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# EFFECT OF SELF-EFFICACY ON STUDENTS' ACHIEVEMENT IN SCIENCE

Sarfraz Aslam, Muhammad Shabbir Ali

Department of Education, University of Education Lahore, Faisalabad campus, Pakistan.

## ABSTRACT

*The study aimed to analyze the effect of self-efficacy on students' achievement in science. The population of the study was consisted of 10$^{th}$ grade science students of govt. secondary and higher secondary schools of district Okara Punjab province. A total of 811 students were selected as a sample from the population. The research tool; Self-Efficacy Questionnaire for Children (SEQ-C) was adapted to use. The data was collected by the researcher himself with the permission of heads of all 24 schools. The process of data collection started in December 2013 and completed in February 2014. The results of the study indicated that female science students had lower self-efficacy than male students.. Furthermore, students of urban localities had higher self-efficacy than students of rural localities. There were no significant differences in self-efficacy on the basis of mother tongues (Punjabi, Urdu and Others).*

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## INTRODUCTION

Science is an acquaintance apparent by the man through his ambiance. Man acquires the information of atmosphere through his sense of touch, hearing, sight and taste. He urbanized his views and approach by that knowledge of surroundings. This knowledge has developed his ways of thinking, doing and acting. He became more civilized and developed by performing in a certain conduct. So Science plays very important role in the civilization of man by exploring various new ways. Now Science has become an important part of man life.

Therefore science has become the essential component of our curriculum at different levels. At secondary level, science is an imperative part of traditional learning. Most of the learners get their formal experiences of science through various structured activities and scientific methods provided by the school curriculum. These actions planned in such a way as to give them some appreciation of scientific concept and they will behave in a certain manner.

Good (1973) expressed that science learning is a field of specialized learning to which amenities, syllabus, and educator learning are related. In (1994) Simpson, Koballa, Oliver and Crawely discussing the relationship among apprentice, science and people. They acknowledged that science learning brings up the all three domains i.e. cognitive, psychomotor and affective by bringing together learns science and society. The cognitive domain deals with the attainment of essentials and notions as well as the maturity of quandary resolving abilities. The psychomotor realm concerns with the maturity of physical abilities and affective realm deals with morals, ideas, benefits and enthusiasm.

Various researches on the interaction between male and female students' achievement in science have conducted by different researchers. According to Bong & Shaalvik (2003) and Pajares (1996) that students' attitude and achievement in scientific discipline usually are favorably and also substantially related. Walberg's theory on educative productiveness identifies seven elements that will promote your variance throughout students' cognitive and also affective results.

Like for example, students' potential, maturation, the caliber of training in addition to quantity of training, their emotional atmosphere in their house, their fellow

party beyond the school room along with the time period associated with video/television mass media (Rana, 2002).

According to Bandura (1997), Self-efficacy is also a factor that is affecting the achievement of science students' in Science. Self-efficacy means peoples' beliefs about their competencies to organize and accomplish the actual plan needed to make given achievements. Their self-efficacy's morals that determine how individuals experience, feel, really encourage themselves in addition to act inside a number of condition or even affair. In many ways person completions and individual welfare are enhanced by the burly intellect of self-efficacy. People with strong beliefs of self-efficacy don't avoid the difficult tasks. They accept difficult tasks as challenges and try hard to master them. Such a kind of self-efficacy fosters intrinsic interest and deep engrossment in activities. They set themselves according to the challenging goals and maintain strong commitment to them. In the case of failure, they never give up rather they heighten and sustain their efforts. They believe that their failure is due to inadequate attempt or lack of awareness and abilities which are acquirable. They believe that they can overcome the threatening situations by their efforts.

Contrary, individuals along with minimal impression of self-efficacy vistas complicated tasks while private risks. They have got minimal dreams along with vulnerable obligations towards targets chosen by simply the crooks to do (Bandura, 1986).

All the above stated investigate work, which particularly swathe the areas of "effect of self-efficacy and achievement in science'', were conducted in all over the world. But no attempt had been made to explore the effects of self-efficacy on students' achievement in science students' of district Okara, Pakistan. The present work was first attempt to lighten the topic.

## 1.1 Statement of the Problem

In order to advance students' achievement in science, a careful indulgent of aspect of self-efficacy and its effect on students' attainment in science was essential, this cram inspected "Effect of Self-Efficacy on Students' Achievement in Science."

## 1.2 Objectives of the Study

The intentions of this cram were:

1) To establish the self-efficacy level of science learners.
2) To find out relationship connecting self-efficacy and achievement of students in science.
3) To explore the differences of students' self-efficacy in science on the basis of masculinity, vicinity, language and tehsil.
4) To inspect the differentiations of learners' achievement on the basis of masculinity, locality, language and tehsil.

## 1.3 Research Questions

In the light of above mentioned objectives, the following research questions were developed and then investigated in this study:

**Research Question # 1**

What is the strength of self-efficacy level of $10^{th}$ grade science students of public schools?

**Research Question # 2**

Are there differences among learners' self-efficacy and their achievement in science?

**Research Question # 3**

Will there be relationship among students' self-efficacy as well as their particular success within research?

**Research Question # 4**

Are there variances inside students' self-efficacy by gender, locality, and language in addition to location?

**Research Question # 5**

Are there variances in learners' achievement in science on the basis of gender, locality, language and location?

## 1.4 Significance of the Study

The study is very significant due to following reasons:

1 The study is significant for the instructional structure as it may present channel appearances for the course makers to advance the syllabus for up gradation of self-efficacy among learners.

2 The course book authors may find direction from this research to write course books which comprise education activities useful to build up self-efficacy.

3 The educators may be influenced to center in acclimatizing such educational approaches that widens the self-efficacy along with academic achievements.

4 It may build up a support with the instruction faculty to choose improved learning tactic so that they may better realize the learning procedure that transmits to self-efficacy approach.

5 The study may get consideration of the instructive evaluation organizations (e.g. B.I.S.E) to integrate ‘’effect of self-efficacy on students’ achievement in science’’.

6 The instrument Self-Efficacy Questionnaire for Children (SEQ-C) has not been broadly used in Pakistan. So, the actual study would required valid along with reliable tool intended for assessing students’ self-efficacy along with achievement in science.

7 Achievement throughout science will probably predict students’ menus of future science courses and also affect students’ aspiration to be able to science careers. .

8 The results of the present study would have significance in the areas of science education, psychology, sociology and guidance etc.

## 1.5 Delimitations of the Study

The study was delimited to:

- Okara District only;
- Public secondary schools; and
- 10$^{th}$ grade science students taking physics, chemistry, biology/computer science and mathematics as science subjects.

## 1.6 Assumptions of the Study

The subjects of the present research had to provide data about ‘’effect of self-efficacy on students’ achievement in science’’. Although the study was delimited to 10$^{th}$ grade science students, yet it was assumed that the students at this level were

mature and had better understanding of self-efficacy, its effect and achievement in science to provide the information.

## 1.7 Operational Definitions of the Variables

### 1.7.1 Self-Efficacy

Self-efficacy means peoples beliefs all about its characteristics to be able to organize in addition to perform your own course associated with action required to offer supplied attainments (Bandura, 1997). Dimensions involving Self-Efficacy Inventory are: (a) level as well as magnitude (particular level of career difficulty), (b) strength (certainty involving efficiently performing a great Individual level of job difficulty), as well as (c) generality (the extent to help in which magnitude and strength beliefs generalize across tasks along with situations).

### 1.7.2 Academic Achievement

"Academic achievement is the extent to which a learner is profiting from instructions in a given area of learning i.e., achievement is reflected by the extent to which skill or knowledge has been imparted to him" (Crow and Crow, 1969)

### 1.7.3 Achievement in Science

Achievement in science refers to science students' academic scores obtained in 9$^{th}$ grade Board examinations for the year 2013.

# REVIEW OF LITERATURE

Human being wants to train their productions to escort a booming living. This vision might get nearer exact just through learning. The core intention of learning is to formulate learners competent for daily life. So, Self-Efficacy is a vital idea in many public instructive standards. Here it is essential to describe the expression Self-Efficacy.

## 2.1 Self-Efficacy

Self-efficacy is an impression derived from Bandura's (1977) open premise of the individual, which lighten that person's accomplishments depend on the common relations of the person's performance, individual dynamics (or self), and ecological

situations. Self-efficacy is one of the individual factors and is cleared as “the conviction that one can successfully execute the behavior required to produce the outcomes” (p. 79).

### 2.1.1 Concepts of Self-Efficacy

Self-efficacy is a impression derived from Bandura’s (1977) open premise of the individual, which lighten that person’s actions depend on the general relations of the person’s performance, individual dynamics (or self), and ecological situations. Self-efficacy is one of the individual factors and is clear that “the conviction that one can successfully execute the behavior required to produce the outcomes” (p. 79).

According to Bandura (1986), “Those who regard themselves as inefficacious shy away from difficult tasks, low their efforts and give up readily in the face of difficulties dwell on their personal deficiencies lower their aspirations and suffer much anxiety and stress. Such self misgivings undermine performance” (P.395).

Bandura (1997, 1986) expressed that self-efficacy means gained ability of the confident persons which make them successful in the assigned work. The students who have a high degree of self-efficacy have better carrier opportunities in regard of potentially higher carrier aspirations without discrimination of gender. Comparisons of students’ objective judgments of their abilities and their self efficacy beliefs, it is obvious that self efficacy beliefs often better indicated their academic successes.

According to Bandura (1986, 1997) and Bandura, Barbaranelli, Caprara, & Pastorelli, (1996) the students raise their self-efficacy who successfully solves the challenging task with little guide line. The highly efficacious students are more likely to choose difficult tasks tried for them longer time applied more effort. Self-efficacy does not remain same; it can vary with time within an individual’s performance. A self efficacious individual knows their abilities to do a task successfully. The judgments of self-efficacy based on the specific domain, so students’ confidence for completing allocated tasks successfully would be assessed by different ways accordingly.

(Bandura, 1997, 1986; Multon, Brown and Lent, 1991) described that Self-efficacy alone predicts better intellectual performance as compared to skills has direct affect on academic performance along with cognition. Self-efficacy influences

memory indirectly. Self-efficacy was found a basic factor to determine individual choices, the exerted efforts, and the persistence of effort in case of difficulties, the thought patterns and emotional responses. Self efficacy beliefs are strongly related to major motivation patterns like self regulation (Zimmerman, 2000, Zimmerman & Bandura, 1994).

According to Smist (1993), for example, in a college population along the course of academic year, chemistry laboratory self-efficacy increased while for the same period biology laboratory self-efficacy decreased. Researchers have found that the students with high level of self-efficacy beliefs tend to perform better than those of low level of self-efficacy beliefs (Jackson, 2002; Lane & Lane, 2001; Parjares, 1996; Pajares, 2003). Self-efficacy can even indicate the carrier choice (Kennedy, 1996; Bandura, 1986; Debacker and Nelson, 1999).

According to Bong & Shaalvik (2003) and Pajares (1996) while self-efficacy totally concerned with task oriented judgment of the student without comparison their capabilities with other students. Self efficacy beliefs have mediated the influence of previous success, knowledge and skill on future coming success (Schunk, 1985).

### 2.1.2 Science Self-Efficacy

In 1997, Bandura said self-efficacy believes developed the courses partially that accepted by the peoples in their lives. Students firm beliefs that they have the capacity to succeed in science tasks, courses or activities or their self efficacy in science greatly affects their choices of science related activities their efforts, persistence efforts in the face of difficulties and conscience success in science (Britner & Pajares, 2001; Zeldin & Pajares, 2000).

Kennedy (1996) described adapted science experiences, choice of science number of efforts and retention in science is affected by the self-efficacy. Teaching efficacy refers as individual firmed thoughts that they have the abilities to aid the student for learning (Ashton & Webb, 1986).

According to Andre, Whigham, Henbrickson and Chambers (1999), Britner & Pajares (2001), kupermintz (2002) and Lau & Roeser (2002), confidence is one of the factors that greatly affect the students self efficacy in science. Self efficacy beliefs of college level students shows how long they will remain in science related majors and

carrier choices (Gwilliam & Betz, 2001; Lent, Brown & Larkin, 1984; Luzzu, Hasper, Albert, Bibby & Martinelli, 1999).

Kupermintz, Lau & Roeser (2002) described at high school level students success in science are related to their self efficacy in science and is better indicated for success and involvement inside and outside the classroom in science activities than sex, ethnicity and their parental history. In 1998, Andrew said that in science, self-efficacy may described the selection of course designed that results the under representation of women.

**2.2 Factors Affecting Self-Efficacy**

Smist, Archambiautt and Owen (1997) described that aptitude, attitudes and attributions are the factors that determine science self-efficacy. General self-efficacy is determined by the four factors; "inactive mastery experience, vicarious experience, verbal persuasion and psychological and emotional states''. Children's self-efficacy beliefs become more accurate and persistence along with time and it is difficult to alter them (Bandura 1997).

Borkowski (1985) expressed that transfer of self-efficacy depends upon learning and motivation as it needs agreement to apply skill and approaches along prolonged phases, varying material and different steps. Confidence is one of the factors that greatly affect the students self efficacy in science (Andre, Whigham, Henbrickson & Chambers, 1999; Britner & Pajares 2001; kupermintz, 2002; Lau & Roeser, 2002).

According to Ryckman & Peckman (1987), among students from elementary schools gender is a major factor for the success and the failure. Females mostly attained their successes by effort, while males gained successes by ability. Hill (1990) found that middle and high school girls lack interest in science carriers and in science related activities outside of school.

In 1986 and 1997, Bandura described four factors to determine self-efficacy; "enactive mastery experience, vicarious experience, verbal persuasion and psychological and emotional states''. The enactive mastery experience is the most effective one which means persons' past experiences of success or failure these past

experiences intergraded with him. Individuals' success raises their self-efficacy and failures lower it, which ultimately show them their strength of capability.

In school, children develop cognitive competencies, get knowledge and problem solving skills need to take part effectively in the larger society. In spite of formal instruction many social factors like peer modeling social comparisons motivation by goals positive incentives and teachers interpretations of children's successes and failures are different paths that positively or negatively influence the children's opinion of their intellectual efficacy (Bandura, 1994).

## 2.3 Self-Efficacy, Self Concept and Self Esteem

### 2.3.1 Self-Efficacy

In 1991, Schunk described that academic self-efficacy turned as an individual consideration that he has the abilities to achieve allocated task successfully at mastery level. Pajares (1996) within the same domain academic self-efficacy and academic self concept can be replaceable with each other in concepts as both are based on same cognitive erect e.g., self perceived capability. Academic self concept and academic self-efficacy both are bigger differing as they have different effect on learners' inspiration, sensation and study actions (Marsh, Walker & Dubus, 1991).

Bong and Shaalvik (2003) determined the conceptual and operational differences between academic self concept and self-efficacy: Basically academic self concept shows acquired qualities in given field or domain where as academic self-efficacy shows the firm beliefs of an individual to fulfill a certain academic task successfully. According to Marsh (1999) Academic self-efficacy and self concept are measurable up to different level of tasks. As academic self-efficacy generally measures at task specific level while academic self concept measures at more general level with in the same domain.

Pajares (1996) has described related motivational constructs like expected performance self concept, self esteem or locus of control are different from self-efficacy as they are more general self descriptive constructs in cooperated to many forms of self knowledge and self evaluating feelings.

### 2.3.2 Self-Concept

Self-concept terms as the students observation their mastery skills or required abilities in educational and non-educational (i.e., social, behavioral and ethical) fields and is most suitably denoted by the heading of self perceptions across domains (Harter, 1999).

According to Wigfield and Eccles (2000), in self concept evaluation items students have to judge their competency through specific target and content free information in a given domain and are completely comprised on previous experiences. Whereas, self-efficacy items concern with students future expectancies which make them successful in performing specific academic target.

On the other hand, Bong and Shaalvik (2003) expressed that Self concepts beliefs mainly depend upon societal relative in order and reveal judgment by the other important persons. Students' academic self concept gives not only self judgment direction as well also gives an efficient direction which gives the operational concept by items (Marsh, 1999).

Eccles, Wigfied and Schiefele (1998 ) expressed while affective and emotional responses emerges by the self judging capability of a person but these responses should not be taken as component of that persons academic self concept. Self concept means a person's overall self perceptions developed by experiences with environment and elucidation of environment. Self awareness hugely affected by the strengthening and evaluations through other person especially (Shavelson & Bows, 1982).

Wigfield and Karpathian (1991) have described that academic self concept is the knowledge and understanding of one's own self under academic outcomes circumstances. Self concept has many directions and consists of self-respect, self-assurance solidity and self-crystallization (Rosenberg & Kaplan, 1982).

According to Harter (1999), Self-concept terms as the students observation their mastery skills or required abilities in educational and non-educational (i.e., social, behavioral and ethical) fields and is most suitably denoted by the heading of self perceptions across domains. Self-esteem is a student's collective judgment of him or herself in addition of when he or she feels happy and satisfaction generally.

Students self concepts develop step by step as they move from middle school to higher school. Adolescents increasing freedom made available for them more chances to take part competitively in the activities and gain more sustain of others as taking more publicly suitable paths with the increase in their perception taking abilities.

Baumeister (2003) expressed that self concept and academic achievement are hugely related to each other, but it seems to be significance relatively than grounds of high attainment. Academic self concept concerns with past experiences and understanding of self, while self-efficacy refers to the upcoming tilting opinions (Bong & Schaalvik, 2003).

### 2.3.3 Self-Esteem

Usually instructors, supervisors and parents pass on about the students' self-esteem. The importance of self-esteem often embroider to the degree that stumpy self-esteem seen to be the reasons of all vices and that of soaring self esteem result all good (Manning, Bear & Minke, 2006).

According to Harter (1999), self-esteem is a student's collective judgment of him or herself in addition of when he or she feels happy and satisfaction generally. In various activities, self-efficacy plays its role to develop self-esteem (Bandura 1986).

## 2.4 Self-Efficacy and Achievement

According to Schunk (2008), studies show that self efficacy is positively anticipated the performance achievement in different tasks like mathematics science and reading. A significant relationship can be found between students' self-efficacy beliefs and their academic achievements (Lane & Lane, 2001).

Pintrich (1999) described that self-efficacy beliefs contribute a significant role in achievement influence relate with self regulated learning processes and mediate academic achievement. Students bringing up a sense of self-efficacy for doing well as they work on tasks and made more skillful (Schunk, 1991).

Eccles (1983) and Bandura (1997) expressed that students' previous success is indicated a direct positive influence on students self efficacy and their English achievement outcomes. Past achievement results enhance self-efficacy, students presents success depends upon their attitudes towards past success and failures. Perceived self-efficacy indicates future achievements better than past performance

(Bandura 1986, Tippins 1991,Miller, Greene, Montalvo, Ravindran and Nichols 1996; Chermer and Garcia 2001; and Garcia and Coppola 1993).

Varying degree of self-efficacy may be determined/resulted varying degree of performance for instance; fluctuation in self-efficacy beliefs may change achievement level two same skilled persons or the same individual in two different situations. According to Bandura (1986, 1997)"Those who regard themselves as inefficacious shy away from difficult tasks, low their efforts and give up readily in the face of difficulties dwell on their personal deficiencies lower their aspirations and suffer much anxiety and stress. Such self misgivings undermine performance" ( P. 395).

Pajares, (1996) refers that self-efficacy beliefs should be measured at the optimum degree of specificity, especially when study concerns with prediction of achievement. Contrary highly self efficacious person frequently persevere regardless of difficult or odds challenges often succeed. Self-efficacy is found to be indirectly related to the performance; previous achievement inform presently occur self-efficacy expectation that in turn affect task initiation and persistence (Bandura 1986, 1997).

Student's academic influence and achievements in science, mathematics and language arts domains are relevant to their firm beliefs in their academic abilities (Britner & Pajares, 2001; Lent Brown & Gore, 1997; Shell, Colvin & Bruning, 1995; Pajares 1997).

Eccles (1983, 2000) and Wigfield (2000) described that Students behavior and academic achievements are determined by to major consequents i.e., the extent students firmly believed that they will achieve the given academic task and the extent to which they valuing the given task. Students previous success is indicated a direct positive influence on students self efficacy and their English achievement outcome (Eccles, 1983; Bandura 1997).

Wigfields (1994) presented a theory that students self efficacy may cause a proximal effect on their achievement goals is in accord with Elliote (1999), "Hierearchikl model of achievement motivation''. Elliot model explains that self efficacy could be the one type of self and competence based variables which directly affect the student's achievements goals, which as a result as a proximal precursor to achievement related processes and feedbacks.

## 2.5 Self-Efficacy Process

Self-efficacy process is defined by Bandura (1994) as follows:

### 2.5.1 Sources of self-efficacy

Four main sources are considered to be developed individuals beliefs about self-efficacy.

1. Mastery experiences

2. Vicarious experiences

3. Social persuasion

4. Psychological and emotional states

### 2.5.2 Efficacy-Activated Process

A number of researchers put forwarded on the four psychological processes which affect human working abilities (Bandura 1994):

1. Cognitive Processes

2. Motivational Processes

3. Affective Processes

4. Selection Processes

## 2.6 Review of Research Studies on Self-Efficacy and Achievement

Tippins (1991) described that number of studies shows relationship of self-efficacy and academic achievement. For instance, self-efficacy positively related to cognitive engagement and academic achievement in $7^{th}$ grade science and English classes. In meta-analysis of 39 studies from 1977 to 1988 reveals, significant relationships were present between self-efficacy and performance of high schools and college students than younger students, relatively weak relationships were founded between self-efficacy and performance of younger students than high schools and college students (Multon, Brown and Lent, 1991).

Greene and Miller (1996) expressed about a study on the college students enrolled in educational psychology found having a positive effects in between perceived capacity, goals in addition to purposeful cognitive proposal which affected instructional achievements. Muris (2001) conducted a study which showed that self-efficacy and certain academic and emotional self-efficacy were significantly negatively related to depression. In short, children with low self-efficacy show high level of depression. Girls were affected more than boys.

Liem, Lau and Nie (2008) carried out a work in 1475 individuals to discover the particular position of self-efficacy throughout good results and in addition they located self-efficacy favorably linked using good results. Analysts have realized the individuals using advanced of self-efficacy philosophy often accomplish greater than these of minimal degree of self-efficacy philosophy (Jackson, 2002; Lan & Lane, 2001; Parjares, 1996; Pajares, 2003). Distinct detectives reveal the technique learners formulate use of the training methods promotes his or her instructional successes (Hwang and Vrongistinos 2002; McKenzie, Gow, and Schweitzer 2004; Pressley, Borkowski, and Schneider 1987; Rollnick, Davidowitz, Keane, Bapoo and Magadla; 2008; Yip and Chung 2005).

Multon, Brown and Lent (1991) described that in a meta-analysis of 39 studies, significant interaction were present between self-efficacy and performance of high schools and college students than younger students, relatively weak relationships were founded between self-efficacy and performance of younger students than high schools and college students. Consistently, researchers have found that he students' who try to master the assignment and have the aspiration to attain innovative skills are highly self-efficacious, have positive patterns of learning, and have higher achievement (Middleton & Midgley, 1997; Midgley &Urdan 1995; Pajares, Britner & Valiante, 2000).

A number of researchers have suggested that students firm beliefs that they have the capabilities to achieve the given task are bitterly indicated their academic achievement and motivation (Graham & Weiner, 1996; Pajares, 2003; Pintrich & DeGrout, 1990; Pintrich & Schunk, 1995).

**2.7 Self-Efficacy and Gender**

According to Smist (1997), male show more positive influence towards carrier in science as compared to females. Among students from elementary schools gender is a major factor for the success and the failure. Females mostly attained their successes by effort, while males gained successes by ability (Ryckman & Peckman, 1987).

Bandura (1986, 1997) expressed that without the discrimination of gender greater carrier opportunities also the potentially higher carrier aspirations for those who have high level of self-efficacy. Different individuals have different efficacy beliefs even vary in the same individual for different tasks. Andrew (1998) said that in science, self-efficacy may described the selection of course designed that results the under representation of women.

Betz & Hackett (1981) and Post-Kammer & Smith (1991) expressed that various studies shown that for typical female occupations females had greater self efficacy to complete educational requirements and job duties. Many researchers have found that negative attitudes and low level of self efficacy are the aspects that partly result persistent under account of woman and minorities in professional occupation (Lent, Brown & Larkin 1986 and Post, Stewart & Smith, 1991).

## 2.8 Conclusions from the Review of Related Literature

Summarizing the literature review, self-efficacy is an important skill of the life and desired by today‘s student. Students’ self-efficacy in science has significant effects on their achievement in science. Self-efficacy is an impression derived from Bandura’s (1977) open premise of the individual, which lightens that person’s accomplishments depend on the common relations of the person’s performance, individual dynamics (or self), and ecological situations. Self-efficacy is one of the individual factors and is cleared as “the conviction that one can successfully execute the behavior required to produce the outcomes” (p. 79).

Kennedy (1996) described Adapted science experiences, choice of science number of efforts and retention in science is affected by the self-efficacy. Teaching efficacy refers as individual firmed thoughts that they have the abilities to aid the student for learning (Ashton & Webb, 1986).

Smist, Archambiautt and Owen (1997) described that aptitude, attitudes and attributions are the factors that determine science self-efficacy. General self-efficacy is determined by the four factors; inactive mastery experience, vicarious experience, verbal persuasion and psychological and emotional states. Children's self-efficacy beliefs become more accurate and persistence along with time and it is difficult to alter them (Bandura 1997).

According to Schunk (2008), studies show that self efficacy is positively anticipated the performance achievement in different tasks like mathematics science and reading. A significant relationship can be found between students' self-efficacy beliefs and their academic achievements (Lane & Lane, 2001).

In meta-analysis of 39 studies from 1977 to 1988 reveals, significant relationships were present between self-efficacy and performance of high schools and college students than younger students, relatively weak relationships were founded between self-efficacy and performance of younger students than high schools and college students (Multon, Brown and Lent 1991).

Liem et.al. (2008) carried out a work in 1475 individuals to discover the particular position of self-efficacy throughout good results and in addition they located self-efficacy favorably linked using good results. Analysts have realized the individuals using advanced of self-efficacy philosophy often accomplish greater than these of minimal degree of self-efficacy philosophy (Jackson, 2002; Lane & Lane, 2001; Parjares, 1996; Pajares, 2003). Distinct detectives reveal the technique learners formulate use of the training methods promotes his or her instructional successes (Hwang and Vrongistinos 2002; McKenzie, Gow, and Schweitzer 2004; Pressley, Borkowski, and Schneider 1987; Rollnick et al; 2008; Yip and Chung 2005).

## MATERIALS AND METHODS

The main function of this study was to explore the result of self-efficacy on students' achievement in science. The variables of this study were self-efficacy and achievement in science. Research methodology for the study is as follow:

### 3.1 Research Design

This study concerned quantitative statistics investigation and was explanatory in character. One feedback form: "Self-Efficacy Questionnaire for Children SEQ-C" (Muris, 2001) was adapted and utilized in this research. Survey method was used to collect information and associations among variable such as self-efficacy which affected the achievement of science students.

### 3.3 Population of the Study

The study was consummated to get the effects of self-efficacy on students' achievement in science along with demographic variables affecting them. Therefore, the population of the study consisted of all 10$^{th}$ grade male and female science learner studying in public secondary and higher secondary schools in district Okara of Punjab province. These students were studying Physics, Chemistry, Biology/ Computer science and Mathematics as science subjects at secondary level.

Following were the grounds for choosing 10$^{th}$ grade science students as population of the study:

- Secondary level is the mainly vital period during the studious period of students as this phase escorts them towards their prospect studious as well as certified profession (Govt. of Pakistan, 1998).
- Further, learners at 10$^{th}$ grade are fully developed and they have new connections with the discipline of science than scholars at middle stage (Govt. of Pakistan, 1998).
- It was assumed that 10$^{th}$ grade science students have urbanized more self-efficacy in science than students at middle stage. So they were in superior situation to answer to the tool of self-efficacy and its effect on student's achievement in science.

### 3.4 Sample of the Study

There are 3 tehsils in district Okara of Punjab province and 180 public secondary and higher secondary schools are present in these 3 tehsils (www.schools.punjab.gov.pk). It was very complicated to gather information from such a hefty population. So, sample was chosen from this population. For the rationale of sample choice, multistage procedure was used. This method is broadly used in the world. According to Tashakkori and Teddlie (2003), since it involves "selecting a relatively large number of units from a population, or from specific subgroups (strata) of a population, in a random manner where the probability of inclusion of every member of the population is determinable" (p. 713).

The following steps were adopted for the sample selection:

1. Three tehsils of district Okara (Okara, Renla Khurd, and Depalpur) were chosen.
2. Each tehsil was at odds into two stratum on the basis of locality i.e., urban and rural schools.
3. Each echelon was further subdivided into two substrata on the basis of gender i.e., male and female schools.
4. Two schools were selected arbitrarily from each substratum in the tehsil of Okara, Renala Khurd and Depalpur due to huge population. All of these schools were included in the sample. Total number of schools selected for the sample of the study were 24 (08 from each tehsil).
5. One science class was selected randomly from each school.
6. The students integrated in illustration were appearing in Secondary School Certificate Examination 2013 of Board of Intermediate & Secondary Education Sahiwal in Punjab province.

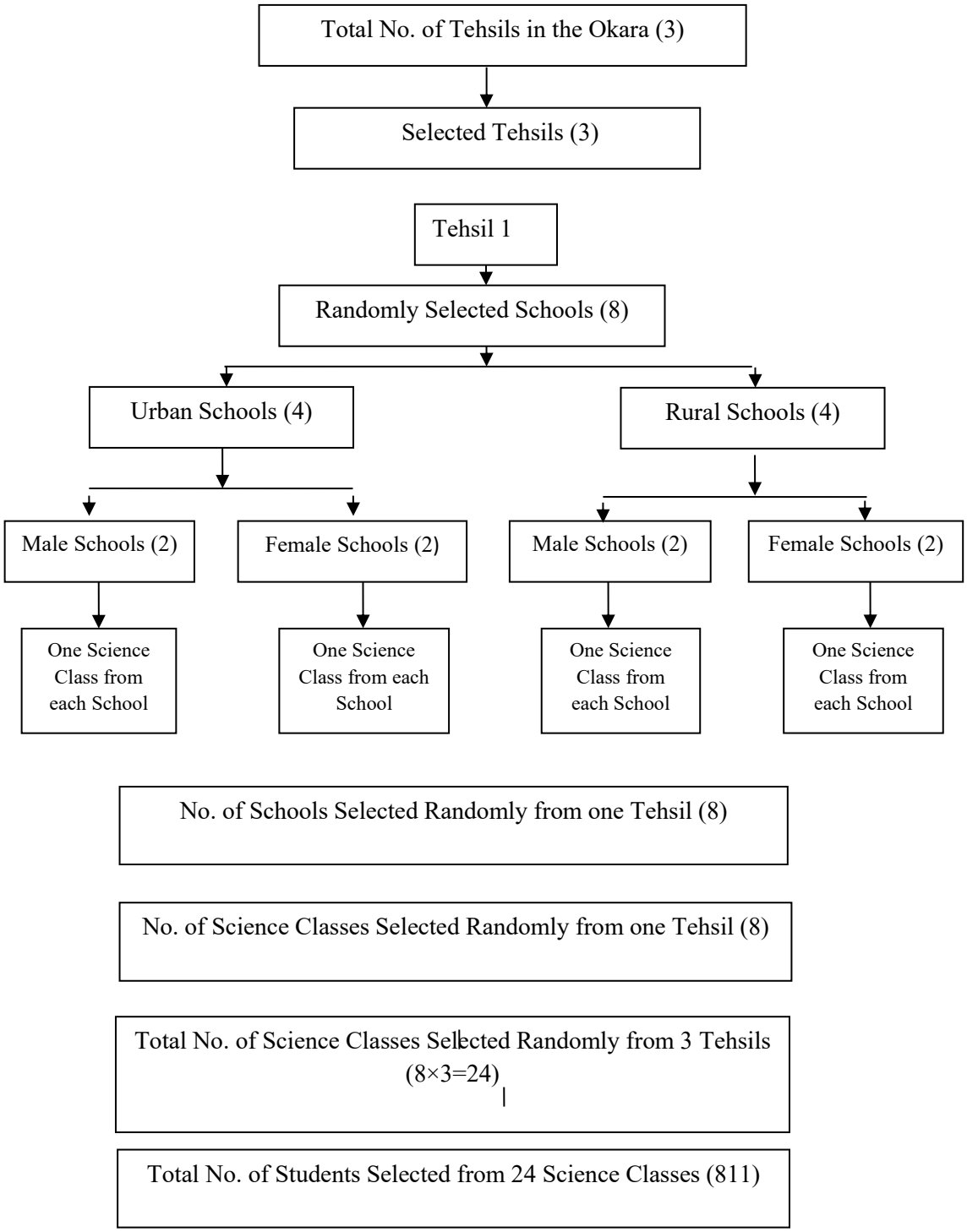



Diagram 3.1 *Selection of Sample for the Study*

### 3.4.1 Distribution of Schools on the Basis of Gender & Locality

Table 3.1 below clarifies the sorting of schools on the basis of gender and locality.

Table 3.1

*Allocation of Schools on the Basis of gender & locality*

| Sr. No. | District | Tehsil | Schools | | | | Total |
|---|---|---|---|---|---|---|---|
| | | | Urban | | Rural | | |
| | | | Male | Female | Male | Female | |
| 1 | Okara | Okara | 2 | 2 | 2 | 2 | 8 |
| 2 | Okara | Renala | 2 | 2 | 2 | 2 | 8 |
| 3 | Okara | Depalpur | 2 | 2 | 2 | 2 | 8 |
| Total | | | 6 | 6 | 6 | 6 | 24 |

### 3.4.2 Distribution of Students on the Basis of Gender and Locality

Table 3.2 below clarifies the organization of students on the basis of gender and locality.

Table 3.2

*Allocation of Students on the Basis of sex and area*

| Sr. No. | Tehsils | Students | | | | Total |
|---|---|---|---|---|---|---|
| | | Urban | | Rural | | |
| | | Male | Female | Male | Female | |
| 1 | Okara | 80 | 60 | 67 | 55 | 262 |
| 2 | Renala | 60 | 80 | 65 | 50 | 255 |
| 3 | Depalpur | 80 | 79 | 65 | 70 | 294 |
| Total | | 220 | 219 | 197 | 175 | 811 |

It is indicated from the Table 3.2 that total number of students selected for the sample were 811. Among these 811 students, 220 male students were selected from urban areas and 197 from rural areas. Similarly, 219 female students were selected from urban areas and 175 from rural areas. The highest number of students (294 students) was selected from tehsil Okara and the lowest number of students (255 students) was selected from tehsil renala.

### 3.5 Research Instruments for the Study

As already explained, the foremost intention of the study was to probe the effect of self-efficacy on students' achievement in science, the following information were required:

1. Students' self-efficacy
2. Students' achievement in science
3. Demographic information i.e., gender, locality, name of tehsil and language.

In order to evaluate students' self-efficacy, the modified and interpreted edition of Self-Efficacy Questionnaire for Children (SEQ-C) was used (section 3.5.1). This instrument is attached as Appendices.

### 3.5.1 Self-Efficacy Questionnaire for Children (SEQ-C)

Self-Efficacy Questionnaire for Children (SEQ-C) was used to judge students' self-efficacy in the current study.

#### 3.5.1.1 Validation for the Selection of SEQ-C

The instrument SEQ-C (Muris, 2001) was used in the present study to quantify 10th grade students' self-efficacy. This instrument was selected due to following reasons:

1. According to Muris (2001), factor analysis of the SEQ-C exposed three dynamics that were in observance with the projected subscales: "social self-efficacy, academic self-efficacy, and emotional self-efficacy".
2. The internal consistency reliability of the SEQ-C was adequate (Muris, 2001).

#### 3.5.1.2 Introduction and Background of SEQ-C

According to Muris (2001), the development of SEQ-C was based on three goals. These goals were edifice of a concise and self-report scale and the service of factor analytic measures for the measurement of "Academic self-efficacy, Social self-efficacy and Emotional self-efficacy" subscales. *Self-Efficacy Questionnaire for children* is a self-report instrument.

The particular Self-Efficacy Questionnaire with regard to Young children SEQ-C (Muris 2001) contains twenty-four products which might be invested in a few areas of self-efficacy: (1) cultural self-efficacy (2) school self-efficacy as well as (3) over emotional self-efficacy. Every single item must be have scored on the 5-point size when i. age. 1 = not at all, 2=Not, 3=Sometimes, 4=Well, 5 = very well.

The reliability values of alpha coefficient for subscales of original version of *Self-Efficacy Questionnaire for Children* were: 0.88 for the total scale, 0.85 for social self-efficacy, 0.88 for academic self-efficacy, and 0.86 for emotional self-efficacy.

### 3.5.1.3 Development of Urdu Version of SEQ-C

In the current study, the *Self-Efficacy Questionnaire for Children* (SEQ-C; Muris 2001) was used with the written consent of the developer of this instrument Dr. Peter Muris, Department of Medical, Clinical, and Experimental Psychology, Maastricht University, Maastricht, The Netherlands.

*Self-Efficacy Questionnaire for Children* (SEQ-C was translated into Urdu language by three language and content experts under the supervision of Dr. Muhammad Shabbir Ali (supervisor of the present thesis). These translations were measured up to each other. On the basis of this judgment, common points were taken out and Urdu version of *Self-Efficacy Questionnaire for Children* was developed. Then this Urdu version of SEQ-C was reviewed by another specialist for confirmation that true content matter had been translated. The names of experts are given in the list which is attached as Appendix-F.

After obtaining the authorization of supervisor and expert, the Urdu translated version was used for pilot study. This Urdu version of *Self-Efficacy Questionnaire for Children* is attached as Appendix-B

The numbers of statements in each subscale of *Self-Efficacy Questionnaire for Children* are presented in Table 3.3 as below:

Table 3.3

*Number of Statements in each Subscale of SEQ-C*

| SEQ-C Subscales | Number of Statements | Serial Number of Statements in Pilot Test of 24 Items |
|---|---|---|
| SEQ-C –Emotional | 8 | 3, 5, 9, 12, 15, 18, 21, 24 |
| SEQ-C –Social | 8 | 2, 6, 8, 11, 14, 17, 20, 23 |
| SEQ-C –Total | 8 | 1, 4, 7, 10, 13, 16, 19, 22 |

### 3.5.1.4 Pilot Testing of *Self-Efficacy Questionnaire for Children*

The translated version of SEQ-C into Urdu language was pilot tested in November 2013 on 150 tenth grade science students of public secondary schools in district Okara. These students were studying Physics, Chemistry, Biology/Computer Science and Mathematics as science subjects. These students were selected from five different schools. These five schools were selected suitably. From each school, 30 students were selected arbitrarily. The names of these schools are:

1. Govt. Model Girls High School, Okara.
2. Govt. Girls High School ¼-L, Okara.
3. Govt. Boys High School ¼-L, Okara.
4. Govt. High School 25/ 2-R, Okara.
5. Govt. C.M.R High School, Okara.

The selected students from above mentioned schools were asked to fill the Urdu translated version of *Self-Efficacy Questionnaire for Children (SEQ-C)*. For pilot testing, the reliability coefficient of *Self-Efficacy Questionnaire for Children (SEQ-C)* was determined by calculating Cronbach Alpha Reliability Coefficient. This value was found $\alpha = .831$. Table 3.4 below shows the mean, standard deviation, and reliability coefficient values of the pilot test.

Table 3.4

*Mean, Standard Deviation, and Reliability Coefficient on Self-Efficacy Questionnaire for Children (SEQ-C)*

| Mean | Standard Deviation | Cronbach Alpha Reliability Coefficient |
|---|---|---|
| 42.5906 | 10.0854 | .831 |

The reliability coefficients were also calculated for each subscale of *Self-Efficacy Questionnaire for Children (SEQ-C)* which are given in Table 3.5 as below:

Table 3.5

*Reliability Coefficients for Subscales of Self-Efficacy Questionnaire for Children (SEQ-C)*

| SEQ-C Subscales | Number of Statements | Alpha Reliability Coefficient |
|---|---|---|
| SEQ-C –Emotional | 8 | 0.559 |
| SEQ-C –Social | 8 | 0.799 |
| SEQ-C –Total | 8 | 0.618 |

Item analysis was performed after pilot testing. Dunn-Rankin (1983) has described the procedure of item analysis as:

> "The mean score of each individual item represents item difficulty for the particular item. The pearson 'r' of each item with the total score on all items (referred as Item-to-Total Correlation) act as a discrimination index for each item. If the item correlates highly with the total score, it is internally consistent and it should be retained. If a zero or very low correlation coefficient is obtained, it is not discriminating between groups and should be deleted."

The above described criteria were used for item analysis in this study.

Table 3.6 below represents the item statistics and the values of discrimination index for the urdu version of self-efficacy questionnaire for children (SEQ-C)

Table 3.6

*Item Statistics and Item-Total Correlations*

| Item Number | Mean (Difficulty Index) | Item-Total Correlation (Discrimination Index) |
|---|---|---|
| SE 1 | 2.79 | 0.387 |
| **SE 2** | **1.25** | **-0.066** |
| **SE 3** | **1.17** | **-0.023** |
| **SE 4** | **1.58** | **-0.029** |
| **SE 5** | **1.76** | **-0.023** |
| SE 6 | 2.83 | 0.381 |
| SE 7 | 2.79 | 0.406 |
| **SE 8** | **3.29** | **-0.056** |
| SE 9 | 2.29 | 0.531 |
| **SE 10** | **1.25** | **-0.037** |
| SE 11 | 2.17 | 0.458 |
| SE 12 | 2.49 | 0.393 |
| **SE 13** | **3.21** | **-0.049** |
| **SE 14** | **1.51** | **-0.023** |
| **SE 15** | **2.29** | **-0.651** |
| SE 16 | 2.41 | 0.590 |
| SE 17 | 2.56 | 0.312 |
| SE 18 | 2.89 | 0.393 |
| SE 19 | 2.25 | 0.446 |
| SE 20 | 2.56 | 0.312 |
| SE 21 | 2.76 | 0.363 |
| SE 22 | 2.86 | 0.383 |
| SE 23 | 2.58 | 0.407 |
| SE 24 | 2.96 | 0.391 |

On the basis of values given in Table 3.6, item number 2, 3,4,5,8,10,13,14 and 15 were rejected and deleted from the SEQ-C. Remaining 15 items were retained in the final questionnaire.

### 3.5.1.5 Development of Final Instrument of SEQ-C

The final questionnaire of SEQ-C consisted of 15 items instead of 24. This 15-item questionnaire was used for the data collection of the present study (The *Self-Efficacy Questionnaire for Children (SEQ-C)* used for final study is attached as Appendix-C). The Alpha reliability value for the final *Self-Efficacy Questionnaire for Children (SEQ-C)* was $\alpha = 0.91$.

Table 3.7 below shows the number of items, serial number of items retained in the final questionnaire and the Alpha reliability values of each subscale of *Self-Efficacy Questionnaire for Children (SEQ-C)*.

Table 3.7

*Items and the Reliability Coefficients of Final Self-Efficacy Questionnaire for Children (SEQ-C)*

| SEQ Sub Scales | Number of Items | Serial Number of Statements in in Final Test | Alpha Reliability Coefficient |
|---|---|---|---|
| SEQ-C -Emotional | 5 | 9,12,18,21,24 | 0.648 |
| SEQ-C -Social | 5 | 6,11,17,20,23 | 0.799 |
| SEQ-C –Academic | 5 | 1,7,16,19,22 | 0.785 |

**Achievement Scores in Science Subjects**

This students' accomplishment in scientific discipline seemed to be a primarily based varied from the present review. This individuals involving tenth class open supplementary educational institutions had previously made an appearance in ninth class B.I.S.E result session 2013. The 9$^{th}$ class Board results of these students in the subjects of Physics,

Chemistry, Biology and Mathematics were obtained from the Board of Intermediate and Secondary Education, Sahiwal for the district of Okara.

### 3.5.2 Demographic Variable Information Performa

The information of the subjects of the study related to demographic variables was collected through a Performa named "Demographic Variable Information Performa." This Performa consists of following information:

- Name and Father's Name;
- Father's education and profession;
- Mother's education and profession;
- Annual income;
- Gender of Students;
- Locality of the School;
- Language Spoken at Home; and
- Roll Number for the Previous 9th Class Board Examination.
  (Demographic Variable Information Proforma is attached as Appendix-A).

### 3.6 Administration of the Instrument

The *Self-Efficacy Questionnaire for Children (SEQ-C)* along with Demographic Information Proforma were administered on 811 students selected from 24 schools of three tehsils (Okara, Renal Khurd, and Depalpur). The data was collected by the researcher himself with the permission of heads of all 24 schools. The process of data collection started in December 2013 and completed in February 2014.

Before the administration of the questionnaire, the students were briefly explained the purpose of the research and procedure to respond to the questionnaires. The students were made sure that all the information obtained would be used for the research purpose only.

### 3.7 Scoring Procedures

The data collected from science students was scored by following methods:

1. *Self-Efficacy Questionnaire for Children (SEQ-C)* consisted of statements on Likert type scale. The scores assigned to positive and negative statements of *Self-Efficacy Questionnaire for Children (SEQ-C)* are presented in Table 3.8 as below:

Table 3.8

*Scoring Procedure for Self-Efficacy Questionnaire for Children (SEQ-C)*

| Positive Statements | | Negative Statements | |
|---|---|---|---|
| Category | Scores | Category | Scores |
| Very well | 5 | Very well | 1 |
| Well | 4 | Well | 2 |
| Sometimes | 3 | Sometimes | 3 |
| Not | 2 | Not | 4 |
| Not at all | 1 | Not at all | 5 |

2. The scoring procedures for demographic variables (Gender, Locality, Language and Tehsils) are presented in following tables:

Table 3.9 below presents the scoring procedure for gender of 10th grade science students included in the present study.

Table 3.9

*Scoring Procedure for Gender*

| Gender | Score |
|---|---|
| Male | 1 |
| Female | 2 |

Table 3.10 below presents the scoring procedure for locality of 10th grade science students included in the study.

Table 3.10

*Scoring Procedure for Locality*

| Locality | Score |
|---|---|
| Urban | 1 |
| Rural | 2 |

Table 3.11 below presents the scoring procedure for language of 10th grade science students included in the study.

Table 3.11

*Scoring Procedure for Mother Tongue*

| Language | Score |
|---|---|
| Punjabi | 1 |
| Urdu | 2 |
| Others | 3 |

Table 3.12 below presents the scoring procedure for tehsils of 10th grade science students included in the study.

Table 3.12: *Scoring Procedure for Tehsils*

| Tehsils | Score |
|---|---|
| Okara | 1 |
| Renla Khurd | 2 |
| Depalpur | 3 |

3. Achievement refers to students' achievement scores obtained in 9th class Board examinations in the subjects of Physics, Chemistry, Biology/Computer Science and Mathematics. The achievement scores of the students obtained in these four subjects as well as sum total of these scores were included in the scoring procedure.

### 3.8 Data Analysis

After the entry of data, it was analyzed by Statistical Package for Social Sciences (SPSS) version 20. The analysis of data was completed under the supervision of Dr. Muhammad Shabbir Ali (Assistant Professor), Education Department, Government College University, Faisalabad. The data analysis started in March 2014 and completed in May 2014.

For the pilot study of instrument, Cronbach Alpha Reliability Coefficient was used. Similarity Difficulty index and Discrimination index were also used for the deletion of some items. Descriptive statistics i.e. Mean, Standard Deviation and Frequency Distributions were used for the description of trends in the data. Values of Chi Square were used to find out the relationship and ANOVA was used to find out differences.

### 3.9 Chapter Summary

The research design for the present study was Causal-Comparative using quantitative research methodology. The population of the study comprised of 10th grade science students of public secondary and higher secondary schools in district Okara, Punjab province. 811 students were selected in the sample from 24 schools situated in 3 tehsils of district Okara, Punjab. Both male and female students were selected as sample on the basis of locality (urban and rural).

The data was collected by administering one instrument: Self-Efficacy Questioner for Children (SEQ-C). Self-Efficacy Questioner for Children (SEQ-C) was used to measure students' self-efficacy and its effect on their achievement in science. The adapted and translated version of SEQ-C was pilot tested and validated for the present research study. Students' achievement scores in science subjects were obtained from their results of 9th class Board examinations. Some demographic information was also obtained.

The data obtained from 811 students were analyzed by Statistical Package for Social Sciences (SPSS) version 20. For the pilot study of instrument, Cronbach Alpha Reliability Coefficient was used. Similarity Difficulty index and Discrimination index were also used for

the deletion of some items. Descriptive statistics i.e. Mean, Standard Deviation and Frequency Distributions were used for the description of trends in the data. Values of Chi Square were used to find out the relationship and ANOVA was used to find out differences.

## RESULTS AND DISCUSSIONS

The main focus of the present study was to investigate the self-efficacy and its effect on students' achievement in science. In the present study, the relationships among self-efficacy and achievement in science were explored. This chapter is mainly divided into two parts.

Part-I provides the descriptive information about the subjects of the study. Part-II provides the answers to research questions for the present study.

### Part I

### 4.1 Descriptive statistics about the Subjects of the Study

This part of the study describes an overview of the data regarding the descriptive statistics.

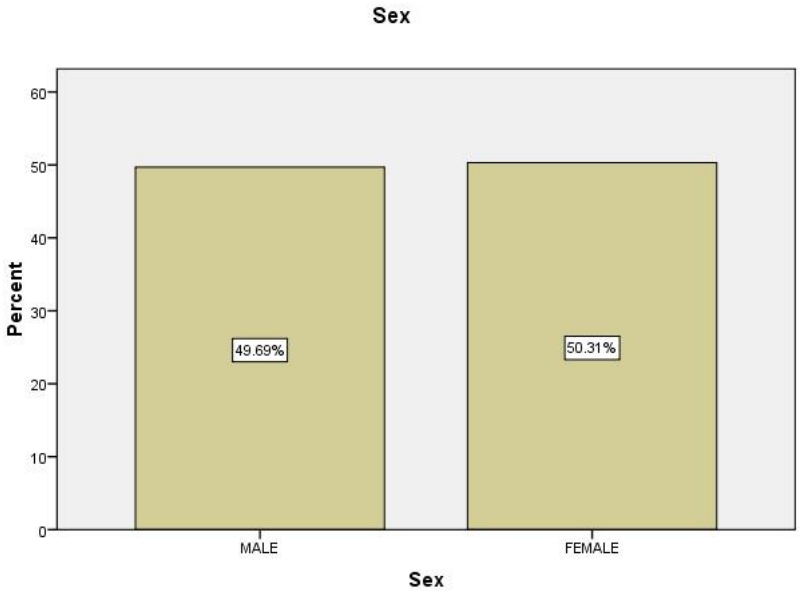
**Demographic Information**

Table 4.1 shows the classification of subjects by gender.

Table 4.1: *Classification of Subjects by Gender*

| Gender | N | Percentage |
|---|---|---|
| Male | 403 | 49.3 |
| Female | 408 | 50.7 |
| Total | 811 | 100 |

The table 4.1 indicates that percentage of male students (49.3 %) was lower than that of female students (50.7 %).




Classification of subjects by locality is presented in Table 4.2 given below.

Table 4.2: *Classification of Subjects by Locality*

| Locality | N | Percentage |
|---|---|---|
| Okara | 263 | 32.4 |
| Renala Khurd | 257 | 31.7 |
| Depalpur | 291 | 35.9 |

According to table 4.2, the greater number of subjects i.e. 291 (35.9 %) belonged to Tehsil Depalpur, while the smaller number of subjects were from Tehsil Renala Khurd i.e. 257 (31.7 %).

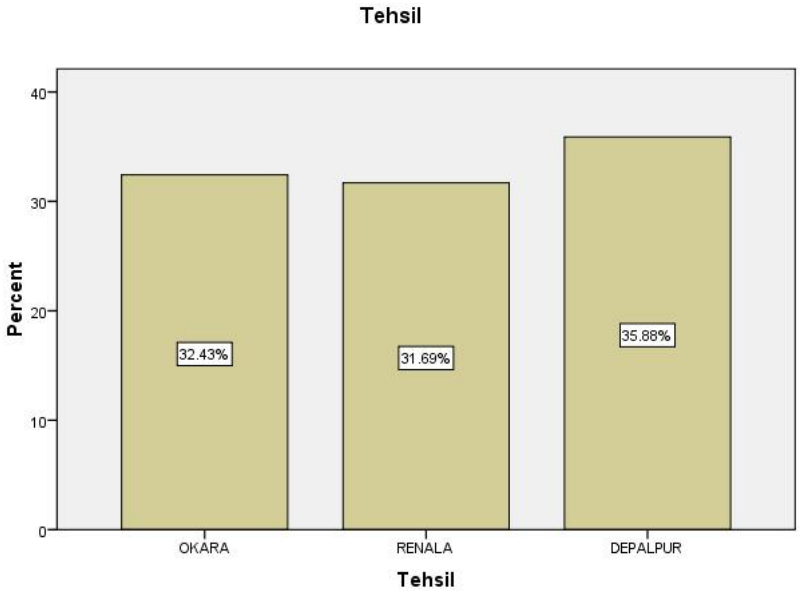



Table 4.3: *Classification of Respondents with respect to Father Education*

| Father Education | N | Percentage |
|---|---|---|
| Primary | 139 | 17.1 |
| Middle | 94 | 11.6 |
| Matric | 125 | 15.4 |
| F.A | 181 | 22.3 |
| B.A | 87 | 10.7 |
| M.A | 74 | 9.1 |
| Other | 111 | 13.7 |
| Total | 811 | 100 |

Table 4.3 explains the classification of father education of respondents. It was found that the highest numbers of subjects belongs to FA Educational level i.e.181 (22.3 %). On the other hand, the lower number of respondents was only 74 (9.1%) whom fathers' education was MA.

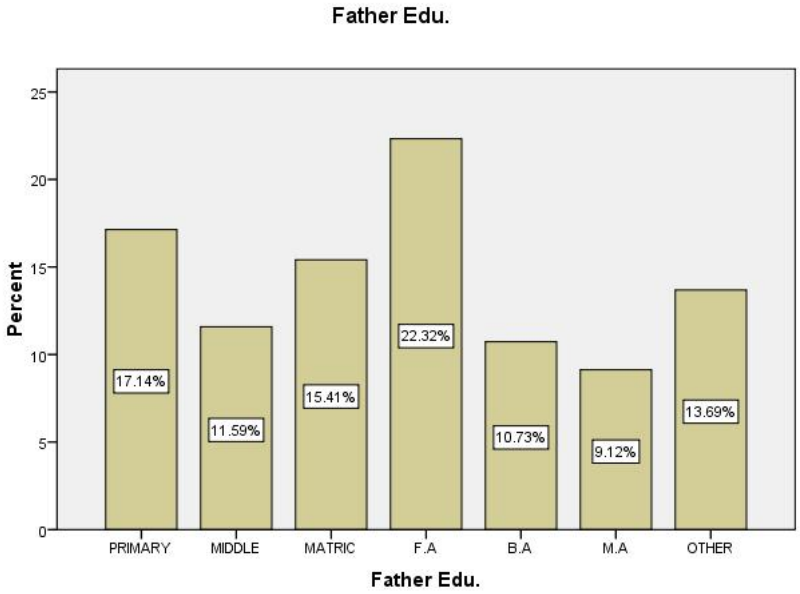



Table 4.4: *Classification of Father Profession*

| Father Profession | N | Percentage |
|---|---|---|
| Agriculture | 189 | 23.3 |
| Business | 258 | 31.8 |
| GovtEmpolyee | 179 | 22.1 |
| Doctor | 40 | 4.9 |
| Others | 145 | 17.9 |
| Total | 811 | 100 |

Table 4.4 explains the classification of fathers' profession of the respondents. It is expressed that the most of the respondents belonged to such families whose fathers were businessmen (31.8 %) and the least number of parents belonged to employees (4.9 %).

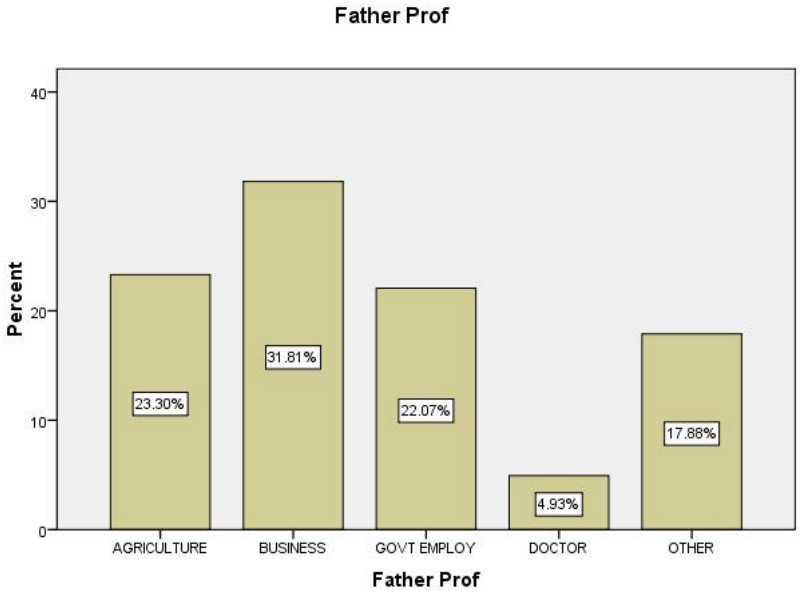



Table 4.5: *Classification of Mother Education*

| Qualification | N | Percentage |
|---|---|---|
| Primary | 128 | 15.8 |
| Middle | 131 | 16.2 |
| Matric | 267 | 32.9 |
| F.A | 158 | 19.5 |
| B.A | 74 | 09.1 |
| Other | 53 | 6.5 |
| Total | 811 | 100 |

Table 4.5 explains the classification of respondents with respects to mothers' education. It is expressed that the most respondents belonged to category whom mothers were only Matric i.e. 267 (32.9%). Least number of respondents were only 53 (6.5%).

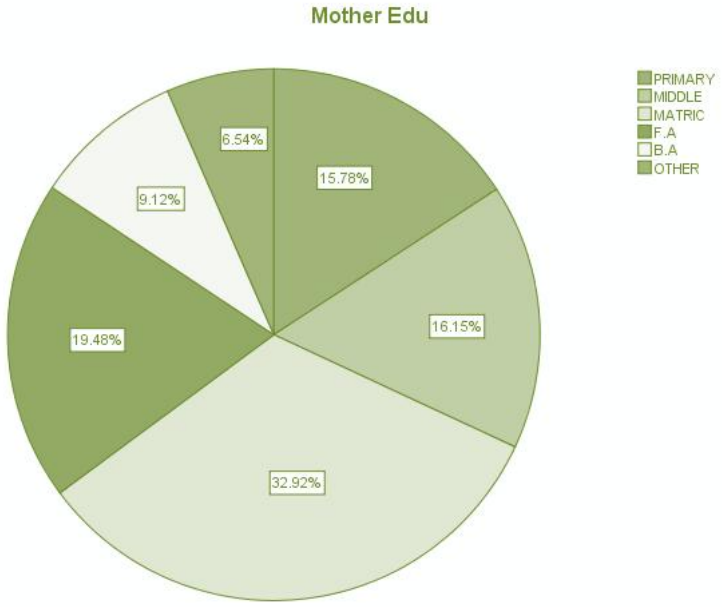



Table 4.6: *Classification of Mother Profession*

| Profession | N | Percentage |
|---|---|---|
| House wife | 549 | 67.7 |
| Employee | 74 | 9.1 |
| Other | 188 | 23.2 |
| Total | 811 | 100 |

Table 4.6 explains the classification of mothers' profession of the respondents. It is expressed that the most of the respondents belonged to such families whose mothers were house wives i.e. 549 (67.7 %) and the least number of parents belonged to employees.

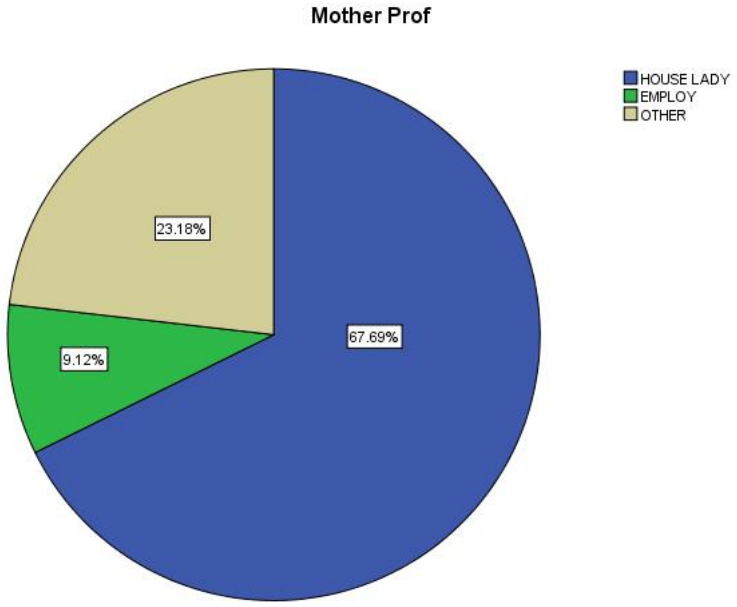
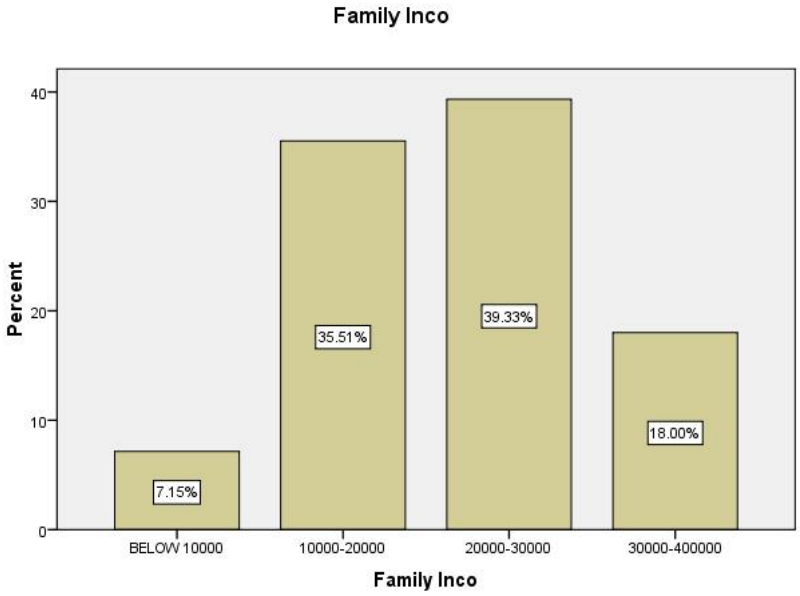



Table 4.7: *Classification of Family with respect to Income*

| Income | N | Percentage |
|---|---|---|
| Below 10000 | 58 | 7.2 |
| 10000-20000 | 288 | 35.5 |
| 20000-30000 | 319 | 39.3 |
| 30000-40000 | 146 | 18.0 |
| Total | 811 | 100 |

Table 4.7 explains the classification of family with respect to income. It is expressed that the large number of respondents belonged income range (20000-30000) having percentage 39.3. On the other hand, the least number of respondents belonged to income range (below 10000) having percentage of 7.2 only.




## Part II: Analysis

This part of the study concentrates on the research questions of the present study through analyzing the data collected from 10th grade science students.

### 4.2 Relationship of Gender with Academic Self Efficacy

Analysis regarding Relationship of Gender with Academic Self Efficacy discussed in this part of the study.

**Q. 1. I get teachers to help me when I get stuck on schoolwork?**

**Table 4.8:** ***Teacher Help on School Work with Respect to Gender***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Male** | **F** | 403 | 0 | 0 | 17 | 35 | 351 | | |
| | **%** | 49.7 | 0 | 0 | 2.1 | 4.3 | 43.3 | | |
| **Female** | **F** | 408 | 0 | 0 | 1 | 2 | 405 | 47.483 | .000** |
| | **%** | 50.3 | 0 | 0 | .1 | .2 | 49.9 | | |
| **Total** | **F** | 811 | 0 | 0 | 18 | 37 | 756 | | |
| | **%** | 100 | 0 | 0 | 2.2 | 4.6 | 93.2 | | |

**p<.01, *P<.05 *df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.8 shows the results about the help of teachers to students regarding the school work. The results showed significant relationship. On the basis of p-value (.000) between the genders. Most of the respondents told that they do their school work without the help of teachers. Responses show that male students do their homework independently when compared with female students. Hence female students need more help than male students.

**Q. 2. I study a chapter for a test?**

**Table 4.9:** ***Relationship of Gender with respect to Study***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Male** | **F** | 403 | 1 | 2 | 13 | 48 | 339 | | |
| | **%** | 49.7 | .1 | .2 | 1.6 | 5.9 | 41.8 | | |
| **Female** | **F** | 408 | 0 | 0 | 0 | 1 | 407 | 67.252 | .000** |
| | **%** | 50.3 | 0 | 0 | 0 | .1 | 52.2 | | |
| **Total** | **F** | 811 | 1 | 2 | 13 | 49 | 746 | | |
| | **%** | 100 | .1 | .2 | 1.6 | 6 | 92.0 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.9 explains the results about the preparation for the test. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents told that they do not prepare for their test. Responses show that male students were more careless when compared with female students. Hence female students prepare their tests well than male students.

**Q. 3.I succeed in passing all subjects?**

**Table 4.10:** ***Relationship of Gender with Respect to Success***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Male** | **F** | 403 | 0 | 132 | 19 | 62 | 190 | | |
| | **%** | 49.7 | 0 | 16.3 | 2.3 | 7.6 | 23.4 | | |
| **Female** | **F** | 408 | 0 | 229 | 1 | 0 | 178 | 104.628 | .000** |
| | **%** | 50.3 | 0 | 28.2 | .1 | 0 | 21.9 | | |
| **Total** | **F** | 811 | 0 | 361 | 20 | 62 | 368 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **%** | 100 | 0 | 44.5 | 2.5 | 7.6 | 45.4 | |

**p<.01, *P<.05 *df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.10 indicates the results about the success of passing the test. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents told that they do not succeed in their test. Responses show that male students face more failure when compared with female students. Hence on the basis of results more female students pass through the exams than male students.

**Q. 4. I succeed in satisfying my parents with my schoolwork?**

**Table: 4.11** ***Satisfaction of Parents with respect to Gender***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Male** | **F** | 403 | 2 | 2 | 20 | 305 | 74 | | |
| | **%** | 49.7 | .2 | .2 | 2.5 | 37.6 | 9.1 | | |
| **Female** | **F** | 408 | 0 | 0 | 0 | 406 | 2 | 106.531 | .000** |
| | **%** | 50.3 | 0 | 0 | 0 | 50.1 | .2 | | |
| **Total** | **F** | 811 | 2 | 2 | 20 | 711 | 76 | | |
| | **%** | 100 | .2 | .2 | 2.5 | 87.7 | 9.4 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.11 shows the results about the satisfaction of parents with respect to school work. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents do not satisfy their parents regarding the school work. Responses show the ratio of female students is higher than that of male students in the school work activities. Hence female students showed more laziness in school work than male students.

**Q. 5. I succeed in passing a test?**

**Table 4.12:** ***Relationship of Passing the Test with respect to Gender***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Male** | **F** | 403 | 2 | 2 | 29 | 54 | 316 | | |
| | **%** | 49.7 | .2 | .2 | 3.6 | 6.7 | 39 | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Female** | **F** | 408 | 0 | 0 | 1 | 0 | 407 | | .000** |
| | **%** | 50.3 | 0 | 0 | .1 | 0 | 50.2 | 95.560 | |
| **Total** | **F** | 811 | 2 | 2 | 30 | 54 | 723 | | |
| | **%** | 100 | .2 | .2 | 3.7 | 6.7 | 89.1 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.12 explains the results about the success in passing the test. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents do not able to succeed in the exams. Responses show the ratio of female students is higher than that of male students in not passing the test. Hence female students showed more laziness during the test than male students.

### 4.3 **Relationship of Gender with Social Self Efficacy**

Analysis regarding Relationship of Gender with Social Self Efficacy is described in this part of the study.

**Q. 6.I become friends with other children?**

**Table 4.13:** ***Friendship of Students with respect to Gender***

| | | **N** | **NA** | **N** | **ST** | **W** | **VW** | **$\chi^2$** | **P-val** |
|---|---|---|---|---|---|---|---|---|---|
| **Male** | **F** | 403 | 1 | 4 | 17 | 309 | 72 | | |
| | **%** | 49.7 | .1 | .5 | 2.1 | 38.1 | 8.9 | | |
| **Female** | **F** | 408 | 0 | 0 | 0 | 407 | 1 | 104.441 | .000** |
| | **%** | 50.3 | 0 | 0 | 0 | 50.2 | .1 | | |
| **Total** | **F** | 811 | 1 | 4 | 17 | 716 | 73 | | |
| | **%** | 100 | .1 | .5 | 2.1 | 88.3 | 9 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.13 indicates the results about the friendship among students. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents do not able to make friends. Responses show the ratio of female students is

higher than that of male students with respect to friendship. Hence female students showed more laziness in making friends than male students.

**Q. 7. I work in harmony with my class mates?**

**Table 4.14:** ***Harmony among Students with respect to Gender***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Male** | **F** | 403 | 6 | 5 | 23 | 52 | 317 | | |
| | **%** | 49.7 | .7 | .6 | 2.8 | 6.4 | 39.1 | | |
| **Female** | **F** | 408 | 0 | 0 | 1 | 1 | 406 | 91.171 | .000** |
| | **%** | 50.3 | 0 | 0 | .1 | .1 | 50.1 | | |
| **Total** | **F** | 811 | 6 | 5 | 24 | 53 | 723 | | |
| | **%** | 100 | .7 | .6 | 3 | 6.5 | 89.1 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.14 explains the results about the harmony among students. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents do not show harmony with friends. Responses show the ratio of female students is higher than that of male students with respect to harmony. Hence female students showed more laziness with respect to harmony than male students.

**Q. 8. I tell a funny event to a group of children?**

**Table 4.15:** ***Sharing of Funny Events to friends with respect to Gender***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Male** | **F** | 403 | 8 | 11 | 275 | 48 | 61 | | |
| | **%** | 49.7 | 1 | 1.4 | 33.9 | 5.9 | 7.5 | | |
| **Female** | **F** | 408 | 0 | 1 | 405 | 2 | 0 | 144.481 | .000** |
| | **%** | 50.3 | 0 | .1 | 49.9 | .2 | 0 | | |
| **Total** | **F** | 811 | 8 | 12 | 680 | 50 | 61 | | |
| | **%** | 100 | 1 | 1.5 | 83.8 | 6.2 | 7.5 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

In the above table 4.15 it is indicated that the results about the sharing of stories with friends. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents do not share stories with friends. Responses show the ratio of female students is higher than that of male students with respect to become isolation. Hence female students showed more isolationthan male students.

**Q. 9.I succeed in staying friends with other children?**

**Table 4.16*: Success of Staying with other Children with respect to Gender***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Male** | **F** | 403 | 7 | 2 | 21 | 325 | 48 | | |
| | **%** | 49.7 | .9 | .2 | 2.6 | 40.1 | 5.9 | | |
| **Female** | **F** | 408 | 0 | 0 | 1 | 406 | 1 | 81.211 | .000** |
| | **%** | 50.3 | 0 | 0 | .1 | 50.1 | .1 | | |
| **Total** | **F** | 811 | 7 | 2 | 22 | 731 | 49 | | |
| | **%** | 100 | .9 | .2 | 2.7 | 90.1 | 6 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.16 shows the results about to remain friends with other children. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents do not make friends. Responses show the ratio of female students is higher than that of male students with respect friendship. Hence female students showed more isolation than male students.

**Q. 10. I succeed in preventing quarrels with other children?**

**Table 4.17*: Preventing Quarrels with other Children with respect to Gender***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Male** | **F** | 403 | 15 | 10 | 29 | 314 | 35 | | |
| | **%** | 49.7 | 1.8 | 1.2 | 3.6 | 38.7 | 4.3 | | |
| **Female** | **F** | 408 | 2 | 0 | 1 | 405 | 0 | 92.565 | .000** |
| | **%** | 50.3 | .2 | 0 | .1 | 49.9 | 0 | | |
| **Total** | **F** | 811 | 17 | 10 | 30 | 719 | 35 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **%** | 100 | 2.1 | 1.2 | 3.7 | 88.7 | 4.3 | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.17 explains the results about to quarrels with other children. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents do not refrain from quarreling. Responses show the ratio of female students is higher than that of male students with respect quarrel. Hence female students showed more aggression than male students.

### 4.4 **Relationship of Gender with Emotional Self Efficacy**

Analysis regarding Relationship of Gender with Emotional Self Efficacy is described in this part of the study.

**Q. 11. I prevent to become nervous?**

**Table 4.18*: Prevention from Nervousness with respect to Gender***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Male** | **F** | 403 | 2 | 6 | 39 | 74 | 282 | | |
| | **%** | 49.7 | .2 | .7 | 4.8 | 9.1 | 34.8 | | |
| **Female** | **F** | 408 | 0 | 1 | 0 | 2 | 405 | 134.778 | .000** |
| | **%** | 50.3 | 0 | .1 | 0 | .2 | 49.9 | | |
| **Total** | **F** | 811 | 2 | 7 | 39 | 76 | 687 | | |
| | **%** | 100 | .2 | .9 | 4.8 | 9.4 | 84.7 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.18 explains the results about the prevention of nervousness. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents become nervous. Responses show the ratio of female students is higher than that of male students with respect nervousness. Hence female students showed more anxiety than male students.

**Q. 12. I control my feelings?**

**Table 4.19*: Control of Feelings with respect to Gender***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Male** | **F** | 403 | 5 | 8 | 154 | 186 | 50 | | |
| | **%** | 49.7 | .6 | 1 | 19 | 22.9 | 6.2 | | |
| **Female** | **F** | 408 | 0 | 0 | 231 | 177 | 0 | 78.595 | .000** |
| | **%** | 50.3 | 0 | 0 | 28.5 | 21.8 | 0 | | |
| **Total** | **F** | 811 | 5 | 8 | 385 | 363 | 50 | | |
| | **%** | 100 | .6 | 1 | 47.5 | 44.8 | 6.2 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.19 indicates the results about to control the feelings. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents unable to control their feelings. Responses show the ratio of male students is higher than that of female students with respect to control of feelings. Hence male students showed more violence than male students.

**Q. 13. I tell a friend that I don't feel well?**

**Table 4.20*: Sharing with Friend about feeling with respect to Gender***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Male** | **F** | 403 | 18 | 21 | 157 | 173 | 34 | | |
| | **%** | 49.7 | 2.2 | 2.6 | 19.4 | 21.3 | 4.2 | | |
| **Female** | **F** | 408 | 0 | 1 | 177 | 230 | 0 | 79.414 | .000** |
| | **%** | 50.3 | 0 | .1 | 21.8 | 28.4 | 0 | | |
| **Total** | **F** | 811 | 18 | 22 | 334 | 403 | 34 | | |
| | **%** | 100 | 2.2 | 2.7 | 41.2 | 49.7 | 4.2 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.20 shows the results about to feelings of frustration. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents share their feelings with friends. Responses show the ratio of female students is

higher than that of male students with respect feeling share. Hence female students share their feelings more freely than male students.

**Q. 14. I succeed in suppressing unpleasant thoughts?**

**Table 4.21*:* Success in Suppressing Unpleasant thoughts with respect to Gender**

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Male** | **F** | 403 | 6 | 10 | 172 | 179 | 36 | | |
| | **%** | 49.7 | .7 | 1.2 | 21.2 | 22.1 | 4.4 | | |
| **Female** | **F** | 408 | 0 | 0 | 229 | 177 | 2 | 54.506 | .000** |
| | **%** | 50.3 | 0 | 0 | 28.2 | 21.8 | .2 | | |
| **Total** | **F** | 811 | 6 | 10 | 401 | 356 | 38 | | |
| | **%** | 100 | .7 | 1.2 | 49.4 | 43.9 | 4.7 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

In the above table 4.21 it is indicated that the results about to suppressing unpleasant thoughts with other children. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents do not suppressing unpleasant thoughtsfriends. Responses show the ratio of female and male students suppressing unpleasant thoughts is almost same.

**Q. 15. I succeed in not worrying about things that might happen?**

**Table 4.22*: Success in not Worrying about things with respect to Gender***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Male** | **F** | 403 | 10 | 13 | 50 | 305 | 25 | | |
| | **%** | 49.7 | 1.2 | 1.6 | 6.2 | 37.6 | 3.1 | | |
| **Female** | **F** | 408 | 0 | 1 | 1 | 406 | 0 | 106.685 | .000** |
| | **%** | 50.3 | 0 | .1 | .1 | 50.1 | 0 | | |
| **Total** | **F** | 811 | 10 | 14 | 51 | 711 | 25 | | |
| | **%** | 100 | 1.2 | 1.7 | 6.3 | 87.7 | 3.1 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.22 shows the results about to mind the things that happen. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents worry about difference incidents. Responses show the ratio of female students is higher than male students who worry about different incidents.

## 4.5 **Relationship of Location with Academic Self Efficacy**

Analysis regarding Relationship of Location with Academic Self Efficacy is discussed in this part of the study.

**Q. 1. I get teachers to help you when you get stuck on schoolwork?**

**Table 4.23*: Help of Teacher in Schoolwork with respect to Location***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Urban** | **F** | 431 | 0 | 0 | 13 | 24 | 394 | | |
| | **%** | 53.1 | 0 | 0 | 1.6 | 3 | 48.6 | | |
| **Rural** | **F** | 380 | 0 | 0 | 5 | 13 | 362 | 4.993 | .082 |
| | **%** | 46.6 | 0 | 0 | .6 | 1.6 | 44.6 | | |
| **Total** | **F** | 811 | 0 | 0 | 18 | 37 | 756 | | |
| | **%** | 100 | 0 | 0 | 2.2 | 4.6 | 93.2 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.23 explains the results about the help of teachers to students regarding the school work. The results showed an insignificant relationship. On the basis of p-value (.082) between the locations, most of the respondents told that they do their school work with the help of teachers. Responses show that urban areas students get more help during homework assignments when compared with rural areas students. Hence rural areas students need less help than urban students.

**Q. 2. I can study a chapter for a test?**

**Table 4.24: *Preparation for a test with respect to Location***

| | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Urban** | **F** | 403 | 1 | 2 | 12 | 31 | 385 | | |
| | **%** | 49.7 | .1 | .2 | 1.5 | 3.8 | 47.5 | | |
| **Rural F** | | 408 | 0 | 0 | 1 | 18 | 361 | 13.375 | .010** |
| | **%** | 50.3 | 0 | 0 | .1 | 2.2 | 44.5 | | |
| **Total** | **F** | 811 | 1 | 2 | 13 | 49 | 746 | | |
| | **%** | 100 | .1 | .2 | 1.6 | 6 | 92.0 | | |

**p<.01, *P<.05, *df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.24 explains the results about the preparation of a test. The results showed significant relationship. On the basis of p-value (.010) between the locations, most of the respondents told that they do not prepare their test. Responses show that urban areas students were lazier while preparing the tests when compared with rural students. Hence rural areas students exercise less laziness than urban areas students during preparing the tests.

**Q. 3. I succeed in passing all subjects?**

**Table 4.25*: Success in passing all Subjects with Respect to Location***

| | | **N** | **NA** | **N** | **ST** | **W** | **VW** | **$\chi^2$** | **P-val** |
|---|---|---|---|---|---|---|---|---|---|
| **Urban** | **F** | 431 | 0 | 155 | 12 | 36 | 228 | | |
| | **%** | 53.1 | 0 | 19.1 | 1.5 | 4.4 | 28.1 | | |
| **Rural F** | | 380 | 0 | 206 | 8 | 26 | 140 | 27.563 | .000** |
| | **%** | 46.9 | 0 | 25.4 | .1 | 3.2 | 17.3 | | |
| **Total** | **F** | 811 | 0 | 361 | 20 | 62 | 368 | | |
| | **%** | 100 | 0 | 44.5 | 2.5 | 7.6 | 45.4 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.25 shows the results about the preparation of a test to pass out the subjects. The results showed significant relationship. On the basis of p-value (.000) between the locations, most of the respondents told that they do not pass their test. Responses show that urban areas students do not qualify the tests when compared with rural areas students. Hence more rural areas students pass the subjects than urban students during the tests.

**Q. 4. I succeed in satisfying my parents with my schoolwork?**

**Table 4.26*: Success in Satisfaction of Parents about School Work with Respect to Location***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Urban** | **F** | 431 | 2 | 2 | 20 | 305 | 74 | | |
| | **%** | 53.1 | .2 | .2 | 2.5 | 37.6 | 9.1 | | |
| **RuralF** | | 380 | 0 | 0 | 0 | 406 | 2 | 2.401 | .662 |
| | **%** | 46.9 | 0 | 0 | 0 | 50.1 | .2 | | |
| **Total** | **F** | 811 | 2 | 2 | 20 | 711 | 76 | | |
| | **%** | 100 | .2 | .2 | 2.5 | 87.7 | 9.4 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.26 indicates the results about the satisfaction of parents with the school work of their children. The results showed an insignificant relationship. On the basis of p-value (.662) between the locations, most of the respondents told that they able to satisfy their parents about their school work. Responses show that rural areas students have higher satisfaction when compared with urban areas students.

**Q. 5. I succeed in passing a test?**

**Table 4.27: Success in Passing a Test with Respect to Location**

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Urban** | **F** | 431 | 2 | 2 | 21 | 29 | 377 | | |
| | **%** | 53.1 | .2 | .2 | 2.6 | 3.6 | 46.5 | | |
| **RuralF** | | 380 | 0 | 0 | 9 | 25 | 346 | 7.247 | .123 |
| | **%** | 46.9 | 0 | 0 | 1.1 | 3.1 | 42.7 | | |
| **Total** | **F** | 811 | 2 | 2 | 30 | 54 | 723 | | |
| | **%** | 100 | .2 | .2 | 3.7 | 6.7 | 89.1 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.27 expresses the results about the success in passing the test. The results showed an insignificant relationship on the basis of p-value (.123) between the locations.

Most of the respondents able to succeed in the exams. Responses show the ratio of urban areas students is higher than that of rural areas students in passing the test. Hence rural areas students show more laziness during the test than urban students.

### 4.6 **Relationship of Location with Social Self Efficacy**

Analysis regarding Relationship of Gender with Social Self Efficacy discussed in this part of the study.

**Q. 6. I become friends with other children?**

**Table 4.28*: Friendship with other Children with Respect to Location***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Urban** | **F** | 431 | 0 | 3 | 14 | 375 | 39 | | |
| | **%** | 53.1 | 0 | .4 | 1.7 | 46.2 | 4.8 | | |
| **Rural F** | | 380 | 1 | 1 | 3 | 341 | 34 | 7.899 | .095 |
| | **%** | 46.9 | .1 | .1 | .4 | 42 | 4.2 | | |
| **Total** | **F** | 811 | 1 | 4 | 17 | 716 | 73 | | |
| | **%** | 100 | .1 | .5 | 2.1 | 88.3 | 9 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

In the above table 4.28 it is indicated the results about the friendship among students. The results showed an insignificant relationship on the basis of p-value (.095) between the locations. Most of the respondents make friends. Responses show the ratio of urban areas students is higher than that of rural areas students with respect to friendship. Hence rural areas students showed more laziness in making friends than urban areas students.

**Q. 7. I work in harmony with my class mates?**

**Table 4.29*: Work in Harmony with Class Mates with respect to Location***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Urban** | **F** | 431 | 3 | 5 | 16 | 27 | 380 | | |
| | **%** | 53.1 | .4 | .6 | 2 | 3.3 | 46.9 | | |
| **RuralF** | | 380 | 3 | 0 | 8 | 26 | 343 | | .171 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **%** | 46.9 | .4 | 0 | 1 | 3.2 | 42.3 | 6.397 |
| **Total** | **F** | 811 | 6 | 5 | 24 | 53 | 723 | |
| | **%** | 100 | .7 | .6 | 3 | 6.5 | 89.1 | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.29 explains the results about the harmony among students. The results showed an insignificant relationship on the basis of p-value (.171) between the locations. Most of the respondents show harmony with friends. Responses show the ratio of urban areas students is higher than that of rural areas students with respect to harmony. Hence rural areas students showed more laziness with respect to harmony than urban students.

**Q. 8. I tell a funny event to a group of children?**

**Table 4.30*: Sharing of Funny Events with Children with Respect to Location***

| | | **N** | **NA** | **N** | **ST** | **W** | **VW** | **$\chi^2$** | **P-val** |
|---|---|---|---|---|---|---|---|---|---|
| **Urban** | **F** | 431 | 4 | 7 | 362 | 27 | 31 | | |
| | **%** | 53.1 | .5 | .9 | 44.6 | 3.3 | 3.8 | | |
| **RuralF** | | 380 | 4 | 5 | 318 | 23 | 30 | .311 | .989 |
| | **%** | 46.9 | .5 | .6 | 39.2 | 2.8 | 3.7 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.30 expresses the results about the sharing of stories with friends. The results showed an insignificant relationship on the basis of p-value (.989) between the locations. Most of the respondents share stories with friends. Responses show the ratio of urban students is higher than that of rural students with respect to become isolation. This happening some times. Hence urban students showed more isolation than rural students.

**Q. 9. I succeed in staying friends with other children?**

**Table 4.31*: Success in Staying Friends with other Children with Respect to Location***

| | **N** | **NA** | **N** | **ST** | **W** | **VW** | **$\chi^2$** | **P-val** |
|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Urban** | **F** | 431 | 3 | 0 | 14 | 389 | 25 | | |
| | **%** | 53.1 | .4 | 0 | 1.7 | 48.0 | 3.1 | | |
| **Rural** | **F** | 380 | 4 | 2 | 8 | 342 | 24 | 3.629 | .459 |
| | **%** | 46.9 | .5 | .2 | 1.0 | 42.2 | 3.0 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.31 indicates the results about to remain friends with other children. The results showed an insignificant relationship on the basis of p-value (.459) between the locations. Both of the groups make friends. Responses show the ratio of urban areas students is higher than that of rural areas students with respect friendship. Hence urban areas students make more friends than rural areas students.

**Q. 10. I succeed in preventing quarrels with other children?**

**Table 4.32*: Preventing Quarrels with Children with respect to Location***

| | | **N** | **NA** | **N** | **ST** | **W** | **VW** | **$\chi^2$** | **P-val** |
|---|---|---|---|---|---|---|---|---|---|
| **Urban** | **F** | 431 | 6 | 6 | 18 | 381 | 20 | | |
| | **%** | 53.1 | .7 | .7 | 2.2 | 47.0 | 2.5 | | |
| **RuralF** | | 380 | 11 | 4 | 12 | 338 | 15 | 3.162 | .531 |
| | **%** | 46.9 | 1.4 | .5 | 1.5 | 41.7 | 1.8 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.32 explains the results about to quarrels with other children. The results showed an insignificant relationship on the basis of p-value (.531) between the locations. Most of the respondents do not quarrel with their friends. Responses show the ratio of urban areas students is higher than that of rural areas students with respect quarrel.

## 4.7 **Relationship of Location with Emotional Self Efficacy**

Analysis regarding Relationship of Location with Academic Self Efficacy discussed in this part of the study.

**Q. 11. I prevent to become nervous?**

**Table 4.33*: Prevention from Nervousness with Respect to Location***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Urban** | **F** | 431 | 2 | 6 | 39 | 74 | 282 | | |
| | **%** | 53.1 | .2 | .7 | 4.8 | 9.1 | 34.8 | | |
| **RuralF** | | 380 | 0 | 1 | 0 | 2 | 405 | 134.778 | .000** |
| | **%** | 46.9 | 0 | .1 | 0 | .2 | 49.9 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.33 shows the results about the prevention of nervousness. The results showed a significant relationship on the basis of p-value (.000) between the locations. Most of the respondents become nervous. Responses show the ratio of rural areas students is higher than that of urban areas students with respect nervousness. Hence rural areas students showed more anxiety than male students.

**Q. 12. I control your feelings?**

**Table 4.34*: Control of Feeling with Respect to Location***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Urban** | **F** | 431 | 3 | 6 | 173 | 225 | 24 | | |
| | **%** | 53.1 | .4 | .7 | 21.3 | 27.7 | 3 | | |
| **RuralF** | | 380 | 2 | 2 | 212 | 138 | 26 | 23.970 | .000** |
| | **%** | 46.9 | .2 | .2 | 26.1 | 17.0 | 3.2 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.34 indicates the results about to control the feelings. The results showed a significant relationship on the basis of p-value (.000) between the locations. Most of the respondents were unable to control their feelings. Responses show the ratio of urban areas students is higher than that of rural areas students with respect to control of feelings. Hence urban areas students showed more violence than rural areas students.

**Q. 13. I tell a friend that you don't feel well?**

**Table 4.35*: Share of Feeling with Friend with respect to Location***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Urban** | **F** | 431 | 0 | 0 | 17 | 35 | 351 | | |
| | **%** | 53.1 | 0 | 0 | 2.1 | 4.3 | 43.3 | | |
| **RuralF** | | 380 | 0 | 0 | 1 | 2 | 405 | 47.483 | .000** |
| | **%** | 46.9 | 0 | 0 | .1 | .2 | 49.9 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.35 explains the results about to feelings of frustration. The results showed a significant relationship on the basis of p-value (.000) between the locations. Most of the respondents share their feelings with friends. Responses show the ratio of rural areas students is higher than that of urban areas students with respect feeling share. Hence rural areas students share their feelings more freely than urban students.

**Q. 14. I succeed in suppressing unpleasant thoughts?**

**Table 4.36*: Suppressing about Unpleasant Thoughts with respect to Location***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Urban** | **F** | 431 | 2 | 6 | 181 | 224 | 18 | | |
| | **%** | 53.1 | .2 | .7 | 22.3 | 27.6 | 2.2 | | |
| **RuralF** | | 380 | 4 | 4 | 220 | 132 | 20 | 25.634 | .000** |
| | **%** | 46.9 | .5 | .5 | 27.1 | 16.3 | 2.5 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.36 shows the results about to suppressing unpleasant thoughts with other children. The results showed a significant relationship on the basis of p-value (.000) between the locations. Most of the respondents do not suppressing unpleasant thoughts friends. Responses show the ratio of urban areas respondents is higher than that of rural areas respondents with respect to suppressing unpleasant thoughts in schools.

**Q. 15. I succeed in not worrying about things that might happen?**

**Table 4.37*: Success in not Worrying about things with Respect to Location***

| | | N | NA | N | ST | W | VW | $\chi^2$ | P-val |
|---|---|---|---|---|---|---|---|---|---|
| **Urban** | **F** | 431 | 2 | 5 | 34 | 373 | 17 | | |
| | **%** | 53.1 | .2 | .6 | 4.2 | 46.0 | 2.1 | | |
| **Rural** | | 380 | 8 | 9 | 17 | 338 | 8 | 12.214 | .016* |
| | **%** | 46.9 | 1.0 | 1.1 | 2.1 | 41.7 | 1.0 | | |

**p<.01, *P<.05

*df= 4, $\chi^2$ at 0.05 level = 9.488

Table 4.37 expresses the results about to mind the things that happen. The results showed a significant relationship on the basis of p-value (.016) between the locations. Most of the respondents worry about difference incidents. Responses show the ratio of urban areas students is higher than rural areas students who worry about different incidents.

4.8 **Achievement Score of Students on the basis of Descriptive Statistics with respect to Tehsil Level**

**Tehsil wise achievement score in the subject of Biology or Computer Science**

**Table 4.38*: Achievement Score of Students in the Subject of Biology or Computer on the Basis of Tehsil Level***

| City | N | Mean | SD | Min | Max |
|---|---|---|---|---|---|
| OKARA | 263 | 46.86 | 3.054 | 39 | 50 |
| RENALA KHURD | 257 | 45.68 | 4.559 | 31 | 50 |
| DEPALPUR | 291 | 44.74 | 5.646 | 31 | 50 |
| Total | 811 | 45.73 | 4.665 | 31 | 50 |

It is obvious from the table that most of the respondents belonged to Depalpur and the least belonged to Okara. Results from standard deviation revealed that intehsil Okara students showed better results in the subject of Bioloy or Computer Science. On the other hand, the respondents from tehsil Depalpur showed poor results.

**Tehsil wise achievement score in the subject of chemistry**

**Table 4.39*: Achievement Score of Students in the Subject of Chemistry on the Basis of Tehsil Level***

| City | N | Mean | SD | Min | Max |
|---|---|---|---|---|---|
| OKARA | 263 | 47.23 | 3.140 | 42 | 53 |
| RENALA KHURD | 257 | 45.49 | 4.542 | 32 | 53 |
| DEPALPUR | 291 | 45.14 | 5.057 | 32 | 53 |
| Total | 811 | 45.93 | 4.439 | 32 | 53 |

It is obvious from the table 4.39 that most of the respondents belonged to Depalpur and the least belonged to Okara. Overall results from standard deviation revealed that in tehsil Okara students showed better results in the subject of Chemistry. On the other hand, the respondents from tehsil Depalpur showed poor results.

**Tehsil wise achievement score in the subject of Physics**

**Table 4.40*: Achievement Score of Students in the subject of Physics on the Basis of Tehsil Level***

| City | N | Mean | SD | Min | Max |
|---|---|---|---|---|---|
| OKARA | 263 | 51.86 | 4.552 | 43 | 60 |
| RENALA KHURD | 257 | 51.19 | 5.620 | 39 | 60 |
| DEPALPUR | 291 | 49.66 | 6.517 | 34 | 60 |
| Total | 811 | 50.86 | 5.725 | 34 | 60 |

It is obvious from the table 4.40 that most of the respondents belonged to Depalpur and the least belonged to Okara. Overall results from standard deviation revealed that in tehsil Okara students showed better results in the subject of Physics. On the other hand, the respondents from tehsil Depalpur showed poor results.

**Tehsil wise achievement score in the subject of Maths**

**Table 4.41: *Achievement Score of Students in the Subject of Maths on the Basis of Tehsil Level***

| City | N | Mean | SD | Min | Max |
|---|---|---|---|---|---|
| OKARA | 263 | 55.44 | 3.448 | 51 | 61 |
| RENALA KHURD | 257 | 54.68 | 4.131 | 41 | 61 |
| DEPALPUR | 291 | 53.45 | 5.654 | 41 | 61 |
| Total | 811 | 54.48 | 4.624 | 41 | 61 |

It is obvious from the table 4.41 that most of the respondents belonged to Depalpur and the least belonged to Okara. Overall results from standard deviation revealed that in tehsil Okara students showed better results in the subject of Maths. On the other hand, the respondents from tehsil Depalpur showed poor results.

**Overall Tehsil wise achievement score in all the subjects**

**Table 4.42*: Overall Achievement Score of Students on the Basis of Tehsil Level***

| City | N | Mean | SD | Min | Max |
|---|---|---|---|---|---|
| OKARA | 263 | 201.40 | 8.098 | 187 | 216 |
| RENALA KHURD | 257 | 197.04 | 14.965 | 144 | 216 |
| DEPALPUR | 291 | 192.98 | 19.654 | 144 | 216 |
| Total | 811 | 197.00 | 15.568 | 144 | 216 |

It is obvious from the table 4.42 that most of the respondents belonged to Depalpur and the least belonged to Okara. Overall results from standard deviation revealed that in tehsil Okara students showed better results. On the other hand, the respondents from tehsil Depalpur showed poor results.

4.9 **Results Related to ANOVA**

**Achievement Scores in the Subject of Biology or Computer with respect to Tehsil Level**

**Table 4.43*: Achievement Scores in the Subject of Biology or Computer with respect to Tehsil Level***

| City | Sum of squares | DF | Mean Square | F | P |
|---|---|---|---|---|---|
| Between Groups | 622.198 | 2 | 311.099 | | |
| Within Groups | 17008.579 | 808 | 21.050 | 14.779 | 000 |
| Total | 17630.777 | 810 | | | |

According to table 4.43, Results F (2, 311) = 14.77, P= 000 indicate that the students in three tehsils showed a significant result in the subject of Biology or Computer Science on the basis of their achievement scores. It was obvious that in these tehsils there is a great variation in teaching the respective subjects. Hence there is a significant difference in the achievement scores of students.

**Achievement Scores in the Subject of Chemistry with respect to Tehsil Level**

**Table 4.44*: Achievement Scores in the Subject of Chemistry with respect to Tehsil Level***

| City | Sum of squares | DF | Mean Square | F | P |
|---|---|---|---|---|---|
| Between Groups | 678.273 | 2 | 339.136 | | |
| Within Groups | 15281.579 | 808 | 18.913 | 17.932 | 000 |
| Total | 15959.852 | 810 | | | |

Table 4.44 shows the results F (2, 339) = 17.932, P= 000. It is indicated that the students in three tehsils showed a significant result in the subject of Chemistry on the basis of their achievement scores. It was obvious that in these tehsils there is a great variation in teaching the respective subject. Hence there is a significant difference in the achievement scores of students.

**Achievement Scores in the Subject of Physics with respect to Tehsil Level**

**Table 4.45*: Achievement Scores in the Subject of Physics with respect to Tehsil Level***

| City | Sum of squares | DF | Mean Square | F | P |
|---|---|---|---|---|---|
| Between Groups | 711.655 | 2 | 355.828 | | |
| Within Groups | 25832.465 | 808 | 31.971 | 11.130 | 000 |
| Total | 26544.121 | 810 | | | |

Table 4.45 shows that results F (2, 355) = 11.130, P= 000 indicate that the students in three tehsils showed a significant result in the subject of Physics on the basis of their achievement scores. It was obvious that in these tehsils there is a great variation in teaching the respective subject. Hence there is a significant difference in the achievement scores of those students.

**Achievement Scores in the Subject of Maths with respect to Tehsil Level**

**Table 4.46*: Achievement Scores in the Subject of Maths with respect to Tehsil Level***

| City | Sum of squares | DF | Mean Square | F | P |
|---|---|---|---|---|---|
| Between Groups | 563.960 | 2 | 281.980 | | |
| Within Groups | 16752.597 | 808 | 20.733 | 13.600 | 000 |
| Total | 17316.557 | 810 | | | |

According to table 4.46, results F (2, 281) = 13.600, P= 000 indicate that the students in three tehsils showed a significant result in the subject of Math on the basis of their achievement scores. It was obvious that in these tehsils there is a great variation in teaching the respective subject. Hence there is a significant difference in the achievement scores of those students.

**Over all achievement Scores on the basis of Tehsil Level**

**Table 4.47*: Over all achievement Scores with respect to Tehsil Level***

| City | Sum of squares | DF | Mean Square | F | P |
|---|---|---|---|---|---|
| Between Groups | 9777.589 | 2 | 4888.795 | | |
| Within Groups | 186529.400 | 808 | 230.853 | 21.177 | 000 |
| Total | 196306.989 | 810 | | | |

According to table 4.47, Results F (2, 4888) = 21.177, P= 000 indicate that the students in three tehsils showed a significant result in all the science subjects on the basis of their achievement scores. It was obvious that in these tehsils there is a great variation in teaching the respective subjects. Hence there is a significant difference in the achievement scores of those students.

## FINDINGS AND CONCLUSIONS

1. The table 4.1 indicates that percentage of male students (49.3 %) was lower than that of female students (50.7 %).
2. According to table 4.2, the greater number of subjects i.e. 291 (35.9 %) belonged to Depalpur, while the smaller number of subjects were from Renala Khurd i.e. 257 (31.7 %).
3. Table 4.3 expresses the classification of fathers' education of respondents. It was found that the highest numbers of subjects belonged to FA Educational level i.e.181 (22.3 %). On the other hand, the lower number of respondents was only 74 (9.1 %) whom fathers' education was MA.
4. Table 4.4 explains the classification of fathers' profession of the respondents. It is expressed that the most of the respondents belonged to such families whose fathers were businessmen i.e.258 (31.8%) and the least number of parents belonged to employees i.e.40 (4.9%).
5. Table 4.5 explains the classification of respondents with respects to mothers' education. It is expressed that the most respondents belonged to category whom mothers were only Matric i.e. 267 (32.9%). Least number of respondents were only 53 (6.5%).
6. Table 4.6 indicates the classification of mothers' profession of the respondents. It is expressed that the most of the respondents belonged to such families whose mothers were house wives i.e. 549 (67.7%) and the least number of parents belonged to Employees 74 (9.1%).
7. Table 4.7 explains the classification of family with respect to income. It is expressed that the large number of respondents belonged income range (20000-30000) having percentage 39.3. On the other hand, the least number of respondents belonged to income range (below 10000) having percentage of 7.2 only.
8. Table 4.8 shows the results about the help of teachers to students regarding the school work. The results showed significant relationship. On the basis of p-value (.000) between the genders. Most of the respondents told that they do their school work without the help of teachers. Responses showed that male students do their homework independently when compared with female students. Hence female students need more help than male students.

9. Table 4.9 expresses the results about the preparation for the test. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents told that they did not prepare for their test. Responses showed that male students were more careless when compared with female students. Hence female students prepared their tests well than male students.
10. Table 4.10 explains the results about the success of passing the test. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents told that they do not succeed in their test. Responses showed that male students faced more failure when compared with female students. Hence on the basis of results more female students passed through the exams than male students.
11. Table 4.11 expresses the results about the satisfaction of parents with respect to school work. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents did not satisfy their parents regarding the school work. Responses showed that ratio of female students were higher than that of male students in the school work activities. Hence female students showed more laziness in school work than male students.
12. Table 4.12 indicates the results about the success in passing the test. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents did not able to succeed in the exams. Responses showed the ratio of female students were higher than that of male students in not passing the test. Hence female students showed more laziness during the test than male students.
13. Table 4.13 shows the results about the friendship among students. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents were not able to make friends. Responses showed the ratio of female students were higher than that of male students with respect to friendship. Hence female students showed more laziness in making friends than male students.
14. Table 4.14 explains the results about the harmony among students. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents did not show harmony with friends. Responses showed the ratio of female students were higher than that of male students with respect to harmony. Hence female students showed more laziness with respect to harmony than male students.
15. Table 4.15 shows the results about the sharing of stories with friends. The results showed significant relationship on the basis of p-value (.000) between the genders.

Most of the respondents did not share stories with friends. Responses showed the ratio of female students were higher than that of male students with respect to become isolation. Hence female students showed more isolation than male students.

16. Table 4.16 shows the results about to remain friends with other children. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents do not make friends. Responses showed the ratio of female students were higher than that of male students with respect friendship. Hence female students showed more isolation than male students.
17. Table 4.17 expresses the results about to quarrels with other children. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents did not refrain from quarreling. Responses showed the ratio of female students were higher than that of male students with respect quarrel. Hence female students showed more aggression than male students.
18. Table 4.18 indicates the results about the prevention of nervousness. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents became nervous. Responses showed the ratio of female students were higher than that of male students with respect nervousness. Hence female students showed more anxiety than male students.
19. Table 4.19 explains the results about to control the feelings. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents were unable to control their feelings. Responses showed the ratio of male students were higher than that of female students with respect to control of feelings. Hence male students showed more violence than male students.
20. Table 4.20 expresses the results about to feelings of frustration. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents shared their feelings with friends. Responses showed the ratio of female students were higher than that of male students with respect feeling share. Hence female students share their feelings more freely than male students.
21. Table 4.21 indicates the results about to suppressing unpleasant thoughts with other children. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents do not suppressing unpleasant thoughts friends. Responses showed the ratio of female and male students suppressing unpleasant thoughts is almost same.

22. Table 4.22 explains the results about to mind the things that happen. The results showed significant relationship on the basis of p-value (.000) between the genders. Most of the respondents were worried about difference incidents. Responses showed the ratio of female students were higher than male students who worry about different incidents.
23. Table 4.23 indicates the results about the help of teachers to students regarding the school work. The results showed insignificant relationship. On the basis of p-value (.082) between the locations, most of the respondents told that they did their school work with the help of teachers. Responses showed that urban areas students got more help during homework assignments when compared with rural areas students. Hence rural areas students need less help than urban students.
24. According to table 4.24, the results about the preparation of a test. The results showed significant relationship. On the basis of p-value (.010) between the locations, most of the respondents told that they did not prepare their test. Responses showed that urban areas students were lazier while preparing the tests when compared with rural students. Hence rural areas students exercised less laziness than urban areas students during preparing the tests.
25. Table 4.25 expresses the results about the preparation of a test to pass out the subjects. The results showed significant relationship. On the basis of p-value (.000) between the locations, most of the respondents told that they did not pass their test. Responses showed that urban areas students did not qualify the tests when compared with rural areas students. Hence more rural areas students passed the subjects than urban students during the tests.
26. Table 4.26 explains the results about the satisfaction of parents with the school work of their children. The results showed an insignificant relationship. On the basis of p-value (.662) between the locations, most of the respondents told that they were able to satisfy their parents about their school work. Responses showed that rural areas students had higher satisfaction when compared with urban areas students.
27. Table 4.27 shows the results about the success in passing the test. The results showed an insignificant relationship on the basis of p-value (.123) between the locations. Most of the respondents able to succeed in the exams. Responses showed the ratio of urban areas students is higher than that of rural areas students in passing the test. Hence rural areas students show more laziness during the test than urban students.

28. Table 4.28 indicates the results about the friendship among students. The results showed an insignificant relationship on the basis of p-value (.095) between the locations. Most of the respondents make friends. Responses showed the ratio of urban areas students is higher than that of rural areas students with respect to friendship. Hence rural areas students showed more laziness in making friends than urban areas students.
29. Table 4.29 expresses the results about the harmony among students. The results showed an insignificant relationship on the basis of p-value (.171) between the locations. Most of the respondents show harmony with friends. Responses showed the ratio of urban areas students is higher than that of rural areas students with respect to harmony. Hence rural areas students showed more laziness with respect to harmony than urban students.
30. Table 4.30 indicates the results about the sharing of stories with friends. The results showed an insignificant relationship on the basis of p-value (.989) between the locations. Most of the respondents share stories with friends. Responses showed the ratio of urban students is higher than that of rural students with respect to become isolation. This happening some times. Hence urban students showed more isolation than rural students.
31. Table 4.31 expresses the results about to remain friends with other children. The results showed an insignificant relationship on the basis of p-value (.459) between the locations. Both of the groups make friends. Responses showed the ratio of urban areas students is higher than that of rural areas students with respect friendship. Hence urban areas students make more friends than rural areas students.
32. Table 4.32 indicates the results about to quarrels with other children. The results showed an insignificant relationship on the basis of p-value (.531) between the locations. Most of the respondents do not quarrel with their friends. Responses showed the ratio of urban areas students is higher than that of rural areas students with respect quarrel.
33. Table 4.33 shows the results about the prevention of nervousness. The results showed a significant relationship on the basis of p-value (.000) between the locations. Most of the respondents become nervous. Responses showed the ratio of rural areas students is higher than that of urban areas students with respect nervousness. Hence rural areas students showed more anxiety than male students.

34. Table 4.34 explains the results about to control the feelings. The results showed a significant relationship on the basis of p-value (.000) between the locations. Most of the respondents were unable to control their feelings. Responses showed the ratio of urban areas students is higher than that of rural areas students with respect to control of feelings. Hence urban areas students showed more violence than rural areas students.
35. Table 4.35 expresses the results about to feelings of frustration. The results showed a significant relationship on the basis of p-value (.000) between the locations. Most of the respondents share their feelings with friends. Responses showed the ratio of rural areas students is higher than that of urban areas students with respect feeling share. Hence rural areas students share their feelings more freely than urban students.
36. Table 4.36 shows the results about to suppressing unpleasant thoughts with other children. The results showed a significant relationship on the basis of p-value (.000) between the locations. Most of the respondents do not suppressing unpleasant thoughts friends. Responses showed the ratio of urban areas respondents is higher than that of rural areas respondents with respect to suppressing unpleasant thoughts in schools.
37. Table 4.37 indicates the results about to mind the things that happen. The results showed a significant relationship on the basis of p-value (.016) between the locations. Most of the respondents worry about difference incidents. Responses showed the ratio of urban areas students is higher than rural areas students who worry about different incidents.
38. It is obvious from the table that most of the respondents belonged to Depalpur and the least belonged to Renala Khurd. Results from standard deviation revealed that in tehsil Okara students showed better results in the subject of Bioloy or Computer Science. On the other hand, the respondents from tehsil Depalpur showed poor results.
39. It is obvious from the table that most of the respondents belonged to Depalpur and the least belonged to Renala Khurd. Overall results from standard deviation revealed that in tehsil Okara students showed better results in the subject of Chemistry. On the other hand, the respondents from tehsil Depalpur showed poor results.
40. It is obvious from the table 4.40 that most of the respondents belonged to Depalpur and the least belonged to Renala Khurd. Overall results from standard deviation revealed that in tehsil Okara students showed better results in the subject of Physics. On the other hand, the respondents from tehsil Depalpur showed poor results.

41. It is obvious from the table 4.41 that most of the respondents belonged to Depalpur and the least belonged to Renala Khurd. Overall results from standard deviation revealed that in tehsil Okara students showed better results in the subject of Maths. On the other hand, the respondents from tehsil Depalpur showed poor results.
42. It is obvious from the table 4.42 that most of the respondents belonged to Depalpur and the least belonged to Renala Khurd. Overall results from standard deviation revealed that in tehsil Okara students showed better results. On the other hand, the respondents from tehsil Depalpur showed poor results.
43. According to table 4.43, Results F (2, 311) = 14.77, P= 000 indicate that the students in three tehsils showed a significant result in the subject of Biology or Computer Science on the basis of their achievement scores. It was obvious that in these tehsils there is a great variation in teaching the respective subjects. Hence there is a significant difference in the achievement scores of students.
44. Table 4.44 explains the results F (2, 339) = 17.932, P= 000. It is indicated that the students in three tehsils showed a significant result in the subject of Chemistry on the basis of their achievement scores. It was obvious that in these tehsils there is a great variation in teaching the respective subject. Hence there is a significant difference in the achievement scores of students.
45. Table 4.45 shows that results F (2, 355) = 11.130, P= 000 indicate that the students in three tehsils showed a significant result in the subject of Physics on the basis of their achievement scores. It was obvious that in these tehsils there is a great variation in teaching the respective subject. Hence there is a significant difference in the achievement scores of those students.
46. According to table 4.46, results F (2, 281) = 13.600, P= 000 indicate that the students in three tehsils showed a significant result in the subject of Math on the basis of their achievement scores. It was obvious that in these tehsils there is a great variation in teaching the respective subject. Hence there is a significant difference in the achievement scores of those students.
47. According to table 4.47, Results F (2, 4888) = 21.177, P= 000 indicate that the students in three tehsils showed a significant result in all the science subjects on the basis of their achievement scores. It was obvious that in these tehsils there is a great variation in teaching the respective subjects. Hence there is a significant difference in the achievement scores of those students.

**The conclusion drawn from the results of the study were as under:**

1. The percentage of male students (49.3 %) was lower than that of female students (50.7 %).
2. The greater number of subjects 291 (35.9 %) belonged to Tehsil Depalpur, while the smaller number of subjects were from Tehsil Renala257 (31.7 %).
3. It was found that the highest numbers of subjects belongs to FA Educational level i.e.181 (22.3 %). On the other hand, the lower number of respondents was only 74 (9.1%) whom fathers' education was MA.
4. Most of the respondents belonged to such families whose fathers were businessmen i.e. 258 (31.8%) and the least number of parents belonged to employees 40 (4.9%).
5. Most respondents belonged to category whom mothers were only Matric.
6. Most of the respondents belonged to such families whose mothers were house wife and the least number of parents belonged to Employees.
7. Most of respondents belonged income range (20000-30000) while the least number of respondents belonged to income range (below 10000).
8. The results about the help of teachers to students regarding the school work showed significant relationship. Most of the respondents told that they did their school work without the help of teachers. Responses show that male students do their homework independently when compared with female students. Hence female students need more help than male students.
9. Most of the respondents told that they do not prepare for their test. Responses showed that male students were more careless when compared with female students. Hence female students prepare their tests well than male students.
10. Most of the respondents told that they do not succeed in their test. Responses show that male students face more failure when compared with female students. Hence on the basis of results more female students passed through the exams than male students.
11. Most of the respondents do not satisfy their parents regarding the school work. Responses showed the ratio of female students is higher than that of male students in the school work activities. Hence female students showed more laziness in school work than male students.
12. Most of the respondents do not able to succeed in the exams. Responses showed the ratio of female students is higher than that of male students in not passing the test. Hence female students showed more laziness during the test than male students.

13. Most of the respondents do not able to make friends. Responses show the ratio of female students is higher than that of male students with respect to friendship. Hence female students showed more laziness in making friends than male students.
14. The results showed significant relationship regarding the harmony among students on the basis of p-value (.000) between the genders. Most of the respondents do not show harmony with friends. Responses show the ratio of female students is higher than that of male students with respect to harmony. Hence female students showed more laziness with respect to harmony than male students.
15. When the comparison was made about the sharing of stories with friends. The results showed significant relationship. Students do not share stories with friends. Responses showed the ratio of female students is higher than that of male students with respect to become isolation. Hence female students showed more isolation than male students.
16. After analyzing the friendship with other children. The results showed significant relationship. Most of the respondents do not make friends. Responses showed the ratio of female students is higher than that of male students with respect friendship. Hence female students showed more isolation than male students.
17. After analyzing the indicator of quarrel with other children. The results showed significant relationship. Most of the respondents do not refrain from quarreling. Responses showed the ratio of female students is higher than that of male students with respect quarrel. Hence female students showed more aggression than male students.
18. Most of the respondents become nervous. Responses showed the ratio of female students is higher than that of male students with respect nervousness. Hence female students showed more anxiety than male students.
19. Most of the respondents unable to control their feelings. Responses showed the ratio of male students is higher than that of female students with respect to control of feelings. Hence male students showed more violence than male students.
20. Most of the respondents share their feelings with friends. Responses showed the ratio of female students is higher than that of male students with respect feeling share. Hence female students share their feelings more freely than male students.
21. Most of the respondents do not suppressing unpleasant thoughts friends. Responses show the ratio of female and male students suppressing unpleasant thoughts is almost same.

22. Most of the respondents worry about difference incidents. Responses showed the ratio of female students is higher than male students who worry about different incidents.
23. Most of the respondents told that they do their school work with the help of teachers. Responses showed that urban areas students get more help during homework assignments when compared with rural areas students. Hence rural areas students need less help than urban students.
24. Most of the respondents told that they do not prepare their test. Responses show that urban areas students were lazier while preparing the tests when compared with rural students. Hence rural areas students exercise less laziness than urban areas students during preparing the tests.
25. On the basis of p-value (.000) between the locations, most of the respondents told that they do not pass their test. Responses showed that urban areas students do not qualify the tests when compared with rural areas students. Hence more rural areas students pass the subjects than urban students during the tests.
26. The results showed an insignificant relationship about the satisfaction of parents with the school. On the basis of the locations, most of the respondents told that they able to satisfy their parents about their school work. Responses show that rural areas students have higher satisfaction when compared with urban areas students.
27. Most of the respondents able to succeed in the exams. Responses showed the ratio of urban areas students is higher than that of rural areas students in passing the test. Hence rural areas students show more laziness during the test than urban students.
28. When the results about the friendship among students were compared. It showed an insignificant relationship. Most of the respondents make friends. Responses showed the ratio of urban areas students is higher than that of rural areas students with respect to friendship. Hence rural areas students showed more laziness in making friends than urban areas students.
29. Most of the respondents show harmony with friends. Responses show the ratio of urban areas students is higher than that of rural areas students with respect to harmony. Hence rural areas students showed more laziness with respect to harmony than urban students.
30. The results about the sharing of stories with friends showed an insignificant relationship on the basis of p-value (.989) between the locations. Most of the respondents share stories with friends. Responses showed the ratio of urban students

is higher than that of rural students with respect to become isolation. This happening some times. Hence urban students showed more isolation than rural students.

31. Both of the groups make friends. Responses showed the ratio of urban areas students is higher than that of rural areas students with respect friendship. Hence urban areas students make more friends than rural areas students.
32. Most of the respondents do not quarrel with their friends. Responses showed the ratio of urban areas students is higher than that of rural areas students with respect quarrel.
33. Most of the respondents become nervous. Responses showed the ratio of rural areas students is higher than that of urban areas students with respect nervousness. Hence rural areas students showed more anxiety than male students.
34. Most of the respondents were unable to control their feelings. Responses show the ratio of urban areas students is higher than that of rural areas students with respect to control of feelings. Hence urban areas students showed more violence than rural areas students.
35. Most of the respondents share their feelings with friends. Responses showed the ratio of rural areas students is higher than that of urban areas students with respect feeling share. Hence rural areas students share their feelings more freely than urban students.
36. The results showed a significant relationship on the basis of p-value (.000) between the locations. Most of the respondents do not suppressing unpleasant thoughts friends. Responses showed the ratio of urban areas respondents is higher than that of rural areas respondents with respect to suppressing unpleasant thoughts in schools.
37. Most of the respondents worry about difference incidents. Responses showed the ratio of urban areas students is higher than rural areas students who worry about different incidents.
38. Greater number of respondents belonged to Depalpur and the least belonged to Renala Khurd. Results from standard deviation revealed that in tehsil Okara students showed better results in the subject of Bioloy or Computer Science. On the other hand, the respondents from tehsil Depalpur showed poor results.
39. It is obvious from the table that most of the respondents belonged to Depalpur and the least belonged to Renala Khurd. Overall results from standard deviation revealed that in tehsil Okara students showed better results in the subject of Chemistry. On the other hand, the respondents from tehsil Depalpur showed poor results.

40. Overall results from standard deviation revealed that in tehsil Okara students showed better results in the subject of Physics. On the other hand, the respondents from tehsil Depalpur showed poor results.
41. Overall results from standard deviation revealed that in tehsil Okara students showed better results in the subject of Maths. On the other hand, the respondents from tehsil Depalpur showed poor results.
42. Overall results from standard deviation revealed that in tehsil Okara students showed better results. On the other hand, the respondents from tehsil Depalpur showed poor results.
43. Results indicate that the students in three tehsils showed a significant result in the subject of Biology or Computer Science on the basis of their achievement scores. It was obvious that in these tehsils there is a great variation in teaching the respective subjects. Hence there is a significant difference in the achievement scores of students.
44. Results indicated that the students in three tehsils showed a significant result in the subject of Chemistry on the basis of their achievement scores. It was obvious that in these tehsils there is a great variation in teaching the respective subject. Hence there is a significant difference in the achievement scores of students.
45. The students in three tehsils showed a significant result in the subject of Physics on the basis of their achievement scores. It was obvious that in these tehsils there is a great variation in teaching the respective subject. Hence there is a significant difference in the achievement scores of those students.
46. The students in three tehsils showed a significant result in the subject of Math on the basis of their achievement scores. It was obvious that in these tehsils there is a great variation in teaching the respective subject. Hence there is a significant difference in the achievement scores of those students.
47. The students in three tehsils showed a significant result in all the science subjects on the basis of their achievement scores. It was obvious that in these tehsils there is a great variation in teaching the respective subjects. Hence there is a significant difference in the achievement scores of those students.

The research showed that educational self-efficacy has a brawny, straight association with educational accomplishment and an tortuous association via negligence. As projected, educational self-efficacy had a brawny connection with educational achievement. This is in line with earlier study that has confirmed that youthful people who trust in their competencies

to work out manage over their learning achievement, attain good results academically than competitors who have low level effectual attitudes in their educational quests (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996, 2001; Brown et al., 1989; Chemers, Hu, & Garcia, 2001; Greene et al., 2004; Multon, Brown, & Lent, 1991; Robbins, Lauver, Davis, Langley, & Carlstrom, 2004; Wood & Locke, 1987).

Present research work shows a brawny upbeat association between self-efficacy and academic achievement. It is very important for the schools to perk up their student's self – efficacy, they can advance the studious achievement of their learners.

This study calculated the levels of self-efficacy of the partaker appeared secondary school examination. Outcomes illustrated that there were sex variation in the heights of self-efficacy. Female students have lesser self-efficacy contrast to male students (Pintrich and De Groot, 1990). This study also showed that boys reported upper levels of self-efficacy than girls.

. These results are in support with the self-efficacy hypothesis, which affirms that a character's effort tasks, in which he considers he is excellent at, are really very expected to become successful. The learners who confirm superior self-efficacy are more victorious with their educational achievement than the fewer doing well students who are unenthusiastic to believe tasks they consider as too hard due to lack of credence and capacities for achievement( Pajares (2000).

Numerous research works stated that self-efficacy becomes an important conception in the educational fields (Cohn and Frederickson, 2009; Langeland, Wahl, Kristoffersen, and Hanestad 2007and Steindhart and Dolbier 2009). In a meta-analysis of 39 studies from 1977 to 1988 reveals that self-efficacy, academic achievements were positively and statistically related to one another for numerous aspects/fields. (Multon, Brown and Lent, 1991).

Overall, the results of this study show that the perception of school students have about their competencies powers their studious recital and their determination to maintain a good result that allows them to carry on in their selected course of study. This study supplementary supports other research that academic self-efficacy is definitely related with good academic results (Bong, 2001; Pajares & Schunk, 2001; Zimmerman, 2000).

The research findings from the current study show that self-efficacy beliefs affect academic success as well as self-efficacy levels differ regarding gender, locality, mother tongue and tehsil.

So, above discussion proved that self-efficacy is positively correlated with the achievement of students in science.

Following recommendations were made in the light of findings and conclusions of the study:

1. This study proved that self-efficacy has great effect on students' achievement in science. It is therefore, recommended that educators, schools and parents must play their role to enhance student's self-efficacy.

2. Research showed that a strong constructive association between self-efficacy and educational achievement recommended the need to direct counsel concentration to secondary level students.

3. Teacher training institutes should consider self-efficacy as an important factor to learn, so they should train the teachers to enhance the level of self-efficacy among the students.

4. Science educators must develop lecture tactics keeping in mind to upgrade the level of self-efficacy among the students.

5. Course book authors may integrate activities in textbooks to facilitate the teaching learning process and helpful to enhance the level of self-efficacy.

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