

**EFFECT OF PROSPECTIVE TEACHERS' INTERPERSONAL SKILLS
ON THEIR SELF EFFICACY**

By

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**NATIONAL UNIVERSITY OF MODERN LANGUAGES,
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EFFECT OF PROSPECTIVE TEACHERS' INTERPERSONAL SKILLS ON THEIR SELF EFFICACY

By

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FACULTY OF SOCIAL SCIENCES

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Azra Raza

Dedicated to

My Beloved Parents

&

My Supervisor

Dr. Qurat Ul Ain Hina

ABSTRACT

Thesis Title: Effect of Prospective Teachers' Interpersonal Skills on their Self Efficacy

This research was conducted to assess the level of prospective teachers' interpersonal skills and to analyze the self-efficacy of prospective teachers, furthermore the purpose of the study was to assess effect of prospective teachers' interpersonal skills on their self-efficacy. Two theories were consulted to design conceptual framework of the study. One was Interpersonal Need Inventory (IPNI) developed by Pareek and Purohit (2010) and the second was based on Sources of Teachers Efficacy Questionnaire (STEQ) by Hoi, Zhou, Teo & Nie (2017). The model of Interpersonal Need Inventory (IPNI) which was consisted of six sub indicators named as belonging, affiliation, extension, recognition, control and influence. While the self-efficacy source consisted of four indicators named as mastery experiences, vicarious experiences, verbal persuasion and physiological states. The research approach used for this study was quantitative. The population of the research was based on International Islamic University Islamabad and National University of Modern Languages Islamabad (session 2019) and there were total 690 students. The sample was 414 of 60% of the total population and 354 questionnaires were returned; rate of return was 85.5%. Purposive sampling technique was used. For the validity of the questionnaire the researcher consulted some experts. The reliability of Interpersonal Need Inventory (IPNI) was (.855) and reliability of Self Efficacy Sources (SES) was (.772). It was revealed that interpersonal skills represented 6.5% variation on self-efficacy and there was a positive statistically significant at 0.01 level of significance and the hypotheses was failed to accept. In teacher training program extracurricular activities may include. There may teacher training programs offered, workshops, seminars and presentations. There may be internship programs conducted for prospective teachers for the improvement of their self-efficacy.

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LIST OF ABBREVIATIONS

| Abbreviation | Terms |
|---------------------|--|
| ATIES | Attitude towards Inclusive Education |
| CE | Computer Education |
| CEII | Chinese Emotional Intelligence Inventory |
| EE | Electrical Engineering |
| EE | Elementary Education |
| EFL | English as foreign language |
| EI | Emotional Intelligence |
| FCE | Federal College of Education |
| FIRO | Fundamental Interpersonal Relations Orientation-Behavior |
| GA | Give Affiliation |
| GB | Give Belonging |
| GE | Give Extension |
| GC | Give Control |
| GR | Give Recognition |
| GI | Give Influence |
| IIUI | International University Islamabad |
| IPE | Instructional Planning and Education |
| IPNI | Interpersonal Need Inventory |
| ME | Mastery Experience |
| MIT | Multiple Intelligence Theory |
| MLTS | Motivated Learning Teaching Strategies |
| MRA | Multiple Regression Analysis |
| MTU | Major Teacher University |
| MU | Marmara University |
| PSAU | Prince Sattam bin Abdul Aziz University |
| PSTE | Pre-Service Teacher Education |
| PS | Physiological States |
| RA | Receive Affiliation |

| | |
|------|--------------------------------------|
| RB | Receive Belonging |
| SCT | Social Cognitive Theory |
| SCT | Self-Concept theory |
| SE | Secondary Education |
| SE | Science Education |
| SES | Self-Efficacy Scale |
| SPSS | Special Packages for Social Sciences |
| TEP | Teacher Education Program |
| UOP | University of Punjab |
| VE | Vicarious Experiences |
| VP | Verbal Persuasion |

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CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Education plays a major role in the growth of a nation. Without education, progression in life is not possible for a nation. Therefore teachers' role becomes vital in this scenario. Teachers are known as the backbone of an educational institution because they are responsible for imparting knowledge, skills and attitudes of students. Teaching profession is considered as the most important and noble among all the professions in the world. In Pakistan, teacher training programs offered by different institutions are meant to train prospective teachers. During their (Prospective teacher's) training, teacher educators make an effort to develop their interpersonal skills and self-efficacy along with their professional skills. Humans are social beings so every human being wants to live in group. Human beings are also called social beings because they need different groups of people to avail all the commodities of life. Interpersonal skills are a type of skills that help a person to communicate and interact within a group. Interpersonal skills play a very major role in a person's personal as well as professional life. A person can easily communicate and adjust in different situations by using interpersonal skills. Interpersonal skills also cover the way of interacting with people through good listening and responding towards them. It is necessary for students to learn interpersonal skills because it helps them to communicate with people and also encourage their concept of self-responsibility (Khan, 2017). The ability to have direct connection with people is considered as the second biggest need for a human being, after the physical criteria including eating, drinking, sleeping and security as the most important need (Boz, 2018).

According to Akhtar (2008) Self efficacy is a form of belief in which people have trust and belief about their own abilities to face the challenges ahead and efficiently complete their mission. It is a part of interpersonal intelligence to be capable of knowing others, working together and successful interaction. Interpersonal intelligence is a capability of brain that allows one to communicate with others and consider their moods, thoughts, desires and expectations (Hajebi, Tahiri & Noshadi, 2018). Interpersonal communication is utilized as verbal and nonverbal form within persons. This intelligence requires the capacity to communicate, collaborate with others and inspire others to accomplish a common purpose. Interpersonal intelligence provides the capability of understanding thoughts, beliefs, desires and those people's skills in their lives (Hajebi, Taheri & Noshadi, 2018). Improving interpersonal skills allow individuals to improve interactions to cope with the social world particularly when interacting with complicated and demanding people (Lindsey & Rice, 2015). Liliweri (2017) stated that an interpersonal relationship can be created between two or more people, communicating with each other, but interpersonal relationship fades if these two or more people do not communicate clearly or concretely. Kahrs (2018) highlighted that interpersonal skills referred to soft skills in which a person communicates with two or more than two people. These types of skills help a person to work effectively with others, and also to build a supportive and positive relationship with others.

Knowing oneself is very essential for interpersonal relationships as through this a person becomes skillful in knowing about his or her strengths and weaknesses. He or she also comes to know, whether or not, he or she is able to do and achieve the target which he or she has set forth.

Self-efficacy of a person has many benefits, such as enhanced self-confidence, self-control, problem solving skills and motivation. Self-confidence means people believes in or trust in his abilities or capabilities knows his strengths and weaknesses and utilizes these skills. Self-control

is also a part of self-confidence that means the skills used to control a person's feelings and thoughts. The other benefit of self-confidence is the ability of problem solving skills. It means the ability of finding out effective ways to analyze and to solve a problem effectively. Individuals having high level of self-efficacy are considered to have higher level skills to solve the problems or situations occurred. The other benefit of self-efficacy is motivation. A person who has higher level of self-efficacy has higher motivation level so he can achieve their life targets easily.

Interpersonal skills and self-efficacy are interrelated with each other. Interpersonal skills mean how much a person has self-confidence and self-control to communicate and interact with others. Self-efficacy means a person's belief and trust on his own abilities and capabilities and about his confidence to achieve the specific task which he has been given. An individual with high degree of self-efficacy has also good interpersonal skills to interact or communicate within a group or individually to meet their basic needs and achieve their short term as well as long term goals. On the other hand, people with a poor degree of self-efficacy cannot achieve general as well as specific tasks which are assigned to them because they have no belief in their abilities and capabilities and also have poor interpersonal skills so they cannot achieve their predetermined goals and objectives. That's why interpersonal skills and self-efficacy are interlinked with each other.

1.2 Rationale of the Study

A research conducted by Malik and Hina (2012) aimed to identify the prospective teachers' awareness about interpersonal skills concluded that prospective teachers had awareness about significance of interpersonal skills. A similar study was conducted by Gopinath and Sivakumar (2018) on prospective teachers' self-awareness about life skills and teaching competences at college level concluded that mostly candidates were agreed that the fact that they had good awareness, problem solving skills and teaching competencies. Another study conducted by Ijaz

(2019) was on the interplay of teachers' occupational stress on their interpersonal skills concluded that most of the teachers were aware about the six dimensions of interpersonal skills (belongingness, affiliation, extension, recognition, control and influence). Jayanchitra (2020) conducted a study on awareness about prospective teachers concluded that most of the prospective teachers were still not aware about these skills.

Arslan (2019) conducted a study which intended to investigate the predictive power of prospective teachers' sources of self-efficacy and attitude towards teaching profession revealed that emotional states, mastery experiences and verbal persuasion were significant predictor of prospective teachers' attitude towards teaching profession. Similar study was also conducted by Shaukat and Iqbal (2013) on prospective teachers' self-efficacy measurement throughout teacher training program (TTP) at graduate level in Pakistan. Public Sector University students were studied and results indicated that four dimensions deteriorated in these students. Another study was done by Elaldi and Yerliyurt (2016) to know the attitude of prospective teachers' towards self-efficacy and teaching profession concluded that there was a positive significant effect prevailing in prospective teachers' attitude towards teaching profession.

Another similar study was done by Sevgi, Gok and Armagan(2017) to explore the difference between fresh and senior prospective teachers' self-efficacy beliefs about teaching, concluded that there was no significant difference observed between fresh and senior prospective teachers in the level of self-efficacy was found. Ahmed, Khan and Rehman (2017) conducted a comparative study to explore difference between males and females teachers' sense of self efficacy at secondary level, concluded that female teachers had better sense of self efficacy than male teachers. Yalcin, Ozcelik and Ercan (2014) conducted a research to determine the self-efficacy beliefs of prospective foreign language teachers and analyzed the correlation of self-efficacy with other variables such as gender ,age, department, socioeconomic status, concluded

that data has not proved any significant relationship between self-efficacy and other above mentioned variables.

Aslan and Bakir (2017) attempted to identify the relationship between prospective teachers' self-efficacy and their professional competence level concluded that the opinion of prospective teachers' about professional teaching was affected with moderate level of academic self-efficacy. The study of Al-mehsin (2017) aimed at examining the contribution of social skills and self-efficacy to the process of decision making confirmed a positive correlation among self-efficacy and the quality of decision making and social skills development and the quality of decision making among students in a Saudi Arabian university (Al-mehsin, 2017).

Another study conducted by Malik, Mehmood, Paracha, Azeem and Jumani (2017) on prospective teachers' attitude towards the improvement of their communication skills in Pakistan concluded that majority of prospective teachers were found with less intention in refining their communication skills and recommended that teacher education planners 'may pay attention towards reviewing teacher education curricula of Pakistan to bring it in lieu with the growing necessities of the advanced world.

A few studies that are conducted in other countries on awareness of prospective teachers' interpersonal skills at university and college level (Jayanchitra, 2020; Gopinath and Sivakumar, 2018; Al-mehsin, 2017).

Mostly researches in other parts of the world were done on self-efficacy of prospective teachers focused on other variables at university level (Arslan, 2019; Sevgi, Gok and Armagan, 2017; Aslan and Bakir, 2017; Elaldi and Yerliyurt, 2016; Yalcin, Ozcelik and Ercan, 2014).

There were only few researches done in Pakistan on interpersonal skills with other variables as activity based learning model, occupational stress (Malik and Hina 2012; Ijaz, 2019; Pasha, 2016; Malik, Muhammad, Paracha, Azeem and Jumani, 2017). Mostly researches held in Pakistani context on self-efficacy of teachers at secondary level (Shahzad and Noureen, 2017;

Ahmed, Khan and Rehman, 2015; Shouqat and Iqbal, 2013). As in the context of Pakistan there are conducted few researches conducted on interpersonal skills and self-efficacy at university level so the researcher felt this gap and wanted to conduct a research on this topic.

1.3 Statement of the Problem

This study was focused on exploring the effect of prospective teachers' interpersonal skills on their self-efficacy. Teachers play very important role in educational institutions. Knowing oneself is very important because when a person is aware of his strengths and weaknesses the state becomes beneficial for him. In Pakistan there are multiple teacher training programs offered for the prospective teachers. But unfortunately there are some issues in the teacher training program they are as follow: Limited duration of teacher training program, no standards are set for teacher training programs, curriculum is not up-to-date, shortage of resources for teacher training programs, Teacher instructors do not have training in the area of training prospective teachers, mostly courses offered are based on theoretical instead of practical aspects of teaching profession (Malik & Hina, 2012). Prospective teachers, mostly take communication skills as extra burden while studying in teacher education program and they (prospective teachers) mostly show lack of interest in the trainings provided for them in such areas (Malik, Mahmood, Paracha, Faisal & Jumani, 2017). One of the main reasons for low interest level among prospective teachers is lack of training provided to them on teaching and handling practical courses. Such as extracurricular activities, use of technology in teaching, out of the box teaching techniques and so on. To develop healthy interpersonal skills and self-efficacy among our youth we need to invest on our teachers. If the teachers are capable to develop the personalities of the coming generation, then we will survive as a nation. For this mission we need to train our teachers, teacher educators, institutions and content needs to be focused on improvement of future teachers' interpersonal skills and self-efficacy. The goal of this research

study was to highlight the significance of this area. Thus this research was based on exploring the effect of prospective teachers' interpersonal skills on their self-efficacy.

1.4 Research Objectives

The objectives of the study were:

1. To assess the level of interpersonal skills of prospective teachers.
2. To analyze the practicing self-efficacy of prospective teachers.
3. To assess the effect of prospective teachers' interpersonal skills on their self-efficacy.
 - 3a.To assess the effect of prospective teachers' interpersonal skills related to belonging on their self-efficacy.
 - 3b.To assess the effect of prospective teachers' interpersonal skills related to affiliation on their self-efficacy.
 - 3c.To assess the effect of prospective teachers' interpersonal skills related to extension on their self-efficacy.
 - 3d.To assess the effect of prospective teachers' interpersonal skills related to recognition on their self-efficacy.
 - 3e.To assess the effect of prospective teachers' interpersonal skills related to control on their self-efficacy.
 - 3f.To assess the effect of prospective teachers' interpersonal skills related to influence on their self-efficacy.

1.5 Null Hypotheses

The null hypotheses of the current study were:

HO1. There is no statistically significant effect of prospective teachers' Interpersonal Skills on their Self Efficacy.

Ho1a. There is no statistically significant effect of prospective teachers' interpersonal skills related to belonging on their self-efficacy.

Ho1b. There is no statistically significant effect of prospective teachers' interpersonal skills related to affiliation their self-efficacy.

Ho1c. There is no statistically significant effect of prospective teachers' interpersonal skills related to extension on their self-efficacy.

Ho1d. There is no statistically significant effect of prospective teachers' interpersonal skills related to recognition on their self-efficacy.

Ho1e. There is no statistically significant effect of prospective teachers' interpersonal skills related to control on their self-efficacy.

Ho1f. There is no statistically significant effect of prospective teachers' interpersonal skills related to influence on their self-efficacy.

1.6 Conceptual Framework

Conceptual framework of the study was based on the theory of interpersonal skills and self-efficacy presented by Ismail and Nachiappan, 2019. In this theory both interpersonal skills and self-efficacy were discussed. This theory analyzes the mastery of interpersonal skills and its effect on students' self-efficacy at Matriculation College, Ministry of Education Malaysia. The sample of the study consisted of twelve students of the Pahang Matriculation College, located in the district of Gambang. The method of this study uses the answer texts written by the respondents as data and transcribed into the text of the study. The text of the study was later analyzed using the Hermeneutical Method. This study demonstrated the importance of the mastery of soft skills and the effect of self-efficacy on the students, as well as the linkages in the mastery of soft skills to the student's self-efficacy. Findings showed that students with a weak foundation in the mastery of soft skills had showed an impact by taking the subject of Dynamic Skill at Matriculation College and successfully enhancing the mastery of their interpersonal

skills. The mastery of these interpersonal skills also had a positive impact on their self-efficacy. The suggestions of this study for the administration of colleges and lecturers were that they need to empower students in compulsory subjects offered by college matriculation to improve student self-efficacy and to create a balanced human capital of the nation. All the respondents agreed that interpersonal skills have an effect on the self-efficacy of individual. Students who express the mastery of interpersonal skills successfully improved their self-efficacy. In many situations, their mastery of interpersonal skills especially communication skills made them more confident. They are confident in dealing with people through strong verdicts. They can also overcome their nervousness as a result they improved their confidence which ultimately resulted in increase in self-efficacy. Further the concept of these two theories were elaborated by Lu (2020) based upon the theory of Bandura (1997) and interpersonal communication efficacy by Xie (2004). The result indicated that Chinese students paid more attention to their interpersonal communication efficacy as compared to international students.

According to Goleman and Gardner (2002) theories connected with interpersonal interactions were used to maintain relationships with others. Further the concept of this theory was more elaborated by the Pareek and Purohit (2010). Interpersonal Skills indicators model was presented by Pareek and Purohit (2010) was adapted as the conceptual framework of the study. It includes six dimensions that were related to belonging, affiliation, extension, recognition, control and influence. Researcher used the interpersonal skills given by Pareek and Purohit (2010) to operationalize the interpersonal skills, on the other hand to determine the self-efficacy of prospective teachers, researcher used self-efficacy theory which was given by Bandura (1997) consists of four dimensions mastery experiences, vicarious experiences, verbal persuasion and physiological states.

The first variable interpersonal skill was considered independent variable and next variable was associated to self-efficacy was treated as dependent variable.

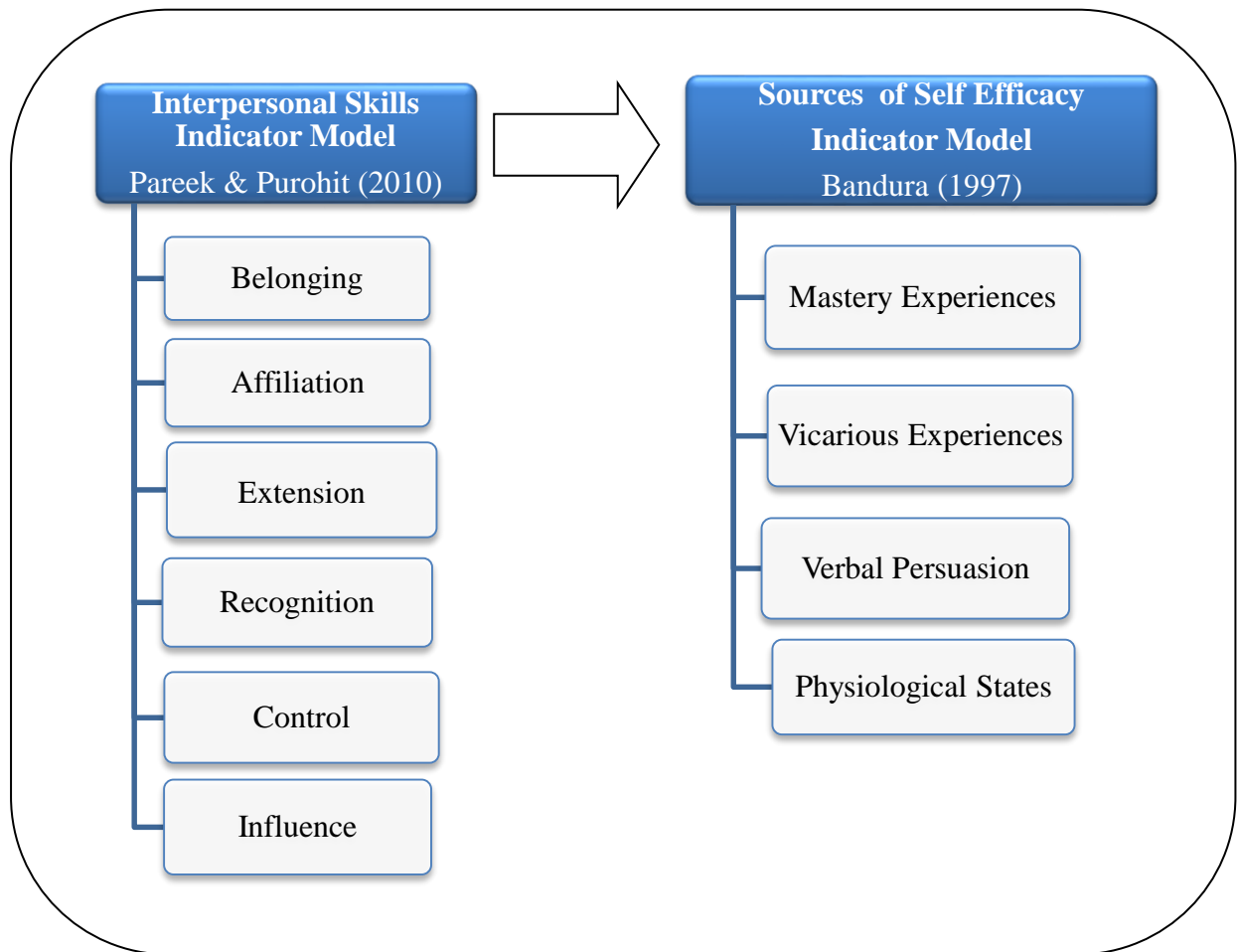


Fig 1.1 Conceptual framework of the study

1.6.1 Interpersonal Skills

Interpersonal skills are related to skills that help an individual to contact with others. According to Pareek and Purohit (2010) there are six dimensions of interpersonal skills. They are as follow:

1.6.1.1. Belonging

According to Deci and Ryan (2004) belonging need is a psychological perception of an individual in a situation of communication in the company of others. Belonging plays very important role in human's life it is the basic formal need of a person.

1.6.1.2. Affiliation

According to Tanzeela (2019) Affiliation is the act of linking, involving or associating with other human beings or any organization. Every Person has an attachment, connection and association to an organization. Affiliation creates with a member of the society or organization. Every individual has affiliated with the family, society and friends in the world. Without an affiliation, the person cannot survive alone. Affiliation is very important skill because without affiliation it is very difficult to survive in society.

1.6.1.3. Extension

According to Pareek (2010) extension means concern about others, including a group or community. It means to sacrifice for others and work for them whether you are in trouble. In this skill helping other people is the main goal giving benefits and providing facilities.

1.6.1.4 Recognition

According to Pareek (2010) recognition is such a type of skill in which a person is able to acquire knowledge about someone or something. This plays very important role in a person's life. Recognition means to do something and recognize someone or identify something when you look towards someone. Recognition of something is to consider and making approval of it (Tanzeela, 2019).

1.6.1.5. Control

According to Pareek (2010) Control means to control others' actions or guide them. Everyone in this world wants to become autocratic and want to control other people by their rules and policies. In other words, it can be said that control

is the leading factor that influences the behavior of other people as well as changing the psychology of the other people (Tanzeela, 2019).

1.6.1.6. Influence

According to Pareek (2010) Influence is the ability to produce desirable and measurable results. Influence includes such type of democratic style in which each and every one of the group has been given the freedom to share their point of view and give suggestions (Tanzeela, 2019).

1.6.2 Self Efficacy

According to Bandura (1997) it is possible to develop people's view in their effectiveness in four ways. They are as follow:

1.6.2.1. Mastery Experiences

According to Bandura (1997) mastery experiences is one of the main sources of self-efficacy. Bandura (1997) explained "The most effective way of developing a strong sense of efficacy is through mastery experiences" It is based on the past experiences about something related to the new behavior. Furthermore Bandura (1997) explained performing a task successfully strengthens our sense of self-efficacy.

1.6.2.2. Vicarious Experiences

The second source of self-efficacy is vicarious experiences. According to Bandura (1997) Vicarious experiences means learning by experience or observing someone to excel.

1.6.2.3. Verbal Persuasion

The third source of self-efficacy is verbal persuasion. According to Bandura (1997) Verbal persuasion gets a successful inspiration from others. It means a person's encouragement can increase yourself efficacy.

1.6.2.4. Physiological States

The fourth source of self-efficacy is physiological states. According to Bandura (1997) physiological states means emotionally and physically triggered through thinking regarding the current pattern of behavior.

1.7 Significance of the Study

Interpersonal skills play vital role in human's life. Humans are social being and cannot live alone. Interpersonal skills are such types of skills which humans use on a daily basis to converse and connect with each other and express their ideas and feelings to others. A person builds an association with other people to fulfill his basic need. These skills are very essential to learn because humans communicate constantly with each other.

It is a universal fact that self-efficacy refers to person's abilities and capabilities to achieve a specific task or goal. Knowing one-self means whether and up to extent a person has the capacity to conduct a given task. Knowing one's identity is the key to progress, because a person who knows his own strengths and weaknesses, never stops learning. One who knows himself cannot be failed. People fail in achieving aims and objectives of life due to unawareness about their own abilities and potentialities.

The outcomes of this study would be useful for the teachers in knowing the level of self-efficacy. It would also help the teacher educators, trainers, policymakers and other concerned authorities to design teacher education programs and courses in such a way that they infuse the spirit of self-efficacy in future teachers.

This study would be very evocative for teacher educators. Teacher educators would learn information about basic interpersonal skills and its effect on self-efficacy of future teachers. They are going to know the strength and weaknesses of the future teachers and will be able to know how to improve their self-efficacy. For this teacher educators would be able to create the

environment of the classroom in which teacher educators would guide and train interpersonal skills and self-efficacy of future teachers by giving presentations to the future teachers.

This study would also be effective for future teachers. They would take benefit from this research about what is the importance of interpersonal skills and self-efficacy and how to improve them. They would be able to know their strengths and weaknesses and also develop strong degree of self-efficacy and helpful throughout the future as well.

This research would be beneficial for curriculum wing as they would be able to know the ways to improve interpersonal skills and self-efficacy of the future teachers. Keeping this point of view, the curriculum wing would be able to make effective decisions in curriculum committee to develop a practical type of courses; which would improve to develop interpersonal skills and increase their self-efficacy.

Universities are the institutions where decisions about the future of a nation are made and the decisions makers, intellectuals, policy makers, leaders, national heroes and the defenders of national ideology are prepared. Those who have these great responsibilities are the teachers. If they would be well aware about their responsibilities, their importance in a nation's progress and decline then they would definitely change the destiny of the nation.

1.8 Methodology

This section includes population, sample, sampling technique, instruments, data analysis and delimitation.

1.8.1. Research Approach

Quantitative approach was used to identify the issues by generating numerical data or information that can be transformed into useful statistical findings. Researcher used this approach because of the nature of the research objectives and hypothesis of the current study.

1.8.2 Research Method

The descriptive research method was used. In this way researcher collected data by personal visits. The researcher was interested to see the effect of prospective teachers' interpersonal skills on their self-efficacy. By design, the research was descriptive research design.

1.8.3. Population

Population of the study consisted of a group of individuals that has one or more characteristics in common, about which the researcher is interested to gather information. This study aimed to explore the effect of interpersonal skills on self-efficacy, at higher education level among prospective teachers. The population of the study was based on prospective teachers' enrolled in session 2019 in regular public sector universities of Islamabad functioning education department including National University of Modern Languages (NUML) and International Islamic University Islamabad (IIUI).

Below is the list of Public Sector Universities which was offering teacher education programs in the current academic year.

Table 1.1

Population of the Study

| Sr# | University Name | Number of Prospective Teachers' Enrolled in Session 2019 |
|--------------------|--|--|
| 1. | National University of Modern Languages Islamabad (NUML) | 294 |
| 2. | International Islamic University Islamabad (IIUI) | 396 |
| Grand Total | | 690 |

This table 1.1 presents the division of population in target universities. These are universities in which education department functions. It explains prospective teachers' population of education department enrolled in session 2019 in the concern universities in Islamabad.

1.8.4. Sample

The study sample was consisted of 60% of the total population. The population of the study was small that's why the researcher made the maximum effort to targeted the maximum population. The questionnaire was distributed among 414 prospective teachers selected randomly as sample and 354 prospective teachers returned questionnaire and the rate of return was 85.5%.

1.8.5. Data Collection Tool

The researcher used two data collection tools for this study. One for interpersonal skills and other for self-efficacy. The details of the two questionnaires are as follows:

1.8.5.1. Interpersonal Need Inventory (IPNI)

The researcher collected the data by the process of adapting the questionnaire of Interpersonal Skills by Pareek and Purohit (2010). There were 60 items and six sub variables. Each sub variables consisted of 10 items. The authors Pareek and Purohit (2010) used the questionnaire for people in groups and organizations. In this questionnaire the authors Pareek and Purohit (2010) developed questions to explore individual and group behavior towards each other. The questionnaire also explored the difference of behavior of an individual with people or group and vice versa.

The researcher adapted this questionnaire to explore the behavior of prospective teachers individually and in group to know how their behavior influences each other. The tool was adapted by the researcher in the light of the theoretical

framework selected for this research. The following table explained the detail of the tool construction.

Table 1.2

Interpersonal Need Inventory (IPNI)

| Variable | Sub Variables | Items |
|-----------------------------|---------------|-------------------------------|
| Interpersonal Skills | Belonging | 1,2,3,4,5,6,7,8,9,10 |
| | Affiliation | 11,12,13,14,15,16,17,18,19,20 |
| | Extension | 21,22,23,24,25,26,27,28,29,30 |
| | Recognition | 31,32,33,34,35,36,37,38,39,40 |
| | Control | 41,42,43,44,45,46,47,48,49,50 |
| | Influence | 51,52,53,54,55,56,57,58,59,60 |

1.8.5.2. Self-Efficacy Scale (SES)

The tool for data collection for self-efficacy was adapted from the work of Hoi, Zhou, Teo and Nie (2017). It had 26 items and four sub scales. The researcher adapted this questionnaire to know about the “Effect of prospective teachers’ interpersonal skills on their self-efficacy”. The following table explained the detail of the tool construction.

Table 1.3

Self-Efficacy Sources (SES)

| Variable | Sub variables | Items |
|----------------------|--------------------------|-------------------------|
| Self-Efficacy | Mastery Experiences | 1,2,3,4,5,6, |
| | Vicarious Experience | 7,,8,9,10,11,12 |
| | Verbal Persuasion | 13,14,15,16,17,18,19,20 |
| | Physiological Persuasion | 21,22,23,24,25,26, |

1.8.5.5. Validity of Instrument

Validity means a test is valid and suitable to collect the information that it is supposed to measure. The research tool was presented to five experts to check the content and construct validity of the tool.

1.8.5.6. Reliability of the instrument

The reliability of the questionnaires was ensured through pilot testing.

1.8.6. Data Collection

Data was collected through two questionnaires as research instrument. Due to pandemic situation of COVID- 19 and lockdown situation it was impossible for the researcher to personally visit the concerned universities, so for this purpose online resources were used for data collection.

1.8.7. Data Analysis

In data analysis the researcher used different types of statistical tests to analyze the data. Data was analyzed through SPSS (Statistical Packages for Social Sciences). The researcher used mean, and regression for the data analysis according to the objectives and hypothesis.

The detail of data analysis was as follow:

Table 1.4

Data Analysis

| Sr # | Objectives | Hypotheses | Statistical Technique |
|------|--|---|-----------------------|
| | To assess the level of Interpersonal Skills of Prospective Teachers. | | Individuals Scores |
| 2 | To analyze the practicing self-efficacy of prospective teachers. | | Mean |
| 3 | To assess the effect of prospective teachers' Interpersonal Skills on their Self efficacy. | HO1. There is no statistically significant effect of Prospective teachers' Interpersonal Skills on their Self Efficacy. | Regression |

1.8.8 Delimitation

The research was delimited to students of public sector universities in Islamabad only.

1.9. Operational Definitions

1.9.1 Prospective Teachers

Students who are studying for getting teacher trainings from different educational institutions are called prospective teachers.

1.9.2 Self Efficacy

It refers to a person's belief about his ability to complete the specific task successfully.

1.9.3 Mastery Experiences

It refers to have a good knowledge about the latest teaching strategies.

1.9.4 Vicarious Persuasion

It refers to way one looks at the performances of other people to get encouragement.

1.9.5 Verbal persuasion

It refers to have motivation from other people encouraging and appreciating one's own skills to do better.

1.9.6 Physiological States

It refers to the judgment of the task of a person that how confident he is to perform a task.

1.9.7 Interpersonal Skills

Interpersonal skills are such type of skills which a person uses to communicate with other person. It is very necessary to have such type of skills because by these skills a person can communicate effectively for the attainment of his goal. Further interpersonal skills have six basic dimensions they are as follow:

1.9.8 Belonging

It refers to be a part of a group and get involved in group activities. It is fundamental because humans are social beings and want to belong to each other. Every person loves to live in group together and a person does not like to live isolated and person feels happy and comfortable when he belongs to others. 'More the merrier is applicable for human beings'.

1.9.9 Affiliation

It refers to make associations with other people and express feelings and emotions for them. Affiliation means attachment with someone because human beings are social beings and they cannot survive alone that's why affiliation with people is necessary. Everyone in this world have affiliation with all people like in home with family, peers and society.

1.9.10 Extension

It refers to understanding and sharing emotions with people and help to sort out the problems of people.

1.9.11 Recognition

It refers to recognizing people with in the light of their previous knowledge. Recognition means to recognize or identify someone or something through previous experiences or knowledge. It is derived from two Latin word "re" and "cognoscere" re means "again" and cognoscere means "to know".

1.9.12 Control

It refers to compete in group for power and force others to do things in their own ways. This is a type of autocracy with a bit mild harshness. In this skill person feels pride when people are following and obeying his rules. This type of skills may have both positive and negative effects on the group of people or society.

1.9.13 Influence

It refers to leaving an effect on people in their decisions and actions. It also works even when they have been given an open and friendly environment in which they work without any restrictions. That's why this type of skill is very important and necessary.

CHAPTER 2

REVIEW OF THE RELATED LITERATURE

This chapter comprises of the review of already available relevant literature. This chapter is divided into three sections. First section comprises of general introduction of related literature in target area, second section comprises of related models and theories on selected variables and the third section deals with the review of the related researches in selected topic that were used for identification of gap in target area.

Section 1 General introduction related to the research area

2.1. Interpersonal Skills

Gardner (1983) was the founder of Multiple Intelligence theory; he presented the idea that there are nine types of Intelligences. Gardner (1983) said that every individual exists with diverse kinds of intelligences. They are verbal intelligences, logical, kinesthetic, musical, interpersonal, naturalistic, spiritual and existential intelligence. Interpersonal skills are also amongst the types of multiple intelligences given by (Gardner, 1983). Interpersonal skills are the skills which help individual in building relationship with others and also for cooperating with others, through experiencing increase in these abilities (Terrell, 2019). According to Kelly (2019) the concept was first used in psychology in 1938 to describe interaction between individuals. Further Kelly (2019) explained that interpersonal intelligence is one of the nine multiple intelligences of Howard Gardner and this intelligence deals with how an individual is competent to understand and communication with others. This category of people is capable to make a relationship in a group and also resolve problems.

According to Dayton (2019) personal means something that relates to a person. Include the prefix “inter” it means what happens between two or more people. It is essential for human beings to have interpersonal skills for effective communication and engagement with each other. Such type of skill is important when communicating with others. Flourishing interpersonal skills increases both the personal and professional success (Shyam & Elizabeth, 2016). Humans are dependent on each other for the fulfillments of their needs and wishes. All human beings rely on language for communication with each other irrespective of their belongings to any ethnic group (Malik & Hina, 2012). They guide and agree with each other and also show care about other people. Interpersonal interaction is an essential feature of any organization and one of the key elements of interpersonal relationship (Velmurugan, 2016).

According to Angeles (2012) interpersonal skill represents the total capacity of individual effectively communicating with others for his needs and wishes. The interpersonal skill of an individual often consists the capacity to establish, develop and maintain careful relationship with others. As indicated by Kocak and Onen (2014) human beings are affected by their environment and have an influence on their own life but also require continuing their lives and fulfilling their basic needs with the help of their relationships.

According to Shyam and Elizabeth (2016) humans require interpersonal skills to communicate effectively and to interact with each other. Such abilities are even more important when communicating in group level with others. The production of interpersonal skills improves an individual’s personal and professional success. According to Dayton (2019) interpersonal skills are the qualities a person use to promote good relations, which comprises of skills like becoming a good listener as well as the capacity to communicate effectively. Interpersonal skills are often named as “people skills” it helps an individual to prepare for social and personal relationship. Such interpersonal skills are essential factors that lead to creating successful relationships ultimately resulting in harmonious community. People who create a successful

impact in society are able to track and change actions of others (Petrovici & Dobrescu, 2014). The enhancement of interpersonal skills strengthens connections between individuals and helps them to cope more efficiently with their task and social conditions, particularly when coping with others who are threatened (Allen & Seaman, 2011).

2.2 Domains of Multiple Intelligences (MI)

Multiple intelligence (MI) is the theory given by Howard Gardner (1983). He suggested that there are nine different types of intelligences. This theory also explains that each individual has different style of intelligence which the individual uses to learn and deal with different situations in life. According to Urgup and Aslan (2015) multiple intelligence theory is like a window opening that describes the basic role of various areas of human brain. According to Shehzada, Khan, Islam & Faqir (2014) Allah has provided intelligence to man which is the reason of his superiority over all other creatures. Intelligence is an important part of individual's life. According to Gardner (1983) it is the ability or combination of skills to solve challenges or to be defined in one or more cultural context. There are three levels of multiple intelligence they are; educational intelligence, individual intelligence and societal intellect (Gardner, 1983).

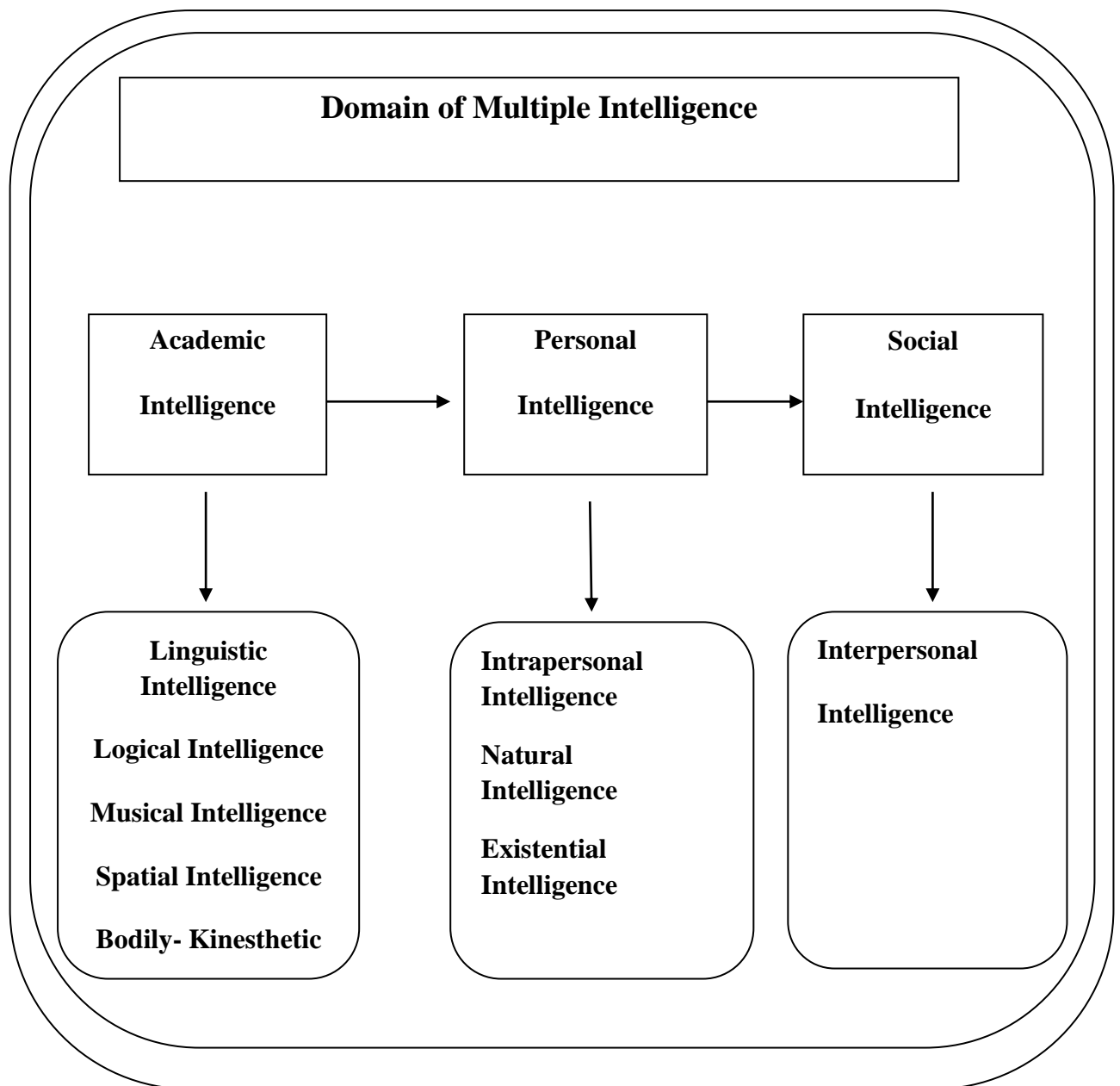


Figure 2.1 Domains of Multiple Intelligences by Gardner (1999)

Nine multiple intelligences are provided by Gardner, 1999) can be categorized in three main categories, they are named as intellectual intelligence, individual intelligence and communal intellect. Thus such three dimensions are also classified to nine domains named as vocabulary, arithmetic, rational, spatial, bodily kinesthetic, interpersonal, intrapersonal naturalistic and existentialism (Gardner, 1999). The details of the three domains are as follow:

2.2.1 Academic Intelligence

Academic intelligence is capable of taking into account the different facets of self-evaluation, knowledge and principles, the specific domains generated in relations to individual's environment (Eccles, 2005). Further academic intelligence is categorized into five domains they are verbal knowledge, conceptual intelligence, musical intelligence, spatial intelligence and physical kinesthetic (Gardner, 1983). The details of these five domains are as follow:

2.2.1.1 Linguistic Intelligence

Linguistic intelligence is one of the nine intelligences given by Gardner (2011). Language is the most valuable element of human characteristics as they interact with others using some language whether Indonesian, English or some other languages that an individual knows (Hali, 2017). Linguistic intelligence is associated with language, it is defined as the potential to use language effectively both orally and in written (Armstrong, 2009; Gardner, 2011). Linguistic intelligence relates to the capacity of individual's words and language as a whole to interpret and organize both the definitions and roles (Prez, Duque & Garcia, 2018). This intelligence is an important communication strategy in which the mastery of vocabulary, grammar and structures play an important role (Antunes, 2011).

Linguistic intelligence is the power to utilize and respond to written and verbal language and the capacity to use to meet the objectives and also being able to acquire new language (Gardner, 2011). The principle of linguistic intelligence requires involving the capacity to convince people to use term orally, innovative writing skills and the potential to quickly understand other languages those with well-developed linguistic intelligence have their own characteristics. They can

easily master every language and do better than those who have poor linguistic intelligence, in other terms people who are able to learn languages indicates that they have a strong linguistic intelligence (Erlina et al., 2003).

2.2.1.2 Logical Intelligence

It is the talent to efficiently apply figures for a good purpose (Pishghadam & Moafian, 2008). An individual possessing logical intelligence is capable of categorizing, inferring and generalizing information for achievement of individual as well as professional goals (Arani & Mubarakeh, 2012). It is the skill of reasoning by numbers, drawing assumption, forming rational relationships, developing theories, solving problems issues, thinking critically and of understanding abstract symbol like numbers and geometric shapes and creating linkage between knowledge (Pehlivan & Durgut, 2017). People with logical knowledge are excellent and studying science and defining relations. They even grasp deep and theoretical thinking (Handayani, 2017).

2.2.1.3 Musical Intelligence

Music is an essential part of human life and culture. It deals with the human being's oldest and most essential social cognitive domains. In our life, music has many roles. This provides fun, simulation, inspiration and learning resources. It enhances immune system functioning. Speed and type of musical range influence blood pressure, heart rate and body temperature. It also enhances listening ability (Sakamoto, Hayashi, Sugiura & Tsujikawa, 2002). It is also considered as an intelligence that requires attention to rhythm, pitch, melody and sound of a musical instrument (Armstrong, 2009). The ability to grasp, interpret, shape and express oneself in musical ways is included in musical intelligence (Carlton, Thomas & Schools, 2000). Musical intelligence requires all these qualities to

contact in the field of music (Hallam, 2010). Musical intelligence is strongly associated with other intelligences (Shabani & Torkeh, 2014). Skills of music and musical intelligence associated with certain cognitive skills like verbal capabilities, social competencies and capacity to communicate oneself (Schellenberg, 2005).

2.2.1.4 Spatial Intelligence

The capacity to perceive space and item within the mind's eye is spatial intelligence. Individual who possess such type of intelligence use to draw an image instead of writing a paragraph. They perceive texture, structure, design, how the object is illuminating and understands intellectual models (Safranji & Zivlak, 2018). It is the particular capacity to build a mentality about the spatial world; to utilize and exploit the attitude to address any spatial world related questions (Gardner, 2006). An individual who possess such type of ability learns through maps, tables, diagrams, images, drawing, visual presentation etc (Shahzada, 2016).

2.2.1.5 Bodily Kinesthetic intelligence

Individuals having such type of intelligence can perform best by participating in physical activities. They can love acting or singing, so they are usually excellent at constructing creative stuffs. They also know better by experiencing it rather than reading or listening to it (Pal, 2011).

This skill is used by the whole body to convey thoughts, emotions and the desire to create things by the use of one's hands. The professions involved in this field are craftsman, doctors, engineers, musicians, jokers and anyone who perform well on stage or has excellent skills relevant to the creating an art work. Kinesthetic learners learn well by utilizing body to build a concept that affects

them on the topic that they are studying. Actually learners learn best by body movements in kinesthetic (Boonma & Phaiboonnuglkij, 2014).

2.2.2 Personal Intelligence

The capacity to think regarding one's own and others personalities and to use personal knowledge to control one's planning and behavior (Mayer, 2008). Personal intelligence reflects on internal intimate interaction and relevant details within oneself and others characteristics, motivations and life experiences. Personal intelligence reflects on internal intimate interaction and relevant details within oneself and others: characteristics, motivations and life experiences. (Mayer, 2009).

2.2.2.1 Intrapersonal intelligence

Intrapersonal intelligence is a person's understanding of their importance and significance as an individual (Nelson & Low, 2011). According to Liu (2009) these abilities are defined as the capacity to cope with external and internal human emotions. Intrapersonal intelligence relates to an individual's self-awareness and capacity to successfully use that information (Sellars & Sanber, 2006). As individual learns how to analyze and use this information and manage their lives, intrapersonal intelligence built (Sellars, 2008).

The capacity of an individual to perceive the human experience and their thoughts and utilizing this information effectively is included in intrapersonal intelligence (Shepard & Simms, 2004). According to Angeles (2012) people with strong intrapersonal skills like to learn each other well, feel confident about them and optimistic for what they do with their lives.

2.2.2.2 Naturalistic Intelligence

The new addition that fulfills the criteria as intelligence is naturalistic intelligence. This is an ability to recognize and distinguish specific organisms

(flora and fauna) that exist in the ecosystem (Armstrong, 2009). The capacity to perceive the natural world is called naturalistic environment and the capacity to appreciate, love it and use it efficiently (Gardner, 1999). An individual who has best perception of naturalistic intelligence is excellent at sensing season, vegetation, habitation, temperature. Persons of naturalistic environment are associated with nature and living creatures (Mumthas & Farooque, 2012).

In the understanding of naturalistic patterns naturalistic intelligence is used (Sternberg, 2003). People who are gifted with naturalistic intelligence learn well through environment practice, visit to different locations, utilizing scientific tools, gather and organize objects, classifying knowledge, identifying similarities (Shahzada, 2016).

Anyone with a best level of naturalistic intelligence knows how to identify trees, creatures, mountains or clouds (Lunenberg & Lunenberg, 2014). In reality naturalistic intelligence emerges from the mindset of someone who has experience in planting, preserving plants in the home, working in a lovely garden or paying attention to animals and plants (Armstrong, 2009).

Individuals who possess naturalistic intelligence would not slash the trees senselessly, eradicating the local vegetation, shooting livestock and damaging cattle, instead of it they keep the natural environment safe and healthy. The most significant possession of this naturalistic intelligence is scientist, ecologist and those who have best association with nature (Ningrum, Soesilo & Herdiansyah, 2018). According to Hayes (2009) that students who are allowed to engage in close study of nature should have a greater understanding and recognize well about the nature and its potential more profoundly.

2.2.2.3 Existential Intelligence

According to Gardner (2006) in 1999 existential intelligence was added to the list of intelligence and is named as big questions of intelligence. This intelligence refers to the capacity to ask and address important questions related to existence. According to McCoog (2010) individual with existential intelligence have a strong view of their thoughts so they, prefer to grasp and perceive new concepts through their own thought and observation.

2.2.3. Social Intelligence

The notion of social intelligence relates to the capacity to consider others emotions, feelings, actions and the ability to overcome social issues of people (Abuhashim, 2008). It implies human capacity to understand and react to what takes place in this universe in an appropriate social and personal way (Hromek & Roffey, 2009). Social intelligence is the deeper understanding of the relationship between human beings and their senses, thoughts and actions (Wallenius, Punamaki & Rumpela, 2007). Social intelligence is defined as a deep perception of the importance of social interaction, the ability to perceive one another and the ability to participate to fulfilling the interactions (Goleman, 2006). The sum of combined actions of one's own and others' representative of social community is social intelligence. It is capable of handling the social transition of society (Honeywill, 2016). Social intelligence is not an individual innate capacity. It is a practiced behavior (Miorandi, Maltese, Rovatsos, Nijholt & Stewart, 2016).

Social intelligence is the skill to coordinate and assist in the company of individuals in social affairs. So it offers knowledge for recognizing a strategy to allow individual achieve specific objectives set in existence (Albrecht, 2006). Social intelligence consists of interpersonal intelligence detail of interpersonal intelligence is given below:

2.2.3.1. Interpersonal Intelligence

In everyday life interpersonal intelligence is very important. It is necessary for individual to connect with family members at home, teachers and peers at schools (Kanazawa, 2010). Interpersonal intelligence needs the ability to perceive and interpret things by contact with others (Advani & Hema, 2016). Interpersonal intelligence relates to observing and listening, interpreting information and establishing social relationship with others (Dien & Wustqa, 2018). Interpersonal intelligence is the competency to interrelate successfully with others, empathize, comprehend and acknowledge the inspiration. Interpersonal intelligence allows learners to come up with suggestions from others or give ideas to others so that they can know effectively. Such social learners are most influenced from community learning (Uno, 2010).

Furthermore as individual with high interpersonal intelligence learners are expected to sympathize well, communicate well, build a peaceful relationship and create a good contact with others (Rizki, 2016). Interpersonal skills have further six major types are belonging, association, extension, acknowledgment, power and effect given by (Pareek and Purohit, 2010). The details of these six types are as follow:

2.2.3.2 Belonging

As individual belonging is crucial for us, but how we build a sense of belonging for others around us and our society is very crucial. Belonging is also defined as a fundamental need and for people to feel secure to strive towards a sense of being truly human (Vanier, 2007).

2.2.3.3 Affiliation

Affiliation is a need which relates to the need for comfort and encouragement for others and the need to treat themselves to establish interpersonal relationship with others. Affiliation focused on the need to build and sustain fulfilling intimate partnership (Marissa, 2016). According to Ijaz (2019) it is a human desire that gives people the power to be able to communicate with one another.

2.2.3.4 Extension

Extension is a need or desire to reach out to one another or to associate oneself with a larger group and its goals. It means helping others and working for as many goals as possible that benefits larger groups. It also means that you have the opportunity to sacrifice your comfort and interest for the benefits of others. This is a profound inspiration that has guided so many wonderful people for the contribution of larger community's benefit (Pareek, 2010).

2.2.3.5 Recognition

The word "recognize" is derived from two Latin words "re" and "cognoscere" re means "again" and cognoscere means "to know". It means know again and again or identify something or someone. To know about an individual his previous knowledge or details matters a lot. This skill is plays very crucial role in an individual's life. It is a talent in understanding and appreciating other people's experiences (Ijaz, 2019).

2.2.3.6 Control

Control is such a type of skill in which a person likes to command on other people. It is an authoritative style, in which a boss control all the people working under him. In this skill all the powers are only with the person who leads the group.

2.2.3.7 Influence

It is such a type of skill in which all the people have given freedom what they want to do and share their ideas with each other. It is a democratic way in which all the people work happily and in a friendly environment.

2.3. Development of Interpersonal Skills

2.3.1. Active Listening and paying attention

According to Cudmore and Slattery (2019) active listening is a method where the audience usually focuses totally on the listener. If other people speaks to you let them sound that you are engaged in listening fully (Shyam& Elizabeth, 2016). Everybody has their special observation, perceptions and view point (Big Thing Edge, 2018).

2.3.2. Smile and be Appreciative

Everyone would love to talk with a happier person. It is best to smile to improve interpersonal skills, furthermore be positive about your work and life it can radiate good energies around you and inspire your colleagues too (Shyam& Elizabeth, 2016).

2.3.3. Self-Awareness

According to Beqiri (2018) self-awareness means the capacity to properly identify your: feelings, talents, weakness, behavior and apprehend how those influence around you.

Self- awareness constituted of four main components. They are as follow:

- The capacity to understand the experience and learn from it.
- Recognition of particular emotions as well as others' emotions.
- The capacity to think in practice.
- The opportunity to make an appropriate decision (Quick & Maccik-Frey, 2004).

2.4. Self-Efficacy

Many other researchers developed the perception of SE in this context. The person defining GE is Pender (1996). GE was developed as an individual's opinion of its capacity to achieve a

certain level of performance .If a person generalizes expectation of one task into new tasks involved is known as generality. For the function of SE assemble with a range of chore is much important i.e. some tasks lead to general efficacy and some leads to specific efficacy (Naseer, 2019). The self-efficacy includes three sub dimensions, including self, self to others and self-assessment. Self-disclosure and self-expressions are among the forms one expresses one's self to others. The self-assessment is a method with a particular response to a technique. The self-assessment has two facets to promote positive behavior and to limit behavior with aversive outcomes (Thagard & Wood, 2015).

The capacity of the person to create essential results is self-efficacy. Those who think they can make a difference feel well and so take initiatives; individuals who feel incompetent are dissatisfied and not inspired to act (Flammer, 2015).

According to Rai & Naz (2017) everyone wants to be successful in today's world but one of the main obstacles to success is the level of self-efficacy. It encourages people to step out of their comfort zone and reach their goals because they know they are performing well. In today's modern world young people do not have deep sense of self efficacy they think they can do nothing. Self-efficacy is achieving particular goals and provides a common ground for all people. It is a natural drive that compels man to take steps based on special achievements he has accomplished. However, it is often not enough to decide what we want to do, or to consider the right way to accomplish it. In fact we are unable to determine the potential achievements (Colt, 2000).

Bandura (1997) said that "belief in one's capability to organize and execute the course of action required producing given attainments". It does not apply to one's actual abilities to perform a particular task, but rather to one's own talent to carry out certain mission in such situations. Self-efficacy is the result of both external and internal effects (Evers, Brouwers & Tomic,

2002). These aspects are interrelated and shape the adults' personality (Khan, Fleva & Qazi 2002).

According to Cobbold & Boateng (2016) self-efficacy to decide what to do with expertise and abilities they have. It is hard to be aware of why people's actions often deviate from their original potential. Self-efficacy belief can improve human success in certain forms. They decide how much people spent on a task and how well they persevere in overcoming challenges and how sensitive they become to unfavorable challenges. The stronger the individual has sense of accomplishment, the more commitment, dedication and endurance he brings to his work (Pajares, 2002).

2.5. Levels of Self Efficacy

Self-efficacy has two levels "high level" and "low level" (Bandura, 1997). Level of self-efficacy increases or decreases due to expectations of individual's regarding their results of success or failure. People are more confident in easy achievements and predict immediate results. As a result failures easily discouraged (Haq, 2013). According to Bandura (1997) the most successful people see challenging task as an obstacle that need to be overcome rather than risks.

A good sense of self efficacy creates sense of stability when faced with tough challenges and tasks. In contrast people with weak self-efficacy believe that problems to be worse than they actually are a perception that causes fear, fatigue, sorrow and a limited opinion can address an issue efficiently. As a consequence self-efficacy can have a huge impact on the level of success that one ultimately accomplished. This act of self-belief can also establish a type of self-fulfilling prophecy in which one fulfills what one think can be fulfilled.

In other words consistency linked with high self-efficacy leads to increase efficiency, it in effect increases one's sense of efficacy, while giving up combined with low self-efficacy, maintains the same damage that leads to decrease in confidence and morality (Cobbold & Boateng 2016).

The adherence to performing a task outlines the self-efficacy of an individual. A low self-effectiveness person has low task performance adherence compared to a high self-efficacy person (Naseer, 2019). Bandura (1997) expressed this appropriate that 23 people who feel poor about their effectiveness try to prevent tough responsibilities. They are weak in their intentions and decisions. Instead of presenting successfully, they turn to their own worries. They address hurdles, effects and personal shortcomings when confronted by complex challenges. Failure causes them to lose their confidence because of their own deficiencies. They slow down or surrender before trouble and gradually get better from retrogression and easily become a casualty of anxiety and misery.

Students who are self-efficient are more inclined to pursue challenging task and make considerably make better attempts to accomplish them in spite of unforeseen challenges than those who have lower self-efficacy. Therefore the learning successes that occur, especially in the phase of hardship, inevitably contribute to changes in self-efficacy of an individual and therefore hopefully more returns in future (Askar & Davenport, 2009).

2.6 Sources of Self Efficacy

As said by Bandura (1997) there are four sources of knowledge that affect self-efficacy including mastery experiences, vicarious experiences, verbal persuasion and physiological states. Self-efficacy is moreover characterized by the roots from which it has been produced (Toda, 2019). There are four primary sources of knowledge from that people have faith in their success (Bandura, 2001). A mastery experience is the first and most powerful approach to develop clear sense of success. The failures contradict it. In order to build resilient productivity consistent attempts are required to conquer obstruction. The second process is by social modeling. Models serve as inspiring sources and knowledge. Being interested in watching people excels by conscientious work enhances observers trust in their own competence. The

third form of power is social persuasion. The fourth strategy to adjust the SE is physical states by which people evaluate their skills to do so.

These four basis of learning affect the understanding of a person's SE (Toda, 2019). The involvement of other indicators may be effected by contextual factors including age, gender, cultural background and learning environment, while researchers have typically described mastery experiences is the most important indicator of SE (Joet, Ushers & Bressoux, 2011). The perceived SE needs to be calibrated the unique area of activity of which emphasis is concerned (Bandura, 2006).

The value of potential teachers in productivity plays a crucial role in learning and understanding of the information that is provided in teacher training. Probably, these convictions affect the way that teachers plans their teaching practices more than they do, though they are more powerful markers of anticipating the way students think. Improved effectiveness in teaching is associated with increased new solutions, encouragement of the pupil, teaching emotions and professional development.

Bandura suggested two forms of anticipation that influences the choice of behaviors and the actions of individuals to achieve certain results: the expectation of performance, which is characterized as approximation of one's actions, which is based on the premise that the action needed to achieve the result is satisfactory and contributes to those results as well as expectations of effectiveness. in addition to determining how much effort they are spending how much time they can have to stand up to challenges and difficult conditions, the degree of confidence in their own success also influence when they pursue an aggressiveness (Poulou, 2007).

2.6.1 Mastery Experiences

A mastery experience is the first and foremost source of self-efficacy. Mastery experiences are the strongest promoter of self-efficacy. The most significant source of

knowledge regarding efficacy is professional experience, as it offers the most visible proof whether or not to excel in a certain area (Bandura, 1997). Francois and Botteman (2002) claimed that the interactions we learn and accomplish are the strongest way to build perceived autonomy. This is built through attaining objectives that is set by an individual. According to Hoy and Burke-Spero (2003) mastery experiences is the best source of efficacy knowledge that is direct experiences by a person. Efficacy beliefs are highly encouraged when a person completes a particular task in a specific environment, while lack of past experiences diminishes the self-efficacy. Bandura (1997) claimed that every success builds trust and as expected all failures, weakens it. However focusing on past achievements promotes a greater degree of self-reliance, as well as flexibility to deal with it. The challenge of a work and the amount of efforts required also play an important role in a person's self-efficacy. Doing a small or less daunting task does not enhance an employee's sense of competence as much as large more complex role has been completed. Finally we want to look at the past to see how it affects our presumed success.

2.6.2 Vicarious Experiences

According to Gulistan (2015) watching people and copying their behavior help to form self-efficacy. According to Bartsch, Case & Meerman (2012) vicarious experience means to observe the failure and success of others as a model. If a person observing the participant performing very effectively a task then it improves the observer self-efficacy on the side if a person observing poor a performance reduces the efficacy of the observer. A vicarious experience refers to an individual observing another individual's teaching within the context of teacher efficacy. Vicarious experience is the typical features of pre service program of teacher education which happens throughout the field of training of the pre service teachers (Wagler, 2011). Experiences that are vicarious are

not as relevant as those in the experiments (Bandura, 1997). The interpretation of a pattern will therefore overcome the effects of enactive mastery interactions in certain situations. The participants may offer draw assumptions by analyzing the behavior performed by another person in order to determine his/her ability, an insight that is particularly useful in cases where the individual has no prior professional experiences (Gangloff & Mazilescu, 2017).

In certain cases the effect of vicarious experiences on understanding of self-efficacy is greater than others. A personal assessment of an individual's ability to perform a task can be greatly effected in context that naturally involves a strong amount of comparative assessment. Vicarious experience is found to have more detrimental effect in situations where people have encountered multiple deficiencies in a given activity or have comparatively limited expertise in the area to be measured (Bandura, 1997).

2.6.3 Verbal Persuasion

This is the third type of self-efficacy given by Bandura (1997). According to Tschannen- Moran & McMaster (2009) verbal persuasion requires verbal feedback from others such as peers, managers and administrators which strengthens a person's confidence that he/ she is worthy of obtaining the required quality of output. The impact of verbal feedback also effect an individual but it is not as a powerful source of efficacy knowledge as mastery experiences and vicarious experiences influence on the effectiveness of individual's self-efficacy (Schunk & Pajares, 2010). The self-efficacy of the person can be maintain and improved if a person makes accurate, positive and honest statements regarding the capacity of individuals to succeed effectively. Strong positive remarks often serve as a source of inspiration and encouragement for a person to make ambitious to achieve the mission (Bandura, 1997).

In comparison to mastery experiences; social persuasion has strong influence on the principles of self-efficacy as observed in the review of elementary science teachers' year (Mulholland & Wallace, 2001).

Verbal persuasion is sometimes utilized by instructors for ease and comfort (Bandura, 1997). Self-assertion and confirmation from others may stimulate perception of efficacy. Nevertheless, verbal reinforcement cannot be as strong or successful as other would think, particularly when congratulations are offered lightly and without substance. Praise will be positive and effective if it is appropriate, precise, and sincere and reflects a result that is genuinely praiseworthy (Pitts & Davidson, 2000).

2.6.4 Physiological States

Physiological and emotional states such as fatigue, anticipation and whatever have an effect on the expectations of people regarding their abilities to accomplish a given activity (Gulistan, 2015). Pintrich & Schunk (2002) activity is associated with expectations that influence self-efficacy beliefs. Individual who carry out the mission in controlling disabilities can expose to issues that reduce their self-efficacy. While a person's enthusiasm for completing a mission effectively improves self-efficacy. Our awareness of physical and emotional responses to certain situation effects our perception of talent (Bandura, 1997). Physiological conditions have a strong effect on physical activity and endurance functions (Bandura, 1997).

Section 2 Theories and models related to research area

This section was split into two components first portion was about the interpersonal skills theories and models and second part was about self-efficacy theories and models.

2.7 Interpersonal Intelligence Theory

All the human beings are mentally and intellectually differ from each other. Every individual has different type of skills present. Different researches had presented their own point of view

about intelligence. The Greeks were the first in western who introduced intelligence. Further intelligence was started by Binet in (1895) was a psychologist in France. He had keen interest to know the differences between individuals that how they were mentally and physically differ. He was the first person to introduced intelligence test and intellectual age or the collection of abilities acquired by children of that age (Nicolas, Andrieu, Croizet, Sanitioso & Burman, 2013). He gave suggestions that constructing an intelligence test it should be accordance to the mental level and background of the individuals (Das, 2004). Later on Spearman (1927) declared that intelligence have two factors general and specific factors. General factor targets the mental ability of individual whereas specific factor targets the particular task which is given. According to Thorndike (1927) Intelligence is the combination of different capabilities and abilities such as involvement of muscles, usage of figures, pictures, further he claimed that intelligence level is also expressed by interacting with each other. People who have best level of intelligence they are interested in developing groups.

According to Thorndike (1927) intelligence has three levels named as mechanical level, abstract level and social level. Mechanical level means to handle and the situation. Second level is abstract level which includes symbols, learning languages, number usage. The third level is social intelligence which means communication with people. This is very important for human being because without interaction with people individual cannot life alone.

2.8 Multiple Intelligence Theory (Gardner, 1983)

According to scientists and philosophers intelligence play very essential part of psychology. It is known as inborn trait by which all the individuals are differing from each other (Hajebi, Tahiri & Noshadi, 2018).

Multiple Intelligences (MI) founded by Howard Gardner in late 1970s and early 1980, claims that a person holds more than eight intelligences (Davis, Christodoulou, Seider& Gardner, 2011). Seven recognized intelligence includes linguistic intelligence, logical intelligence, spatial

intelligence, musical intelligence, kinesthetic intelligence, interpersonal intelligence, intrapersonal intelligence (Gardner, 1999). Finally Gardner (2003) added another two intelligence naturalistic and existentialistic intelligence.

According to Armstrong (2009) intelligence is based on three main factors they are biological, cultural life history and personal life history. Biological include hereditary, cultural historical background means where you born which plays visit and cultural area, personal life history includes parents, peers, family, teachers etc. these are the three factors which effect on individuals intelligences.

Gardner had given nine different types of intelligence. They are as follow:

2.8.1 Linguistic Intelligence

Linguistic intelligence focuses on grips of a person's language, use and understands of language, pitch of the voice.

2.8.2 Logical intelligence

It mainly focuses on solving a problem, understanding the situation, inductive deductive reasoning, analyzing.

2.8.3 Musical Intelligence

In this intelligence mainly focus is on the tone, pitch of the sound, identifying the sound. It involves identification of pitch and tone, determination of rhythm and recollection of sounds (Shearer, 2004).

2.8.4 Spatial Intelligence

It is the ability to understand the picture world. Observe the picture what the message is hidden in the picture.

2.8.5 Kinesthetic Intelligence

It is the ability to use the whole body to do some task, solving a problem with body movement by the use of fingers, hands etc.

2.8.6 Intrapersonal Intelligence

Intrapersonal intelligence means such an ability to know about one self. It is very important to understand yourself by understanding yourself a person is able to know his/her weaknesses.

2.8.7 Interpersonal Intelligence

Interpersonal Intelligence means ability to understanding other people feelings and emotions. This is very important need. Without people a person cannot live alone and his basic needs cannot be fulfill.

2.8.8 Naturalistic Intelligence

Naturalistic Intelligence means that understands and loves the nature. Know about the naturalistic environment about animals, plants, birds.

2.8.9 Existentialistic Intelligence

Existentialistic intelligence means ability of deep thinking about human, life and death. Questioning about who created us, what is universe, what life.

2.9 Social Exchange Theory (Homans, 1958)

The theory of social exchange is a two sided process in which one gets and the other receive. Majority of psychologist claim that this social exchange theory is strongly individualistic. According to this theory individual sees what personal benefits he acquire through his/her social interactions (Tiwari, 2017). Social exchange theory is a concept it which culture may be interpreted as a set of relationship between individuals focused on assessments of rewards and punishments. In this context individual's relationship are focused on the rewards or punishments while analyzing the cost benefit model (Crossman, 2020).

2.9.1 History of Social Exchange Theory

Homans (1961) and Peter Blau were the first to establish this social exchange theory. According to Homans (1958) in social exchange theory there are two basic properties

one is self interest and other is interdependent. According to Homans (1958) when an interaction takes place between two people. Two parties depend on each other for the fulfillment of their basic needs. On the end if the relationship results come positive then they can continue if the results come negative then they don't want to work together again. On the other hand Blau was much inspired by the theory of Homans, he further said that people should look forward, if the people will only focus on the result what they will be rewarded by interaction with other people then they cannot able to understand the basic development of the theory of interaction.

2.9.2 Advantages of Social Exchange Theory

According to Tiwari (2017) benefits of social exchange theory is as follow:

- It is a systematic approach
- If an individual is aware about this theory he/ she become willing to move for more positive relationships.
- This teaches us how to build and establish relationships.
- This theory tells the individual that this is two sided theory means give and receive.

2.10 Uncertainty Reduction Theory (URT) (Berger and Calabrese, 1975)

The uncertainty Reduction Theory (URT) discusses the contact between individuals that exists prior to the actual communicating process. In 1975, Berger and Calabrese created it. They tried to clarify how contact between people is used in initial interaction to minimize uncertainty between strangers (Bajracharya, 2018). The theory of reducing uncertainty is based on the fundamental premise that strangers mainly concentrate on reducing uncertainty and increasing predictability while communicating. The following are the assumptions related to this theory:

- Initial interpersonal contact let us feel nervous.
- Uncertainty can trigger people, cognitive tension and hinder a situation.
- Communication between persons may be separated into phases.

- Communication between individuals leads to reduction in ambiguity (Bajracharya, 2018).

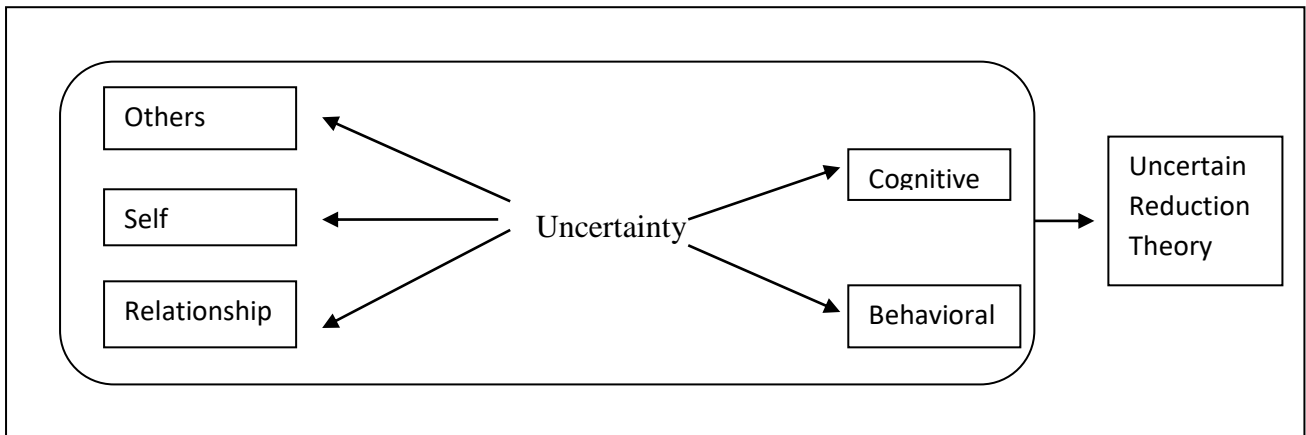


Fig2.2 Elements of Uncertainty Found in Interpersonal Interactions (Redmond, 2015)

2.10.1 Uncertainty

Uncertainty is described as having many alternatives or clarifications. The more options there are the higher degree of ambiguity. As such uncertainty is viewed as a cognitive mechanism in which many options are weighed in attempting to understand Something.

2.10.2 Self Uncertainty

Self-uncertainty is insecurity in a person's identification, interpretation or prediction of his own actions, thinking and feelings.

2.10.3 Relational Uncertainty

It is lack of faith in the abilities of an individual to clarify the difficulties of a given relationship. Essentially, it is a degree of certainty of the relationship's present or future state or relevant problems.

2.10.4 Others Uncertainty

It is our failure to anticipate a certain person's actions, thoughts and feelings. There are two broad uncertainties we have with ourselves or others they are named as cognitive and behavioral. They are as follow:

2.10.5 Cognitive Uncertainty

Cognitive uncertainty is the uncertainty when we know whether an individual believes or thinks of our ideas.

2.10.6 Behavioral Uncertainty

Behavioral uncertainty is the certainty that a person can anticipate, explain or understand what behavior is expected of us or can predict our own actions (Redmond, 2015).

2.11 Interpersonal Needs William Schutz (1958)

William Schutz (1958) had designed the model of Fundamental Interpersonal Relations Orientations (FIRO-B). According to FIRO-B there are three main interpersonal needs named as inclusion, control and affection. There are two aspects of three behavioral needs- expressed and wanted. Individuals ought to communicate their desires to others and to themselves, which represent their three interpersonal needs (Karim, Lessard& Siegel, 2012). There are three dimensions of needs details are as follow:

2.11.1 Need for Inclusion

The first need is inclusion need, which is a willingness to sustain a certain partnership with certain individuals to be interested in their activities. Everybody wants to contribute to a group but they want to be left alone at the same time. There is a balance between introversion and extra version patterns. Individual thus vary in proportional degree of need, on two aspects of inclusion criteria: the criteria to include others or expressed inclusion and the need to be included by someone or called wanted inclusion (Furnham, 2008). Wanted inclusion is characterized in term of the need for others to join in order to

achieve an acceptance.” Under social’ people are typically introverted and quiet while “over social” people are extroverted and selfish (Karim, Lessard& Siegel, 2012). Schutz (1966) claimed that inclusion corresponds to an individual’s self-esteem. “Under social” people feel unbiased and incompetent in society whereas over social individuals tend to centre their attentions on themselves.

2.11.2 Need for Control

The second need is need for control which is described as need for authority and strength. This need requires keeping a strong balance of power and authority. Individuals also need to show authority or influence others. This need is described as “expressed control” by FIRO-B. Somehow some people like to be dominated or directed by others (Karim, Lessard& Siegel, 2012).

2.11.3 Need for Affection

This is the third need called affection, which relates to the desire for affection and fellowship. Affection required the desire to connect to someone and to create a feeling of affection and devotion. Individual may show love towards others, but sometimes they need to maintain space. They like attention and also attention to others (Karim, Lessard& Siegel, 2012).

2.11. Model on Fundamental Interpersonal Relationship

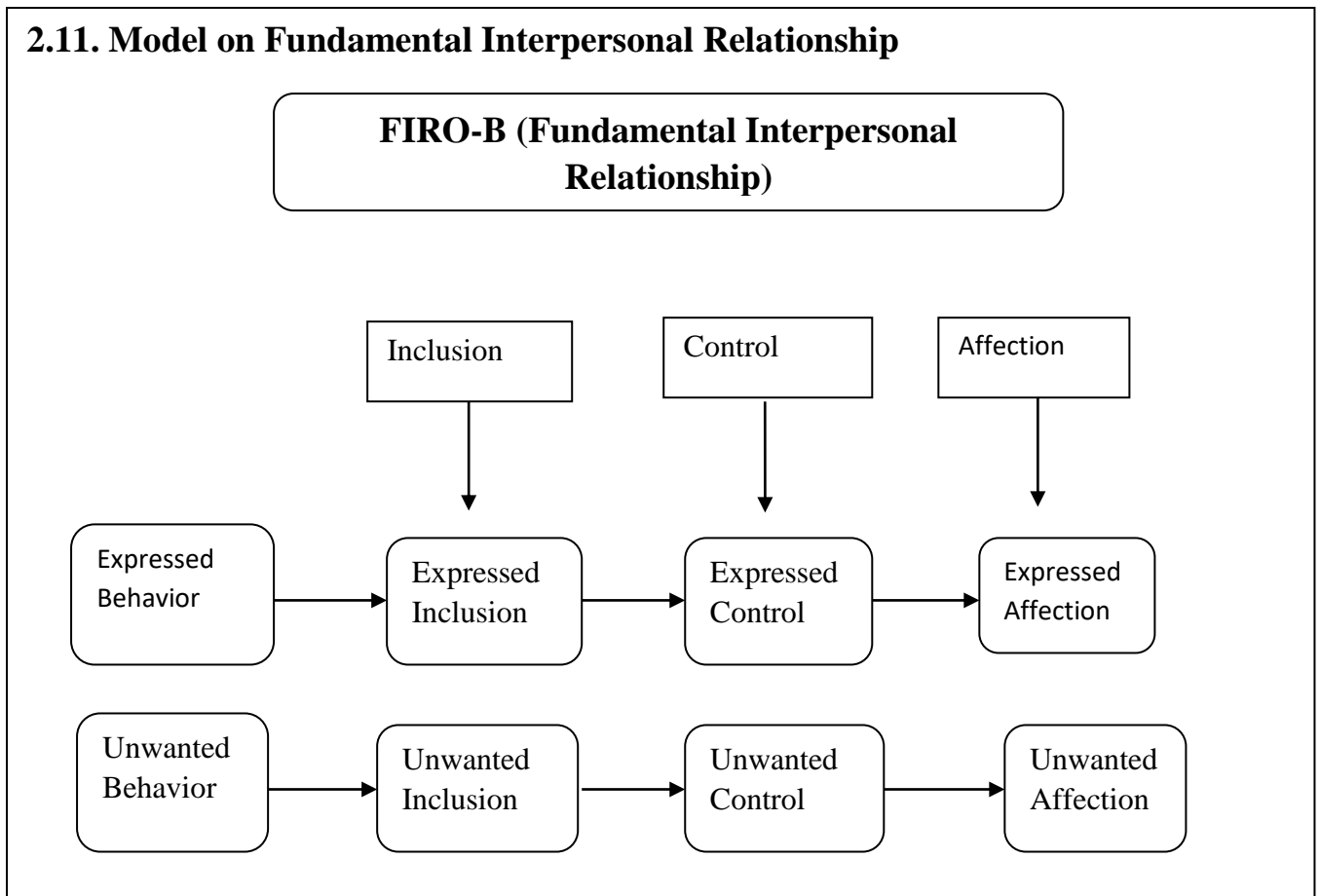


Fig 2.3 Interpersonal Needs William Schutz (1958)

2.12 Social Cognitive Theory (Bandura, 1997)

Social Cognitive Theory (SCT) explains how people conduct various tasks in the social environments, including awareness and knowledge development and acceptance. It states that why people learn to perceive mimic and models others' actions through social process. Thus Social Cognitive Theory (SCT) defines itself through the relationships between social and cognitive influences as determinants of the activity (Palsdottir, 2013). SCT is more involved in developing different abilities and information than in the outcome of the learning phase (Jenkins, Hall & Raeside, 2018). Burney (2008) explores the history of social cognitive theory stating that during the second part of the 20th century Bandura established the theory of social learning. The specific dimensions of Social cognitive theory are viewed as self efficacy, awareness and performance perception (Ramirez, Kulinna & Cothran, 2012). Social Cognitive

Theory (SCT) explains the model of human agency in which individual's self-organization, self-reflection and self-regulation developing (Bandura, 2001). The theory of social cognitive is a theory that reflects on how people benefits by watching each other and creating their own actions. This idea was introduced by Bandura (1997). He believed that the behavior of a person might be induced by their environment and restoring the behavior of a person might trigger things in the world (Bandura, 1997). As a result of internal and external consequences the following components are produced.

2.12.1 Self Efficacy

Self-efficacy is an implicit confidence in one's capacity to perform a desired action. This is an important element influencing action and affected by experiences and climate.

2.12.2. Outcome Expectancies

They are expected possibilities of obtaining real predicted outcome when performing a desired activity. It is also an important component of personal factor.

2.12.3 Behavioral outcomes

These are the results obtained through behavior. The findings are closely related to outcome expectancies and behavior.

2.12.4 Self-management

It is set of skills which encompasses a group of dynamic behaviors including establishing goal, self-monitoring, improving etc which enhances the possible effectiveness of the desired activity.

2.12.5 Behavior

It is a way in which an individual behaves towards other people according to the situation occurred (Gomez- Mejia et al., 2014).

According to Nabavi (2012) Bandura (1997) suggest only one internal principle consisting of three interactive components. This concept is referred as triadic reciprocal.

Social cognitive theory implies that human activity is a part of triadic and inseparable system, which continuously effect human behavior, personal factors and environmental factors (Nabavi, 2012).

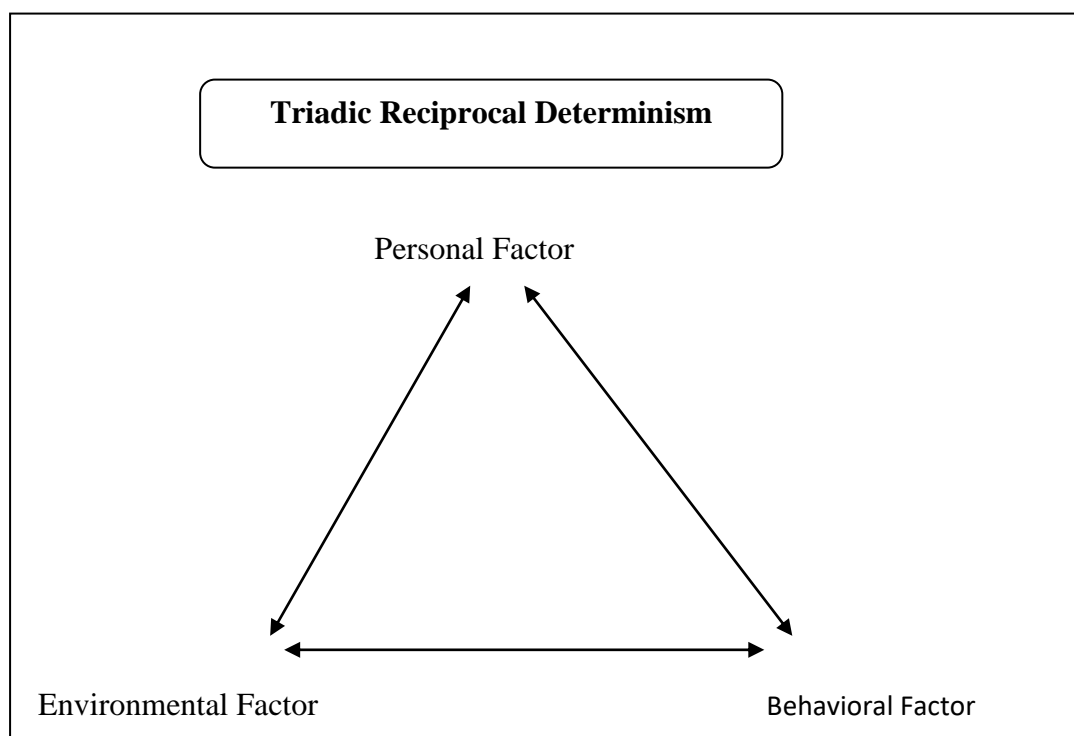


Fig 2.4 Santrock Triadic Reciprocal Determinism Model (2012)

Environmental factor is defined as the factors that are intrinsic to the person and provide social help and opportunities (Glanz, Rimer & Viswanath, 2008). Personal factors comprise of demographic, cognitive or personal aspects that characterize a person (Carillo, 2015).

2.13 Social Learning Theory (Bandura, 1997)

This theory is focused on the premise that we learn within a social framework through our experiences with others. Individuals acquire specific benefits through watching others behavior (Nabavi, 2012). This theory is classified as behavioral approach because it consists of looking other peoples' behavior and their incentive and penalty from that behavior which was occurred (Johnson, 2014). Social learning theory comprises of three general rules, they are observation,

imitation and modeling (Shaffer, 2005). Social Learning Theory (SLT) is generally related to as an integral aspect of effective use natural resources and promoting behavioral changes (Muro & Jaffery, 2018). Learning theory has already been the most popular learning theory and development. Sometimes this theory is named as a bridge between theory of behavioral learning and theory of cognitive learning, as it includes concentration, memory and motivation (Muro & Jaffery, 2018). That's why he incorporated a social dimension in his theory claiming that through studying other individuals, people will gain new ideas and behaviors. There are three basic rules for learning from each other according to the concept of this definition. There are three general principals focused on SLT. First people can learn by observing what is referred to as observational learning. Second, intellectual state is often considered an inherent reinforcement for learning. Third is that learning does not automatically contribute to behavioral improvements and implement a teaching approach (Nabavi, 2012).

In 1961 Bandura carried out his well-known project, the Bobo Doll Project to investigate behavioral patterns, in order to study behavioral trends, at least partially, using the principle of social learning and that specific habits were learned using people who influenced their own behavior through modeling activities. The findings of Bobo Doll study changed the direction of contemporary psychology (Nabavi, 2012).

2.13.1 Imitation process

According to Zentall (2006) copying others behavior is called imitation. Imitation is a basic action with two essential ingredients in it.

2.13.2 Modeling process

It means to follow someone, when an individual is observing someone and his/her behavior attract him/her then he then save it in his/her mind then want to copy it.

2.14 Self Concept theory (SCT) (Bandura, 1997)

Self-concept is defined as true self understanding that effect getting a good sense of others, development and enjoyment of all aspects of life (Cowin & Hengstberger- Sims, 2006). The main key factors that make the shape of self-concept of individual are the environment and the people. These play very important role in self-concept (Behestifar & Nezhad, 2012). Self-concepts have numerous elements they are; physical, intellectual, social and interpersonal. The physical dimension of self-concept linked to concreteness, academic self-concept involves how much we are performing (Behestifar & Nezhad, 2014). Two layers of self-conceptions are General academic and social content. General academic self-concept relates to the academics performances that how strong we are in different subjects like mathematics, literature, English etc. social self-concept relates that how we responds to others and the transpersonal self-concept explains that how we response the supernatural creatures (Yahaya & Ramli, 2009). Aspects of self-concept are as follow:

2.14.1 Individual self-concept

Individual self-concept refers to the strength and shortcomings of people. This degree may be strengthened or diminished by contrasting the strength and shortcomings of person with those of others.

2.14.2 Relational self-concept

The partnerships are generally determined by individuals themselves.

2.14.3 Collective self-concept

In this level individuals are defined in terms of their community conditions (Golparvar, Noori & Khaksar, 2007).

2.15 Observational Learning(OL)

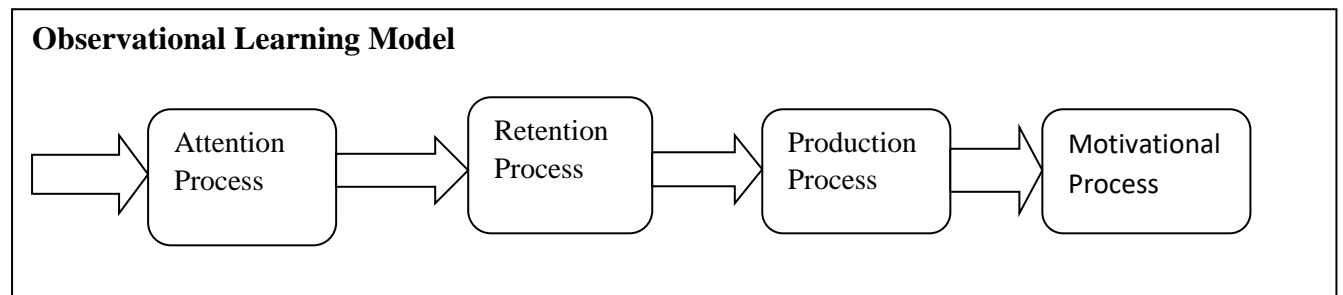


Fig 2.5 Observational learning model Bandura (1989)

This is observational learning model given by Bandura (1989). According to Bandura there are four process of observational learning which helps in learning. They are named as attention, retention, production and motivation.

2.15.1 Attention

This is the first process of observational learning. In this phase an individual is paying attention to the specific person which he wants to copy. In this process the observer observes the observee in such a manner that what is he/she is doing. The observer should be active and attention to observe very thoroughly.

2.15.2 Retention

This is the second process after the observation process is completed this process starts. In this process the observer is keeping in mind all the steps of the observee about a specific task that what he did. In this phase observer keeps the behavior presented by the observer in his mind and if the observer forget any step done by the observee then he cannot be able to copy his behavior. If the Observer keeps the behavior of a person in a image form in his mind then he cannot forget it. It can be retention for long term.

2.15.2 Production

This is the third stage or process called production. After retention the observer is trying to imitate the behavior of the observee. The observer tries again and again to learn the

observee behavior permanently. If the observer tries again and again the behavior of the observee then he becomes successful to learn the behavior.

2.15.3 Motivation

This is the fourth and last process called motivation. After production the motivation process comes. This process gives motivation to the observer. Motivation is of two types' positive motivation and negative motivation. Positive motivation means that if the observer has learnt and succeeds in copying the behavior of the observee then it motivates the observer to learn again and again. On the other hand if the observer is failed to learn the behavior then it demotivates the observer and he/she become hopeless. On the other hand if the observer is failed to learn the behavior then it demotivates the observer and he/she become hopeless.

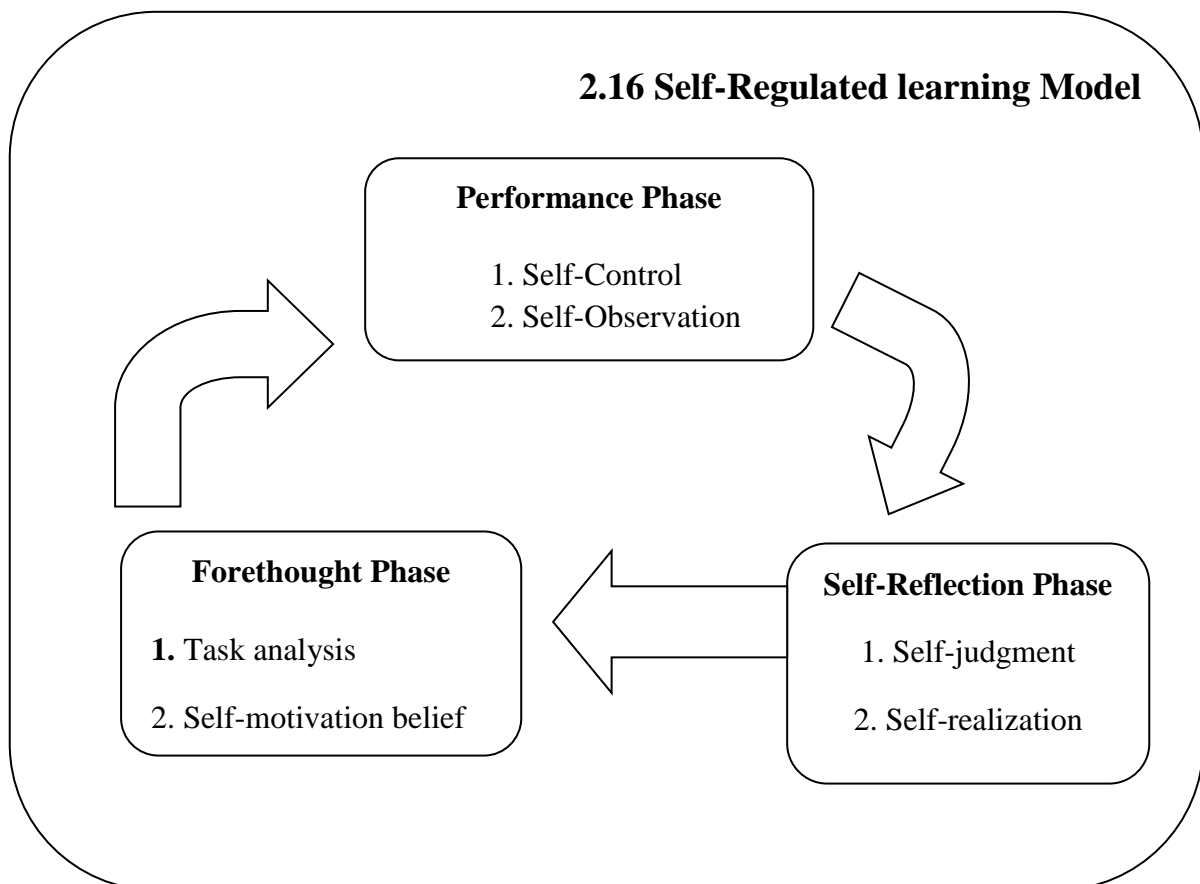


Fig 2.6 Self-regulated learning model Zimmerman & Moylan (2009)

2.16 Self-Regulated Learning (SRL)

2.16.1 Self-Regulated Learning

Before, during and after learning process tracking and regulating one's cognitive output is called self-regulation (Li, Ye, Tang, Zhu & Hu, 2018). Self-regulation is the supervision of information, attitudes emotions and encouragement of students by utilizing specific methods to achieve the goal they have identified (Panadero& Tapia, 2014).

2.16.2 Zimmerman Model of Self-Regulation

In 2000 the cyclical stage model was introduced and the processes were separated into a separate table into each step (Zimmerman, 2000). The self-regulation model was divided in three phases by Zimmerman (2000) named as; forethought phase, self-reflection and performance phase. Details of theses phases are as follow:

2.16.2.1 Forethought phase

This is the first step in which learners are pursuing their mission by analyze and evaluate their performance capacity with success, setting objectives and plans how to finish it. The importance of mission and targets play important role in achieving adequate preparation and conduct the mission properly (Panadero& Tapia, 2014).

2.16.2.2 Performance phase

This is second phase in this phase named as performance phase. In this stage performances normally occur. Throughout the performance it is necessary for the students to retain their concentration, appropriateness of learning approaches. There are two explanations behind this, first their enthusiastic will not decrease and second monitor their progress towards their mission (Panadero& Tapia, 2014).

2.16.2.3 Self-reflection phase

This is third and last phase called self-reflection phase. In this phase learners evaluate and refine their performance and describe the explanation behind their performances. They feel optimistic or negative feelings when defending their loss and performances. In the future these feelings can distort their determination and monitoring (Panadero & Tapia, 2014).

Section 3 Related Researches on Interpersonal Skills and Self-Efficacy

This section consists of researches related to interpersonal skills and self-efficacy of previous researches.

2.17 Researches related to interpersonal skills and self-efficacy

People's trust in the achievement of a mission, named as their self-efficacy triggers a sense of pleasure with the job, whereas the reverse can create frustration and tension. High degree of self-efficacy allows teachers to be less worried and to be more sensitive disappointment and less dismissive to students mistakes (Tschannen & Hoy, 2001).

Interpersonal skills depend on the impact of an individual in touch with one another. The main components of interpersonal skills are: respect and empathy for others, importance of other person's significant in heart, be conscious of the nature of the partnership and are involved in maintaining contacts and relationship with that individual (Duffy, Gordon, Whelan, Cole- Kelly & Frankel , 2004).

Individuals with strong interpersonal skills can help them to develop their capacity to recognize acceptable behavior to cope with inappropriate behavior, to handle tension, to organize social contact, to share responsibilities and communicate more effectively with others (Bar- On, 2005). A person's desire is to be a team member, to work with people from around the world to

engage with divergent people and to operate on initiatives with strict schedules on the market place (Bar-On, 2005).

Another study conducted to evaluate the bond involving self-efficacy and academic achievement of prospective teachers conducted by (Saracaloglu & Dincer, 2009). Self-efficacy and academic achievement of prospective teachers were identified based on institution, class, program, time and GPA. The result analysis showed that the degree of self-efficacy and academic achievement of approaching teachers were associated. The relationship between overall academic motivation and GPA was low but positive.

According to Gavora (2010) the idea of self-efficacy was established by Bandura as a strong conviction that one can accomplish goal in an incentive and efficient way. Self-efficacy is a self-system that regulates personal tasks including the correct usage of skills. The self-efficacy of teachers is a vital characteristic and closely related to performance in teaching.

Shaukat (2011) noted that research was conducted on validation and development of in service teachers' self-efficacy in Pakistani perspective. For this purpose 180 teachers both private and public sector schools for both male and female from all over Pakistan were selected. Four dimensions of teachers' self-efficacy scale was used which indicators were professional mastery, classroom management, persistent behavior and level of anxiety in teachers. The result pointed out that major distinction established in the middle of the four features of self-efficacy scale. It is applicable in Pakistan.

Considering their future role in the teaching profession identification and development of self-efficacy beliefs towards teaching is of great importance in the perspective of prospective teachers. Prospective teachers own opinion about their teaching skills can convey an understanding of the course of action they should have as they join the profession while the view remain in shifting (Yalcin, 2011; Bandura, 1997).

A research was conducted to explore the relationship among two main factors of teachers' personality named as self-efficacy and teaching methods in the context of Iranian EFL (English Foreign Language) by Heidari, Nourmohammadi and Nowrouzi (2012). The result concluded that there was a major difference between self-efficacy and teaching methods. A research conducted by Malik and Hina (2012) on awareness of interpersonal skills of prospective teachers. For that purpose 100 prospective teachers were selected as a sample from NUML (National University of Modern Languages) and FEC (Federal Education College) Islamabad. The result indicated that both of the prospective teachers had awareness about interpersonal skills. Furthermore they recommended that there should be teacher training programs conducted for students for their personality grooming.

A research study conducted by Shaukat and Iqbal (2013) on prospective teachers' self-efficacy measurement throughout Teacher Training Program (TTP) in Masters' level in Pakistan public sector university, consisted of 96 males and 20 females. Four dimensions of teachers' self-efficacy scale were used. The result indicated that in students' four dimensions deteriorated starting first semester to last semester.

A research study conducted by Yalcin, Ozcelik and Ercan (2014) on self-efficacy beliefs of prospective teachers. The main purpose of the study was identification between prospective teachers' correlation between self-efficacy and gender, age and academic achievement. The result concluded that no relationship found amongst prospective teachers' level of self-efficacy among gender, age and academic achievement.

A research conducted by Garcia-Ros, Fuentes and Fernandez (2015) to explore the teachers' interpersonal skills affects evaluation and predictive capacity of teachers. The study indicates that the relationship between teachers' interpersonal self-efficacy and burn out, which emphasizes the suitability of TISES adaptation.

According to Talvio, Berg and Lonka (2015) a research was conducted on how do social interactions benefit teachers. For this purpose two groups were made 20 teachers of Finland were selected who had attended the training workshop and 20 teachers who didn't attend the training workshop. While comparison no different was found between the two groups. The result was concluded that the teachers' social training program tended to accomplish its aim, as the teachers learnt the skills during training program (Talvio, Berg & Lonka, 2015).

A research conducted by Dayan, Parveen and Khan (2016) on prospective teachers' idea about teaching profession and teachers' role in pre service teacher training: a case study of Pakistan. Teachers play a key role in teacher learning process. These beliefs should be implied in social context. In shaping the beliefs of future teachers' training plays significant role (Dayan, Parveen& Khan, 2016). Results show that in changing the beliefs of prospective teachers learning practice and influence of supervision on training program.

A research conducted by McWhirter, Brandes, William Diehm and Hackett (2016) to investigate that outcome of attitude of pre-service teachers' interpersonal skills on disable students. The sample was 122 teachers from Major Teacher University (MTU) in USA. The result indicated that interpersonal skills characteristics affect prospective teachers training program.

Elaldi and Yerliyurt (2016) carried out a review on self-efficacy beliefs and attitude towards pre-service preschool teachers studying at faculty of Education in Cumhuriyet University fall 2015-16 in Turkey. The study was mixed method both qualitative and quantitative method. Both the qualitative and quantitative results indicated that pre-service teachers of the primary school had extremist stage of self-efficacy and optimistic attitude for teaching profession, furthermore female teachers had positive thoughts towards teaching profession than male teachers.

Pasha (2016) conducted a research to learn the social skills of prospective teachers by the use of Activity Based Learning Model (ABLM). A trained teacher needs to be expertise of both hard and soft skills. Teacher education in Pakistan relies mostly on hard skills. This study had established an Activity Based Learning Model (ABLM) for teaching soft skills for prospective teachers while delivering the course of Curriculum Development. The observation of the participants' attitude towards the activity was measured through questionnaire and observation. The result indicated that it is very efficient for future teachers to develop the soft skills.

Turkoglu, Cansoy and Parlar (2017) conducted a research on examining a liaison connecting self-efficacy and their job satisfaction. Both males and females teacher were selected as a sample. The result stated that affirmative association involved self-efficacy and job satisfaction. A research conducted on self-efficacy and its connection with decision making, social skills among the students of princes Sattam Bin Abdul Aziz University Saudi Arabia by Al-mehsin (2017). The sample was 560 females from the university. The result indicated that rapport of self-efficacy flanked by social skills and decision making was positive.

A research performed to identify the self-efficacy beliefs of prospective teachers related to their teaching by (Sevgi, Gok and Armagan, 2017). Two groups have been formed one freshman and other senior prospective teachers. The sample was 453 among them 213 were freshman prospective teachers and 240 were senior prospective teachers. Result indicated that strong belief of self-efficacy of prospective teachers found.

A research study conducted by Kanadli (2017) to investigate prospective teachers' self-efficacy beliefs effect on attitude towards teaching profession and perceived autonomy support. The key purpose of the research was to classify possible factors which may relate to the extent of professional self-efficacy of prospective teachers. A research sample comprised of 173 prospective teachers who finished the academic year 2014- 15 from the State university turkey. Data was collected through qualitative and Quantitative method. The result indicated that the

quantitative data analysis indicate an important connection of prospective teachers' self-efficacy belief on their attitude towards teaching and perceived autonomy support.

A study conducted by Sevimel and Subasi (2018) to examine the perception ELT (English Language Teaching) of prospective teachers' teaching efficacy according to the factors that influence the formation of their belief about efficacy. The result concluded that ELT (English Language Teaching) pre service teachers effectively increase and improve efficacy perception during their training years.

A research conducted by Arslan (2019) in order to investigate the mediating role of training of prospective teachers between both the self-efficacy and teaching career attitudes. Design of the research was co relational. The research was conducted on 315 prospective teachers' session 2017-2018. Three questionnaires were used "Prospective Teachers' Self Efficacy", "Attitude of Teachers' Self Efficacy" and "Sources of Self Efficacy". For data analysis Pearson Correlation Coefficient and PATH analysis methods were used and result shows that emotional intelligence, mastery experiences and verbal persuasion were important predictor towards prospective teachers' self-efficacy and attitude towards the teaching career. In teaching prospective teachers' recognition and establishment of strong self-efficacy beliefs are considering as very necessary for their future role in teaching career (Yalcin 2011; Bandura 1997).

A research conducted by Cansiz and Cansiz (2019) to explore the relationship between sources of self-efficacy of pre service teachers with constructivist and traditional approaches. For this purpose 151 pre-service teachers were selected. The result showed that mastery experiences had the major contribution to the constructivist pre service teachers' belief, while on the other hand physiological states had the major contribution towards teachers' traditional approaches. Such findings showed that pre service teachers have more positive teaching values while they accumulate practice.

Durdukoca and Atalay (2019) conducted a research exploring the connection between job-related nervousness and self-efficacy level among prospective teachers. The result concluded that occupational anxiety was less and higher rank of occupational self-efficacy was high. The result mentions that negative linked along with occupational anxiety and occupational stress found.

A research conducted on dimensions of interpersonal skills of teachers in school environment with regards to their job experiences, job and gender by (Petani and Karinjovic, 2019). 100 teachers from 8 elementary schools from Zadar were chosen for the reason of the study. From this 80 respondents were females and 20 were males. The result indicated that majority of teachers has taken moderate benefits, sympathy with students and collaborating with parents. Further the result indicated that male make respondents had more control over the class than female respondents. On the other hand females were most collaborated with parents than males.

2.18 Discussion

Strong interpersonal skills are a key indicator of success in a working environment, as benefits include the ability to cooperate with teammates to solve difficult problems. Developing interpersonal skills is really important for students for a better learning, expressing themselves to others, personality development and improving academics too. It is considered that students who have good interpersonal skills have a successful career and personal life too (Khan, 2017).

Ijaz (2019) concluded that the highest mean value of the section related to influence at (3.81). It shows that the respondents agreed that they were using interpersonal skills. The respondents agreed that they were using interpersonal skills related to belonging, affiliation, extension, recognition, control and influence. Affiliation domain was used by the male and female teachers differently. Male teachers were used affiliation domain more as compared to female teachers (Ijaz, 2019).

Das, Byadwal, and Singh (2015) concluded that among the six dimension of interpersonal skills (inclusion, affiliation, extension, recognition, control and influence) that there was a significant difference found between inclusion, recognition, control and influence whereas the dimensions affiliation and extension didn't have found any significant difference.

Other variable cited in the literature review was self-efficacy which is an individual's belief on the competencies he/she can perform. Self-efficacy does not tell how much one person is capable of doing something; it rather tells that how a person believes that he/she can do certain task.

Anderson and Betz (2001) concluded that mastery experiences and physiological states were the significant predictor of self-efficacy. Study of Arslan (2019) concluded that the highest mean value of the section related was mastery experiences. It shows that the respondents agreed that they were utilizing self-efficacy sources. The respondents agreed that they were utilizing self-efficacy sources related to mastery experiences, vicarious experiences, verbal persuasion and physiological states.

Mohamadi, Asadzadeh, Ahadi and Jomehri (2011) studies concluded that the highest mean value was of mastery experiences. Hulquist (2014) concluded that the highest mean value was of emotional states. Another study presented by Gill (2020) concluded that the highest mean score of sources of self-efficacy was verbal persuasion.

In the study of Ismail and Nachiappan (2019) all the respondents agreed that soft skills effect the self-efficacy of an individual. A student who expresses the mastery of soft skills helps to improve their individual self-efficacy. In many situations, their mastery of soft skills especially communication skills make them more confident. They are bolder about dealing with people through strong convictions. They can also overcome their nervous problem, this belief which improves their confidence which result in increase in self-efficacy.

As mostly researches related to interpersonal skills were discussed by the researcher. They conducted a research on awareness about interpersonal skills in school, college and university level. Mostly respondents were agreed that they had awareness about interpersonal skills. But in mostly researches the number of respondents was low and another weak point is this that the model which the researcher selected related to interpersonal skills its six dimensions (belonging, affiliation, extension, recognition and control) only one research was found regarded to this model in Bangladesh and in Pakistan there also one research was found.

As most of the researches related to self-efficacy main focus was on prospective teachers' belief about their self-efficacy at university level. In mostly researches the model of Tschannen and Hoy (2001) was used and only few researches were found which focused on the model of Bandura (1997) its four dimensions were (mastery experiences, vicarious experiences, verbal persuasion and physiological states). The number of respondents was low.

2.19 Gaps of the Research

It has been seen that mostly researches conducted in other part of the world on the variable interpersonal skills have only be carried out on teaching competencies, emotional intelligence, relational orientation and school environment (Gopinath and Sivakumar; Jayanchitra, 2020; Talvio, Berg, Litmanen, and Lonka, 2016; McWhirter, Brandes, Williams-Diehmand Hackett, 2016; Petani and Karinjovic, 2019; Das, 2015). Only few researchers were found in which both the variables interpersonal skills and self-efficacy were carried out with other variables decision making and teacher burnout (Ismail and Nachiappan, 2019; Al-mehsin, 2017; Garcia-Ros, Fuentes, and Fernandez, 2015; Koyuncu, 2018).

In Pakistan only few researches were conducted on interpersonal skills carried out in occupational stress, activity based learning model (Malik and Hina; 2012; Ijaz, 2019; Pasha, 2017; Malik, Mehmood, Paracha, Azeem and Jumani, 2017).

It has been seen that mostly studies conducted on the variable self-efficacy have only been carried out in special content knowledge competencies such as science, biology, mathematics, computer and job satisfaction, self-esteem (Anderson and Betz, 2001; Mohamadi, Asadzadeh, Ahadi and Jomehri, 2011; Saracaloglu & Dincer, 2009; Gill, 2020; Turkoglu, Cansoy, and Parlar, 2017; Heidari, Nourmohammadi and Nowrouzi, 2012; Khan, Fleva and Qazi, 2015). Few studies have been conducted on prospective teachers' self-efficacy beliefs with academic achievement, teacher training program, teaching method, English language teaching, teaching career and attitude towards teaching profession (Ekici, 2008; Uysal and Kosemen, 2013; Sevgi, Gok and Armagan; Elaldi and Yurliyurt, 2016; Sevimal and Subasi, 2018; Kanadli, 2017; Arslan, 2017; Cansiz and Cansiz, 2019; Yalcin, Ozcelik and Ercan, 2014; Yalcin, 2011).

In Pakistan there are few studies conducted on prospective teachers' self-efficacy have carried out in teacher training programs, academic achievement, gender base, validation and development of teachers (Shoukat, 2011; Dayan, Parveen and Khan, 2016; Ahmed, Khan and Rehman, 2017; Shoukat and Iqbal, 2013).

Thus, it is concluded that in Pakistan there were few researches conducted on interpersonal skills and self-efficacy. This was the reason for conducting a research on this topic.

For this purpose the researcher conducted the study on effect of prospective teachers' interpersonal skills on their self-efficacy. For achieving this target the researcher made three main objectives 1) to analyze the self-efficacy of prospective teachers. 2) to assess the level of interpersonal skills of prospective teachers and 3) to assess the effect of prospective teachers' interpersonal skills on their self-efficacy. To achieving this goal the detail was discussed in chapter 3.

2.20 Conclusion

Prospective teachers' interpersonal skills and self-efficacy interlinked with each other. If interpersonal skills are developed well then it gives benefits. Interpersonal skills plays very

important role in 21st century for teachers. It is necessary for prospective teachers to aware about these interpersonal skills. Prospective teachers who have strong interpersonal skills they have automatically strong efficacy because when a person's interpersonal skills means communication with other people are strong can easily achieve their goals and targets. A student who expresses the mastery of soft skills helps to improve their individual self-efficacy. Interpersonal skills are those skills which gives a trainer to use their abilities to show their confidence for achieving a task regarded self-efficacy. On the other hand if a teacher has weak interpersonal skills then he/she is not able to communicate and cooperate with other people and cannot able to fulfill his basic needs. That's why interpersonal skills and self-efficacy are interlinked with each other.

Without good interpersonal skills it is often more difficult to develop other important life skills. Unlike specialized and technical skills (hard skills), interpersonal skills (soft skills) are used every day and in every area of students' lives. Students with good interpersonal skills are usually perceived as optimistic, calm, confident and charismatic qualities that are often endearing or appealing to others. Students who have worked on developing strong interpersonal skills are usually more successful in both their professional and personal lives.

CHAPTER 3

METHODS AND PROCEDURES

This chapter addresses in detailed about research approach, research method, population, sampling technique, sample, data collection tool procedure, data collection, validity, reliability and data analysis.

3.1. Research Approach

The research study utilized quantitative research approach. Quantitative research is based on numerical measurement and statistical analysis for data analysis. Quantitative approach is applied to identify and analyze numerical data or information that can be presented into statistical value for better understanding. Researcher used this approach based on the nature of the research objectives and hypothesis.

The major objectives of the study were determining the level of interpersonal skills regarding prospective teachers and analyze the self-efficacy of prospective teachers and third objective was to assess the effect of prospective teachers' interpersonal skills on their self-efficacy. In this way these three objectives required quantitative data collection, analysis and interpretation. This was the reason to select the quantitative approach for the current research. In this research the researcher gathered the records along the assist on questionnaire.

The methodology was selected at the stage of proposal writing. The collected data was converted in the form of numbers and statistical tests were applied.

3.2. Research Design

Research design was defined as an arrangement of conditions for collection and analysis of data in a way that combines relationship with the purpose of the research to the economy of

procedure (Gachingiri, 2015). In order to examine the effect of independent variable on dependent variable researcher adopted descriptive design. Major objective of this design is to describe systematically a situation or area of interest factually or accurately.

3.3. Research Method

By method, the research was descriptive research. Descriptive research is a type of research that describes a population, situation, or phenomenon that is being studied. It focuses on answering how, what, when, and where questions about the phenomena under study. There were two main objectives of the study i.e. to assess the level of interpersonal skills and self-efficacy level of prospective teachers. These two objectives were related to the analysis of the present situation prevailing in the field of education. Basically descriptive research is the research that deals with the present day issues and problems. Thus, to understand the effect of prospective teachers' interpersonal skills on their self-efficacy is one of the current variables of the research that must be discussed today, so the research fall in the category of the descriptive research.

Descriptive method was applied to explore the opinion of the prospective teachers about their interpersonal skills and self-efficacy respectively. According to the objective no 3 of the research study was to assess the effect of prospective teachers' interpersonal skills on their self-efficacy, the co-relational research method. The researcher was interested to see the effect of prospective teachers' interpersonal skills on their self-efficacy.

3.4. Overview of Research Objectives

Objectives are the foundation for the research as without specifying the objectives the researcher cannot achieve their aim or target. Objectives are the backbone or base for the learning concerning the research. The researcher determined three research objectives. The objectives of the study were:

3.4.1 Objective No.1: To assess the level of interpersonal skills of prospective teachers.

For the attainment of Objective No.1 the researcher had used individual scores on the basis of responses of the respondents. There were total 60 items in the questionnaire. The minimum score was 60 ($1 \times 6 = 60$) and the maximum score was 300 ($5 \times 60 = 300$). Thus the range (60-300) was divided into three levels named as average, above average and below average. The levels of interpersonal skills of prospective teachers were divided as follow:

(60-140) below

(141-220) Average

(221-300) Above

There were six dimensions of interpersonal skills (Belonging, Affiliation, Extension, Recognition, Control and Influence).

3.4.2 Objective No.2: To analyze the practicing self-efficacy of prospective teachers.

The Objective No.2 was entertained by using quantitative approach. Thus a tool on sources of self-efficacy was adapted and further divided into four sections named as: Mastery Experiences, Vicarious Experiences, Verbal Persuasion and Physiological States. Thus the data collected was analyzed with the help of mean value.

3.4.3 Objective No.3: To assess the effect of prospective teachers' interpersonal skills on their self-efficacy.

The Objective No.3 was also analyzed by the use of quantitative approach. The tool was comprised of two parts one part on interpersonal skills and second part on self-efficacy. The data was collected by the use of statistical technique of regression.

3.5 Population

Population of the study was consisted of the group of people that has some qualities in common about which the researcher is interested to gather information. This study aimed to explore the effect of prospective teachers' interpersonal skills on their self-efficacy at higher education level. The research population was consisted of prospective teachers enrolled in session 2019 in public sector universities of Islamabad. There were total 15 public sector universities in Islamabad (see appendix D). While only two regular universities were offering teacher education programs (session 2019). The researcher got permission letter from her university to get the population of the concern university. 690 students both males and females of National University of Modern Languages (NUML) and International Islamic University Islamabad (IIUI) of education department were categorized as population of the study. Population was explained in the table below:

Table 3.1

Population of the study

| Sr# | University Name | Number of Prospective Teachers' Enrolled in Session (2019) |
|-----|--|--|
| 1. | National University of Modern Languages Islamabad (NUML) | 294 |
| 2. | International Islamic University Islamabad (IIUI) | 396 |
| | Grand Total | 690 |

This table shows the division of population in selected universities. The table indicates that education department of National University of Modern Languages Islamabad (NUML) and International Islamic University Islamabad (IIUI) session 2019 enrolled 690 prospective teachers in total.

3.6 Sampling Technique

There are two types of sampling technique probability and non-probability sampling methods. Probability sampling technique consists of four sub types of sampling techniques simple random sampling, stratified, systematic, cluster and convenience. Non probability sampling consists of four types snowball sampling, convenience, purposive and quota. According to the different nature and characteristics of population different sampling techniques are used. For the present study, the purposive sampling technique is used. It is a type of non-probability sampling. It is most effective technique of sampling in which specific field of knowledge from related people is needed. It is used in both qualitative and quantitative approaches (Dolores & Tongco, 2015). In purposive sampling the researcher designs the sample with a purpose in mind. The main goal is to focus on particular characteristics of a population, which are of interest. As mentioned that main focus was to investigate the effect of prospective teachers' interpersonal skills on their self-efficacy.

3.7. Sample

The sample is a representative portion of the population which is selected because the researcher cannot collect data from the whole population, the researcher selects the small portion of population for gathering the responses of selected sample which is representative and consists of the same characteristics of the population. The sample of this study was consisted of 60% of the total population. The population of the study was small that's why the researcher made the maximum effort to target the maximum population. The questionnaire would be distributed among 414 prospective teachers selected as sample and 354 prospective teachers returned questionnaire and the rate of return was 85.5%.

3.8 Tool Construction

Data collection instruments play very important role for collection of data in research process; the researcher uses tools according to the need of their research. For the collection for present

study, the researcher used two adapted questionnaires. One questionnaire aimed to collect data about Interpersonal Skills was adapted from the model of Pareek and Purohit (2010) covering seven dimensions (Belonging, Affiliation, Extension, Recognition, Control and Influence). Additionally Demographic Information was also the part of data collection instrument. The second questionnaire was on Self Efficacy Questionnaire (SEQ) adapted from the work of Hoi, Zhou, Teo and Nie (2017) sources (Mastery Experiences, Vicarious Experiences, Verbal Persuasion and Physiological States).

3.8.1 Demographic Information

Demographic information collected about the sample of the study was about Gender, University, Program, Shift and Semester. It provided respondents' background.

3.8.2 Interpersonal Need Inventory (IPNI)

This tool was aimed to collect data about "Interpersonal Skills Questionnaire". There were 60 items in total and had six dimensions each dimensions had 10 items. All the 60 statements were based on closed ended items. The details of the items were given in the table 3.2.

Table 3.2

Items included in Interpersonal Need Inventory (IPNI)

| Serial No. | Scale | Sub Scale | Items | No. of Items |
|------------|------------------------------------|-------------|-------------------------------|--------------|
| 1 | Interpersonal Need Inventory | | | 60 |
| 1a | | Belonging | 1,2,3,4,5,6,7,8,9,10 | 10 |
| 1b | | Affiliation | 11,12,13,14,15,16,17,18,19,20 | 10 |
| 1c | | Extension | 21,22,23,24,25,26,27,28,29,30 | 10 |
| 1d | | Recognition | 31,32,33,34,35,36,37,38,39,40 | 10 |
| 1e | | Control | 41,42,43,44,45,46,47,48,49,50 | 10 |
| 1f | | Influence | 51,52,53,54,55,56,57,58,59,60 | 10 |

Table No. 3.2 explains the detailed items of interpersonal skills consisted of 60 items and was based on six sub sections. Each sub sections contained 10 items among them 12 were reverse questions.

3.8.3 Scoring of the Research Tool

The Interpersonal Need Inventory (IPNI) was adapted by the researcher for the purpose of assessment of prospective teachers' level of interpersonal skills. The scale was rated on 5 point likert scale. Respondents were asked to respond against the option ranging from 5 to 1 indicating their preferences of responses (5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree).

Further the responses were scored by calculating the scores obtained by the respondents.

There were 60 items included in this scale. Thus, the minimum possible score was 60 ($1 \times 60 = 60$) and the highest possible score was 300 ($5 \times 60 = 300$). This range (60- 300) was divided into three levels that were below Average, Average and Above Average.

The scoring of the responses to calculate the level of skills was based on the following division:

Score (60-140) Below Average

Score (141-220) Average

Score (221-300) Above Average

Table 3.3

Scoring for the level of prospective teachers' Interpersonal Skills

| Variable | Level of Interpersonal Skills | Score |
|-----------------------------|-------------------------------|---------|
| Interpersonal Skills | Below Average | 60-140 |
| | Average | 141-220 |
| | Above Average | 221-300 |

3.8.4 Self Efficacy Scale

The second questionnaire used for this study was adapted for analyzing Self Efficacy. The researcher had adapted this questionnaire by the work of Hoi, Zhou, Teo and Nie (2017) and the researcher had selected the theoretical framework by Bandura (1997). There are four sources of Self Efficacy. The details of the items were given in the table 3.4.

Table 3.4

Self-Efficacy Sources (SES)

| Serial No. | Scale | Sub Scale | Items | No. of Items |
|------------|---------------|-----------------------|-------|-----------------|
| 2 | Self-Efficacy | | | 26 |
| 2a | | Mastery Experiences | 1-6 | 6 |
| 2b | | Vicarious Experiences | 7-12 | 6 |
| 2c | | Verbal Persuasion | 13-20 | 8 |
| 2d | | Physiological States | 21-26 | 6 |

Table No. 3.4 shows the detailed division of items in self-efficacy questionnaire. This questionnaire consisted of 26 items and was based on four sub sections. Each sub sections contained 6 items while Verbal Persuasion section consisted of 8 items among them 4 were reverse questions.

3.8.5 Five Point Likert Scale

The researcher used five point Likert scales for both of the questionnaires one “Interpersonal Skills” and other on “Self Efficacy”.

This scale has five points they are as follow:

- Strongly disagree (SA)
- Disagree (D)
- Neutral (N)
- Agree (A)

- Strongly Agree (SD)

3.8.5.1. Coding Procedure

The coding procedure for both of the questionnaire was same. 1 was used for strongly disagree, 2 was used for disagree, 3 was used for neutral, 4 was used for agree and 5 was used for strongly disagree.

3. 8.6 Validity of the Instrument

The researcher had adapted two questionnaires one on Interpersonal Skills by Pareek and Purohit (2010) and the other questionnaire on Self Efficacy by Bandura (1997). The researcher made amendments according to her topic and for the validity of both questionnaires; the researcher consulted five experts for validation of Interpersonal Need Inventory (IPNI) and Self-Efficacy Questionnaire (SEQ). The experts had thoroughly checked the two instruments by keeping in view the objectives, research topic and models. Experts had given comments and advices for improvement of the questionnaire, the questionnaires were improved, rearranged and prepared for data collection by following their valuable remarks and suggestions.

The experts included in the instruments validation committee were:

Table 3.5

List of Experts Instruments Validation

| Sr No. | Validity of Experts | Name of the University |
|--------|-------------------------|---|
| | Dr Muhammad Ajmal | Chairman Department of Distance and Non Formal Education in Allama Iqbal Open University (AIOU) (Islamabad) |
| | Dr. Farkhanda Tabbassum | Assistant Professor in National University of Modern Languages (NUML) (Islamabad) |
| | Dr Fouzia Ajmal | Assistant Professor in International Islamic University Islamabad (IIUI) |
| | Dr Malik Ghulam Behlol | Head of Department in Fatima Jinnah Women University (FJWU) Rawalpindi |
| | Dr. Imran Yousaf | Associate Professor in PMAS Agriculture University (Rawalpindi) |

This table 3.5 presents the names, designation and affiliation of experts from whom the researcher validated his/her questionnaire.

3.8.7 Pilot Testing

For pilot testing the researcher selected sample of 40 students consisted of both males and females from education department. Researcher personally visited and collected the data. Two questionnaires were presented to the respondents, one questionnaire on Interpersonal Skills consisted of 60 items and 6 dimensions each dimensions (Belonging, Affiliation, Extension, Recognition, Control and Influence) were consisted of 10 items. The second questionnaire was about Self Efficacy consisted of 26 items and 4 dimensions (Mastery Experiences, Vicarious Experiences, Verbal Persuasion and

Physiological States) each sources consisted of 6 items only verbal persuasion consisted of 8 items. The researcher contacted the students of education department and distributed the questionnaires to the students and asked them to solve the questionnaire in one sitting. The researcher explained each and every thing regarded to the questionnaire and asked them to select the option from the five point likert scale. It was assured to the respondents that collection of data from them will be used only for research purpose.

The researcher collected the data for pilot testing from 40 students and for actual data the researcher selected 60% of the total population which was 414 among them 354 respondents returned the questionnaires so their responses were entered in SPSS that's why the researcher mentioned in Chapter 3 about reliability of pilot testing and in Chapter 4 the researcher mentioned 354.

3.8.8 Reliability of the Instrument

The data obtained through pilot testing was analyzed by using Statistical Package for the Social Sciences (SPSS) to pilot test data entry and the result. Pilot testing is used to verify rectify the strengths and weaknesses of the items and finalization of the tool. For reliability test Item total Correlation, Cronbach's Alpha Reliability and Inter-section Correlation was used. The Interpersonal Need Inventory (IPNI) was found reliable at .932 and Self Efficacy Questionnaire (SEQ) was at .910. It was found that the two questionnaires were found fair and the researcher had improved the instrument for final data collection by making some changes suggested by experts. The reliability of the two instruments details were given below.

3.8.8.1. Interpersonal Need Inventory

The Interpersonal Need Inventory (IPNI) was subdivided into six sub sections.

The six sub sections were (1) Belonging, (2) Affiliation, (3) Extension, (4)

Recognition, (5) Control, (6) Influence. This table is about the Cronbach's Alpha Reliability Scale of Interpersonal Need Inventory (IPNI).

Table 3.6

Cronbach's Alpha Reliability of Interpersonal Need Inventory Scale (IPNS) Pilot Testing (n=40)

| Scale | Major Sections | Items | Cronbach's Alpha Reliability |
|--|---|-------|------------------------------|
| Interpersonal Need Inventory (IPNI) | | 60 | .932 |
| | Belonging (Giving, Receiving) | 10 | .840 |
| | Affiliation (Giving, Receiving) | 10 | .623 |
| | Extension (Giving, Receiving) | 10 | .808 |
| | Recognition (Giving, Receiving) | 10 | .728 |
| | Control (Giving, Receiving) | 10 | .608 |
| | Influence (Giving, Receiving) | 10 | .700 |
| | | | |

Table 3.6 illustrates that the Cronbach's Alpha Reliability of "Interpersonal need inventory" (IPNI) was .932. The tool was divided into six sub sections (Belonging, Affiliation, Extension, Recognition, Control and Influence) the reliability score of section related to Belonging was found reliable at .840, section related to Extension found reliable at .808, section related to Recognition found reliable at .728, section related to Influence found reliable at .700 and section related to Affiliation found reliable at .623 and section Control found reliable at .608.

3.7.8.2. Self-Efficacy Scale

Self-Efficacy Scale was based on four sub sections. These four sub sections were Mastery Experiences, Vicarious Experiences, Verbal Persuasion and Physiological States. This table 3.6 is about Cronbach's Alpha Reliability Scale of Self Efficacy Scale.

Table 3.7

Cronbach's Alpha Reliability of Sources of Self Efficacy Scale (SES) Pilot Testing (n= 40)

| Scale | Major Sections | Items | Cronbach's Alpha Reliability |
|--------------------------------------|-----------------------|-------|------------------------------|
| Self-Efficacy Scale (SES) | | 26 | .910 |
| | Mastery Experiences | 6 | .662 |
| | Verbal Experiences | 6 | .613 |
| | Vicarious Experiences | 8 | .810 |
| | Physiological States | 6 | .744 |

Table 3.7 shows that the reliability of "Self Efficacy Scale" (SES) was .910. The tool was divided into four sub sections (Mastery Experiences, Vicarious Experiences, Verbal Persuasion and Physiological States.) the highest reliability of section related to Verbal Persuasion found reliable at .810, section related to Physiological States found reliable at .744, section related to Vicarious Experiences found reliable at .613.

The researcher used correlational to identify the relationship between variables. For analyzing these reliability the relationship between items of the questionnaire and also used to identify the relationship among the items of the sections of the questionnaires for tool finalization.

Pilot testing is a preliminary required process in research methodology. It helps the researcher to add or remove the items before collecting the actual data. That's why the researcher conducted a pilot testing on 40 respondents to check reliability of both variables.

Table 3.8

Item- total Correlation of Interpersonal Need Inventory Scale (IPNIS) Pilot Testing (n=40)

| Items Codes | r | Items/Codes | r | Items Codes | r |
|--------------------|----------|--------------------|----------|--------------------|----------|
| GB1 | .738** | GE1 | .792** | GC1 | .691** |
| RB2 | .765** | GE2 | .262 | RC2 | .328* |
| RB3 | .523** | GE3 | .608** | GC3 | .287 |
| GB4 | .832** | RE4 | .504** | RC4 | .541** |
| RB5 | .670** | RE5 | .859** | GC5 | .651** |
| RB6 | .667** | RE6 | .739** | RC6 | .607** |
| GB7 | .642** | RE7 | .813** | GC7 | .291 |
| GB8 (R) | .232 | GE8 | .590** | RC8 (R) | -.185 |
| GB9 | .460** | GE9 (R) | -.065 | RC9 | .517** |
| RB10 (R) | .093 | RE10 | .655** | RC10 (R) | -.267 |
| GA1 | .785** | RR1 | .795** | GI1 | .677** |
| RA2 | .742** | GR2 | .711** | RI2 | .442** |
| GA3 | .497** | GR3 | .612** | RI3 | .632** |
| RA4 | .464** | RR4 | .751** | RI4 | .712** |
| GA5 (R) | -.139 | GR5 | .695** | RI5 | .569** |
| RA6 (R) | -.239 | GR6 | .688** | GI6 | .825** |
| GA7 | .392* | RR7 | .394* | GI7 (R) | -.215 |
| RA8 | .558** | GR8(R) | -.131 | GI8 | .534** |
| GA9 (R) | .158 | RR9(R) | -.009 | GI9 | .355** |
| GA10 | .401* | GR10 | .503** | RI10 (R) | -.198 |

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

*Correlation is significant at the 0.05 level (2- tailed).

The table 3.8 shows Item-total Correlation of Interpersonal Need Inventory Scale. The highest correlation was of items No RE5 (.859**) and the lowest correlation was of the item No. RR9. The items having reverse statements (GE9(R), RC8(R), RC10 (R), GA5(R), RA6(R), GR8(R), RR9(R), GI7(R) and RI10(R)).

Table 3.9

Intersection Correlation of Interpersonal Need Inventory Scale Pilot Testing (n = 40)

| Sections | Belonging | Affiliation | Extension | Recognition | Control | Influence | Interpersonal Skills |
|----------------------|------------------|--------------------|------------------|--------------------|----------------|------------------|-----------------------------|
| Belonging | 1 | | | | | | |
| Affiliation | .434** | 1 | | | | | |
| Extension | .713** | .702** | 1 | | | | |
| Recognition | .687** | .779** | .747** | 1 | | | |
| Control | .581** | .421** | .669** | .474** | 1 | | |
| Influence | .649** | .490** | .661** | .575** | .511** | 1 | |
| Interpersonal Skills | .845** | .765** | .915** | .867** | .732** | .791** | 1 |

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

Table 3.9 illustrates that the highest correlation was found between section about Recognition and Affiliation at (.779**) and the lowest correlation was found between sections related to Control and Affiliation at (.421**). This table shows that all the sections were statistically correlated with each other at the 0.01 level of significance.

Table 3.10

Item- total Correlation of Self Efficacy Scale (IPNIS) Pilot Testing (n=40)

| Items Codes | r | Items/Codes | r | Items Codes | r |
|----------------|--------|-----------------|---------------|-----------------|---------|
| ME1 | .688** | VE4 (R) | -.126 | VP7 | .707** |
| ME2 | .744** | VE5 | .760** | VP8 | .739** |
| ME3 | .786** | VE6 | .675** | PS1 | .799** |
| ME4 | .740** | VP1 | .860** | PS2 | .714** |
| ME5 (R) | -.291 | VP2 | .762** | PS3 | .796** |
| ME6 | .754** | VP3 | .828** | PS4 | .749** |
| VE1 | .682** | VP4 | .835** | PS5 (R) | -.450** |
| VE2 | .800** | VP5 (R) | -.433** | PS6 | .649** |
| VE3 | .670** | VP6 | .597** | | |

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

*. Correlation is significant at the 0.05 level (2- tailed).

The table 3.10 shows that Item-total Correlation of Self Efficacy Scale. The highest correlation was found between items No VP4 (.835**) and the lowest correlation was of the item No. VE4(R). Items having reverse statements were (ME5(R), VE4(R), VP5(R) and PS5(R)).

Table 3.11

Intersection Correlation of Self Efficacy Scale (n= 40)

| | Mastery Experiences | Vicarious Persuasion | Verbal States | Physiological States | Self Efficacy |
|----------------------------------|--------------------------------|---------------------------------|--------------------------|---------------------------------|----------------------|
| Mastery Experiences | 1 | | | | |
| Vicarious Experiences | .781** | 1 | | | |
| Verbal Persuasion | .749** | .677** | 1 | | |
| Physiological States | .600** | .610** | .741** | 1 | |
| Self Efficacy | .881** | .854** | .925** | .844 | 1 |

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

The table 3.11 shows that the highest correlation was found between the section related to Vicarious Experiences and Mastery Experiences at (.781**) and the lowest correlation between the section related to Physiological States and Master Experiences at (.600**). This table shows that sections related with each other at the 0.01 level of significance.

3.9. Revision of Tool

Table 3.8 shows that items of Interpersonal Need Inventory (IPNI) out of 60 items 15 had value below 0.30 and named as GB8 (R) (.232), RB10 (R) (.093), GA5 (R) (-.139), RA6 (R) (-.239), GA9 (R) (.158), GE2 (.262), GE9 (-.065), GR8 (R) (-.131), RR9 (R) (-.009), GC3 (.287), GC7 (.291), RC8 (R).185, RC10 (R) (-.267), GI7 (R) (-.215) RI10 (10) (-.198). These items have been improved to finalize the research tool.

The same situation occurred with second variable Self Efficacy Scale (SES). Table 3.9 represents that out of 26 items only 2 have correlation value below 0.30 which were ME5 (R) (-.291) and VE4 (R) (-.126).

3.10 Data Collection

It is the process of collecting data from the respondents about the target variables. It is very crucial part in the conducting research because by this process the researcher gets the results, on the basis of the result the hypothesis are accepted or rejected. Without collecting the data the conduction of the study is incomplete. It needs patience while collecting the data. In final data collection researcher faced a number of problems because of pandemic crisis of COVID - 19 and sudden lock down situation; it became difficult for the researcher to collect data from respondents through personal visit from sample universities and respondents. Therefore, researcher collected responses through online process to fill the questionnaire.

3. 11 Data Analysis

The data was analyzed by the use of Statistical Packages for Social Sciences (SPSS). Tests like Individual scores, Mean and Regression were applied to explore scenario concerning target variables and analysis of Null hypothesis.

Table 3.12

Data Analysis

| Sr # | Objectives | Hypotheses | Statistical Technique |
|------|--|---|-----------------------|
| | To assess the level of Interpersonal Skills of Prospective Teachers. | | Individual Scores |
| | To analyze the self efficacy of prospective teachers. | | Mean |
| | To assess the effect of prospective teachers' Interpersonal Skills on their Self efficacy. | HO1. There is no statistically significant effect of Prospective teachers' Interpersonal Skills on their Self Efficacy. | Linear Regression |

3.12 Ethical Consideration

While conducting different steps of research these were ethical considerations for the researcher. The study was based on the effect of prospective teachers' interpersonal skills on their self-efficacy. Respondents' names were not asked in the questionnaire and the researcher asked the students who wanted to respond and fill the questionnaire willingly and also the respondents were taken in confidence that their answers would be used for research purpose only.

3.13 Delimitation of the Research Study

Due to time and financial constraints following delimitation were made:

- Students of Education Department were included of both universities International Islamic University Islamabad (IIUI) and National University of Modern Languages Islamabad (NUML) and only public sector universities were selected.
- B.ED (honors) (4 years), M.A Education (2 years) and B.S.Ed. (4 years) were selected from the concerned universities for data collection.
- Universities were selected only from Islamabad city territory and regular universities which are functioning education department that's why Allama Iqbal Open University was omitted because it provides only distance education.
- The researcher used only close ended questionnaires on both variables interpersonal skills and self efficacy which were based on five point likert scale ranging from 1-5.

CHAPTER 4

ANALYSIS AND INTERPRETATION OF THE DATA

4.1 Section I Tool Finalization (N=354)

Section 1 is based on analysis related to construction for the research tool. Two questionnaires were used for this study, one was based on interpersonal skills scale and the other tool intended to collect data about self-efficacy of prospective teachers. This section deals with the reliability, item total correlation and intersection correlation based on both variables in detail.

4.2 Section II Demographic Presentation of the Sample

This section II deals with the Demographic information and its interpretation in detail. Demographic data was based on the background of the respondents. For this purpose the researcher had added section of demographic presentation.

4.3 Section III Level of Interpersonal Skills

This section III was based on objective No.1 that was to evaluate the levels of relational aptitude of the prospective teachers from International Islamic University Islamabad for this purpose the levels of interpersonal skills of prospective teachers were classified into three categories named as below average, average and above average.

4.4 Section IV Self Efficacy among Prospective Teachers

Section IV was focused on objective No.2 that was intended to analyze the self-efficacy among prospective teachers. Further self-efficacy was divided into four sub indicators named as mastery experiences, vicarious experiences, verbal persuasion and physiological states.

4.5 Section V Effect of Interpersonal Skills on Prospective Teachers' Self Efficacy

This section V was based on objective No.3 that was to measure the consequences of interpersonal skills on prospective teachers' self-efficacy. For this purpose the statistical tool applied to assess the effect of interpersonal skills on self-efficacy was Regression analysis. This section explains the effect of interpersonal skills of prospective teachers' on their self-efficacy and its detail. Further this objective was divided into six sub objectives based on belonging, affiliation, extension, recognition, control and influence.

Section I

4.1. Tool Construction

Table 4.1

Cronbach's Alpha Reliability of Interpersonal Need Inventory Scale (IPNI) (n= 354)

| Scale | Major Sections | Items | Cronbach's Alpha Reliability |
|--|--------------------|-------|---------------------------------|
| Interpersonal Need Inventory (IPNI) | | 60 | .855 |
| | Belonging | 10 | .567 |
| | Affiliation | 10 | .752 |
| | Extension | 10 | .801 |
| | Recognition | 10 | .624 |
| | Control | 10 | .790 |
| | Influence | 10 | .748 |

Table 4.1 illustrates the reliability of Interpersonal Need Inventory (IPNI) was .855. This variable was further divided into six sub sections named as belonging, affiliation, extension, recognition, control and influence as suggested in the theory. The most reliable sub variables among this section was Extension found reliable at .801, area correlated with Control was discovered reliability score of this construct was .790, segment connected to Affiliation was reliable at .752, portion related to Influence was found consistent at .748, segment linked to Belonging was set up dependable at .567 and component correlated to Recognition was formed dependable at .624.

Table 4.2

Cronbach's Alpha Reliability of Sources of Self Efficacy Scale (SES) (n= 354)

| Scale | Major Sections | Items | Cronbach's Alpha Reliability |
|--------------------------------------|------------------------------|-------|---------------------------------|
| Self Efficacy Scale (SES) | | 26 | .772 |
| | Mastery Experiences | 6 | .748 |
| | Verbal Persuasion | 6 | .687 |
| | Vicarious Experiences | 8 | .676 |
| | Physiological States | 6 | .682 |

The table 4.2 indicates that the reliability of Self Efficacy Scale (SES) was .772 further this variable was divided in to four sub sections named as mastery experiences, vicarious experiences, verbal persuasion and physiological states. The highest reliability was found among this sections of Mastery Experiences found reliable at .748, section Verbal Persuasion was found reliable at .687, section Physiological States was found reliable at .682 and Vicarious Experiences was found reliable at .676.

The overall reliability score of "Interpersonal Need Inventory" was .93 and after actual data the reliability value reduced (.85) from pilot testing and similarly the second variable Self Efficacy Sources pilot testing was .91 and actual data reliability was reduced from actual data (.77) because it depends on the respondents how they answer and the respondents were individually different from each other and they have their own points view related to statements given in questionnaire.

Table 4.3

Item- total Correlation of Interpersonal Need Inventory Scale (IPNI) (n=354)

| Items Codes | r | Items/Codes | r | Items Codes | r |
|-------------|--------|-------------|--------|----------------|-------------|
| GB1 | .187** | GE1 | .420** | GC1 | .430** |
| RB2 | .246** | GE2 | .368** | RC2 | .312** |
| RB3 | .175** | GE3 | .485** | GC3 | .395** |
| GB4 | .266** | RE4 | .372** | RC4 | .480** |
| RB5 | .121* | RE5 | .483** | GC5 | .322** |
| RB6 | .207** | RE6 | .511** | RC6 | .351** |
| GB7 | .250** | RE7 | .425** | GC7 | .368** |
| GB8 | .252** | GE8 | .304** | RC8 | .294** |
| GB9 | .222** | GE9 | .457** | RC9 | .325** |
| RB10 | .250** | RE10 | .371** | RC10 | .416** |
| GA1 | .218** | RR1 | .354** | GI1 | .428** |
| RA2 | .403** | GR2 | .329** | RI2 | .440** |
| GA3 | .353** | GR3 | .399** | RI3 | .425** |
| RA4 | .246** | RR4 | .193* | RI4 | .371** |
| GA5 | .312** | GR5 | .316** | RI5 | .343** |
| RA6 | .296** | GR6 | .312** | GI6 | .220** |
| GA7 | .391** | RR7 | .395** | GI7 (R) | .003 |
| RA8 | .200** | GR8 | .480** | GI8 | .281** |
| GA9 | .361** | RR9 | .322** | GI9 | .252** |
| GA10 | .278** | GR10 | .351** | RI10 | .333** |

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

*. Correlation is significant at the 0.05 level (2- tailed).

Table 4.3 illustrates the item total correlation of Interpersonal Need Inventory (IPNI). The highest association was found between statement No GE 3 (.485**) and the lowest correlation was of item No GI7 (R) (.003).

The researcher designed this index for Interpersonal Need Inventory (IPNI), however after checking for item total correlation for the sample size the researcher noticed that as the sample increased the correlation for the items GB1, RB2, RB3, GB4, RB5, RB6, GB7, GB8,GB9, RB10, GA1, RA4, RA6, RA8, GA10, RR4, RC8, GI7 (R), GI8 and GI9 weakened significantly. It proves that these statements are less reliable in the chosen sample to represent IPNI. Moreover, other statements showed significant correlation, thus reliable for data analysis.

Table 4.4

Intersection Correlation of Interpersonal Need Inventory Scale (IPNI) (n= 354)

| Sections | Belonging | Affiliation | Extension | Recognition | Control | Influence | Interpersonal skills |
|-----------------------------|------------------|--------------------|------------------|--------------------|----------------|------------------|-----------------------------|
| Belonging | 1 | | | | | | |
| Affiliation | .202** | 1 | | | | | |
| Extension | .188** | .388** | 1 | | | | |
| Recognition | .171** | .213** | .503** | 1 | | | |
| Control | .154** | .036 | .048** | .386** | 1 | | |
| Influence | .127* | .029 | .049** | .138** | .624** | 1 | |
| Interpersonal Skills | .485** | .547** | .642** | .668** | .633** | .561** | 1 |

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

*Correlation is significant at the 0.05 level (2-tailed).

The values of table 4.4 display that the highest correlation is found between sections related to Interpersonal skills and Recognition (.668**). The least connection was obtained between section Influence and Affiliation that was (.029).

In this table the value shows a relationship between Influence and Affiliation was (.029) and also between control and affiliation (.036) which shows no correlation between these two sections. This is because by definition, those three sub variables are totally different from each

other and it is apparent from their meanings that it is highly unlikely to exist in a person simultaneously. From the definitions of sub variables we see that affiliation is mostly a voluntary support to others in terms of ideas, encouragement and so on. Whereas, influence is a non-voluntary skills in a person that effects the behavior of others. Similarly, control is related to subjugating of power, inverse of voluntary affiliation. Consequently, it is unimaginable to consider the coexistence of these sub variables or one sub variable affecting the others as these seem to be unrelated to each other. Thus the relation between these variables is weak.

Table 4.5

Item- total Correlation of Sources of Self Efficacy Scale (SES) (n=354)

| Items Codes | r | Items/Codes | r | Items Codes | r |
|-------------|---------------|-------------|--------|-------------|---------------|
| ME1 | .316** | VE4 | .443** | VP7 | .321** |
| ME2 | .339** | VE5 | .332** | VP8 | .392** |
| ME3 | .343** | VE6 | .357** | PS1 | .440** |
| ME4 | .399** | VP1 | .345** | PS2 | .417** |
| ME5 | .420** | VP2 | .381** | PS3 | .365** |
| ME6 | .437** | VP3 | .468** | PS4 | .304** |
| VE1 | .423** | VP4 | .408** | PS5 (R) | .264** |
| VE2 | .499** | VP5 (R) | .408** | PS6 | .285** |
| VE3 | .462** | VP6 | .412** | | |

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

* . Correlation is significant at 0.05 level (2- tailed).

This table 4.5 indicates the item total correlation of sources of self-efficacy scale. The highest correlation was found between item No VE2 (.499**) and lowest correlation was item No. PS6 (.285**).

The researcher designed this index for Self Efficacy Scale (SES), however after checking for item total correlation for the sample size the researcher noticed that as the sample increased the correlation for the items PS5 (R) and PS (6) weakened significantly. It proves that these statements are less reliable in the chosen sample to represent Self Efficacy Scale (SES). Moreover, other statements showed significant correlation for data analysis.

Table 4.6

Intersection Correlation of Self Efficacy Scale (n = 354)

| | Mastery Experiences | Vicarious Experiences | Verbal Persuasion | Physiological States | Self-Efficacy |
|------------------------------|--------------------------------|----------------------------------|------------------------------|---------------------------------|----------------------|
| Mastery Experiences | 1 | | | | |
| Vicarious Experiences | .418** | 1 | | | |
| Verbal Persuasion | .029 | .232** | 1 | | |
| Physiological States | .015 | .206** | .274** | 1 | |
| Self-Efficacy | .566** | .685** | .668** | .591** | 1 |

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

The table 4.6 illustrates the item total correlation of self efficacy scale. It explains the highest correlation between correlation between correlation score of the scale of Self Efficacy and Vicarious Experiences is (.685**). The lowest correlation was between sections Physiological states and Mastery Experiences is (.015).

In this table the value between Physiological States and Mastery Experiences was (.015) while on the other hand the value between Verbal Persuasion and Mastery Experiences was (.029) which shows no correlation between these two sections. There could be several reasons for non-existing relationship between these three sub variables. The most plausible explanation could be that a person might not possess all capabilities at once. It means that he/she might be good at certain skills but might lack verbal persuasiveness or factors like fear and stress might create hindrance for that person. Thus a person is not able to persuade his/her mastery skills which might explain the weak relationship between mentioned sub variables.

Section II

4.2 Demographic presentation of the Sample

Table 4.7

Demographic Characteristics of the Sample (n=354)

| Demographic | Category | Frequency N | Percentage % |
|-------------|----------------------------------|-------------|--------------|
| Gender | Males | 110 | 26.57% |
| | Females | 244 | 58.93% |
| Total (414) | | 354 | 85.5% |
| University | International Islamic University | 354 | 85.5% |
| | Islamabad (IIUI) | | |
| Total (414) | | 354 | 85.5% |
| Program | B.Ed (4 years) | 63 | 15.21% |
| | B.SEd (4 years) | 228 | 55.08% |
| | M.A Education (2 years) | 63 | 15.21% |
| Total (414) | | 354 | 85.5% |
| Semester | 2 nd | 66 | 15.94% |
| | 3 rd | 62 | 14.97% |
| | 4 th | 61 | 14.73% |
| | 5 th | 40 | 9.66% |
| | 6 th | 45 | 10.86% |
| | 7 th | 40 | 9.67% |
| | 8 th | 40 | 9.67% |

| | | | |
|-------------|---------|-----|-------|
| Total (414) | | 354 | 85.5% |
| Shift | Morning | 206 | 49.7% |
| | Evening | 148 | 35.7% |
| Total (414) | | 354 | 85.5% |

The table 4.7 indicates the demographical detail of the sample who responded the questionnaire. In demographic part sub variables that were included are gender, university, semester, shift and program. This table explains the detail of the demographic part. A total of 354 students participated of International Islamic University Islamabad both males and females campus of Education department. Among them there were 110 males respondents (26.57%) and 240 females respondents (58.93%).

There were 228 respondents (55.08%) of BS. Ed (4 years), 63 respondents (15.21%) were of B.Ed (4 years) and 63 respondents were (15.21%) were from M.A Education (2 years).

Semester wise 66 respondents (15.94%) were of 2nd semester, 62 respondents (14.97%) were of 3rd semester, 61 respondents (14.73%) were of 4th semester, 40 respondents (9.66%) were of 5th semester, 45 respondents (10.86%) were of 6th semester, 40 respondents (9.67%) were of 7th semester and 40 respondents (9.67%) were of 8th semester. 206 respondents (49.7%) were from morning shift and 110 respondents (35.7%) were from evening shift.

Section III

4.3 Levels of Interpersonal Skills

Objective No.1: “To assess the level of interpersonal skills of prospective teachers”.

Table 4.8

Level of Interpersonal Skills (n=354)

| Sr. N | Score | Level of Interpersonal Skills | N | Percent% |
|-------|---------|-------------------------------|-----|----------|
| 1 | 60-140 | Below Average | 20 | 5.64% |
| 2 | 141-220 | Average | 200 | 56.4% |
| 3 | 221-300 | Above Average | 134 | 37.8% |

The level of interpersonal skills of prospective teachers is shown in table 4.8. To categorize respondents according to the level of Interpersonal skills of respondents it was divided into three dimensions to find out that how many people fall at which level. For this the score of the respondents were split into three groups ranging named as Below Average, Average and Above Average. 60-140 named as below average 141-220 named as average and 221-300 named as above average. Result obtained from the above table indicates that majority (56.4) of the prospective teachers were at Average level of interpersonal skills, while (37.8%) prospective teachers were at Above level and only 5.64% of the prospective teachers were at Below Average.

Section IV

4.4 Self Efficacy among Prospective Teachers

Objective No. 2: To analyze the practicing self-efficacy of prospective teachers.

Table 4.9

Self-efficacy among prospective teachers (n= 354)

| SR. No | Variable | n | Mean (M) | Remarks |
|--------|------------------------------|-----|----------|---------|
| 1. | Mastery Experiences | 354 | 3.61 | Agree |
| 2. | Vicarious Experiences | 354 | 3.09 | Neutral |
| 3. | Verbal Persuasion | 354 | 3.62 | Agree |
| 4. | Physiological States | 354 | 4 | Agree |

This table demonstrates the practicing self-efficacy among prospective teachers. The mean value of the four sources of self-efficacy is mastery experiences, vicarious experiences, verbal persuasion and physiological states are 3.61, 3.09, 3.62 and 4 respectively. The highest value of mean is related to the section physiological states (4). This table shows that the prospective teachers were agree on using these three sources of self-efficacy (Mastery Experiences, Verbal Persuasion and Physiological States) but on the fourth source (Vicarious Experiences) their responses were neutral which means that some were agree to use this source and some were disagree on using this source.

Section V

4.5 The effect of prospective teachers' interpersonal skills on their self efficacy.

Objective No. 3: To assess the effect of prospective teachers' interpersonal skills on their self Efficacy”.

H₀₁: “There is no statistically significant effect of prospective teachers' interpersonal skills on their self-efficacy”.

Table 4.10

Effect of prospective teachers' interpersonal skills on their self-efficacy (n= 354)

| Independent Variable | Dependent Variable | β (Coefficient) | t | Sig. | R Square |
|----------------------|--------------------|--------------------------|-------|------|----------|
| Interpersonal Skills | Self-Efficacy | .297 | 4.939 | .000 | .065 |

**P< 0.01

*P<0.05

Table 4.10 shows one way relationship between interpersonal skills and self-efficacy. The Independent Variable (IPS) R square value .065 which explains that interpersonal skills had 6.5% percent variation in self-efficacy and the rest is due to other factors. While the coefficient ($\beta=.297$) shows that this effect is positive and observed statistically significant at 0.01 level of significance. Thus the hypothesis No.1 there is no statistically significant effect of prospective teachers' interpersonal skills on their self-efficacy' failed to accept.

Objective No.3 (a): “To assess the effect of prospective teachers’ interpersonal skills related to belonging their self-efficacy”.

Ho1 (a): “There is no statistically effect of prospective teachers’ interpersonal skills related to belonging on their self-efficacy”.

Table 4.11

Effect of Belonging on Self Efficacy (n= 354)

| Independent Variable | Dependent Variable | β(Coefficient) | t | Sig. | R Square |
|-----------------------------|---------------------------|--|----------|-------------|-----------------|
| Belonging | Self-Efficacy | .132 | 3.089 | .002 | .026 |

** $P < 0.01$

* $P < 0.05$

This table shows that R^2 value is .026 which indicates that belonging had 2.6% percent variation in self-efficacy and the rest is due to other factors. On the other hand the coefficient is (β .132) which represents that there is positive significant effect at 0.02 level of significance. Thus this hypothesis No. 1 (a) “There is no statistically significant effect of prospective teachers’ interpersonal skills related to belonging on their self-efficacy” failed to accept.

Objective No. 3 (b): “To assess the effect of prospective teachers’ interpersonal skills related to affiliation on their self-efficacy”.

Ho1 (b): “There is no statistically effect of prospective teachers’ interpersonal skills related to affiliation on their self-efficacy”.

Table 4.12

Effect of Affiliation on Self Efficacy (n= 354)

| Independent Variable | Dependent Variable | β (Coefficient) | t | Sig. | R Square |
|-------------------------|-----------------------|-----------------------|--------|------|----------|
| Affiliation | Self-Efficacy | -.041 | -1.181 | .238 | .004 |

*** $P < 0.01$*

** $P < 0.05$*

Table 4.12 shows that R^2 value is .004 which indicates that affiliation had 0.4% variation on the self-efficacy and the rest is related to other aspects. The coefficient value is ($\beta = -.041$). As the significant value is (.238) which is greater than 0.05. This shows that there is no statistically significant difference of prospective teachers’ interpersonal skills related to affiliation on their self-efficacy. Thus the result concluded that hypothesis Ho1 (a) there is no statistically significant effect of prospective teachers’ affiliation on their self-efficacy was accepted.

Objective No. 3 (c): “To assess the effect of prospective teachers’ interpersonal skills related to extension on their self-efficacy.

Ho1 (b): “There is no statistically effect of prospective teachers’ interpersonal skills related to extension on their self-efficacy”.

Table 4.13

Effect of Extension on Self Efficacy (n=354)

| Independent Variable | Dependent Variable | β (Coefficient) | t | Sig. | R Square |
|----------------------|--------------------|-----------------------|------|------|----------|
| Extension | Self-Efficacy | .024 | .750 | .454 | .002 |

****** $P < 0.01$

***** $P < 0.05$

This table shows that R^2 value is .002 which indicates that extension had 0.2% variation on self-efficacy and the rest is due to other factors. The coefficient ($\beta = .024$) p- value is .454 which is greater than 0.05. Thus it is concluded that hypothesis Ho1 (c) there is no statistically significant effect of prospective teachers’ interpersonal skills related to extension on their self-efficacy and it was accepted.

Objective No. 3 (d): “To assess the effect of prospective teachers’ interpersonal skills related to recognition on their self-efficacy”.

Ho1 (d): “There is no significant effect of prospective teachers’ interpersonal skills related to recognition on their self-efficacy”.

Table 4.14

Effect of Recognition on Self Efficacy (n=354)

| Independent Variable | Dependent Variable | β (Coefficient) | t | Sig. | R Square |
|-------------------------|-----------------------|-----------------------|-------|------|----------|
| Recognition | Self-Efficacy | .088 | 2.082 | .038 | .012 |

**P<0.01

*P<0.05

This table shows that R^2 value is .012 which represents that recognition had 1.2% variation in self-efficacy and the rest is due to the factors. The coefficient value is ($\beta = .088$) represents that this is positive significant at 0.01 level of significance. Thus, it is concluded that Ho1 (d) there is no statistically significant effect of prospective teachers’ interpersonal skills related to Recognition is failed to accept.

Objective No. 3 (e): “To assess the effect of prospective teachers’ interpersonal skills related to control on their self-efficacy”.

Ho1 (d): “There is no significant effect of prospective teachers’ interpersonal skills related to control on their self-efficacy”.

Table 4.15

Effect of Control on Self Efficacy (n=354)

| Independent Variable | Dependent Variable | β (Coefficient) | t | Sig. | R Square |
|-------------------------|-----------------------|---------------------------|-------|------|----------|
| Control | Self-Efficacy | .182 | 5.489 | .000 | .079 |

**P<0.01

*P<0.05

This table shows that R^2 value is .079 which indicates that control had 7.9% variation in self-efficacy and the rest was due to the other factors. While the coefficient ($\beta = .182$) shows that there is positive statistically significant at 0.01 level of significance. Thus, it is concluded that the hypothesis No. Ho1 (e) “There is no statistically significant effect of interpersonal skills related to control on their self-efficacy” was failed to accept.

Objective No. 3 (f):To assess the effect of prospective teachers' interpersonal skills related to Influence on self-efficacy.

Ho1 (d): “There is no significant effect of prospective teachers' interpersonal skills related to influence on their self-efficacy”.

Table 4.16

Effect of Influence on Self Efficacy (n=354)

| Independent Variable | Dependent Variable | β (Coefficient) | t | Sig. | R Square |
|----------------------|--------------------|-----------------------|-------|------|----------|
| Influence | Self-Efficacy | .274 | 8.043 | .000 | .156 |

**. $P < 0.01$.

*. $P < 0.05$.

This table shows that R^2 value is .156 which indicates that self-efficacy had 15.6% percent variation in self-efficacy and the rest is due to other factors. Further the coefficient is .274 which indicates that there is positive statistically significant effect at 0.01 level of significance. Thus, it is concluded that hypothesis No. Ho1 (f) there is no significant effect of prospective teachers' interpersonal skills related to influence on their self-efficacy was failed to accept.

CHAPTER 5

SUMMARY, FINDINGS, CONCLUSIONS, DISCUSSIONS AND RECOMMENDATIONS

This chapter addresses summary, findings, discussion, conclusions and recommendations centered upon the research analysis. The detail of this chapter is given below:

5.1 Summary

This research was based on the effect of prospective teachers' interpersonal skills on their self-efficacy. The research was conducted to achieve three main objectives, these are as follows: (i) to assess the level of interpersonal skills of future instructors, (ii) to analyze the practice of self-efficacy of prospective teachers and (iii) to assess the effect of prospective teachers' interpersonal skills on their self-efficacy. The null hypothesis designed for this study was, there is no statistically significant effect of prospective teachers' interpersonal skills on their self-efficacy. Two theories were addressed to design theoretical framework for this study. These were based on Interpersonal Need Inventory (IPNI) made by Pareek and Purohit (2010) and the second was based on four Sources of Self Efficacy (SES) model made by Bandura (1997). The model of Interpersonal Need Inventory (IPNI) consisted of six indicators named as belonging, affiliation, extension, recognition, control and influence. While self-efficacy scale was consisted of four sub indicators named as mastery experiences, vicarious experiences, verbal persuasion and physiological states.

The research approach used for this study was quantitative. Quantitative approach presents data and results in numerical form. It is concerned with numbers and reasons. The population of the

research was based on public sector universities of Islamabad both male and female session 2019. The sample of the study was consisted of students of education department only. There were total 690 students of education department including both male and female students. The sample was consisted of 60% population because population was very small that's why the researcher has made the full commitment to get responses from the majority. For collection of the data two questionnaires were adapted one questionnaire on Interpersonal Need Inventory (IPNI) it had total 60 items and had 6 sub variables each variables were consisted 10 items. The second questionnaire was on Sources of Self Efficacy (SES) it had total 26 items and had four sub variables named as mastery experiences, vicarious experiences, verbal persuasion and physiological states. Mastery experiences, vicarious experiences and physiological states each were consisted of 6 items and verbal persuasion was consisted of 8 items. Both of the instruments were consisted of two parts first part was based on demographical variables which included; gender, university, program, shift and semester while the second part was consisted of the items according to the variables.

For the validity of the questionnaire the researcher consulted some experts related to the specific field and gave the two questionnaires Interpersonal Need Inventory (IPNI) and Sources of Self Efficacy (SES). The experts checked the questionnaire in the light of the objectives, hypotheses and theoretical frame work. They gave some suggestions for the improvement of the questionnaire. According to the experts' advices and comments the questionnaires were rearranged and prepared for further pilot testing. For pilot testing the researcher had selected 40 students. The researcher had directly contacted respondents for collecting the required data. Researcher had given questionnaires to the respondents along with directions to respond and fill it. When data was gathered the researcher entered in SPSS (Statistical Packages for the Social Sciences) to test the reliability of questionnaire. The reliability of Interpersonal Need Inventory (IPNI) was (.932) and reliability of Sources of Self Efficacy (SES) was (.910). After the

calculation of the reliability of pilot testing some changes were made in the questionnaire to consider it ready for final data collection. For the final data collection 60% sample was selected. The researcher had personally visited the required number of people for data collection and the researcher had personally distributed 414 questionnaires among the students and 354 students returned back the questionnaire the rate of return was 85.5%. When the data was collected the researcher had entered the data through SPSS. For the data analysis the researcher had used tests which were Individual score, Mean and linear Regression.

5.2 Findings

Based on data analysis the results were drawn. Details of these findings are given below.

1. After an analysis of the data gathered by the researcher, Cronbach's Alpha reliability was used to verify the reliability of the instrument. The findings indicate that the overall reliability of the Interpersonal Need Inventory (IPNI) in Cronbach's Alpha was .855. Furthermore, questionnaire consisted of five major dimensions, named as belonging, affiliation, extension, recognition, control and influence. The reliability of these five dimensions in the Cronbach's Alpha were belonging .567, affiliation .752, extension .801, recognition .624, control .790 and influence .748 (Table 4.1).
2. Cronbach's Alpha reliability was applied to verify the reliability of the instrument. The findings indicate that the overall reliability of the Self Efficacy Sources (SES) in Cronbach's Alpha was .722. Furthermore, questionnaire consisted of four major dimensions, named as mastery experiences, vicarious experiences, verbal persuasion and physiological states. The reliability of these four dimensions in the Cronbach's Alpha was mastery experiences .748, verbal persuasion .687, physiological states .682 and vicarious experiences .676 (Table 4.2).
3. The item total correlation was measured for all items of the Interpersonal Need Inventory Scale and the findings show that all items of the scale of Interpersonal Need

Inventory Item total correlation of items included in Interpersonal Need Inventory (IPNI) was calculated and all the items were found significantly correlated with each other. Moreover, item no GE3 (.485**) was found Highest correlation from all items (Table 4.3).

4. The researcher calculated the inter section correlation for Interpersonal Need Inventory and its six dimensions (belonging, affiliation, extension, recognition, control and influence) were correlated with each other. It was found that the highest correlation was between sub constructs interpersonal skills and Recognition at (.668**) and the lowest correlation was between sub constructs Influence and Affiliation that was (.029). (Table 4.4).
5. All items in Self Efficacy Sources (SES) were calculated and all the items have been statistically significant with each other. Moreover, item No VE2 (.499**) was found that highest correlation with all the items (Table 4.5).
6. The researcher measured the intersection correlation of the instrument Self Efficacy Scale (SES) and its four dimensions (mastery, vicarious, verbal, physiological) and it was found that all sub scales were found correlated with each other. It was found that the highest correlation was found between two sub-constructs mastery experiences and vicarious experiences at (.685**). The lowest correlation was between sub-constructs physiological states and mastery experiences at (.015) (Table 4.6).
7. Demographic analysis of the population showed that there were total 354 prospective teachers among them 110 (26.57%) were males and 244 (58.93%).were females. Furthermore there were 63 (15.21%) prospective teachers were from B.ED (4years), 228 (55.08%) were from B.SEd (4 years) and 63 (15.21%) were from M.A Education (2 years). Furthermore 206 (49.7%) were from morning shift and 148 (35.7%) were from evening shift (Table 4.7).

Objective No.1 “To assess the level of interpersonal skills of prospective teachers”.

8. It was found that majority of the respondents had (56.4%) average level of interpersonal skills while (37.8%) prospective teachers were at Above level and only 5.64% of the prospective teachers were at Below Average (Table 4.8).

Objective No.2 “To analyze the practicing self-efficacy of prospective teachers”.

9. It was found that the respondents were agreed that they were using self-efficacy sources with all its four dimensions. The mean value of the four sources of self-efficacy is mastery experiences, vicarious experiences, verbal persuasion and physiological states are 3.61, 3.09, 3.62 and 4 respectively. It means that among the four sources of self-efficacy the respondents were agree on using three sources of self-efficacy they were (mastery experiences, verbal persuasion and physiological states) whereas on the fourth source (vicarious persuasion) the respondents responded neutral. It means that some were agree on using of this source and some were disagree. The highest value of mean is related to the section physiological states (4) and the lowest value is related to section vicarious experiences which is 3.09.(Table 4.9).

Objective No.3 “To assess the effect of prospective teachers’ interpersonal skills on their self-efficacy”.

10. As the hypothesis, there was no statistically significant effect of prospective teachers’ interpersonal skills on their self-efficacy. From the interpretation of the table it was found that interpersonal skills had 6.5% percent variation in self-efficacy and this effect was positive statistically significant at 0.01 level of significance. Thus the hypothesis “there was no statistically significant effect of prospective teachers’ interpersonal skills on their self-efficacy.” was rejected and it was found that there was a statistically significant effect of prospective teachers’ interpersonal skills on their self-efficacy. (Table 4.10).

3a. “To assess the effect of prospective teachers’ interpersonal skills related to belonging on their self-efficacy”.

11. As the hypothesis, there was no statistically significant effect of prospective teachers’ interpersonal skills related to belonging on their self-efficacy. From the interpretation of the table it was found that belonging had 2.6% percent variation in self-efficacy and this effect was positive statistically significant at 0.02 level of significance. Thus the hypothesis “there was no statistically significant effect of prospective teachers’ interpersonal skills related to belonging on their self-efficacy.” was rejected and it was found that there was a statistically significant effect of prospective teachers’ interpersonal skills related to belonging on their self-efficacy. (Table 4.11).

3b. “To assess the effect of prospective teachers’ interpersonal skills related to affiliation on their self-efficacy”.

12. As the hypothesis, there was no statistically significant effect of prospective teachers’ interpersonal skills related to affiliation on their self-efficacy. From the interpretation of the table it was found that it was found that affiliation had 0.4% variation on the self-efficacy. As the significant value was (.238) which was greater than 0.05. Thus the hypothesis “there was no statistically significant effect of prospective teachers’ interpersonal skills related to affiliation on their self-efficacy.” was accepted and it was found that there was no statistically significant effect of prospective teachers’ interpersonal skills related to affiliation on their self-efficacy(4.12).

3c. “To assess the effect of prospective teachers’ interpersonal skills related to extension on their self-efficacy”.

13. As the hypothesis, there was no statistically significant effect of prospective teachers’ interpersonal skills related to extension on their self-efficacy. From the interpretation of the table it was found that extension had 0.2% variation on self-efficacy. The significant value

was .454 which was greater than 0.05. Thus the hypothesis “there was no statistically significant effect of prospective teachers’ interpersonal skills related to extension on their self-efficacy.” was accepted and it was found that there was no statistically significant effect of prospective teachers’ interpersonal skills related to extension on their self-efficacy (4.13).

3d: To assess the effect of prospective teachers’ interpersonal skills related to recognition on their self-efficacy.

14. As the hypothesis, there was no statistically significant effect of prospective teachers’ interpersonal skills related to recognition on their self-efficacy. From the interpretation of the table it was found that recognition had 1.2% variation in self-efficacy and there was positively 0.01 level of significance. Thus the hypothesis “there was no statistically significant effect of prospective teachers’ interpersonal skills related to recognition on their self-efficacy.” was rejected and it was found that there was a statistically significant effect of prospective teachers’ interpersonal skills related to recognition on their self-efficacy (4.14).

3e: “To assess the effect of prospective teachers’ interpersonal skills related to control on their self-efficacy”.

15. As the hypothesis, there was no statistically significant effect of prospective teachers’ interpersonal skills related to control on their self-efficacy. From the interpretation of the table It was found that interpersonal skills related to control represented 7.9% variation on self-efficacy and this effect was positive statistically significant at 0.01 level of significance. Thus the hypothesis “there was no statistically significant effect of prospective teachers’ interpersonal skills related to control on their self-efficacy.” was rejected and it was found that there was a statistically significant effect of prospective teachers’ interpersonal skills related to control on their self-efficacy (Table 4.15).

3f: “To assess the effect of prospective teachers’ interpersonal skills related to influence on their self-efficacy”.

As the hypothesis, there was no statistically significant effect of prospective teachers’ interpersonal skills related to influence on their self-efficacy. From the interpretation of the table it was found that interpersonal skills related to influence represented 15.6% of variation on self-efficacy. There was a statistically positive and significant at 0.01 level of significance. Thus the hypothesis “there was no statistically significant effect of prospective teachers’ interpersonal skills related to influence on their self-efficacy.” was rejected and it was found that there was a statistically significant effect of prospective teachers’ interpersonal skills related to influence on their self-efficacy. (4.16).

The researcher applied linear regression to find the effect of independent variable on dependent variable and it was delimited to one way effect.

Objective No. 3 was to assess the effect of prospective teachers’ interpersonal skills on their self-efficacy and also the six sub variables of interpersonal skills (belonging, affiliation, extension, recognition, control and influence) were used to assess their effect on dependent variable self-efficacy.

5.3 Discussions

The research study was designed to assess the effect of prospective teachers’ interpersonal skills on their self-efficacy with three major objectives. The first objective was to assess the level of interpersonal skills. It was found that mostly prospective teachers were at the average level of interpersonal skills. Humans required interpersonal skills to communicate effectively and to interact with each other. Such abilities are important when communicating in group level with others (Shyam 2016). This finding is supported by the study of Tutkun (2015) that prospective teachers’ interpersonal skills were at average level. Individuals with strong

interpersonal skills can help them to develop their capacity to recognize acceptable behavior to cope with inappropriate behavior, to handle tension, to organize social contact, to share responsibilities and communicate more effectively with others (Bar-On, 2005). In the study of Malik and Hina (2012) result indicated that both (university and college) prospective teachers had awareness about interpersonal skills. The study of Jayanchitra (2020) stated that mostly teachers still have poor awareness about life skills. It is therefore necessary to include such courses in teacher education programs can help in the improvement of life skills of teachers generally and communication skills specifically.

According the 2nd objective the result showed that the mean values related to mastery experiences, vicarious experiences, verbal persuasion and physiological states were 3.61, 3.09, 3.62 and 4 respectively. In the study physiological states was considered as the strongest source of self-efficacy which affect the prospective teachers' self-efficacy and the second one was verbal persuasion which mean was 3.62 and third factor effect on prospective teachers was mastery experiences was 3.61 and the fourth one was vicarious experiences was 3.09 which was neutral as some of the respondents were agree and some were disagree. Thus it was revealed from the study that most of the prospective teachers were agreed using three sources of self-efficacy.

A study conducted by Mohamadi and Asadzadeh (2012) in which the results showed that a mastery experience was the strongest source of self-efficacy. Further this study revealed that mastery experiences, vicarious experiences and verbal persuasion are most effective factors that strengthen teachers' self-efficacy. In the study of Arslan (2018) it showed that mastery experience was the most powerful source of self-efficacy of prospective teachers.

Another study conducted on this is by Sevgi, Gok and Armagan (2017) revealed the similar result that the mean scores of self-efficacy were high among freshly graduated teachers than senior teachers.

The third major objective of the study was to analyze the effect of prospective teachers' interpersonal skills on their self-efficacy. Findings of the study revealed that there is a significant effect of prospective teachers' interpersonal skills on their self-efficacy. Because the indicators of six interpersonal skills named as belonging, affiliation, extension, recognition, control and influence positively effect on prospective teachers' self-efficacy.

The finding of Koyuncu (2018) showed that the participants' life skills predict their self-efficacy at significant level. Further Koyuncu (2018) explained that it needs to communicate with others as a social being and responding to society in general. The mechanism of adaptation requires the quality to select the right thing to live with challenges which are not equally applicable for everybody. These most fundamental abilities are problem solving, decision making, innovative thinking skills, teamwork, self-consciousness, interpersonal skills (Koyuncu, 2018).

In the study of Ismail & Nachiappan (2019) all the respondents agreed that soft skills affect the self-efficacy of individuals. A student who expresses the mastery of soft skills indicates the improvement in their individual self-efficacy. In many situations, their mastery of soft skills especially communication skills make them more confident. They are bolder in dealing with people through strong convictions. They can also overcome their nervous state, which improves their confidence resulting in improvement in self-efficacy.

Self-efficacy is effected by interpersonal skills at variance 6.5% and also effected by its six sub variables named as belonging, affiliation, extension, recognition, control and influence. As the researcher had found the other factors which effect on self-efficacy by searching that what are the independent variables which are effecting on self-efficacy and the factors which are effecting self-efficacy are as follow: such as a study conducted by Zarei and Taheri (2013) that musical intelligence affects self-efficacy of individuals. Another study conducted by Guan and So (2016) stated that social identity also effect on self-efficacy and other study conducted by

Han, Chu, Song and Li (2015) revealed that social capital and its dimensions (peer support, family support and general support of others) all have predictive effect on self-efficacy.

5.4 Conclusion

From the findings of the study following conclusions were drawn:

Objective No.1 was to assess the level of interpersonal skills of prospective teachers. On the basis of findings, it was concluded the majority of prospective teachers exhibited an average level of interpersonal skills at (56.4%). Prospective teachers can enhance their interpersonal skills through social interaction with others. Interpersonal skills are very essential skills that everyone may have. Students can only attain these skills through teachers. So it is the time for teachers to get acquainted with these skills. Therefore, it is essential for curriculum wing to include interpersonal skills related practices in already existed courses. So that it can be imported easily to the students.

Objective No.2 was to analyze the practicing self-efficacy of prospective teachers. It was found that respondents were agreed that they were using four sources of self-efficacy. The mean value of mastery experiences was 3.61, vicarious experience was 3.09, verbal persuasion was 3.62 and a physiological state was 4. The highest value of mean is related to the section physiological states (4). Teachers can develop their self-efficacy through practical work, presentations and workshops.

Objective No.3 was to assess prospective teachers' interpersonal skills on their self-efficacy. It was concluded that prospective teachers represent 6.5% variation in self-efficacy and it was concluded from the finding that there was a significant effect of prospective teachers' interpersonal skills on their self-efficacy. The conclusions of sub hypotheses of objective no.3 were as follow:

It was concluded that belonging had 2.6% effect on self-efficacy and concluded that there was a significant effect of prospective teachers' interpersonal skills related to belonging on their self-efficacy.

It was concluded that affiliation had 0.4% effect on self-efficacy and concluded that there was no statistically effect of prospective teachers' interpersonal skills related to affiliation on their self-efficacy.

It was concluded that extension had 0.2% effect on self-efficacy and concluded that there was found statistically significant effect of prospective teachers' interpersonal skills related to extension on their self-efficacy.

It was concluded that recognition had 1.2% effect on self-efficacy and concluded that there was found no statistically significant effect of prospective teachers' interpersonal skills related to recognition on their self-efficacy.

It was concluded that control had 7.9% effect on self-efficacy and concluded that there was found no statistically significant effect of prospective teachers' interpersonal skills related to control on their self-efficacy.

It was concluded that influence had 15.6% variation in self-efficacy and concluded that there was found no statistically significant effect of prospective teachers' interpersonal skills related to influence on their self-efficacy.

5.5 Recommendations

On the basis of findings of the study following recommendations were made:

1. It was found that majority of the prospective teachers had (56.4%) average level of interpersonal skills. According to the objective No.1 recommendations are as follow:
 - a. Educational institutions may offer such type of activities which enhance the interpersonal skills of prospective teachers.

- b. Teacher educators may create the environment of classroom that is very friendly so that each and every student participates.
 - c.]Teacher educators may also engage prospective teachers in group activities to involve them with each other and work together in team work to train them to become interact with each other and to increase their interpersonal skills.
- 2. It was found that respondents were using self-efficacy with its entire dimensions that were related to mastery experiences, vicarious experiences verbal persuasion and physiological states. So, it is recommended that:
 - a Curriculum of the already existed course work may need to be up to date and with each theoretical chapter there may be added practical work for the improvement of prospective teachers' self-efficacy.
 - b The duration of internships may be increased and the educational institutions where these trainees are going for internship they may give the trainees opportunities to utilize their skills to improve their four sources of self-efficacy.
- 3. It was revealed that prospective teachers' interpersonal skills had 6.5% variation on self-efficacy. It further revealed that there was a positive significant effect of interpersonal skills of prospective teachers on their self-efficacy level. So, it is recommended that:
 - a. The educational institutions may offer teacher training programs in which teacher educators may focus on their building of interpersonal skills so that their self-efficacy would be improve.
 - b. During the course work University may conduct workshops, seminars and make sure to give opportunity to each and every learner to participate which is a best platform for improving their skills.

4. It was found that belonging had 2.6% percent variation in self-efficacy and this effect was positive statistically significant at 0.02 level of significance. So it is recommended that:
 - a. It is the duty of university may offer seminars, workshops and presentations for students and it would be sure to include each and every student in these activities.
 - b. Teacher educator may conduct group activities in which each and every student must be included so by interacting and discussing with each other may be improve their skills.
5. Affiliation had 0.4% variation on the self-efficacy and the rest is related to other aspects. As the significant value is (.238) which is greater than 0.05. So it is recommended that:
 - a. Teacher educators may make the environment of the classroom very friendly so that each and every student participates without any hesitation and become very friendly and close to each other.
6. Extension had 0.2% variation on self-efficacy. The significant value was .454 which was greater than 0.05. So it is recommended that:
 - a. Teacher educators may make group of students and assign problem based activities in which the students help each other and may try to solve problems of each other.
 - b. Teacher educators may engage the practitioners in such activities which may help to develop their self-motivation in order to achieve the defined goals.
7. Recognition represented 7.9% variation on self-efficacy and this effect was positive statistically significant at 0.01 level of significance. So it is recommended that:

- a. Teacher educators may make group of students and assign problem based activities in which the students help each other and may try to solve problems of each other.
8. Control had 1.2% variation in self-efficacy and there was positively 0.01 level of significance. So it is recommended that:
 - a. Teacher educators in classroom may give opportunity for future teachers to control the class for one day or one week according to their strength this may help them to use the control skills and improve their self-efficacy
 - b. During internship program school administration may make sure to give opportunities for internees to take classes where they may communicate and control the class to improve their self-efficacy.
9. Influence represented 15.6% of variation on self-efficacy. There was a statistically positive and significant at 0.01 level of significance. So it is recommended that:
 - a. Teacher educators may make the classroom environment very friendly so that they discuss with each other and share their point of views and decisions with classroom and this may help them to improve their self-efficacy.

5.6 Recommendations for Future Researchers

The researcher has given the following recommendations to future researchers.

1. It is recommended for further researchers can explore the dimensions that study was unable to cover, this study was delimited to only Islamabad public sector universities, A comparison can be conducted between public and private university students located in Islamabad.
2. This research can also be carried out in both Islamabad and Rawalpindi public and Private Sector University for comparative study.

3. As the sample size is very small, further the future researchers can conduct a research on larger population and sample size.
4. As this study was conducted on prospective teachers only so this research can also be conducted in other disciplines at university level.

5.7 Limitations

Throughout the research process researcher had faced some research restrictions which are as follow:

Due to the pandemic COVID-19 situation and lockdown the researcher was unable to collect the data because all the universities were closed that's why the researcher was unable to collect data from the concerned universities. Researcher collected online data from the respondents and could not visit due to corona pandemic.

Due to COVID pandemic the researcher used to fill questionnaire through online google form. The researcher used simple language which was easily understandable to fill the questionnaire. The researcher used only close ended questionnaires based on five point likert scale ranging from 1-5 on both variables interpersonal skills and self-efficacy which were based on five point likert scale ranging from 1-5.

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Conceptual Framework

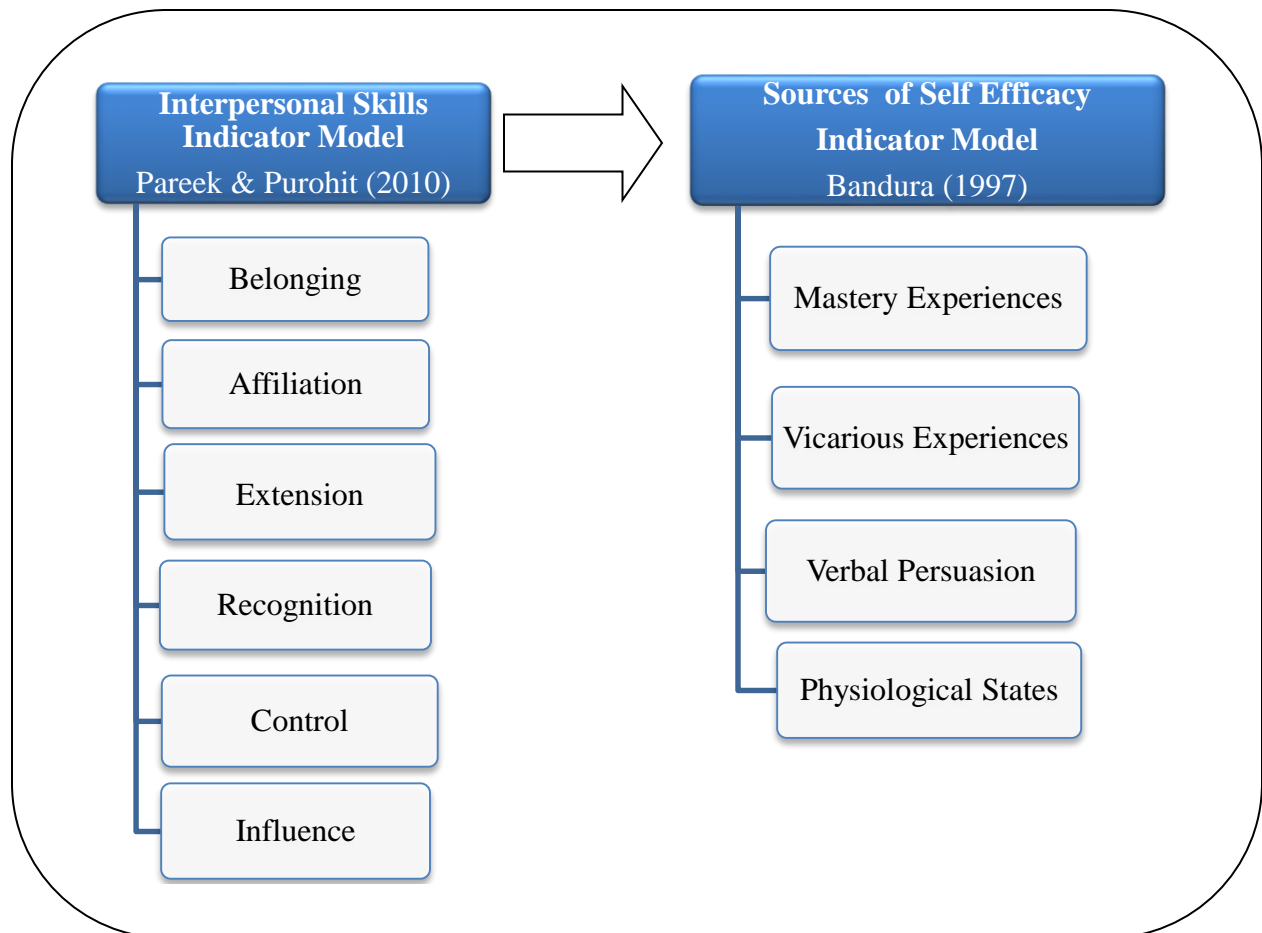


Fig 1.1 Conceptual framework of the study

Demographics Presentation of the Sample

| Demographic | Category | Frequency N | Percentage % |
|--------------------|--|--------------------|---------------------|
| Gender | Males | 110 | 26.57% |
| | Females | 244 | 58.93% |
| Total (414) | | 354 | 85.5% |
| University | International Islamic University Islamabad (IIUI) | 354 | 85.5% |
| Total (414) | | 354 | 85.5% |
| Program | B.Ed (4 years) | 63 | 15.21% |
| | B.SEd (4 years) | 228 | 55.08% |
| | M.A Education (2 years) | 63 | 15.21% |
| Total (414) | | 354 | 85.5% |
| Semester | 2 nd | 66 | 15.94% |
| | 3 rd | 62 | 14.97% |
| | 4 th | 61 | 14.73% |
| | 5 th | 40 | 9.66% |
| | 6 th | 45 | 10.86% |
| | 7 th | 40 | 9.67% |
| | 8 th | 40 | 9.67% |
| Total (414) | | 354 | 85.5% |
| Shift | Morning | 206 | 49.7% |
| | Evening | 148 | 35.7% |
| Total (414) | | 354 | 85.5% |

List of Universities as population

| Sr# | University Name | Number of Prospective Teachers' Enrolled in Session 2019 |
|--------------------|--|---|
| 1. | National University of Modern Languages Islamabad (NUML) | 294 |
| 2. | International Islamic University Islamabad (IIUI) | 396 |
| Grand Total | | 690 |

Appendix D

List of HEC Recognized Public-Sector Universities in Islamabad

| S.No | University Name | Main campus location | Discipline | Website address |
|------|--|----------------------|----------------------------|---|
| 1 | Air University, Islamabad | Islamabad | General | https://www.au.edu.pk |
| 2 | Allama Iqbal Open university (AIOU), Islamabad | Islamabad | General | http://www.aiou.edu.pk |
| 3 | Bahira University, Islamabad | Islamabad | General | https://bahria.edu.pk |
| 4 | COMSATS Institute of Information Technology, Islamabad | Islamabad | General | https://www.comsats.edu.pk |
| 5 | Federal Urdu University of Arts, Science and Technology, Islamabad | Islamabad | General | http://www.fuuastisb.edu.pk |
| 6 | Institute of Space and Technology (IST), Islamabad | Islamabad | General | http://www.ist.edu.pk |
| 7 | International Islamic University, Islamabad | Islamabad | General | http://iiu.edu.pk |
| 8 | National Defense University, Islamabad | Islamabad | General | http://www.ndu.edu.pk |
| 9 | National University of Modern languages (NUML), Islamabad | Islamabad | General | https://www.numl.edu.pk |
| 10 | National University of Sciences and Technology languages (NUST), Islamabad | Islamabad | General | http://www.nust.edu.pk |
| 11 | National University of Technology (NUTECH), Islamabad | Islamabad | Engineering and Technology | https://nutech.edu.pk |
| 12 | Pakistan Institute of Development Economics (PIDE), Islamabad | Islamabad | General | http://www.pide.org.pk |
| 13 | Pakistan Institute of Engineering and Applied Sciences, Islamabad | Islamabad | General | http://www.pieas.edu.pk |
| 14 | Quaid-i-Azam University, Islamabad | Islamabad | General | https://qau.edu.pk |
| 15 | Shaheed Zulfiqar Ali Bhutto Medical university, Islamabad | Islamabad | Medical | http://www.szabmu.edu.pk/ |

Covering Letter for Tool Validation

Cover Letter of Validity Certificate

EFFECT OF PROSPECTIVE TEACHERS' INTERPERSONAL SKILLS ON THEIR SELF EFFICACY

Subject **Request for Validity**

Respected Sir/ Madam,

I have attached my questionnaires adapted for the purpose of research titled as “Effect of Prospective Teachers’ interpersonal skills on their self efficacy”.

Interpersonal Needs Inventory

To assess Teachers’ interpersonal skills Researcher has adapted interpersonal skills assessment Questionnaire is based on the model of “Interpersonal Needs Inventory” (IPNI) presented by Pareek & Purohit (2010). Interpersonal Needs Inventory has 6 dimensions and consisted of 60 items in total.

1. Belonging 2. Affiliation 3. Recognition 4. Extension 5. Control
6. Influence

Self-Efficacy Questionnaire

To assess Prospective Teachers’ Self Efficacy Researcher has adapted the questionnaire in the light of the indicators presented in the model of “Sources of Self Efficacy. Researcher adapted the questionnaire of Hoi, Zhou, Teo and Nie (2017).Self Efficacy has 4 dimensions and consisted of 26 items intotal.

1. MasteryExperiences
2. VicariousExperiences
3. VerbalPersuasion
4. Physiological States

Certificate for Tool Validation

Certificate for Tool Validation

(Prospective Teachers' Interpersonal Skills Questionnaire)



CERTIFICATE OF VALIDITY

EFFECT OF PROSPECTIVE TEACHERS' INTERPERSONAL SKILLS ON THEIR SELF EFFICACY

By Ms Azra Raza,

M.phil Scholar, Department of Education National University of Modern Languages (NUML)

H-9, Islamabad, Pakistan

This is to certify that the questionnaire developed by the scholar towards her thesis has been assessed by me and I find it to have been designed adequately to assess prospective teachers' interpersonal skills based on Six Variables (Belonging, Affiliation, Recognition, Extension, Control and Influence).

It is considered that the research instruments developed for the research above- titled, is according to the objectives and hypothesis of the research, assure adequate construct and content validity according to the purpose of the research, and can be used for data collection by the researcher with fair amount of confidence.

Name Dr. Fouzia Ajmal

Designation Assistant Professor

Institute Department of Education
International Islamic University Islamabad

Signature

Date 22-12-2019

Certificate for Tool Validation
(Prospective Teachers' Self Efficacy Questionnaire)



CERTIFICATE OF VALIDITY
EFFECT OF PROSPECTIVE TEACHERS' INTERPERSONAL SKILLS
ON THEIR SELF EFFICACY

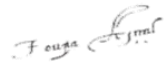
M.phil Scholar, Department of Education National University of Modern Languages (NUML)
H-9, Islamabad, Pakistan

By Ms Azra Raza

This is to certify that the questionnaire developed by the scholar towards her thesis has been assessed by me and I find it to have been designed adequately to assess prospective teachers' Self Efficacy based on four sub variables (Mastery Experiences, Vicarious Experiences, Verbal Persuasion and Physiological States).

It is considered that the research instruments developed for the research above- titled, is according to the objectives and hypothesis of the research, assure adequate construct and content validity according to the purpose of the research, and can be used for data collection by the researcher with fair amount of confidence.

Name Dr. Fouzia Ajmal
Designation Assistant Professor
Institute Department of Education
International Islamic University Islamabad

Signature 
Date 22-12-2019

Certificate for Tool Validation
(Prospective Teachers' Self Efficacy Questionnaire)



CERTIFICATE OF VALIDITY
EFFECT OF PROSPECTIVE TEACHERS' INTERPERSONAL SKILLS ON THEIR
SELF EFFICACY

M.Phil Scholar, Department of Education National University of Modern Languages (NUML)

H-9, Islamabad, Pakistan

By Ms Azra Raza

This is to certify that the questionnaire developed by the scholar towards her thesis has been assessed by me and I find it to have been designed adequately to assess prospective teachers' Self Efficacy based on four sub variables (Mastery Experiences, Vicarious Experiences, Verbal Persuasion and Physiological States).

It is considered that the research instruments developed for the research above- titled, is according to the objectives and hypothesis of the research, assure adequate construct and content validity according to the purpose of the research, and can be used for data collection by the researcher with fair amount of confidence.

Name Dr. M. Imran Yousuf
Designation _____
Institute _____
Signatures [Signature] **Dr. M. Imran Yousuf**
Date 19-12-19 **Associate Professor**
Department of Education
PMAS Arid Agriculture University
Rawalpindi

Certificate for Tool Validation

(Prospective Teachers' Interpersonal Skills Questionnaire)



CERTIFICATE OF VALIDITY

**EFFECT OF PROSPECTIVE TEACHERS' INTERPERSONAL SKILLS ON THEIR
SELF EFFICACY**

By Ms Azra Raza,

M.phil Scholar, Department of Education National University of Modern Languages (NUML)

H-9, Islamabad, Pakistan

This is to certify that the questionnaire developed by the scholar towards her thesis has been assessed by me and I find it to have been designed adequately to assess prospective teachers' interpersonal skills based on Six Variables (Belonging, Affiliation, Recognition, Extension, Control and Influence).

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Name Dr. M. Imran Yousuf

Designation _____

Institute _____

Signatures _____

Date 19-12-19

Dr. M. Imran Yousuf
Associate Professor
Department of Education
PMAS-Arid Agriculture University
Rawalpindi

Certificate for Tool Validation

(Prospective Teachers' Interpersonal Skills Questionnaire)



CERTIFICATE OF VALIDITY

EFFECT OF PROSPECTIVE TEACHERS' INTERPERSONAL SKILLS
ON THEIR SELF EFFICACY

By Ms Azra Raza,

M.phil Scholar, Department of Education National University of Modern Languages (NUML)

H-9, Islamabad, Pakistan

This is to certify that the questionnaire developed by the scholar towards her thesis has been assessed by me and I find it to have been designed adequately to assess prospective teachers' interpersonal skills based on Six Variables (Belonging, Affiliation, Recognition, Extension, Control and Influence).

It is considered that the research instruments developed for the research above- titled, is according to the objectives and hypothesis of the research, assure adequate construct and content validity according to the purpose of the research, and can be used for data collection by the researcher with fair amount of confidence.

Name Dr. Farhana Tabassum
Designation Assistant professor
Institute NUML Islamabad
Signatures [Signature]
Date 24/12/19

Certificate for Tool Validation
(Prospective Teachers' Self Efficacy Questionnaire)



CERTIFICATE OF VALIDITY
EFFECT OF PROSPECTIVE TEACHERS' INTERPERSONAL SKILLS
ON THEIR SELF EFFICACY

M.phil Scholar, Department of Education National University of Modern Languages (NUML)
H-9, Islamabad, Pakistan

By Ms Azra Raza

This is to certify that the questionnaire developed by the scholar towards her thesis has been assessed by me and I find it to have been designed adequately to assess prospective teachers' Self Efficacy based on four sub variables (Mastery Experiences, Vicarious Experiences, Verbal Persuasion and Physiological States).

It is considered that the research instruments developed for the research above- titled, is according to the objectives and hypothesis of the research, assure adequate construct and content validity according to the purpose of the research, and can be used for data collection by the researcher with fair amount of confidence.

Name Dr. Farheen dr. Tabassum
Designation Assistant- Prof.
Institute NUML Islamabad
Signatures Farheen dr.
Date 24/12/19

Certificate for Tool Validation

(Prospective Teachers' Interpersonal Skills Questionnaire)



CERTIFICATE OF VALIDITY

EFFECT OF PROSPECTIVE TEACHERS' INTERPERSONAL SKILLS
ON THEIR SELF EFFICACY

By Ms Azra Raza,

M.phil Scholar, Department of Education National University of Modern Languages (NUML)

H-9, Islamabad, Pakistan

This is to certify that the questionnaire developed by the scholar towards her thesis has been assessed by me and I find it to have been designed adequately to assess prospective teachers' interpersonal skills based on Six Variables (Belonging, Affiliation, Recognition, Extension, Control and Influence).

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Name Dr. Malik Ghulam Bekhal
Designation HOD Fatm
Institute Fatima Jinnah women University
Signatures [Signature]
Date 22-12-2019

Certificate for Tool Validation
(Prospective Teachers' Self Efficacy Questionnaire)



CERTIFICATE OF VALIDITY
EFFECT OF PROSPECTIVE TEACHERS' INTERPERSONAL SKILLS
ON THEIR SELF EFFICACY

M.phil Scholar, Department of Education National University of Modern Languages (NUML)
H-9, Islamabad, Pakistan

By Ms Azra Raza

This is to certify that the questionnaire developed by the scholar towards her thesis has been assessed by me and I find it to have been designed adequately to assess prospective teachers' Self Efficacy based on four sub variables (Mastery Experiences, Vicarious Experiences, Verbal Persuasion and Physiological States).

It is considered that the research instruments developed for the research above- titled, is according to the objectives and hypothesis of the research, assure adequate construct and content validity according to the purpose of the research, and can be used for data collection by the researcher with fair amount of confidence.

Name Dr. Malik Ghulam Behl

Designation HOD

Institute Fatima jinnah women University

Signatures _____

Date 22-12-2019

Certificate for Tool Validation

(Prospective Teachers' Interpersonal Skills Questionnaire)



CERTIFICATE OF VALIDITY

**EFFECT OF PROSPECTIVE TEACHERS' INTERPERSONAL SKILLS
ON THEIR SELF EFFICACY**

By Ms Azra Raza,

M.phil Scholar, Department of Education National University of Modern Languages (NUML)

H-9, Islamabad, Pakistan

This is to certify that the questionnaire developed by the scholar towards her thesis has been assessed by me and I find it to have been designed adequately to assess prospective teachers' interpersonal skills based on Six Variables (Belonging, Affiliation, Recognition, Extension, Control and Influence).

It is considered that the research instruments developed for the research above- titled, is according to the objectives and hypothesis of the research, assure adequate construct and content validity according to the purpose of the research, and can be used for data collection by the researcher with fair amount of confidence.

Name Dr. M. Ajmal
Designation _____
Institute _____
Signatures Dr. M. Ajmal Chaudhary
CHAIRMAN
Department of Distance
Education
Date 22-11-19 & Non Formal Education
Allama Iqbal Open University, Islamabad

Certificate for Tool Validation
(Prospective Teachers' Self Efficacy Questionnaire)



CERTIFICATE OF VALIDITY
EFFECT OF PROSPECTIVE TEACHERS' INTERPERSONAL SKILLS
ON THEIR SELF EFFICACY

M.phil Scholar, Department of Education National University of Modern Languages (NUML)
H-9, Islamabad, Pakistan

By Ms Azra Raza

This is to certify that the questionnaire developed by the scholar towards her thesis has been assessed by me and I find it to have been designed adequately to assess prospective teachers' Self Efficacy based on four sub variables (Mastery Experiences, Vicarious Experiences, Verbal Persuasion and Physiological States).

It is considered that the research instruments developed for the research above- titled, is according to the objectives and hypothesis of the research, assure adequate construct and content validity according to the purpose of the research, and can be used for data collection by the researcher with fair amount of confidence.

Designation _____

Dr. Muhammad Ajmal Chaudhary

Signatures _____

Department of Distance,
& Non Formal Education
Allama Iqbal Open University, Islamabad


Date _____

22-12-19.

List of Experts for Tool Validation

| Sr No. | Validity of Experts | Name of the University |
|--------|-------------------------|---|
| 1 | Dr Muhammad Ajmal | Chairman Department of Distance and Non Formal Education in Allama Iqbal Open University (AIOU) (Islamabad) |
| 2 | Dr. Farkhanda Tabbassum | Assistant Professor in National University of Modern Languages (NUML) (Islamabad) |
| 3 | Dr Fouzia Ajmal | Assistant Professor in International Islamic University Islamabad (IIUI) |
| 4 | Dr Malik Ghulam Behlol | Head of Department in Fatima Jinnah Women University Rawalpindi (FJWU) |
| 5 | Dr. Imran Yousaf | Associate Professor in PMAS Agriculture University (Rawalpindi) |

Reference Letter of Data Collection

| | |
|---|---|
|  | DEPARTMENT OF EDUCATION FACULTY OF SOCIAL SCIENCES National University of Modern Languages Sector H-9, Islamabad Tel. No: 051-9265100 Ext: 2090 |
| ML.1-5/2020-Edu | Dated: 10-02-2020 |

WHOM SO EVER IT MAY CONCERN

Ms. Azra Raza, student of MPhil, Department of Education, National University of Modern Languages is engaged in the Research Work.

She may please be allowed to visit you to obtain the required information for her Research Work.

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

Dr. Hukam Dad Malik
Head,
Department of Education.

COVERING LETTER OF QUESTIONNAIRE

Effect of Prospective Teachers' Interpersonal Skills on their Self efficacy

Dear Respondent,

I am M.Phil Scholar (Education) working on my research work on the above mentioned topic. You are requested to fill in the questionnaire attached. The first part of questionnaire consists of Demographic information. The remaining part of this questionnaire deals with two variables first part is about prospective teachers' self efficacy and second is about prospective teachers' interpersonal skills. It is assured that your response will be kept confidential and will not be disclosed to any person or authority. The questionnaire is developed to collect data for my research work only.

Azra Raza (M.Phil Researcher)

Department of Education

National University of Modern Languages

DEMOGRAPHIC INFORMATION

| | | | | | | | | | |
|----|------------|--|-----------------|-------------------|-----------------|---|-----------------|-----------------|-----------------|
| a. | Gender | Male | | | | Female | | | |
| | | 1 | | | | 2 | | | |
| b. | University | National University of Modern Languages Islamabad (NUML) | | | | International Islamic University Islamabad (IIUI) | | | |
| | | 1 | | | | 2 | | | |
| c. | Program | B.Ed. (4 Years) | | B.S.Ed. (4 Years) | | M.A (2 Years) | | EPM (2 Years) | |
| | | 1 | | 2 | | 3 | | 4 | |
| d. | Shift | Morning | | | | Afternoon | | | |
| | | 1 | | | | 2 | | | |
| e. | Semester | 1 st | 2 nd | 3 rd | 4 th | 5 th | 6 th | 7 th | 8 th |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

Appendix K

Interpersonal Need Inventory (IPNI)

INSTRUCTIONS

You are required to give your responses against the options ranging from 5to1 indicating your preferences of responses (5= Strongly Agree, 4=Agree, 3= Neutral, 2= Disagree, 1=-Strongly Disagree).

| Prospective teachers' Interpersonal Skills | | | | | | | |
|--|------|---|----|---|---|---|----|
| Interpersonal Skills | | | | | | | |
| Sr No | Code | I. Belonging GB (Give Belonging) RB (Receive Belonging) (Belonging means socialization. It refers to make contacts with all people and express feelings and emotions for them.) | SD | D | N | A | SA |
| 1. | GB1 | I like to take part in different workshops and seminars. | 1 | 2 | 3 | 4 | 5 |
| 2. | RB2 | I like to become a member of groups. | 1 | 2 | 3 | 4 | 5 |
| 3. | RB3 | I like my fellows to include me in their groups. | 1 | 2 | 3 | 4 | 5 |
| 4. | GB4 | I like to get involve in group activities. | 1 | 2 | 3 | 4 | 5 |
| 5. | RB5 | I like to involve my fellows to my group. | 1 | 2 | 3 | 4 | 5 |
| 6. | RB6 | I like to give suggestions to my group. | 1 | 2 | 3 | 4 | 5 |
| 7. | GB7 | I like to work with my fellows. | 1 | 2 | 3 | 4 | 5 |
| 8. | GB8 | I feel comfortable to work alone. | 1 | 2 | 3 | 4 | 5 |
| 9. | GB9 | I like my fellows to invite me to their group activities. | 1 | 2 | 3 | 4 | 5 |
| 10. | RB10 | I care about my fellows. | 1 | 2 | 3 | 4 | 5 |
| | | II. Affiliation GA (Give Affiliation) RA (Receive Affiliation) (Affiliation means connection with other people or group to establish close and personal relationship.) | SD | D | N | A | SA |
| 1 | GA1 | I like to make contacts with all my fellows. | 1 | 2 | 3 | 4 | 5 |

| | | | | | | | |
|----|------|--|-----------|----------|----------|----------|-----------|
| 2 | RA2 | I like my fellows to be sincere to me. | 1 | 2 | 3 | 4 | 5 |
| 3 | GA3 | I like to express feelings to my fellows. | 1 | 2 | 3 | 4 | 5 |
| 4. | RA4 | I like my fellows to share their feelings with me. | 1 | 2 | 3 | 4 | 5 |
| 5 | GA5 | I like to work in a friendly environment. | 1 | 2 | 3 | 4 | 5 |
| 6 | RA6 | I like to work with my fellows in a friendly environment. | 1 | 2 | 3 | 4 | 5 |
| 7 | GA7 | I like to be surrounded with fellows. | 1 | 2 | 3 | 4 | 5 |
| 8 | RA8 | I like my fellows to be surrounded with me. | 1 | 2 | 3 | 4 | 5 |
| 9 | GA9 | I like to have a big friends' circle. | 1 | 2 | 3 | 4 | 5 |
| 10 | GA10 | I like to make a close relationship with my fellows. | 1 | 2 | 3 | 4 | 5 |
| | | III. Extension GE (Give Extension) RE (Receive Extension) (It refers to understanding and share emotions with people and help to sort out the problems of the people.) | SD | D | N | A | SA |
| 1 | GE1 | I like to help to sort out the problems of my fellows. | 1 | 2 | 3 | 4 | 5 |
| 2 | GE2 | I like to work for a group rather than working for myself. | 1 | 2 | 3 | 4 | 5 |
| 3 | GE3 | I like to share my problems with my fellows. | 1 | 2 | 3 | 4 | 5 |
| 4 | RE4 | I like my fellows to share their problems with me. | 1 | 2 | 3 | 4 | 5 |
| 5 | RE5 | I like my fellows to help me in achieving a goal. | 1 | 2 | 3 | 4 | 5 |
| 6 | GE6 | I like to help my fellows in achieving their goals. | 1 | 2 | 3 | 4 | 5 |
| 7 | RE7 | I like my fellows to help me when needed. | 1 | 2 | 3 | 4 | 5 |
| 8 | GE8 | I like to help fellows whenever they need help. | 1 | 2 | 3 | 4 | 5 |
| 9 | GE9 | I suffer for the sake of my fellows. | 1 | 2 | 3 | 4 | 5 |
| 10 | RE10 | I like my fellows to support me in emergency situation. | 1 | 2 | 3 | 4 | 5 |
| | | IV. Recognition GR (Give Recognition) RR (Receive Recognition) (Recognition means the ability to recognize something, people or places from your previous knowledge. It refers to recognize people with their previous knowledge.) | SD | D | N | A | SA |
| 1 | RR1 | I feel happy when my fellows appreciate my work. | 1 | 2 | 3 | 4 | 5 |
| 2 | GR2 | I like to appreciate my fellows' work for their best | 1 | 2 | 3 | 4 | 5 |

| | | | | | | | |
|----|------|---|-----------|----------|----------|----------|-----------|
| | | performance. | | | | | |
| 3 | GR3 | I give attention to my fellows. | 1 | 2 | 3 | 4 | 5 |
| 4 | RR4 | I like my fellows to praise me for my success. | 1 | 2 | 3 | 4 | 5 |
| 5 | GR5 | I like to appreciate my fellows for their success. | 1 | 2 | 3 | 4 | 5 |
| 6 | GR6 | I like to praise my fellows for their best experience about their work. | 1 | 2 | 3 | 4 | 5 |
| 7 | RR7 | I like my fellows applying my skills. | 1 | 2 | 3 | 4 | 5 |
| 8 | GR8 | I don't get irritated from my fellows when I am busy. | 1 | 2 | 3 | 4 | 5 |
| 9 | RR9 | I don't ignore the appreciation of my friends for my work. | 1 | 2 | 3 | 4 | 5 |
| 10 | GR10 | I like my fellows to give my reference. | | | | | |
| | | V. Control GC(Give Control) RC (Receive Control) (Control means to supervise. Use your power to control something. It refers to compete in group for power and force to do things in their own ways.) | SD | D | N | A | SA |
| 1 | GC1 | I prefer to control the group in which I am working. | 1 | 2 | 3 | 4 | 5 |
| 2 | RC2 | I remain silent, If my fellows refuse to accept the idea. | 1 | 2 | 3 | 4 | 5 |
| 3 | GC3 | My fellows easily guide me. | 1 | 2 | 3 | 4 | 5 |
| 4 | RC4 | I like it when my fellows follow me. | 1 | 2 | 3 | 4 | 5 |
| 5 | GC5 | I like to ask my fellows what to do. | 1 | 2 | 3 | 4 | 5 |
| 6 | RC6 | I like it when my fellows direct me. | 1 | 2 | 3 | 4 | 5 |
| 7 | GC7 | I like it when my fellows ask me about my plans. | 1 | 2 | 3 | 4 | 5 |
| 8 | RC8 | I like to give autonomous decisions to my fellows. | 1 | 2 | 3 | 4 | 5 |
| 9 | RC9 | I like my senior fellows to help me to sort out my problems. | 1 | 2 | 3 | 4 | 5 |
| 10 | RC10 | I like my fellows to do things my way. | 1 | 2 | 3 | 4 | 5 |
| | | I. Influence (Give Influence) RI (Receive Influence) (Influence means the power or the capacity to effect some | SD | D | N | A | SA |

| | | | | | | | |
|----|------|--|---|---|---|---|---|
| | | one's behavior character. It refers to leave an effect on people by decisions and keep importance in the group.) | | | | | |
| 1 | GI1 | I like to keep up my importance in my group. | 1 | 2 | 3 | 4 | 5 |
| 2 | RI2 | I like to influence other fellows by my decisions. | 1 | 2 | 3 | 4 | 5 |
| 3 | RI3 | I want my class fellows to accept my point of view. | 1 | 2 | 3 | 4 | 5 |
| 4 | RI4 | I like my fellows to give me suggestions. | 1 | 2 | 3 | 4 | 5 |
| 5 | RI5 | I like to influence my fellows by my decisions. | 1 | 2 | 3 | 4 | 5 |
| 6 | GI6 | I like to learn new things after searching. | 1 | 2 | 3 | 4 | 5 |
| 7 | GI7 | I don't like disagreement of my fellows. (R) | 1 | 2 | 3 | 4 | 5 |
| 8 | RI8 | I like to make decisions after discussions with my fellows. | 1 | 2 | 3 | 4 | 5 |
| 9 | GI9 | I like to read books for getting more new ideas. | 1 | 2 | 3 | 4 | 5 |
| 10 | RI10 | I like my fellows offering me suggestions. | 1 | 2 | 3 | 4 | 5 |


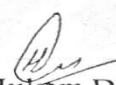
Self-Efficacy Sources (SES)

| Self-Efficacy | | | | | | | |
|----------------------|------|--|----|---|---|---|----|
| Sr No | Code | I. Mastery Experiences (This is the first source of self efficacy it refers to the experience of a person's towards his goal accomplishments.) | SD | D | N | A | SA |
| 1. | ME1 | I feel that I can perform my teaching tasks very well. | 1 | 2 | 3 | 4 | 5 |
| 2. | ME2 | I hope that I will be a successful teacher in future. | 1 | 2 | 3 | 4 | 5 |
| 3. | ME3 | I feel that I have good knowledge about latest teaching strategies. | 1 | 2 | 3 | 4 | 5 |
| 4. | ME4 | I think that I understand the use of teaching skills. | 1 | 2 | 3 | 4 | 5 |
| 5. | ME5 | I feel easy in developing concepts of others/students. | 1 | 2 | 3 | 4 | 5 |
| 6. | ME6 | I can teach the difficult content in an easy way for my students. | 1 | 2 | 3 | 4 | 5 |
| | | II. Vicarious Experiences (Vicarious experiences means to observe or watch others. In this source a person learns from watching others' behavior and he is able to know his own that can he perform the specific task or not.) | SD | D | N | A | SA |
| 1. | VE1 | I am encouraged by looking at the performance of my class fellows. | 1 | 2 | 3 | 4 | 5 |
| 2. | VE2 | I get encouraged by my teachers' teaching strategies. | 1 | 2 | 3 | 4 | 5 |
| 3. | VE3 | I actively look for expert teachers as role model for my teaching behavior. | 1 | 2 | 3 | 4 | 5 |
| 4. | VE4 | I feel happy by the performance of my peer fellows. | 1 | 2 | 3 | 4 | 5 |

| | | | | | | | |
|----|------|---|-----------|----------|----------|----------|-----------|
| 5. | VE5 | I get motivated by my peer fellows. | 1 | 2 | 3 | 4 | 5 |
| 6. | VE6 | I continuously appreciate teaching capabilities of my peer fellows. | 1 | 2 | 3 | 4 | 5 |
| | | III. Verbal Persuasion Verbal persuasion means orally persuade someone. When a person motivates you that you can do the task verbally then it increases your confidence. | SD | D | N | A | SA |
| 1. | VP1. | My teachers expect from me that I will be a good teacher in future. | 1 | 2 | 3 | 4 | 5 |
| 2. | VP2. | My teacher appreciates my teaching skills. | 1 | 2 | 3 | 4 | 5 |
| 3. | VP3. | My parents feel proud for me as a future teacher. | 1 | 2 | 3 | 4 | 5 |
| 4. | VP4. | My peers encourage me to become an effective teacher. | 1 | 2 | 3 | 4 | 5 |
| 5. | VP5. | My fellows don't provide immediate feedback to improve my teaching skills. (R) | 1 | 2 | 3 | 4 | 5 |
| 6. | VP6. | My fellows feel that I have a good problem solving skills to handle classroom situations. | 1 | 2 | 3 | 4 | 5 |
| 7. | VP7. | The Head of department appreciates me on my achievements. | 1 | 2 | 3 | 4 | 5 |
| 8. | VP8. | The Head of department feels that I have teaching talent. | 1 | 2 | 3 | 4 | 5 |
| | | IV. Physiological and states (It refers to the judgment of the task of a person that how confident he is to perform a task. It is emotional arousal of learner experience.) | SD | D | N | A | SA |
| 1. | PS1 | Teaching rehearsal is an enjoyable activity. | 1 | 2 | 3 | 4 | 5 |
| 2. | PS2 | Teaching rehearsal provide me motivation to work. | 1 | 2 | 3 | 4 | 5 |
| 3. | PS3 | Teaching rehearsal makes myself purposeful. | 1 | 2 | 3 | 4 | 5 |
| 4. | PS4 | Teaching rehearsal helps me to understand my concepts clearly. | 1 | 2 | 3 | 4 | 5 |

| | | | | | | | |
|----|-----|---|---|---|---|---|---|
| 5. | PS5 | Sometimes I have to sacrifice my social life to complete my teaching tasks. (R) | 1 | 2 | 3 | 4 | 5 |
| 6. | PS6 | Teaching rehearsal makes me feel energetic. | 1 | 2 | 3 | 4 | 5 |

Approval of M.Phil. Topic and Supervisor

| | |
|---|--|
|  | NATIONAL UNIVERSITY OF MODERN LANGUAGES FACULTY OF SOCIAL SCIENCES DEPARTMENT OF EDUCATION |
| ML.1-4/2020/Edu | Dated: 20-01-2020 |
| To: Azra Raza, 1404-MPhil/Edu/F17 | |
| Subject: <u>APPROVAL OF MPHIL THESIS TOPIC AND SUPERVISOR</u> | |
| 1. Reference to Minute Sheet No. ML.1-2/2020-Edu dated 02-1 -2020, the Higher Authority has approved your topic and supervisor/s on the recommendation of Faculty Board of Studies vide its meeting held on 15 th Oct 2019. | |
| a. <u>Supervisor's Name & Designation</u> Dr. Quratul Ain Hina Assistant Professor, Department of Education NUML, Islamabad. | |
| b. <u>Topic of Thesis</u> Effect of Prospective Teachers' Interpersonal Skills on their Self Efficacy | |
| 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 <u>30th June 2020</u> 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 the MPhil & PhD Coordinator, Department of Education. | |
| Telephone No: | 051-9265100-110 Ext: 2090 |
| E-mail: | mdin@numl.edu.pk |
| Cc to: | Dr. Quratul Ain Hina |
| |  Dr. Hukam Dad Malik Head, Department of Education |

Permission Letter for Questionnaire Usage

Request for permission to use of Sources of teachers' Self efficacy Questionnaire

5/12/2020

Gmail - Request for permission to use of Sources of teachers' Self efficacy Questionnaire



Azra Raza <azraraza919@gmail.com>

Request for permission to use of Sources of teachers' Self efficacy Questionnaire

3 messages

Azra Raza <azraraza919@gmail.com>
To: CathyHoi@um.edu.mo

28 October 2019 at 16:01

Respected Cathy Hoi,

I am M.phil Scholar from Pakistan and wants to use "Sources of teachers' Self efficacy Questionnaire" Which you used in article " MEASURING EFFICACY SOURCES: DEVELOPMENT AND VALIDATION OF THE SOURCES OF TEACHER EFFICACY QUESTIONNAIRE (STEQ) FOR CHINESE TEACHERS".
I request you please allow me to use this scale for my research study.

I shall be very thankful to you for this act of kindness.
Regards,
Azra Raza
Mphil Scholar
National University of Modern Languages Islamabad,
Pakistan

cathyhoi <cathyhoi@um.edu.mo>
To: Azra Raza <azraraza919@gmail.com>

28 October 2019 at 19:49

Dear Azra,

Thank you for showing interests in our work. You have my permission to use the scale for research purposes.

All the best for your research and academic career.

Regards,
Cathy Hoi, Ph.D.
Macau Fellow
Educational and Psychological Researcher
Faculty of Education | University of Macau
Tel: (853) 8822 9269 | Fax: (853) 8822 2402
澳門學院

[Quoted text hidden]

Azra Raza <azraraza919@gmail.com>
To: cathyhoi <cathyhoi@um.edu.mo>

28 October 2019 at 19:54

Thank you so much Respected Ma'am.
[Quoted text hidden]

2 attachments

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澳門學院 image001.png
9K

PROOF READING CERTIFICATE



CERTIFICATE OF PROOFREADING

**Effect of Prospective Teachers' Interpersonal Skills on their Self
Efficacy**

By

Ms Azra Raza

National University of Modern Languages, Islamabad

It is certified that the research work with the title “Effect of Prospective Teachers’ Interpersonal Skills on their Self Efficacy “submitted by Azra Raza has been checked and proofread for the Language and Grammatical mistakes.

Name_____

Designation_____

Institute_____

Signature _____

Date_____