysts of work escaping goal acquisition. Learners follow a set of objectives that MG and PG just establish a minor sub-group of the thinkable goal's students can acquire. Many research studies through using dichotomous or trichotomous achievement goal concept intended to explore the connection between achievement goals and educational success. As Geta (2012) evaluated the association of AGO strategies to education and educational outcomes of learners. The study was based on 243 Teacher Education colleges. The study discovered that success targets orientation were statistically associated with academic outcomes. The research showed noteworthy significant connection with PAG and MG and a non-significant connection with PAvG with outcomes focused progressions and success.

Phan (2014) conducted a study in Sydney, Australia, the study comprised of 288 secondary school learners including girls and boys. The results of the research were different with earlier study of Elliot (1999) where mastery-approach was not in a noteworthy relation with academic results. The reason behind inconsistent results is the difference of methodology. This indicates the methodology used for research affects results of the study.

Sideridis and Kaplan (2011 revealed a noteworthy connection between mastery and focus but failed to find such connection in case of performance avoidance focused and determination. Another study, focused on trichotomous concept of achievement goal model. Agbuga and Xiang (2008) examined the connection among MG, PAG and PAvG orientation. Targets and self-defined determination was observed in Turkish high school students. A progressive connection was found among self-defined effort and MG orientation.

In a meta-analytic review of AG orientation, Hulleman and Harackiewicz (2010) reported the findings of the research revealing non- significant relationship among PAG orientation and presentation products while MAG orientation were not

significantly connected to performance results. According to the results of the study as learner's advancement in school shows a strong connection with avoidance goals but a frail connection between performance- approach goals and educational product like interest. Roussel, Elliot and Feltman (2011) studied the relation between 2x2 achievement concepts among secondary school learners. The findings of the study described MA and Mav as helpful analysts of support pursuing whereas performance targets in both approach and avoidance context were weak analysts of support pursuing in educational setting (Diseth, Danielsen and Samdal 2012). Using Patterns of adaptive Learning Scales (PALS), Midgley et.al., (2000) studied the association between teachers' care of fundamental psychological needs in, Norway. The study shared an important undesirable relation of performance goals with all other variables including self-reliance, achievement goals, life contentment and educational success. The finding pointed out the AG along with additional factors giving an operational model, which forecast educational success.

In other study, Diseth and Samdal (2014) intended to explore factors concerning the pupils' self-success targets and discern school presentation. The study revealed MAG, MAvG, PAG and PAvG as positive predictor of academic success. Moreover, girls were in high scores in MG orientation and boys in PG orientation. Chen (2015) in his study on association between perceived parenthood and educational outcomes concluded that learners frame their goal orientations according to their understanding of parenting styles, which affect their academic outcomes. Person's goal orientation turns as a facilitator to define connections between authoritative bringing out and academic outcomes of learners. Learners holding Perception of authoritative parenting were found strongly associated with mastery goals, and hence present students' academic achievement positively. Students holding perception of both authoritative and authoritarian parenting styles are focused to outperform others as they have high parental expectations. Both these parenting styles may apparently promote the strong and weak aspects of performance-approach goals and come up with individuals' academic outcomes.

Ng'ang'a, Mwaura, Dinga, (2018) intended to examine the association between AGO and educational achievement in Kenya. An important relation highlighted among the sub sections of AGO (MG, MAvG, PA, and PAvG). The study

points out an important optimistic connection of MAG, MAvG, PAG, PAvG with educational success. While PAG shows an important negative connection with educational success. The study also shares an interesting finding that mastery orientations including both mastery approaches and mastery avoidance are positive predictors of academic success. The results of this study were similar to Geta (2012) who stated a noteworthy connection among AGO and educational success. The finding is also consistent with Sideridis and Kaplan (2011) who point out mastery goals in a positive relation with educational outcomes.

Ismail (2010) in a study on social perceptions of realizing learners and success targets of learners in Malaysia and the Philippines revealed that Filipino university students largely acquire mastery goals in comparison with Malaysia students, where strong peer attachment insights of students' demonstrating mastery goals act as a positive mediator. Whereas, Malaysian university students largely acquire performance goals in comparison to their Filipino fellows, strong peer relationship perception and insights of affability of learners who represent performance goals act as mediator for these differences. The results indicated that Filipino students have achieved advanced stages of mastery targets compared to Malaysians moderately as Filipino undergraduates displayed positive connections with mastery-oriented students. However, Malaysian undergraduates have achieved advanced stages of performance targets related to Filipinos partly as Malaysians displayed positive connections with MGO learners and that these learners are more sociable, cheerful, and acceptable by peers and tutors.

A social psychologist Schug et al., (2009) stated that traditional variations may be described by stating the surrounding background. Hereafter, these changes may be due to different educational arrangements as well as different accessibility to advanced education in two countries. The Malaysian system expects learners to be more competitive as it appears to be more discerning. Inside such structure, Malaysian students established an advance opinion of norms focus for describing and calculating learning and success targets. Therefore, Malaysian students may have strong concerns with the fellows who are PGO as these fellows demonstrate the talents that would consent a learner to gain admittance to university, through enrollment in their chosen departments and disciplines. While, advanced education

system of Philippine seems to be less discerning and thus, there are fewer burdens to present normative aptitude. Inside such background, Filipino learners may be less modest, with inspirations that are more personal. Hence, they value more to self-choice and ideals in explaining and computing success targets, unlikely to struggle and normative presentations of success. Hence, Filipino students may have strong concerns for their mastery-goal oriented fellows. In other study, Diseth and Samdal (2014) intended to explore factors concerning to the pupils' self-success targets and discern school presentation. The study revealed MAG, MAvG, PAG and PAvG as positive predictor of academic success. Moreover, girls were in high scores in MG orientation and boys in PG orientation.

Kitsantas, Steen and Huie (2009) selected eighty-one learners for their study on goal orientation of elementary students' educational success. The findings on the basis on gender differences showed no noteworthy differences in any variable of study. Mattern (2005) conducted a comparative study on achievement outlines of learners. With 143 learners, among male and female population, the study revealed best performance the group holding strong mastery goal orientation, better performance the group holding strong goal orientation and worst performance by the class with week MGO and PAG orientation, holding week mastery but strong performance-approach. Harackiewicz et al. (2000) concluded alike results through highlighting the learners' acceptance of performance-approach targets to be strongly linked with course scores.

While examining the goal orientation with self-efficacy on science students' success Pei-Hsuan Hsieh, Cho, Min Liu, and Schallert (2006) discovered an inverse relation that is PAG and PAvG orientation decreased with increase in learner's presentation and self-efficacy. Jalalia (2014) intended to examine the impact different genders AGO and their presentation in Commuter Based Test and Paper Based Test. Yet the study did not notice any indication for GO giving any performance difference results on these two types of test. It was determined that goal orientation gives slight, average or no connection with presentation of the test clients.

The results revealed noteworthy better performance of females test clients, which shows that female learners were more successful in both tests.

2.12   BLENDED LEARNING GOALS AND ACHIEVEMENT

Many researchers intended to examine how diverse blending of goals is related to different learning conclusions (Wormington & Linnenbrink-Garcia, 2016). Acquiring a self-centered strategy, individuals holding same combinations of goals can be acknowledged. Based on such approach, researchers discovered blending of MG and PAG orientations with weak PAvG orientation are related to give significant study conclusions (Bouffard, Vezeau & Bordeleau, 1998; Luo et.al., 2011; Schwinger et.al, 2016). Some researches (Meece & Holt, 1993; Ng, 2006) concluded that learners with mastery approach targets are related with flexible educational results. Wornmington and Linnenbrink-Garcia (2016) revealed that individuals holding strong MG along with strong MG and PAG both results in accepted educational products. Focusing on other cross-sectional studies on success goal profiles, it is possible that advanced achievement stage arouses some goal profiles among individuals (Schwinger & Wild, 2012). Schwinger and Wild (2012) recognized three success objective outlines between elementary school learners with strong mastery goals. Their study revealed that learners with more blending of goals displayed the minimum success products. Tracking PG orientation can reduce the significance of MG. Though this outline involved strong PAG along with strong performance avoidance goals, the avoidance targets, in place of the approach targets, could be the reason for this conclusion.

Hejazi (2012) explore the association among educational identity status, GO and educational success at school level. The findings of the indicate association among, educational identity, goal orientation and educational success. Disperse academic identity forecasts the peak share of modification in educational success. Was et.al., (2009) disperse educational identity is pointed by the failure in study and assurance to educational standards. Berzonsky (2004) stated, learners having a disperse avoidant identity have an unpredictable self-idea. This incongruity affects their opinions about competences and generates a sense of low confidence. Moreover, this feeling of incongruity, is linked with unproductive use of cognitive approach and absence of academic goals (Berzonsky & Kuk, 2005), results in less academic achievement. These results are similar with Hejazi (2009) results and approve the interpretation that learners having disperse educational identity, have little academic

abilities and self-regulation and have high risk of academic barriers.

Hejazi (2012) revealed a negative relation between barred academic identities is academic success. Mastery approach goal orientation possess a strong positive association with educational success and these conclusions are alike with the results of (Elliot et al., 2005; Sideridis, 2005). However, the finding also shows difference with findings (Wolters, 2004; Elliot et al., 1999) revealed a non-significant association of MAG orientation with educational success. Learners with mastery approach orientation have more inner motivation, which enhances their capabilities for learning, and engagement in difficult tasks and hence acquire more success that is academic. The researcher also stated a strong relationship between MG and PAG orientations with attainment educational distinctiveness. The results are alike with the earlier finding (Was et al., 2009), approve a title that exploration is a common factor for achieving mastery goal orientation and attainment personality. Moreover, avoidant goals in terms of both mastery and performance significantly related with diffused and foreclosed identity. These results specify that the lack of assurance, dispersed individuality, or foreclosed identity develop non-adaptive GO.

The study showed that the development and consideration of identity should be the focus of educational institutions as an important factor for adaptation of goal orientations and success conduct. Among male and female students, the study showed male students were at high scores in diffuse academic identity. Findings of some other studies also show alike results that male students in dispersed individuality (Yunus et al., 2010) and dispersed-avoidance individuality (Berzonsky, 1994) achieve greater scores.

Furthermore, avoidant, goals both in terms of MG and PG orientation significantly connected to diffused and foreclosed identity. These results specify that the lack of assurance, dispersed individuality, or foreclosed identity develop non-adaptive goal orientations. The results show the development and consideration of identity should be the focus of educational institutions as an important factor for adaptation of goal orientations and success conduct. Among female and male students, the study showed male students were at high scores in diffuse academic identity. A finding of some other studies also shows alike results that male students in dispersed individuality (Yunus et al., 2010) and diffused-avoidance identity

(Berzonsky, 1994) achieve high results. Wormington and Linnenbrink-Garcia (2016) revealed an individual holding strong MG and strong mastery and PAG orientation both results in acceptive educational products. Focusing on other cross-sectional studies on success goal profiles, it is also possible that advanced accomplishment stage arouses certain goal profiles among individuals (Schwinger & Wild, 2012).

Moenica and Zahed-Babelan (2010) studied about the connection among mathematics-feat, mathematics-aptitude, educational motivation, and intellect. The study was based on 1670 high school learners. The findings showed that mathematics aptitude, educational inspiration, and intellect are the predictor's mathematics feat (Moenica & Zahad-Babelan 2010). Others including Keys, Conley, Duncan, & Domina (2012) are noteworthy for their study based on trichotomous goal concept including MAG, PAG and PAvG orientations. Keys (2012) revealed a connection among all success targets orientations and mathematical feat. MAG orientation was found as a predictor of mathematics success. While PAG and PAvG orientations did not found predictors of mathematics success. In an observational research, performance feat goal was found as connected and projector of educational success (Daniels, et al., 2009). Three sentiments (anxiety, pleasure, and dullness) strongly mediate both mastery and performance success targets orientations for prediction of feat in both course as well as general level (Daniels et al., 2009).

The results from various studies advocated the contradictory relations between attainment goal orientations and educational success. Some discoveries revealed mastery goal orientations in relation with more success, while other exploration showed direct association between performance goal orientations and more success (Harakiewicz, et al., 2002; Kaplan & Middleton, 2002; Midgley, Kaplan & Middleton, 2001; Pintrich, 2000). Specifically, the primary attainment goal researchers claim that mastery target orientation offer higher school performance than performance targets (Dweck, 1986). Some explorations revealed strong significant association between PG orientation school success than MG orientation (Daniels, et al., 2009).

Many researchers intended to examine how diverse blending of goals is related with different learning conclusions (Wormington & Linnenbrink-Garcia, 2016). Acquiring a self-centered strategy, individuals holding same combinations of

goals can be acknowledged. Based on such approach, researchers discovered that blending of MAG and PAG with weak PAvG are related with the significant learning conclusions (Bouffard, Vezeau & Bordeleau, 1998; Luo et al., 2011; Schwinger, Steinmayr, and spinath, 2016). Some other researchers (Meece & Holt, 1993; Ng, 2006) concluded that learners with mastery approach targets are related with flexible educational results. Wormington and Linnenbrink-Garcia (2016) revealed an individual holding strong MG and strong mastery and PAG orientation both results in accepted educational products. Focusing on other cross-sectional studies on success goal profiles, it is also possible that advanced accomplishment stage arouses certain goal profiles among individuals (Schwinger & Wild, 2012)

Schwinger and Wild (2012) recognized certain success objective outlines among elementary school understudies, with strong mastery goals. Their study revealed that learners with more blending of goals displayed the lowermost success outcomes. Tracking PG can reduce the significance of MG. Conversely, the outline involved strong PAG along with strong PAvG orientations, the avoidance targets, in place of the approach targets, could be the reason for this conclusion. The researcher also stated an optimistic association among mastery and PAG with achievement educational distinctiveness. The findings are alike with the earlier finding Was et al., (2009) approve a title that exploration is a common factor for achieving mastery goal orientation and attainment personality.

In the Western cultures, performances as well as the mastery-avoidance targets are allied with high anxiety, disconnection, and little realization (Wolters, 2004: Van Yperen, Elliot, & Anseel, 2009). The various objective outlines, conversely, argue those signals, and assumes that individuals can be more helped by performance targets than mastery areas; learners might have of both mastery and performance targets, and individuals can get greater benefit for comprising both MG and PG (Senko et.al., 2011). Studies focusing social belongings to inspiration (Kimmel & Volet, 2010) studied goal-orientation in parallel arrays across cultures. More research studies are desirable to comprehend the relationship between culture and motivation.

2.13   ACADEMIC MOTIVATION CONSTRUCTS

Learners scholarly conduct and accomplishment are known to be firmly connected with their scholastic inspiration (Mcinerney and Ali 2006; Smith, Duda, Allen, and Hall 2002). Of the different inspirational builds analyzed in previous research, self-convictions have been found to have impact on various products. For instance, studies have shown that learners' self-convictions will in general have huge effect on basic educational results (Mcinerney, Yeung, and Mcinerney 2001; Smith et.al., 2002). In AGO theory, MG orientation displays an important effect on presentation and further study results (Marting, 2007; Midgley, Maehr, Hurda, Anderman, & Freeman, 2000). In self-conviction theory, proof appears to highlight the noteworthy impacts of self-idea on a scope of instructive results (Craven & Yeung, 2008). Our motivation in this examination is to consider two very much recorded elements (MG and perceived capability) and look at the positive impact of different factors on present moment and in the future perspective.

2.14   INSTRUMENTATION

The instrumentation of the study is based on the idea that learners may have one among two implicit views about intellect. In the inspiration framework given by Dweck et al., Cain and Dweck 1989; Dweck and Bempechat 1983; Dweck and Elliot 1983; Dweck and Leggett 1988 the two views of intellect more focus on multiple goals, mental activities, effect and attitude. Roedel and Schraw (1995) found a direct relation between views about intellect, goal orientation and behavioral feedbacks, as perception of intellectual goal orientations which in turn shapes behavioral responses. Dweck in his social-cognitive framework, explained learners approach of success task because they avoid interaction with respect to their own intelligence (Dweck, 1999). This outline integrates two separate concepts about intellect including incremental and entity. People holding incremental view of intellect believe that intelligence is an increasing character that can be learnt through acquisition of knowledge and skills (Dweck & Bempechat, 1983) these people are more likely to believe mastery goal. Therefore, the study is based on concept that mastery goal-oriented learners hold incremental view of intelligence. Which means that learner's concept of intellect is not stable; it can be increased with the passage of time through hard work and effort. On the other side learners with entity concept about intellect view intellect as

unchanging character which cannot be increased or decreased with the passage of time through effort or hard work. People with this concept of intellect believe that intelligence is unevenly divided among all individuals. This concept enhances learners' performance in multiple ways. Hence it could be determined that views about intellect are significant aspect of performance orientation. Therefore, it is believed that performance-oriented students hold entity concept of intelligence, which means that learner's concept about intellect, helps them to either present their capabilities or hide them.

Initial frameworks on goal orientation were focused on differences among MG and PG extents of achievement related inspirations, the AGT outline lately integrated performance-avoidance extant to explain exactly the multifaceted character of MG and PG (Elliot 1999; Elliot and Covington 2001; Harakiewicz et al., 1998; Urdan 1997). The 2x2 outline highlighted four forms of GO and PAG is focused to exceed others, through outstanding result. PAvG is focused to keep away from the insight of incapability or incompetence. MAG is aimed at acquisition of information, knowledge, learning and mastering expertise and competencies. MAvG is focused on evading lack of one's skills, expertise and competencies. Elliot (2005) explained the mastery-avoidance goals are less significant to educational context than the other three explained types of goals. Even if more appropriate to research of advanced years, (Payne et al., 2007) stated the 2x2 framework is comparatively moderate and has not been much applied in educational background.

As a result of the few quantitative confirmations and difficulty in grouping goals into mastery and performance categories also relating MG in past and task referent contexts this study is concerned to differentiate AGO as grouped into three main orientation groups: MG, PG and WAG orientations. Many studies from different cultures have stated constructive association between performance and mastery goals orientation however, many other have shared opposite findings. In effort to resolve this contradiction, researchers have grouped performance goals into two orientations PAG and PAvG (Elliot, 1999; Pintrich, 1999). The current research focused on two- performance goal as presented in the trichotomous framework Elliot (1999) share an outline based on all historical, hypothetical, and observed explanations to select this framework.

An adapted scale by Was (2006) was used for collection of data. The base behind developing this questionnaire was to combine two views of intellect with a goal orientation measure. Was (2006) used two psychometrically well-considered measures were for the development of the new scale. First that was designed by Elliot (1999) based three types of goals, including one category of mastery and other category of difference among PAG and PAvG. The second that was published by Harakiewicz et al. (2000) based on three orientation MG vs PG and WAvG orientations. The scale consists of question items regarding the association between goal orientation and self-implicit theory. The scale was designed with the beliefs that combining basics of two questionnaires with including question item about implicit theories of intelligence can give more effective tool to measure students' goal orientations.

The scale consists 33 items 6 of which were designed to directly measure both entity and incremental concept of intellect. These 6 items were written in both mastery and performance (approach, avoidant) parts of questionnaire. Overall, 13 items were designed to measure MGO, 8 items for measuring PAG orientation, 7 for measuring PAvG orientation, while 5 items are for measuring work avoidant orientation. Five-point Likert scale responses choices ranged from strongly disagree (5), disagree (4), uncertain (3), agree (2) and strongly agree (1). For measuring academic achievement of students their result obtained marks of previous class were asked and collected in questionnaire.

CHAPTER-3

RESEARCH METHODOLOGY

The study based on quantitative approach through using descriptive method. The section below deals with research methodology. The chapter has 3 main sections. Section 1 includes description of research approach. Section 2 includes over view of research objectives, description of study sample sampling technique, and research tool. Section 3 deals with pilot analysis which further includes reliability analysis, inter item and inter class analysis of research tool.

SECTION 1

3.1   RESEARCH APPROACH

The present research based on quantitative approach to collect responses from the high school science students' about their goal orientation. Researcher selected this approach because it used to highlight the concern through creating statistical information or data with which can be turned over into operational figures. It utilizes quantifiable data to close realities and explore distinctive research patterns.

The questionnaire adapted by researcher grounded on four sub parts containing closed ended question statements. The question statements were rated on 5- point Likert scale. The responses were coded as 1 to 5 i-e from strongly disagree to strongly agree. For measuring academic achievement of students' their board marks of class 9th were collected and analyzed using statistical tool to draw the end results of the research.

The researcher examined the existing literature of the subject to build up an

understanding of the goal orientation beliefs. The study specifically deals with the examination of existing problems and issues. Therefore, the current study falls in the category of descriptive study. Moreover, in the study, further comparative style was used. The researcher compared science students' achievement with respect to educational sectors (public and private) and gender. The researcher for the purpose of collection of responses visit field personally.

SECTION 2

3.2 OVER VIEW OF RESEARCH OBJECTIVES

3.2.1   Objective No. 1

To examine science students' goal orientation (a part of motivational beliefs) at secondary school level.

The purpose of the research was to explore four different types of goal orientation of high school learners. The four types of GO includes MG, PAG, PAvG and WAG orientations. The researcher is keenly interested to discover the extant of different types of goals in students' in educational setting.

3.2.2   Objective No. 2

To compare science students' goal orientation beliefs with respect to gender at secondary school level.

Objective No 2 is pursued by further categorizing it into four sub- objectives that are as follows;

2.1   To compare male and female science students' goal orientation beliefs regarding mastery goal orientation at secondary school level.

2.2   To compare male and female science students' goal orientation beliefs regarding performance approach goal orientation at secondary school level.

2.3   To compare male and female science students' goal orientation beliefs regarding performance avoidant goal orientation of secondary schools.

2.4   To compare male and female science students' goal orientation regarding work avoidant goal orientation at secondary school level.

The study was grounded to explore the significance difference between male and female science students' goal orientation. The researcher intended to explore any significant difference between male and female students' with respect to MG, PAG, PAvG and WAG orientation beliefs on ground realities. The researcher finds out this objective from a number of quantitative studies. A significant difference found between the perception of both genders (male and female) regarding different goal orientations.

3.2.3   Objective No. 3

To compare science students' goal orientation between public and private sectors at secondary school level.

To achieve this objective, four further sub-objectives were formulated.

3.1   To compare science students' goal orientation between public and private schools regarding mastery goal orientation.

3.2   To compare goal orientation of science students' between public and private school regarding performance approach goal orientation.

3.3   To compare science students' goal orientation between public and private schools regarding performance avoidant goal orientation.

3.4   To compare goal orientation beliefs of science students' between public and private school regarding work avoidant goal orientation.

The researcher is eager to discover if there is any significant difference among science students' goal orientation with respect to the educational sectors. The researcher is interested to look at any significant difference of science students' goal orientation beliefs among public and private school students' at secondary school level.

3.2.4   Objective No. 4

To examine the effect of goal orientation, on science students' academic achievement at secondary school level.

To achieve this objective the researcher intended to assess students' board exams marks of science students' including physics, chemistry, biology, and mathematics to measure students' academic achievement. Keeping in view the four sub types of goals the researcher is interested to explore the effect of all four types of goal orientation, on science students' academic achievement at secondary school level. For this purpose, this objective is further divided into four sub objectives with respect chosen conceptual frame work occupying four orientations. The sub-objectives are as follow:

4.1   To examine the effect of mastery goal orientation, on science students' academic achievement at secondary school level.

4.2   To examine the effect of performance approach goal orientation, on science students' academic achievement at secondary school level.

4.3   To examine the effect of performance avoidant goal orientation, on science students' academic achievement at secondary school level.

4.4   To examine the effect of work avoidant goal orientation, on science students' academic achievement at secondary school level.

3.3   POPULATION

The population of the study includes 10th class science students' from tehsil Havelian enrolled in Board of Secondary and Elementary Education Abbottabad which includes both gender (male and female) students' from both educational sectors (public and private). According available statistical Gazette records 2018 there were 50 secondary schools with total enrollment of 1682 in Tehsil Havelian BISE (ATD). Among these 7 are public secondary schools including 3 schools for males with enrollment of 258 and 4 for female students having 481 students. Whereas, private secondary schools are 43 in numbers among these 21 schools are for male with enrollment of 597 and 22 are female secondary schools with enrollment of

346. The table below enunciates the population of the study.

Table 3.1

Population of the study

Public Secondary School					
Boys	Girls	Boys Enrollment 10th class	Girls Enrollment 10th class	Total School	Total Enrollment
3	4	258	481	7	739
Private Secondary School					
Boys	Girls	Boys Enrollment 10th class	Girls Enrollment 10th class	Total School	Total Enrollment
21	22	597	346	43	943
Total Number of Secondary School in Tehsil Havelian					
Boys	Girls	Boys Enrollment 10th class	Girls Enrollment 10th class	Total School	Total Enrollment
24	26	855	827	50	1682

3.4   SAMPLING TECHNIQUE

Stratified random sampling was adopted and applied for drawing sample for the study. The population was divided into two major strata- based on gender (male and female) and educational sectors (public and private). Accordingly, for these groups stratified random sampling is used. The main objective to use this sampling technique was to give appropriate ratio to each stratum. The same or alike proportion of sample is selected from each division i.e. gender wise and education institute wise

3.5   SAMPLE

Population of the study was grouped into two major groups that are;

1. School wise division including public and private secondary school of BISE, Abbottabad.
2. Gender wise division including male and female science students' of secondary schools of BISE, Abbottabad.

The total enrolment of public secondary school is 739 while, total enrolment of private secondary school is 943. For 1682 participants' the sample size chosen was 400 that are 28% of total population. The male respondents were 202 which in regards form 51% of sample and 198 were female which could be accounted for 50% of sample. 203 respondents participated in the study were from public school which is accounted for 51% of study sample. While 196 respondents were from private school which is accounted for 49% of study sample

Initially, 400 questionnaires were distributed among responded, the responded rate was 98% in this way finally all questionnaire-based responses were selected for analysis of data that consisted 98% of rate of return.

3.6   RESEARCH TOOL

The questionnaire was used as research tool adapted according to theoretical framework presented by Christopher Was 2006. The theoretical frame work presents the model of goal orientation theory based on four major types thus questionnaire contains four sub- sections overall, the questionnaire was divided into two portions including demographic information and goal orientation assessment scale. The scale consists 33 items 6 of which were designed to directly measure both entity and incremental concept of intellect. These 6 items were written in both mastery and performance (approach, avoidant) parts of questionnaire. Overall, thirteen items were designed to measure mastery goal orientation, eight items for measuring performance approach goal orientation, seven for measuring performance avoidant goal orientation, while five items are for measuring work avoidant orientation. Five-point Likert scale responses choices ranged from strongly disagree (5), disagree (4), uncertain (3), agree (2) and strongly agree (1).

For measuring academic achievement of participant their obtained marks in science subjects including mathematics, biology, physics and chemistry were recorded.

3.6.1   Demographic Information

The demographic information includes the information regarding gender, age

and educational sector. This section designed to provide essential contextual data of respondents.

3.6.2   Goal Orientation Assessment Scale

The portion concerning information of goal orientation s was termed as goal orientation scale the scale includes 33 closed ended question items on five Likert scale. Response choices ranges from (1) strongly disagree (2) disagree (3) uncertain agree (5) strongly agree. The scale is adapted by the researcher for the assessment of students' perception. The detail of these is presented in the table.

Table 3.2

Description of Goal Orientation Assessment Scale

Scale	Major Sections	Section Codes	No of Items
Goal Orientation Assessment Scale	04		33
	Mastery Goals	MG	13
	Performance Approach Goal	PA	08
	Performance Avoidant Goal	PAV	07
	Work-avoidant Goal	WA	05

3.6.3   Validation of the Tool

The experts from the field of education approved the tool.

3.7   PILOT STUDY

For the current study, questionnaire was piloted among 50 science students. Pilot study is the best way to purify the questionnaire items by testing the reliability and validity. The data gathered was coded into four sub goal orientation types and analyzed through Statistical Package for Social Sciences SPSS 20thVersion.

3.8   DATA COLLECTION

The population of the study contains 1682 participants, out of which 400 participants' were chosen for data collection from different strata through stratified

random sampling at secondary schools. Collected data was used to analyze students' goal orientation.

3.9   DATA ANALYSIS

Data coding was the essential advance to get ready the collected information for empirical researches and furthermore facilitate the inclusion of the gathered data in factual package for social sciences (SPSS). Researcher embedded all the responses in an orderly manner following the item code that was predefined and gone into the SPSS program. For representation of data each item of the survey questionnaire was given code. SPSS 20th version was further used for initially data screening factor analysis such as Cronbach, Alpha, Reliability Test, Mean independent t-test correlation and regression was used.

SECTION 3

Table 3.3

Overview of main research objective

Sr No	Research Objectives	Research Hypothesis	Statistical Analysis
1.	To explore science students' goal orientation (a part of motivational beliefs) at secondary school level.		Mean, percentage
2.	To compare the science students' goal orientation beliefs with respect to gender.	There is no significant difference between goal orientation of male and female science students' at secondary school level	Independent sample *t* test
3.	To compare science students' goal orientation among public and private schools at secondary school level	There is no significant difference between goal orientation of public and private science students' at secondary school level	Independent sample *t* Test
4.	To examine the effect of goal orientation, beliefs on science students' academic achievement at secondary school level		Linear Regression

3.10   RELIABILITY OF THE INSTRUMENT

For assessment of strength of scale, the data gathered was analyzed through Cronbach Alpha Reliability Test and presented in the form of tables.

Table 3.4

Cronbach Alpha reliability of Goal Orientation Beliefs Assessment Scale Pilot Testing (N=48)

Scale	Major sections	Items	Cronbach Alpha Reliability
Goal Orientation Beliefs Assessment Scale	04	33	.841
	Mastery Goal	13	.866
	Performance Approach Goal	8	.871
	Performance Avoidant Goal	7	.877
	Work Avoidant Goal	5	.891

The given table elucidates the reliability of the Goal Orientation Beliefs Assessment Scale was .841 whereas the reliability of major sections "Mastery Goal, Performance Approach Goal, Performance Avoidant Goal, Work Avoidant Goal" were .866, .871, .877, and .891 respectively. Results show that all these scales are reliable as exceeds approximately the least threshold value of .7.

3.11   INTER ITEM CORRELATION

To statistically assess and prove the reliability of scale inter item correlations are used. The study measures 4 variables refer to effect of GO on science students' academic achievement. Each variable consist different no of question items that measure goal orientations of respondents concerning to their academic achievement.

Table 3.5

Inter item correlation for mastery goal orientation

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13
M1	1												
M2	.61	1											
M3	.45	.31	1										
M4	.35	.49	.55	1									
M5	.61	.60	.57	.47	1								
M6	.40	.44	.54	.58	.42	1							
M7	.41	.45	.61	.46	.46	.57	1						
M8	.58	.47	.41	.57	.31	.68	.52	1					
M9	.36	.43	.59	.66	.44	.46	.41	.39	1				
M10	.40	.32	.60	.57	.66	.57	.39	.45	.77	1			
M11	.36	.46	.45	.49	.45	.56	.43	.49	.68	.65	1		
M12	.42	.48	.56	.36	.44	.67	.44	.59	.44	.48	.49	1	
M13	.53	.49	.43	.86	.31	.79	.34	.40	.61	.68	.59	.47	1

Inter item correlations are used to measure the reliability of scale. Above table explain the inter item correlation of mastery goal orientation. This section consists of 13 questions on average that measures mastery goal orientation of respondents. The responses were sought on Likert scale ranging from 1= strongly disagree to 5= strongly agree. The results revealed statistically significant inter an item correlation, which in turn indicates the reliability of scale measuring the same variable in question. Highest correlation of M13 and M4 items (.86) and lowest correlation was found between M2 and M3 (.31).

Table 3.6

Inter item correlation for performance approach goal orientation

	PA14	PA15	PA16	PA17	PA18	PA19	PA20	PA21
PA14	1.000							
PA15	.264	1.000						
PA16	.199	.525	1.000					
PA17	.604	.410	.398	1.000				
PA18	.674	.395	.450	.779	1.000			
PA19	.456	.433	.294	.683	.650	1.000		
PA20	.300	.449	.293	.442	.480	.493	1.000	
PA21	.681	.241	.103	.615	.684	.597	.475	1.000

Inter item correlations are used to measure the reliability of scale. Above table explain the inter item correlation of PAG orientation. This section consists of 8 questions on average that measures PAG orientation respondents. The responses were sought on Likert scale ranging from 1= strongly disagree to 5= strongly agree. The results revealed statistically significant inter item correlation, which in turn indicates the reliability of scale measuring the same variable in question. Highest correlation of PA18 and PA17 items (.779) and lowest correlation was found between PA21 and PA16 (.103).

Table 3.7

Inter item correlation for performance avoidance goal orientation

	PAV22	PAV23	PAV24	PAV25	PAV26	PAV27	PAV28
PAV22	1.000						
PAV23	.629	1.000					
PAV24	.597	.774	1.000				
PAV25	.535	.693	.659	1.000			
PAV26	.505	.746	.728	.780	1.000		
PAV27	.527	.521	.506	.665	.663	1.000	
PAV28	.083	.162	.294	.085	.232	.162	1.000

Inter item correlations are used to measure the reliability of scale. Above table explain the inter item correlation of PAvG orientation. This section consist 7 questions on average that measures PAvG of respondents. The responses were sought on 5 point Likert scale ranging from 1= strongly disagree to 5= strongly agree. The

results revealed statistically significant inter item correlation, which in turn indicates the reliability of scale measuring the same variable in question. Highest correlation of PAV26 and PAV25 items (.780) and lowest correlation was found between PAV28 and PAV22 (.083).

Table 3.8

Inter item correlation for work avoidant goal orientation

	WA29	WA30	WA31	WA32	WA33
WA29	1.000				
WA30	.700	1.000			
WA31	.444	.513	1.000		
WA32	.695	.583	.487	1.000	
WA33	1.000	.700	.444	.695	1.000

Inter item correlations are used to measure the reliability of scale. Above table explain the inter item correlation of work avoidant goal orientation. This section consist 7 questions on average that measures work avoidant goal orientation of respondents. The responses were sought on five-point Likert scale from 1= strongly disagree to 5= strongly agree. The results revealed statistically significant inter item correlation, which in turn indicates the reliability of scale measuring the same variable in question. Highest correlation of WA33 and WA29 items (1.000) and lowest correlation was found between WA31 and WA29 (.444).

3.12 INTER CLASS CORRELATION

Table 3.8

Inter class correlation of goal orientation assessment scale (N=400)

	Academic achievement	Sum_M	Sum_PA	Sum_PAV	Sum_WA
Academic Achievement	1				
Mastery goal	.485**	1			
Sum_PA	-.215**	-.297**	1		
Sum_PAV	-.368**	-.636**	.444**	1	
Sum_WA	-.361	-.487**	.552**	.620**	1

**. Correlation is significant at 0.01 level (2-tailed)

The above table revealed that the sub-section of questionnaire was statistically significantly correlated with each other 0.01 level of significance. A significant relation exists between academic achievement and goal orientation at P vale (.485) indicates positive relation between MGO and academic success. For PAG orientation p vale (-.215) is negative which indicates a negative relation between PAG orientation and educational success for p= (-.297) also indicate negative relation between MG and PAG orientations. For PAvG orientation p= (-.368) and p = (-.636) indicated a negative relation with academic achievement and mastery goal while p value (.444) indicates a positive relation between PAvG and PAG orientations. For work avoidant orientation p vale (-.361), and p = (-.487) indicated a negative relation with academic achievement and with mastery goal orientation, while p value (.552) and (.620) shows a positive relation of work avoidant goal with performance approach and performance avoidant goal orientations.

CHAPTER-4

DATA ANALYSIS

SECTION 1

4.1   DEMOGRAPHIC INFORMATION OF RESPONDENTS

Table 4.1

Gender wise distribution N = (400)

Gender	Frequency	Percentage
Male	202	50.5
Female	198	49.5

The table 4.1 revealed that there were 400 numbers of respondents in total. The male respondents were 202, which in regards form 51% of sample and 198 were female, which could be accounted for 50% of sample.

Table 4.2

Gender wise distribution N = (400)

Gender	Frequency	Percentage
15-16 years	194	48.5%
16-17 years	206	51.5%

The table 4.2 revealed that there were 400 respondents in total. 194 respondents were 15-16 years of age that is accounted for 49% of sample. While 206 respondents were

16-17 years of age, which is accounted for 52% of sample

Table 4.3

Educational institute wise distribution N = (400)

Gender	Frequency	Percentage
Public	203	50.8%
Private	196	49%

The table 4.3 revealed that there were 400 respondents in total. 203 respondents join in the research belongs to public school, which is accounted for 51% of study sample. While 196 respondents were from private school which is accounted for 49% of study sample

SECTION 2

4.2   DATA ANALYSIS AGAINST OBJECTIVE NO 1

Objective No 1 to examine science students' goal orientation (a part of motivational beliefs) at secondary school level.

Table 4.4

Mastery Orientation Assessment scale

Item	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	Mean
M1	52 (13%)	77 (19%)	12 (3%)	125 (31%)	132 (33%)	3.52
M2	51 (13%)	94 (23%)	26 (6%)	117 (29%)	112 (28%)	3.36
M3	74 (18%)	94 (23%)	24 (6%)	118 (29%)	89 (22%)	3.13
M4	45 (12%)	89 (22%)	19 (5%)	132 (33%)	114 (28%)	3.45
M5	46 (11%)	76(19%)	25 (6%)	125 (31%)	128 (32%)	3.53
M6	49 (12%)	61 (15%)	11 (3%)	152 (38%)	126 (31%)	3.61
M7	57 (14%)	67 (17%)	17 (4%)	153 (8%)	104 (26%)	3.44
M8	39 (10%)	67 (17%)	23 (6%)	130 (33%)	141 (35%)	3.66
M9	90 (23%)	149(37%)	15 (4%)	76 (19%)	70 (17%)	2.71
M10	157(14%)	66 (16%)	13 (3%)	124 (31%)	140 (31%)	3.56
M11	46 (11%)	82 (20%)	17 (4%)	124 (31%)	131 (33%)	3.53
M12	54 (13%)	80 (20%)	17 (4%)	148(37%)	100 (25%)	3.401
M13	54 (13%)	82 (20%)	21 (8%)	138 (34%)	105 (26%)	3.39
Over all%	21%	20%	4%	29%	28%	

Table 4.1 Five Likert scale from strongly disagree to strongly agree ranging from 1 to 5 was used by the researcher to determine the goal orientation beliefs of students. Mean and percentage of responses was calculated. The result demonstrates out of 400 selected students on average 21% of students' are strongly disagree, 20% are disagree, 4% are uncertain, 29% are agreed and 28% are strongly agree with mastery goal orientation assessment scale. Total, 57% of respondents are mastery goal oriented.

Table 4.5

Performance Approach Orientation Assessment scale

Item	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	Mean
PA14	49 (12%)	91 (23%)	23 (6%)	142 (35%)	95 (24%)	3.35
PA15	56 (14%)	70 (17%)	25 (6%)	158 (35%)	91 (35%)	3.39
PA16	71 (1%)	95 (24%)	26 (6%)	130 (32%)	78 (19%)	3.12
PA17	80 (20%)	94 (23%)	18 (4%)	135 (34%)	73 (18%)	3.06
PA18	64 (16%)	102 (25%)	36 (9%)	123 (31%)	75 (19%)	3.10
PA19	78 (19%)	101 (25%)	16 (4%)	137 (34%)	68 (17%)	3.04
PA20	86 (21%)	98 (24%)	24 (6%)	102 (25%)	90 (22%)	3.03
PA21	69 (7%)	105 (26%)	25 (6%)	115 (28%)	86 (11%)	3.11
Over all%	15%	23%	6%	31%	20%	

Table 4.2 five point Likert scale from strongly disagree to strongly agree ranging from 1 to 5 was used by the researcher to determine the goal orientation of students. Mean and percentage of responses was calculated. The result shows that out of 400 selected students' on average 15% of students' are strongly disagree, 23% are disagree, 6% are uncertain, 31% are agreed and 20% are strongly agree with performance approach goal orientation assessment scale. Total, 51% of respondents are performance approach goal oriented.

Table 4.6

Performance Avoidant Orientation scale

Item	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	Mean
PAV22	82 (20%)	103 (26%)	29 (7%)	114 (28%)	72 (18%)	2.97
PAV23	100 (25%)	84 (21%)	17 (4%)	119 (30%)	80 (20%)	2.98
PAV24	59 (15%)	119 (30%)	25 (6%)	118 (29%)	77 (19%)	3.08
PAV25	63 (16%)	127 (32%)	27 (17%)	102 (25%)	81 (20%)	3.02
PAV26	94 (23%)	95 (24%)	19 (5%)	130 (32%)	62 (15%)	2.92
PAV27	89 (22%)	88 (22%)	23 (6%)	117 (29%)	83 (21%)	3.04
PAV28	115 (29%)	99 (25%)	16 (4%)	110 (27%)	59 (15%)	2.75
Overall %	21%	26%	7%	28%	18%	

Table 4.1 Five Likert scale from strongly disagree to strongly agree from 1 to 5 was used by the researcher to determine the goal orientation of students. Mean and percentage of responses was calculated. The results show that out of 400 selected students' on average 21% of students' are strongly disagree, 26% are disagree, 7% are uncertain, 28% are agreed and 18% are strongly agree with performance avoidant goal orientation assessment scale. Total, 46% respondents hold performance avoidance goal orientation.

Table 4.7

Work Avoidant Orientation scale

Item	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree	Mean
WA29	77 (19%)	108 (27%)	33 (8%)	114 (28%)	68 (17%)	2.97
WA30	76 (19%)	80 (20%)	15 (4%)	134 (33%)	93 (23%)	3.33
WA31	92 (23%)	102 (25%)	24 (6%)	115 (29%)	67 (17%)	2.90
WA32	78 (19%)	92 (23%)	32 (8%)	110 (27%)	87 (22%)	3.09
WA33	78 (19%)	93 (23%)	20 (5%)	114 (28%)	93 (23%)	3.17
Overall %	20%	24%	6%	29%	20%	

Table 4.1 Five Likert scale from strongly disagree to strongly agree ranging from 1 to 5 was used by the researcher to determine the goal orientation of students. Mean and percentage of responses was calculated. The result express that out of 400 selected students' on average 20% of students' are strongly disagree, 24% are disagree, 6% are uncertain, 29% are agreed and 13% are strongly agree with work avoidant goal orientation assessment scale. Total, 49% respondents are work avoidant oriented.

Table 4.8

Goal Orientation Assessment Scale

Goal Orientations	N	Mean	SD
Mastery	400	40.35	6.576
Performance approach	400	25.37	6.766
Performance avoidant	400	22.15	3.611
Work avoidant	400	16.50	4.277

Table 4.1 Five Likert scale from strongly disagree to strongly agree ranging from 1 to 5 was used by the researcher to determine the goal orientation of students. The calculation includes mean and standard deviation of responses. The result displays that there are more mastery-orientated students' than other orientations. It was discovered that the huge part of the participants was MGO (40.35) whereas, a small portion of sample belongs to work avoidant orientated students' (16.50). Both performance approach and performance avoidant oriented students' are on average (25.37) and (22.15) respectively.

SECTION 3

4.3 GENDER WISE DISTRIBUTION OF SCIENCE STUDENTS' GOAL ORIENTATION

4.3.1 Independent sample *t* test

The main research hypothesis is based on gender wise distribution of science students' goal orientation. To test the main research hypothesis independent sample t test was applied. The table below describes t test results. The variables analyzed include GO, PAG, PAvG and WAG orientations.

Objective No 2A:	**To compare the perceptions of male and female science students' regarding mastery goal orientation at secondary school level.**
H0a (1):	**There exist no significant difference between male and female students' regarding mastery goal orientation i.e., $(\overline{x1} - \overline{x2}) = 0$**
H1 a: (1):	**There is a significant difference between male and female students about mastery goal orientation i.e., $(\overline{x1} - \overline{x2}) = 0$**

Table 4.9

Gender wise comparison of secondary school science students' mastery goal orientation assessment scale (N=400)

Variables	Gender	N	Mean	T	Df	Sig
MGO	Male	202	45.85	2.680	322.747	.008
	Female	198	42.68			

To test the null hypothesis of no significant difference between male and female students'' researcher used t-test to compare mean $(\overline{x})$ of male students with female students. The value of t- statistics in Table 4.0 above is t (t=2.680) which falls in the rejection region at all level of significance with p value of 0.08 i.e. (Significant). Hence, on the basis of above statistics in our sampled data we failed to admit the null

hypothesis H0a "there exist no significant difference between male and female students' regarding their mastery goal orientation beliefs" and accept the alternative hypothesis. Thus, we conclude that based on our survey sample there exist a significant difference between male (45.85) and female (42.68) respondents regarding mastery goal orientation beliefs at secondary school level. Further the male respondents were found more mastery goal oriented as unlike to female respondents.

Objective No 2B:	**To compare the perception of male and female science students' regarding performance approach goal orientation at secondary school level.**
H0b(2):	**There exist no significant difference between male and female students' regarding performance-approach goal orientation i.e., $\overline{(x1 - x2)} = 0$**
H1b: (2):	**There exists a significant difference between male and female students' regarding performance approach goal orientation i.e., $\overline{(x1 - x2)} = 0$**

Table 4.10

Gender wise comparison of secondary school science students' performance- approach goal orientation assessment scale (N=400)

Variables	**Gender**	**N**	**Mean**	**T**	**Df**	**Sig**
Performance-approach goal orientation	Male	202	24.24	-2.785	398	0.006
	Female	198	26.23			

To test the null hypothesis of no significant difference between male and female students' goal orientations beliefs the researcher used t-test to compare mean $(\bar{x})$ of male students' with female students. The value of t- statistics in Table 4.5 above is t (t= -2.785) which falls in the rejection region at all level of significance with a p value of 0.006 i.e. (significant). Hence, on the basis of above statistics in our sampled data we failed to agree to take the null hypothesis H0 a "there exist no significant difference between male and female students' regarding their goal orientation beliefs" and accept the alternative hypothesis. Thus, we conclude that based on our survey

sample there exist a significant difference between male (24.24) and female (26.23) respondents with regards to PAG orientation at secondary school level. Further, the female students were found more mastery goal oriented as compared to male respondents.

Objective No 2C:		**To compare the perceptions of male and female science students' regarding performance avoidant goal orientation at secondary school level.**
H0 c(3):		**There exist no significant difference between male and female students' regarding performance avoidant goal orientation i.e., $\overline{(x1 - x2)} = 0$**
H1 c: (3):		**There exist a significant difference between male and female students' regarding performance-avoidant goal orientation i.e., $\overline{(x1 - x2)} = 0$**

Table 4.11

Gender wise comparison of secondary school science students' performance-avoidant goal orientation assessment scale (N=400)

Variables	Gender	N	Mean	T	Df	Sig
Performance-avoidance goal orientation	Male	202	20.66	-0.47	391.69	0.633
	Female	198	20.91			

To test the null hypothesis of no significant difference between male and female students' the researcher used t test to compare mean $(\bar{x})$ of male students' with female students. The value of t- statistics in Table 4.6 above is t (t= -0.47) which falls in the acceptance region at all level of significance with a p value of 0.633 i.e. (non-significant). Hence, based on above statistics in our sampled data we failed to take the alternative hypothesis H1 "there exist a significant difference between male and female students' regarding their performance avoidant goal orientation beliefs" and accept the null hypothesis. Thus, we conclude that based on our survey sample there

exist no significant difference between male (20.66) and female (20.91) respondents regarding PAG orientation at secondary school level.

Objective No 2d: **To compare the perceptions of male and female science students' regarding work avoidant goal orientation at secondary school level.**

H0 d(4): **There exist no significant difference between male and female students' regarding work avoidant goal orientation i.e., $\overline{(x1 - x2)} = 0$**

H1 d: (4): **There exist a significant difference between male and female students' regarding work avoidant goal orientation i.e., $\overline{(x1 - x2)} = 0$**

Table 4.12

Gender wise comparison of secondary school science students' work-avoidant goal orientation assessment scale (N=400)

Variables	Gender	N	Mean	T	Df	Sig
Work-avoidant goal orientation	Male	202	14.77	-2.12	393.14	.034
	Female	198	15.87			

To test the null hypothesis of no significant difference found between male and female respondents goal orientation believes the researcher use t test to compare mean (x) of male students' with female students. The value of t-statistic sin Table 4.7 above is t (t= -2.12) which falls in the rejection region at all level of significance with a p value of 0.03 i.e. (significant). Hence, on the basis of above statistics in our sampled data we failed to accept the null hypothesis H0 a "there exist no significant difference between male and female students' regarding their goal orientation beliefs" and accept the alternative hypothesis. Thus, we conclude that based on our survey sample though there exist a significant difference between male (14.77) and female (15.87) respondents with respect to performance-approach goal orientation but this difference is minor. Further, the female respondents were found slightly more work avoidant goal oriented as compared to male respondents.

SECTION 4

4.4   EDUCATIONAL SECTORS WISE DISTRIBUTION OF SCIENCE STUDENTS' GOAL ORIENTATION

4.4.1   Independent sample test

The main research hypothesis is based on educational sectors wise distribution of science students' goal orientations. An independent sample t test was applied to evaluate the main study hypothesis. The table below describes t test results. The variables analyzed include MG, PAG, PAvG WAG orientations.

Objective No 3.a	**To compare science students' goal orientation between public and private schools regarding mastery goal orientation at secondary school level**
H0 3 (a):	**There exist no significant difference between public and private science school students' regarding mastery goal orientation i.e., $\overline{(x1 - x2)} = 0$**
H13 (a):	**There exist a significant difference between public and private science school students' regarding mastery goal orientation i.e., $\overline{(x1 - x2)} = 0$**

Table 4.13

Educational sectors wise comparison of secondary school science students' regarding mastery goal orientation assessment scale (N=400)

Variables	Educational Sector	N	Mean	T	Df	Sig
Mastery goal orientation	Public	203	45.74	2.519	386.62	.013
	Private	196	42.77			

To test the null hypothesis of no significant difference between public and private school respondents' goal orientation the researcher uses t-test to compare mean ($\overline{x}$) of public-school students' with private school students. The value of t- statistics in Table 4.8 Above is (t=2.519) with a p value of 0.013 i.e. (significant).

Hence, on the basis of above statistics in our sampled data we failed to take the null hypothesis H0 a "there exist no significant difference between public and private secondary school science students' regarding their goal orientation beliefs" and accept the alternative hypothesis. Thus, we conclude that based on our survey sample there exist a significant difference between public (45.74) and private (42.77) respondents related to mastery goal orientation at secondary school level. Further, the public-school students were found more mastery goal oriented in comparison with private school students.

Objective No 3b;   **To compare science students' goal orientation between public and private schools regarding performance approach goal orientation at secondary school level.**

H03 (b):   **There exists no significance difference between public and private school science students' regarding performance approach goal orientation i.e., $\overline{(x1} - \overline{x2}) = 0$**

H1 3: (b):   **There exist a significant difference between public and private school science students' regarding performance approach goal orientation i.e., $\overline{(x1} - \overline{x2}) = 0$**

Table 4.14

Educational sectors wise comparison of secondary school science students' PAGO assessment scale (N=400)

Variables	Educational sector	N	Mean	T	Df	Sig
PAG Orientation	Public	203	25.01	-0.562	387.642	0.576
	Private	196	25.42			

To test the null hypothesis of no important difference between public and private secondary school science students' goal orientation the researcher uses t-test to compare mean ($\overline{x}$) of public with private school students. The value of t- statistics in Table 4.9 above is (t= -.562) which falls in the acceptance region at all level of significance with a p value of .576 i.e. (non-significant). Hence, based on above statistics in our sampled data we failed to accept alternative hypothesis H1 "there exist a significant difference between public and private school science students' regarding their performance approach goal orientation beliefs" and accept the null

hypothesis. Thus, we conclude that based on our survey sample there exist no significant difference between public (25.01) and private (25.42) secondary school science students' related to PAG orientation beliefs at secondary school level.

Objective No 3c:	**To compare science students' goal orientation between public and private schools regarding performance avoidance goal orientation at secondary school level.**
H0 3 (c):	**There exist no significance difference between public and private school science students' regarding performance avoidance goal orientation i.e., $\overline{(x1-x2)}=0$**
H13 (c):	**There exist a significant difference between public and private school science students' regarding performance avoidance goal orientation i.e., $\overline{(x1-x2)}=0$**

Table 4.15

Educational sectors wise comparison of secondary school science students' mastery goal orientation assessment scale (N=400)

Variables	Educational Sector	N	Mean	T	Df	Sig
Performance avoidance goal orientation	Public	203	19.56	-4.56	392.92	.000
	Private	196	22.06			

To test the null hypothesis of no significant difference between public and private secondary school science students' goal orientation the researcher uses t-test to compare mean ($\overline{x}$) of public with private school students. The value of t-statistics in Table 4.15 above is (t= 4.56) which falls in the rejection region at all level of significance with a p value 0.000 i.e. (highly significant). Hence, on the basis of above statistics in our sampled data we failed to receive the null hypothesis H0a "there exists no significant difference between public and private school students' regarding their goal orientation" and accept the alternative hypothesis. Thus, we conclude that based on our survey sample there exist an important difference between public (19.56) and private (22.06) school respondents related to performance avoidance goal orientation at secondary school level. Further, the private school

respondents were found more PAvG at secondary school level respondents.

Objective No 3d	**To compare science students' goal orientation between public and private schools regarding work avoidant goal orientation at secondary school level.**
H03 (d):	**There exist no significant difference between public and private school science students' regarding work avoidant goal orientation i.e., $\overline{(x1 - x2)} = 0$**
H13 (d):	**There exist a significant difference between public and private school science students' regarding work avoidant goal orientation i.e., $\overline{(x1 - x2)} = 0$**

Table 4.16

Educational sectors wise comparison of secondary school science students works avoidant goal orientation assessment scale (N=400)

Variables	Educational Sector	N	Mean	T	Df	Sig
Work-avoidant goal orientation	Public	203	14.83	1.89	397	.059
	Private	196	15.81			

To test the null hypothesis of no important difference between public and private secondary school science students' goal orientation the researcher uses t-test to compare mean ($\overline{x}$) of public with private school students. The value of t-statistics in Table 4.16 above is (t= 1.89) which falls in the acceptance region at all level of significance with a p value of .05 i.e. (non-significant). Hence, based on above statistics in our sampled data we failed to accept the alternative hypothesis H1 "there exist a significant difference between public and private school science students' regarding their work avoidance goal orientation beliefs" and failed to reject the null hypothesis. Thus, we conclude that based on our survey sample there exist no important difference between public (14.98) and private (15.95) science school students' respondents related to work avoidant goal orientation at secondary school level.

SECTION 5

4.5   EFFECT OF GOAL ORIENTATION ON ACADEMIC ACHIEVEMENT

4.5.1   Correlation Analysis

A correlation was applied to check out the association between GO and academic success and also the direction of their association. The Pearson correlation was used. The tables below describe statistical analysis results. The variables analyzed include MG, PAG, PAvG, WA orientations each with students' academic achievement.

Objective No 5   To examine the effect of goal orientation on science students' academic achievement at secondary school level

Table 4.17

Inter section correlation of goal orientation assessment scale (N=400)

	Academic achievement	Sum_M	Sum_PA	Sum_PAV	Sum_WA
Academic achievement	1				
Sum_M	.485**	1			
Sum_PA	-.215**	-.297**	1		
Sum_PAV	-.368**	-.636**	.444**	1	
Sum_WA	-.361	-.487**	.552**	.620**	1

**. Correlation is significant at 0.01 level (2-tailed)

To check the association between academic achievement and goal orientation and, also the direction of their association Pearson correlation was used. The correlation found significant at 0.01 level of significance. This means that a significant relation exists between academic achievement and goal orientation. P vale (.485) indicates positive association between MG orientation and educational success. For PAG orientation p vale (-.215) is negative which indicates a negative relation between performance approach orientation and educational success for p (-.297) also indicate negative relation between MG and PAG orientation.

For PAG orientation at p = (.368) and p = (-.636) indicated a negative relation with

academic achievement and mastery goal while p value (.444) indicates a positive relation between PAG and PAvG orientations. For work avoidant orientation p vale (-.361), and p = (-.487) indicated a negative relation with academic and with mastery goal orientation, while p value (.552) and (.620) shows a positive relation of WA with PAG and PAvG orientations.

Above table, support the regression analysis. To conclude the effect of each dependent variable (goal orientations) on independent variable (academic achievement) regression analysis was done.

4.6 REGRESSION ANALYSIS

Simple linear regression was applied to determine the effect of mastery goal orientation on students' academic achievement. The tables below describe statistical analysis results. The variables analyzed include MG, PAG, PAvG, and WAG orientations each with students' academic achievement.

Objective No 4   **To examine the effect of goal orientation of science students' academic achievement at secondary school level.**

Table 4.18

Effect of GO on academic achievement

	B	Std Error	Beta	T	P	R Square
GO	.365	.046	.353	8.642	.000	.230

The main objective of the study was to examine the effect of goal orientation on academic achievement at secondary school level. The results revealed that goal orientation could statistically significantly predict students' academic achievement F = (8.642) at p = (0.000). The un-standardized coefficient value B = (.365) indicate goal orientation a positive predictor of academic achievement. Thus, goal orientation in this regards explains 23% of the variability in academic achievement. Thus, a unit increase in goal orientation could variate academic achievement up to 23% in negative direction.

Objective No. 4.1   **To examine the effect of mastery goal orientation of science students' academic achievement at secondary school level**

Table 4.18

Effect of MGO on academic achievement

	B	Std Error	Beta	T	P	R Square
Sum_M	.473	.046	.458	10.278	.000	.21

A linear regression model was fit to analyze the effect of MG orientation on academic achievement the results indicates students' MGO could statistically significantly predict students' academic achievement F = (105.637) at p = (0.000). Mastery goal orientation with regards to explain 21% of the variability in academic achievement, which mean that a unit rise in mastery goal orientation of students' could variant their achievement in terms of their average scores up to 21% in a positive direction.

Objective No 4.2   **To examine the effect of performance approach goal on science students' academic achievement at secondary school level.**

Table 4.19

Effect of PAG orientation on academic achievement

	B	Std Error	Beta	T	P	R Square
Sum_PA	-.367	.084	-.215	-4.387	.000	.046

With regards to performance approach goal orientation the result of linear regression model reveled that this goal orientation could statistically significantly predicts students' academic achievement F = (19.245) at p = (0.000). The unstandardized co - efficient value B = (-.367) indicate PAG orientation a negative predictor of academic achievement. PAG orientation in regards explains 4.6% of the variability in academic achievement. Thus, a unit increase in performance approach goal orientation could variant their achievement in terms of their average scores up to 4.6 in negative direction%.

Objective No 4.3   To examine the effect of performance avoidant goal on science students' academic achievement at secondary school level

Table 4.20

Effect of PAvG on academic achievement

	B	Std Error	Beta	T	P	R Square
Sum_PAV	-.811	.103	-.368	-7.89	.000	.135

Simple linear regression was applied to determine the effect of PAvG orientation and academic achievement. The results revealed the performance avoidant goal orientation could statistically significantly predict students' academic achievement F = (62.312) at p = (0.000). Thus B = (-0.811) indicates PAvG a negative predictor of educational success. PAvG in regards explain 13.5% of the variability in academic achievement. Thus, a unit increase in Performance avoidance goal orientation could vary their achievement in terms of their average scores up to 13.5%.

Objective No 4.4   To examine the effect of work avoidant goal on science students' academic achievement at secondary school level

Table 4.21

Effect of work avoidant goal orientation on academic achievement

	B	Std. Error	Beta	T	P	R Square
Sum_WA	-.855	.111	-.361	-7.717	.000	.13

The last variable analyzed was work avoidant goal orientation. The results revealed that work avoidant goal orientation could statistically significantly predict students' academic achievement F = (59.559) at p = (0.000). The un-standardized coefficient value B = (-.855) indicate WAG orientation a negative predictor educational achievement. Thus, work avoidant orientation in this regards explains 13.5% of the variability in academic achievement. Thus, a unit increase in work avoidant goal orientation could vary their achievement in terms of their average scores up to 13.5% in negative direction.

CHAPTER-5

SUMMARY, FINDINGS, DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1   SUMMARY

This unit deals with explanation of data. The study was intended to observe the effect of GO on science students' academic achievement at secondary school level. The main objectives of the study are:

1. To examine science students' goal orientation (as part of motivational beliefs) at secondary school level.
2. To compare science students' goal orientation with respect to demographic variables i.e., gender.
3. To compare science students' goal orientation with public and private sectors at secondary school level.
4. To examine the effect of goal orientation on science students' academic achievement at secondary school level.

The researcher further included 12 sub objectives regarding each main objective. Two main hypotheses consisting eight sub hypotheses were developed to test sample data about objectives. The research population included 400 secondary school science students. Stratified sampling technique was selected to choose the sample for study. The study population was separated into strata based on gender and educational sectors. Male and female science students, also public and private school students' were counted as four major strata of population. The researcher adopted

goal orientation assessment scale by Was (2006). The questionnaire was based on five sections. The first section was dealing with demographic information of respondents, whereas the rest of four were related with measuring four different goal orientations. The questionnaire was based on 33 closed ended question statements rated on 5-points Likert scale. The questionnaire was adapted in nature and was changed by four experts from the field of education. The experts changed question items based on conceptual framework adopted in the study. Pilot test was conducted on 50 respondents including both genders (male and female) from both (public and private) educational sectors. The data collected was examined through Cronbach's Alpha Reliability, Inter Item and Inter Class Correlation through Statistical Package for Social Sciences (SPSS) 20th version. Hence, the description of results done and recommendations were drawn.

5.2   FINDINGS

400 respondents participated in the study with a response rate of 100% out of which 50.5% respondents were male while 49.5% were female and also 49.8% respondents were from public schools and 51% were from private school sectors. The majority of students were found mastery goal oriented that is 57% moreover, students were also found multiple goal-oriented. Students holding mastery goal orientation were also shadowed by performance orientation. Average students' were found performance goal oriented while a small portion of respondents were work avoidant goal orientated.

With reference to mastery goal orientation, a significant difference was found between male (M=45.85) and female (M=42.68) secondary school science students. The male students' were found more mastery goal oriented as compared to female students. Additionally, a small size effect was found between two mean (male and female) table 4.9

Similarly, male and female students' response regarding performance approach goal orientation at high school level was significantly different. The female respondents (M=26.23) were found slightly more performance approach goal oriented as compared to male (M=24.24) respondents. Moreover, a small size effect was found between two means (male and female) table 4.10

Gender wise a noteworthy difference was not found regarding performance avoidance goal orientation at secondary school level. No substantial difference was found between male (M=20.66) and female (M=20.91) secondary school science students. Additionally, no effect was found between two means (male and female) table 4.11

A significant difference was also found between both genders respondents (male and female) regarding work avoidant goal orientation at secondary school level. The female respondents (M=15.87) were found slightly more work avoidant goal oriented as compared to male (M=14.77) respondents. However, a small size effect was found between two means (male and female) table 4.12

There was a significant difference between public and private school science students' regarding mastery goal orientation at secondary school level. The public-school science students (M=45.74) were more mastery goal oriented as compared to private secondary school science students (M=42.77). Likewise, a small size effect was found between two means (public and private) table 4.13

About performance approach goal orientation, statistically, no significant difference was found between public (M=25.01) and private secondary school science students (M=25.42). Additionally, no difference was found between two means (public and private) table 4.14

There was a significant difference between public and private school science students regarding performance avoidant goal orientation at secondary school level. The public-school science students (M=19.56) were found less performance avoidance goal oriented as compared to private secondary school science students (M=22.06). Moreover, small size effect was found between two means (public and private) table 4.15

With regard to work avoidant goal orientation statistically no significant difference was found between public (M=14.98) and private secondary school science students (M=15.95). Moreover, a very small size difference was found between two means (public and private) table 4.16

To determine the effect of goal orientation on academic success. Goal orientation was found positive predictor of academic achievement at 0.000 level of significance with regard to a unit change in goal orientation of students' could positively variate academic achievement up to 23%.

Mastery goal orientation was found positive predictor of academic achievement at 0.000 levels of significance with regard to a unit change in goal orientation of students who could positively variate academic achievement up to 21%.

With regard to performance approach goal orientation, students academic achievement is significantly predicted at p = (0.000) level. The performance approach goal orientation indicates educational achievement negatively. (B= -.367). Therefore, a unit increase in performance approach goal orientation could negatively variate academic achievement up to 4.6%.

Performance avoidant goal orientation was found significant predictor of students academic achievement at high level of significance (p=0.000). The Performance avoidant goal orientation negatively predicts educational success at (B= -.811). Thus, a unit increase in Performance avoidant goal orientation could negatively variate educational success up to 13.5%.

Work avoidant goal orientation was found strong significant predictor of learners academic achievement (p=.000) at level of significance. The work avoidant goal orientation negatively predicts academic achievement (B= -.855). Consequently, a unit increase in work avoidant goal orientation could negatively vary academic achievement up to 13.5%.

5.3   DISCUSSIONS

The study intended to examine the effects of goal orientation on science students' academic achievement at secondary school level. The study was focused on four main objectives. The first objective was to examine science students' goal orientation at secondary school level. Overall, majority of students displayed mastery goal orientation. Students were found multiple goals orientated as these results were similar with Basit & Rahman's (2017) findings revealed mainstream of students

holding mastery goal orientation; also this orientation was shadowed by performance approach and performance avoidant goal orientations.

The next objective was to compare the science students' goal orientation with respect to gender. The study displayed considerable differences between both gender respondents regarding all other goal orientations except performance avoidant goal orientation. The results demonstrated that male respondents are more mastery goal orientated as compare to female respondents. Female students' were found more performance approach goal orientations. The results are similar to findings of Basit & Rahman (2017) in terms of gender wise comparison and revealed female students' with more performance approach goal orientated than boys. Hall's (2015) findings also support the fact that females are high performers than males. Kayis & Ceyhan's, (2015) results also support the current study finding by revealing female students more performance approach-oriented, likely to achieve more academic success as compared to those who are avoidance-oriented.

Boyd, and Amanda M (2017) also found female students more performance approach orientated as compared to the male students. Another study by AM Hutchins (2009) displays mastery orientation as significant factor of masculinity and revealed a positive association between masculinity and motivation to succeed, whereas, a strong relation between femininity and motivation to avoid failure. Kwok (2002) also revealed same results showing females more performance goal oriented than males. The results are inconsistent with Rijavec and Brdar (2002); Brdar et.al, (2006) and Byme (2001) who found male students' more work avoidant oriented and more performance approach goal oriented as compared to girls. Results are also inconsistent with Duchesne et al., (2017) who found females more mastery goal oriented as compare to males.

This dissimilarity in findings is probably due to the significance of female education in the context of social life. Pakistan is a male dominating society where social fabric for girls is confined and compact. Gender roles for girls are defined and do not suggest spotlight for many reasons as their role includes being gentle, calm, kind, trustful and reserved. Therefore, girls are more concerned with how others see their ability. Each girl learns by her society due to gender inequity (where equity is not really implemented) and the status of women is defined. Many families consider

investment in boy's education as a future investment and girls are provided with limited study resources. Career choices for many girls are not as opened as for boys. According to UN report on gender inequity (2018) in Pakistan, 48.1% of females were not given equal rights as males for decisions making. Girls also get less exposure as their mobility is limited. Girls after getting aware of their roles due to media influence, and change in communal values, this uneven rights dynamics between girls' and boys' results in striving for seeming more competent than boys.

The reason for work avoidant orientation in girls includes social norms like child marriages, family insecurities, gender inequity, household burdens, and less family support for career and higher studies etc. According to UN report (2018) 24% of girls from strong rich backgrounds while 63% from poor families are married before 18. Many families favor girls' early marriages as they reach puberty for believing that values are attached to them and often domesticated in a way to get desirable women for husband's family so, they believe that girls should not be educated further than a certain age. Moreover, sometimes families fear insecurity like sexual victimization, kidnapping, conflict, and long school distance serves as major barriers for female education. These factors create less career focus and motivation for girls related to their education, which can be a big cause for girls' avoidance to display their competence and focus to give less effort and hard work for academic success than boys. Boys as compared to girls, have more support from society for socialization, education and career choices therefore, they are more mastery goal oriented.

The third objective was to compare science students' goal orientation with public and private school sectors at secondary school level. The results revealed no significant difference for performance avoidance and work avoidant goal orientation of students among public and private school. In case of mastery goal orientation, public school respondents were found more mastery goal oriented. Whereas, Private school students were found more performance avoidant oriented as compared to public school students. In a comparative analysis of students' achievement in public and private school AG Awan (2018) found public school students better and more active in school activities. Learners' goal orientation is linked with many factors including school and classroom climate, learner's motivation, teaching methodology,

and teacher's goals orientation, which affect pupil in many ways.

School climate is an important predictor of teacher's instructional practices and learners' mastery goal orientation (Deemer, 2004). Positive school climate is associated with good study habits among learners and better academic achievements Mustafa, Lulin et al. 2017. McEvoy (2000) revealed that positive interactive contacts and optimal learning chances can affect school climate in a positive way which in turn lessen maladjusted behaviors. Tubbs, J. E., & Garner, M. (2008) stated that an unfriendly work climate, with a lack of respect for staff creates frustration, which in turn negatively affects the teaching and learning process. It is acknowledged in Pakistan that private school sectors have done well in providing good grades to students. On the other side, this sector is also lacking in satisfaction of staffs' expectations including, job security, attractive salary packages, interpersonal support, and providing an optimal climate that fosters the feeling of competency, and respect. Students goal orientation can also be affected by the teacher's job satisfaction and motivation which in turn is affected by school environment. Teachers' attitude towards their profession is affected by level of job satisfaction (Demet Hasbay, 2018). Public schools' heads are more satisfied with their jobs than private school heads (AG Awan, 2018).

Public sectors are enriched with resources like infrastructure, more qualified teachers, job satisfaction of teachers, and provide conducive environment for teaching and learning. Goal orientation of students is also linked with teacher's goal orientation, which is affected by school climate. According to Shim (2013) teachers' goal orientation for teaching affects goal structure of the classroom. Private sectors are more content centered as long as they are more concerned with students good grades contradictory to public sectors where students self-effort is appreciated. These reasons explain the difference in goal orientation of different educational sectors (public and private).

The fourth objective was to study the effect of goal orientation on science students' educational achievement at secondary school level. Mastery goal orientation showed positive association with academic achievement. Other goals including performance (approach and avoidant) and work avoidant revealed a negative relationship with the academic success. These results of the current study are similar

to previous researches Sideridis and Kaplan (2011) in their study of a State University in Southern Greece revealed a noteworthy connection between mastery goal orientation and educational success. Ng'ang'a, Mwaura, & Dinga, (2018) intended to find out association between achievement goal orientation and educational success among students in Kenya. The study revealed an important positive connection between mastery goal, and performance avoidant goal and educational achievement. While performance approach goal orientation shows an important negative connection with educational successes. Phan (2014) in his study on secondary school students of Sydney also stated similar results for mastery goal as a positive indicator of educational success, while mastery approach goal orientation was not in a noteworthy relation with academic results. The results of the study are also same as Geta (2012) who stated a significant association between achievement goal orientation and educational success. The findings are also consistent with Sideridis and Kaplan (2011) who investigated the relationship between achievement goal orientation and success in University in Southern Greece revealed same results by stating a noteworthy connection between mastery oriented and success but not a strong connection with performance approach, and performance avoidance focus and success.

Roussel, Elliot and Feltman (2011) studied association between 2x2 achievement frame works in high school students. The findings of the study described mastery approach goal and mastery avoidant goal as helpful analysts of success whereas performance targets in both approach and avoidance contexts were weak analysts for success in an educational context. King & Mclnerney, (2014) also found work-avoidant goal more silent in describing students' academic achievement. Keys (2012) revealed a connection between all three achievement goal orientations and mathematical feat. Mastery approach goal orientation was found as a predictor of mathematics success. While performance approach and performance avoidant goal orientations did not found predictors of mathematics success. A Finnish study based on transition faced by learners during a changeover from comprehensive school to higher secondary education discussed that mastery goal-oriented students were more involved in learning and found their school work more interesting ((Tuominen-Soini, Salmela-Aro, & Niemivirta, 2012). Results are also consistent with another study of Austrian cities on secondary school learners showed that performance-

approach goals an indirect predictor of social-oriented achievement motivation (Abd-El-Fattah, 2011).

5.4   CONCLUSION

The first objective of the study was focused to examine students' goal orientation. It had been concluded that majority of students was found mastery goal oriented. However, students were also found multiple goals oriented. It is implied that the mainstream of students' were found more active in learning new knowledge and put greater efforts into the learning process.

It was concluded that majority of male students was significantly more mastery goal oriented as compared to female. In general, male students' were more focused to develop new expertise and knowledge.

With respect to performance approach, goal orientation it was concluded that majority of female students were significantly more performance approach oriented as compared to male. In general, female students strive for apparent competency or more concerned with how others see their ability.

For performance avoidant goal orientation, it was concluded that both male and female students were holding the same goal orientation. No statistically important difference was found between male and female students. Mostly, both girls and boys equally avoid presenting little ability and are linked with fears of showing their achievement publicly.

For work avoidant goal orientation, it was concluded that majority of female students were significantly more work avoidant oriented as compared to male. Generally, female students are related with a lot of work escaping or work mitigating strategies.

Majority of public students were significantly more mastery goal oriented as compared to private school students. It was implied that over the focus on increasing and learning skills public school students are motivated for acquiring new learning.

For performance approach goal orientation, no significant difference was

found among respondents from both (public and private) educational sectors. Mostly, students from both public and private sectors hold same level of performance approach goal through estimating skills and abilities in comparison with others.

For performance avoidance goal orientation, statistically significant difference has been found among respondents from both (public and private) educational sectors. Respondents from private institutes were found more PAvG oriented as compared to the respondents from public sectors, which implies that private school students believe that they are skill deficient as compared to others.

For work avoidant goal orientation, no significant difference was found between public and private school students. This shows that students from both public and private sectors hold the same level of work avoidant goal, as both are focused to complete their assignment or course with giving less hard work or effort.

Goal orientation was found an important positive predictor of academic achievement, it is implied that students' academic achievement is linked with their behavior in learning situations that stimulates their motivation for learning.

Mastery goal orientation was found as important positive predictor of academic achievement. It is implied that academic success is linked with students motivation for being active in acquiring knowledge and developing new skills.

Performance approach goal orientation was found a negative predictor of academic achievement. This shows that students estimating skills and abilities in comparison with others negatively affect academic achievement.

Performance avoidant goal orientation was found a negative predictor of academic achievement. In general, academic failure is caused by students fear of showing their achievement publicly as it may certify their skill deficiency.

Work avoidant goal orientation was found a negative predictor of academic achievement. Generally, academic failure and delays are caused by students work escaping or work lessens strategies.

5.5   RECOMMENDATIONS

i.   As mainstream of students were mastery goal oriented and followed by other goals. Therefore, teacher may learn the factors affecting students' goal orientation in order to create desirable goal structure for classroom.

ii.   School administrators may develop professional development policies to educate teachers about classroom goal structure.

iii. Majority of female students were performance goal oriented therefore, considering factors affecting female education teachers may create classroom environment with minimum learning comparison to promote mastery goal orientation among students.

iv.   To minimize academic gender differences teacher, need to motivate all students' to achieve their potential through equal provision of emotional and academic support.

v.   As private school students were more performance goal oriented. It is therefore, recommended that government could formulate such rules for private schools to regulate required infrastructure and apply monitoring mechanisms to improve the performance of schools.

vi.   Private school managers may focus on satisfaction of staff needs to acquire more desirable form of learning.

vii. As students' achievement is mostly defined by mastery goal orientation. However, the teacher may enrich teaching practice with meaningful activities to upsurge intrinsic motivation, which results in more student-centered learning and hence mastery goal orientation.

viii. Performance avoidant and work avoidant has a negative effect on achievement therefore, school administrators may conduct mentorship program to help students to undergo cognitive reconstruction.

ix.   To avoid inconvenient effects of performance goal pedagogical methods could be design to avoid social comparison and rivalry.

POLICY IMPLICATIONS

i.   Mastery goal orientation shows a positive association with academic achievement; therefore, all stakeholders may create an encouraging environment that is helpful for enhancing personal psychological factors in

students.

ii. Performance avoidant and work avoidant was found a negative predictor of academic achievement students' counselors and psychological experts may facilitate weak students to go through goal orientation reorganization.

5.6 RECOMMENDATIONS FOR FUTURE RESEARCHERS

The research was confined to secondary school level. It is recommended for further researches to consider large sample including elementary and university students to observe the generalization of the current study results.

Future researchers should extend study with respect to various disciplines to examine if differences exist among various disciplines, to better comprehend the effect of achievement goal orientation on learning.

5.7 LIMITATIONS OF THE STUDY

The chief limitation of the current study is that the learning of students was assessed on the grounds of their perceptions. The perceptions are not always parallel to reality. Some respondents might misrepresent the responses to avoid giving real responses or to give more socially acceptable responses. The methodology was not focused on other variables that might have enabler or barrier effects on the study.

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Conceptual framework of the study
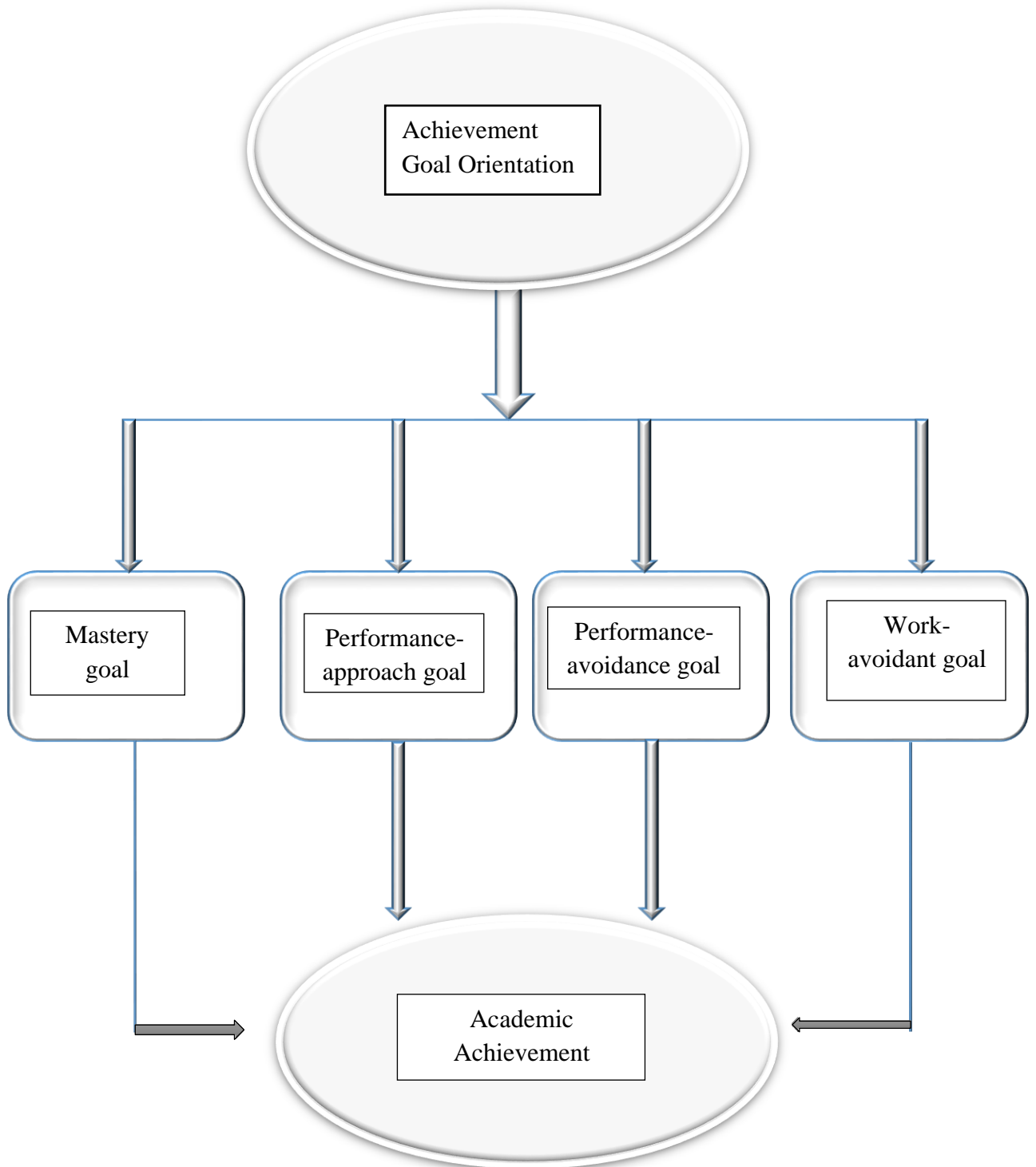
APPENDIX B

Topic approval letter

NATIONAL UNIVERSITY OF MODERN LANGUAGES
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF EDUCATION

ML.1-4/2019/Edu   Dated: 22-02-2019

To: **Saba Altaf,**
       1409-MPhil/Edu/F17

Subject: **APPROVAL OF MPHIL THESIS TOPIC AND SUPERVISOR**

1.   Reference to Letter No. ML.1-2/2019-Edu dated 11-02-2019, the Higher Authority has approved your topic and supervisor on the recommendation of Faculty Board of Studies vide its meeting held on 4th Dec 2018.

    i.   **Supervisor's Name & Designation**
        Dr. Hukam Dad Malik,
        Head / Associate Professor, Department of Education
        NUML, Islamabad.

    ii.   **Co-Supervisor's Name & Designation**
        Dr. Aisha Bibi,
        Assistant Professor, Department of Education
   NUML, Islamabad.

    iii.   **Topic of Thesis**

Effect of Goal Orientation on Science Students' Academic Achievement at Secondary School Level

2.   You may carry out research on the given topic under the guidance of your Supervisor/s and submit the thesis for further evaluation within the stipulated time. It is to inform you that your thesis should be submitted within the prescribed period by Sept 2020 positively for further necessary action please.

3.   As per policy of NUML, all MPhil/PhD theses are to be run through Turnitin by QEC of NUML before being sent for evaluation. The university shall not take any responsibility for high similarity resulting due to thesis prior run by any other individual.

4.   Thesis is to be prepared strictly on NUML's format that can be taken from MPhil & PhD Coordinator, Department of Education.

Telephone No: 051-9265100-110 Ext: 2090
E-mail: mdin@numl.edu.pk

Dr. Hukam Dad Malik
Head,
Department of Education

Cc to:
    Dr. Hukam Dad Malik (Supervisor)
    Ms. Aisha Bibi (Co-Supervisor)
    Individual Concerned

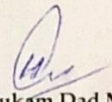# APPENDIX C

Data collection reference letter

TO WHOM SO EVER IT MAY CONCERN

Ms. Sabah Altaf student of M.Phil, Department of Education, National University of Modern Languages is engaged in Research Work. She may please be provided relevant information for her research work.

The information shall not be divulged to any unauthorized person or agency. It shall be kept confidential.

Dr. Hukam Dad Malik
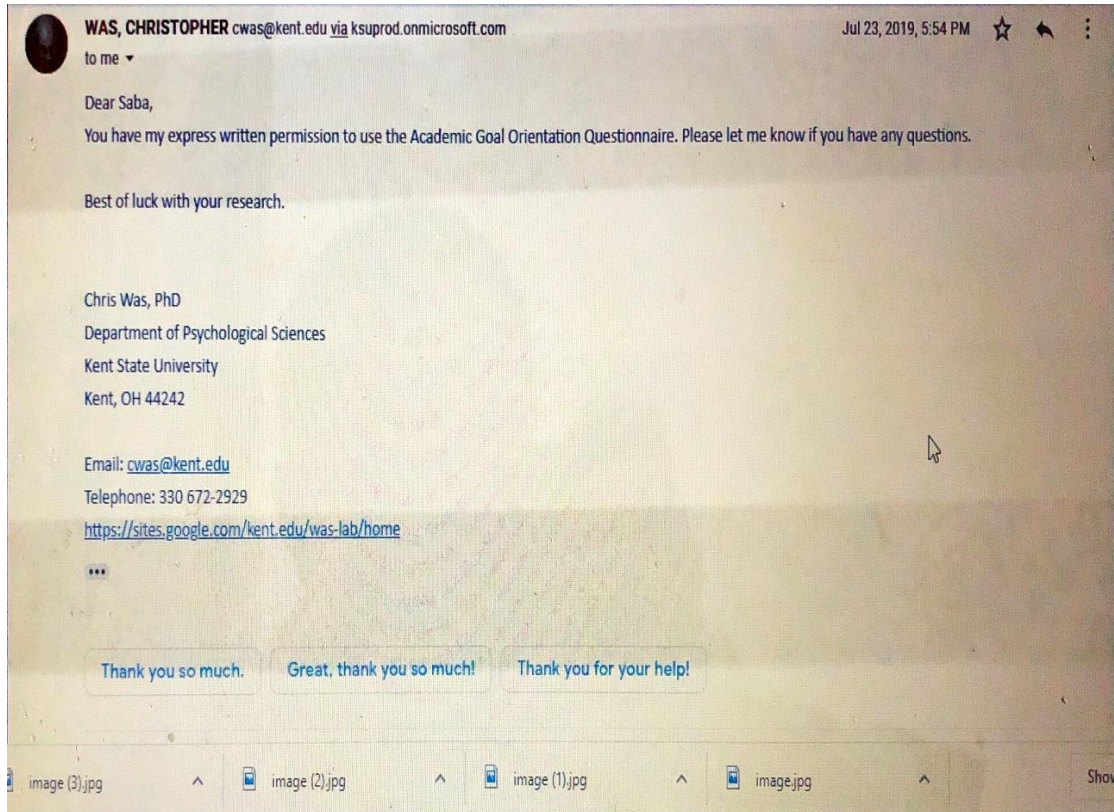Head,
Department of Education.

APPENDIX D

List of experts committee for tool validation

Sr. No	Name of expert	Designation
1	Dr Tehseen Tahir	Assistant Professor UOH
2	Dr Sadaf Ayub	Assistant Professor UOH
3	Dr Ambreen Ishfaq	Assistant Professor UOH

APPENDIX E

Approval for adaption of research tool

WAS, CHRISTOPHER cwas@kent.edu via ksuprod.onmicrosoft.com   Jul 23, 2019, 5:54 PM
to me

Dear Saba,

You have my express written permission to use the Academic Goal Orientation Questionnaire. Please let me know if you have any questions.

Best of luck with your research.

Chris Was, PhD
Department of Psychological Sciences
Kent State University
Kent, OH 44242

Email: cwas@kent.edu
Telephone: 330 672-2929
https://sites.google.com/kent.edu/was-lab/home

...

Thank you so much.   Great, thank you so much!   Thank you for your help!

image (3).jpg   ^   image (2).jpg   ^   image (1).jpg   ^   image.jpg   ^   Show

APPENDIX F

Research instrument validity certificate

CERTIFICATE OF VALIDITY

EFFECT OF GOAL ORIENTATION ON SCIENCE STUDENTS ACADEMIC
ACHIEVEMENT AT SECONDARY SCHOOL LEVEL

By: Sabah Altaf

MPhil Scholar, Faculty of Social Sciences National University of Modern Languages, H-9,
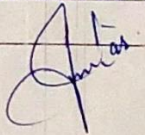Islamabad Pakistan

This is certify that the questionnaire adapted by the scholar towards her thesis has been
assessed by me and I find it to have been designed adequately to explore the effect of goal
orientation on science students academic achievement at secondary school level the
hypotheses of the study.

Responses thus collected will aid treatment of the subject in scientific manner. It is considered that
the research instrument, developed for the above mentioned titled research, is according to the
objectives and hypothesis of research. It assures adequate construct and content validity according
to the purpose of the research, and can be used for data collection by research with fair amount of
confidence.

Name: _Dr. TEHSEEN TAHIR._

Designation: _ASSISTANT PROFESSOR._

Institute: _UNIVERSITY OF HARIPUR._

Signature: _____

APPENDIX F

Research instrument validity certificate
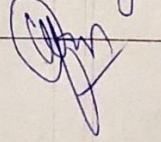
CERTIFICATE OF VALIDITY

EFFECT OF GOAL ORIENTATION ON SCIENCE STUDENTS ACADEMIC
ACHIEVEMENT AT SECONDARY SCHOOL LEVEL

By: Sabah Altaf

MPhil Scholar, Faculty of Social Sciences National University of Modern Languages, H-9,
Islamabad Pakistan

This is certify that the questionnaire adapted by the scholar towards her thesis has been assessed by me and I find it to have been designed adequately to explore the effect of goal orientation on science students academic achievement at secondary school level the hypotheses of the study.

Responses thus collected will aid treatment of the subject in scientific manner. It is considered that the research instrument, developed for the above mentioned titled research, is according to the objectives and hypothesis of research. It assures adequate construct and content validity according to the purpose of the research, and can be used for data collection by research with fair amount of confidence.

Name: _Dr. Saddaf Ayub_

Designation: _Assistant Professor_

Institute: _The University of Haripur_

Signature: _____

APPENDIX F

Research instrument validity certificate

APPENDIX G

List of school included in population of research

Sr No	School Name	School Type
1	**GGHSS Havelian Abbottabad**	**Public**
2	**GGHSS Sultanpur Havelian Abbottabad**	**Public**
3	**GHS NO 1 Havelian Abbottabad**	**Public**
4	**GHS Manjia Via Bodla Havelian Abbottabad**	**Public**
5	**GMHS Havelian Abbottabad**	**Public**
6	**Jinnah public school Havelian Abbottabad**	**Private**
7	**International public school Havelian Abbottabad**	**Private**
8	**Pakistan city school Havelian Abbottabad**	**Private**
9	**Muslim school Havelian Abbottabad**	**Private**
10	**Alarqam school Havelian Abbottabad**	**Private**

APPENDIX H

Research instrument

Goal orientation assessment scale

Dear students, you are requested to contribute your precious time to help achieve excellence in area of goal orientation beliefs mentioned in the questionnaire. Please tick the appropriate statement. Your correspondence will remain confidential and will not be used for other means. Thank you so much for your cooperation.

SECTION A

Gender
Male
Female

AGE
15-16
16-17

EDUCATIONAL INSTITUTE
Public
Private

HOW TO RATE

Please tick the most appropriate response option given against each statement where; **Strongly Disagree= SD 1, Disagree= D 2, Uncertain= U 3, Agree= A 4, Strongly Agree= SA 5**

Sr. No	Mastery	SD1	D2	U3	A4	SA5
1	I challenge myself with goals for a test based on my past exam results.					
2	I am more concerned with improving from week to week than I am in doing better than others.					
3	Even when I am doing well in my class. I continue to work hardtop Improve my understanding of the material.					

4	I prefer the material that arouses mycuriosity, even if it is difficult to learn.					
5	I feel that effort that leads to improvement increases my ability.					
6	My goal is to do my best, in exams even if others are doing better.					
7	I try to improve my test and exam scores throughout the year.					
8	I feel that one can increase their mental abilities through effort.					
9	I will try my best for every exam even if I know I do not need to try hard for a good grade.					
10	Doing well on a test or exam encourages me to do even better the next time.					
11	Understanding the content of course is more important than just getting a good grade.					
12	I prefer material that challenges me in class.					
13	I am more concerned with doing my best than doing better than others.					
	Performance Approach					
14	I believe that if one does not try hard in a class, but still does well, they must be smart.					
15	It is important for me to do well compared to others in this class.					
16	I believe that intelligence is something you are born with.					
17	I want to do well in this class so that my friends, family, instructor, and others will recognize my ability.					
18	When tests or exams are returned in this class I immediately want to compare my scores to others.					
19	I feel that if someone tries hard in class, but does poorly, they are not very intelligent.					
20	My only goal is to get the best grade.					
21	I am more interested in doing better than the other students in class, than doing my best.					
	Performance Avoidant					
22	I am afraid that if I ask the instructor for help they may not think I am very smart.					
23	When others ask how I did on test or exam I often lie and say I did better than I actually did.					
24	When test or exams are returned in class I do not want others to know how I did.					

25	I often worry about doing poorly in class.					
26	I worry more about getting a bad grade than I do about understanding the material.	xii				
27	I like my classes best when there is not much to learn.					
28	I feel that having to try hard to do well in a class is evidence of lack of ability.					
	Work Avoidant					
29	I want to do as little work as I have to.					
30	If I know I am getting a good grade in a class without much effort I will slack off.					
31	Getting a good grade is more important than understanding the material covered.					
32	I just want to do as much as I have to in order to get by inclass.					
33	My primary goal is to avoid getting a bad grade.					