EFFECT OF PEER TUTORING DYNAMICS ON SOCIALIZATION AND STUDENTS ACADEMIC PROGRESS AT SECONDARY SCHOOL LEVEL

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DEDICATION

Time deserves the dedication as

'In the end we only regret for the chances we did not take.'

(Anonymous)

APPROVAL SHEET

EFFECT OF PEER TUTORING DYNAMICS ON STUDENTS SOCIALIZATION

AND ACADEMIC PROGRESS AT SECONDARY SCHOOL LEVEL

BY

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Abstract

One of the popular philosophies to enhance pupils' educational dynamics is peer tutoring that has sensitized the researchers in the field. Peer tutoring is the formal or informal suite which brings the pupils belonging to the same community closer, to interact with each other for overcoming each other's deficiencies in a subject or topic. The study aimed at exploring how peer tutoring dynamics work as an instructional technique to improve learning experiences for pupils' better socialization and academic progress. The study intended to explore whether peer tutoring, as a continuous activity, effected peer- students' socialization and academic progress. It also identified the significant role of peer-tutors in enhancing peer-students' (tutees') socialization and academic progress. The study also looked into the relationship between the perceptions of tutors and tutees on the role of peer tutoring on their socialization and academic progress. It also identified difference between the experimental and control groups' socialization. The QUAN-QUAL mixed method triangulation design was used with two-group post-test-only control-group randomized true experimental design, a survey, and a structured interview to collect data. The data analysis was carried by processing a variety of data. The QUAN and QUAL data were then compared for listing important results. *T-test* was applied for the calculation and comparison of the collected data from two groups'. The calculated data of the questionnaires a well as that of the interview was correlated separately for both variables by applying correlation coefficient Pearson's *r* and the relationship between the responses of the tutors and tutees was identified. Important results collected from quantitative data included; the significant effect of class wide peer tutoring in improving students' (tutees) academics, the significant effect of class wide peer tutoring in improving students' (tutors and tutees) socialization, the perception of the experimental group's students remained much better and positive on

peer tutoring than those of the control group, a positive trend was seen in the socialization of experimental group confirming a positive relationship between their socialization and academic progress, and tutees showed better socialization amongst them than that of tutors with in the treatment group. Peer tutoring programs can be of significant help to achieve the objectives of making students ready to take the responsibility of their own academics as well as to help others in their educational uplift. Many socio-cultural and political concerns of the Pakistani nation can be addressed well through such a programs for a positive outcome of education. Such a programs are significant in addressing crises of teacher performance deficit due to weak educational bases in both rural and urban areas. Serious steps are needed to be introduced for introducing peer tutoring program in Pakistan especially at the secondary or O-levels and generally at all levels of education to make students useful individuals of the society even during their student life. Special incentives for the students working as tutors are needed if to run the program effectively like; some stipend in return of tutoring in each session for increasing volunteering as well as performance ratio of tutoring. Researchers have wider prospects to perform in the area and help in solving the academic and related problems of the Pakistani youth. It would serve as the best internship option during term or semester break for making students engaged at an educational as well as social platform to address many personality issues of the new generation.

Keywords: Peer tutoring, peer-tutor, peer-student (tutee), socialization, academic progress.

DECLARATION

I hereby announce that **'Effect of Peer Tutoring Dynamics on Students Socialization and Academic Progress at Secondary School Level'** is the research study completely conducted by myself. The standard rules for a research study of this level are followed at their best. The sources referred in the study are acknowledged accurately in the prescribed referencing style in-text and out-text. The study is surely my own research work completed duly under the valuable guidance of my honorable and devout supervisor. No fraction of this research work has been previously used or submitted against any degree or qualification of the same or any other university or institute of learning.

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ACKNOWLEDGEMENT

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LIST OF ABRIVIATIONS

ASD - Autism Spectrum Disorder

BST - Behavior skills training

CAT - Cross-Age tutoring

CBM - Classroom-Based Measurement

CIRC - Cooperative Integrated Reading and Composition

COM - Concern Over Mistakes

CSV - Community Service Volunteers

CWPT - Class-wide Peer Tutoring

EBP - Emotional and behavioral problems

FE - Further education

NGO - Non- Governmental Organization

GDP - Gross Domestic Product

HPT - Heterogeneous peer tutoring

PALS - Peer-Assisted Learning Strategies

PBS - Positive behavior support

PPR - Model of Productive Processing of Reality

RPT - Reciprocal Peer Teaching

SEL - Social-emotional learning

SNS - Social Network Sites

VSO - Voluntary Service Oversees

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FORWARDING SHEET

The thesis entitled **'Effect of Peer Tutoring Dynamics on Students Socialization and Academic Progress at Secondary School Level'** submitted by Summera Malik in the partial fulfillment of Ph.D. degree in Teacher Education, has been finalized under my direction and supervision. I am gratified with the eminence of student's research effort and approve her to submit thesis for further process in lieu with IIUI rules and regulations.

Date: _____ Signature: _____

Prof. Dr. Nabi Bux Jumani

Signature: _____

Prof. Dr. Samina Malik

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CHAPTER 1

INTRODUCTION

The educational dynamics now-a-days are facing the complicated challenges of globalization. Education has become the pivotal part of social infrastructure that regulates the rest with a diverse scheme of ideas, beliefs, methods, strategies and structures. The chief target to be achieved through the educational dynamics is to furnish pupils' academic achievement which, in turn, is not possible without overhauling teaching and learning both. Therefore, the historical journey of educational developments carries with it a dynamic variety of ideas and theories. One of the popular philosophies to enhance pupils' educational dynamics is peer tutoring that sufficiently suffices the purpose and is in wider application in the West.

Diverse learning theories are available to attend the range of the learners and the settings in which they are convoluted (Mergel, 1998) and teacher's instructional design depends upon the theory he follows. Amongst all the three core learning theories; Behaviourism, Cognitivism, and Constructivism, the second appreciates the relationships constructed on the rules of continuity and repetition. It also highlights the role of reinforcement and feedback to assure the accuracy of responses so that it plays its part as an instigator (Good & Brophy, 1990). The psychologists like Piaget are convinced that the cognitive development of a child occurs in a series of stages but late 20th century's researches have provided evidence (Shrager & Siegler, 1998) deviating from this belief. Piaget supported constructivism significantly but Vygotsky's belief in social-constructivism, in turn, acknowledges the construction of meaning by the individual himself on the basis of his interaction with his environment. Peer tutoring is also one of the methodologies founded on Cognitivism that works on the same

dimensions to enrich pupil learning. It promotes cognitive activity through its processing with peer constructive associations that is then indicated through pupils' behavior.

Rizve (2012) worked on the similar theme and appreciated Piaget and Vygotsky for their theories as the most widely influential in the research and practice of education. Backing peer tutoring, she related that both the theorists supported the view of individual's active self-creation of knowledge and understanding. It occurs from the information he acquires from his environment as an alternative of grasping it submissively. Previous research studies present the peer-tutoring program as a beneficial stand for learners to exercise language (Sharif, Zakaria, Mansor, Nordin, Fong, & Mustafa, 2012). Moreover, according to Abouda, Badri, and Mrabet (2016) differences especially in culture and language between the tutors and the students may play the role of hindrance for the occurrence of smooth peer tutoring process. Furthermore, the influence of subcultures and generational modifications is also noticed as a significant factor.

The West has been doing a continuous series of researches in the similar areas to find new ways of providing learning support to the learners as it faced the lack of student aspirations in studying further and at higher education levels. The dropout rate is also on rise due to students' lack of interest and attraction for their further education especially after high school (Davis, 1994; Potter, 1997; Strayhorn, 2008). Garibaldi (1992) recognizes that the academic disaster for African-American male learners arises early, troubling their talent that makes it hard for them to complete high school. Investigators insisted upon the (Rizve, 2012) African-American students for achieving better in college level academics (Davis, 1994; Garibaldi, 1992). The same initiative

is taken for the same situation found widely around the world within the educational scenario. Experts recommend the application of peer tutoring as an effective means of improving pupils' academic success. Previous studies' results indicate substantial dissimilarities between the underlying processes of peer tutor- tutees' interactional dynamics while undergoing an on-line and direct or face to face tutoring sessions. More hierarchal approach was seen in direct or face-to-face contacts whereas tutors' role remained main in controlling the discourse. On the other hand the indirect or on-line collaborations were more democratic where discourse control remained majorly in the tutees part (Jones, Garralda, Li, & Lock, 2006) but it also served the purpose of enhancing students' capability to manage their learning in a better manner. It further opened a wider horizon for the teachers to play their indirect role in instructing their students and involve them in their own learning directly or indirectly through their class mates or peers of higher levels.

Topping, (2005) calls peer assisted learning as an ancient practice of cooperative or communal accomplishment, and perhaps has been continually applied indirectly as a substitute. Usually, peer tutoring is considered as an instructional method in which one pupil coaches another of almost the same age group, in the concepts or things on which he is proficient than the other (Damon & Phelps, 1989). Amongst the others, the Class-wide Peer Tutoring programs are applied widely in USA, UK, including many other countries of the world and have proven effective in improving educational dynamics. It is also providing learners unique opportunities to interact and empower themselves with better skills to learn. A study i.e. (Terrion & Leonard, 2007) on peer mentoring at the university level relates that at university level it is viewed as a useful interposition guaranteeing the accomplishment and memory of weak learners. Keeping in view such results of implementing these programmes many

institutions of this level have employed some arrangement of mentorships as an important segment of their pupil support amenities. Some research studies also associate peer mentoring roles with the category of peer best fitting to accomplish the goals set for these associations. Enriched favourable results for the studies on peer associated programmes are available in the west to implement them in any form for student welfare but such a tradition is not seen in the countries like Pakistan.

Peer assisted learning is grounded in the human socio-psychological factors involving the minimization of the threat of being rated as weak performer. It helps in improving confidence to realize one's own shortfalls while living in a comfort zone with a class fellow or another student who is not actually a real teacher. In the developed countries a lot of studies have been conducted on the impact of peer tutoring on students' achievements, however in Pakistan no significant work is carried to explore this crucial area.

Getting help from others when needed is an essential means to adjust students' own learning and academic progress at the elementary and middle school level. The stakeholders contributing to such a supporting role in improving their skills and approaches include; pupils' parents, instructors, and peers which reflects their sense of adaptive help seeking (Newman, 2000) and supports students' academic achievement and other areas of their concerns showing their social inter-dependence throughout the school life. Female teens report more to look for an active contribution by the helper who are mainly their peers and instructors, however male teens incline more in getting practical help. Moreover, the high school learners expect more active contribution from the helpers as compared to the learners of middle school (Schenke, Lam, Conley, & Karabenick, 2015) as they are more conscious about their academic achievement at this level of school education. Teachers also report that students look for help throughout

the session in order to achieve academic self-efficacy and socialization aims (Ryan & Shin, 2011) which needs better associations if to address the set goals. Pupils show concern over mistakes (COM) more positively associated to help seeking or its avoidance (Shim, Rubenstein, & Drapeau, 2016) that leads them to perform and score better. The results of investigations carried at different academic levels relate pupils' help seeking positively linked to the task mastery and interest in homework at the distinct level of individual and class. Help seeking seems positively associated to the access of family help, pupils' interest in homework, peer involvement, performance adjustment, checking enthusiasm, value acceptance, and the frequency of family support (Du, Xu, & Fan, 2016). The previous research studies' results confirm strong consensus on the point that an approach of getting mastery, avoiding mastery, and that of making or strengthening friendship aims are progressive interpreters of contributory help-seeking (Roussel, Elliot, & Feltman, 2011) prevailing largely in peer attitude. All the previous research studies report the essential presence of a social association in terms of help-seeking or help-giving behaviour across all academic age groups and levels targeting academic uplift. This is what socialization is that plays its direct or indirect role in varied shapes involving all or some of the stakeholders, time to time or in a continuous mode.

Socialization in its real sense is taken as a conditional, challenged, two-way practice (Talmy, 2008) which may have its positive as well as negative prospects in terms of individuals' mode of interaction and its forecasting influence on his character, category, company, and choices. Student socialization is not a very familiar terminology here in Pakistani educational setup and not known well for its positive outcomes in terms of pupils' academic and social welfare. That is why it needs to be given research consideration especially along with teacher-student welfare.

Peer tutoring platform appears to be the resultant of research efforts in the field of applied research and development for more than one and half decades. Recently Class-wide peer tutoring (CWPT) is in wider use which serves as a model of instructional policies that includes students with varied ethno-cultural context, not necessarily showing infirmities. It has been added to the teacher training programs in regular and special education as a very significant part (Greenwood, 1997) where socialization interacts with individuals' cognition and works as one of the major underlying factors of metacognition. Peer tutoring strengthening these factors works as a meaningful platform carrying and caring teacher-student welfare trends. Peer socialization with each other with same age or different age choices play as an accommodating factor for the ones taking more time to get accommodated with their teachers and improves individuals' learning skills. Previous studies of i.e. Kamps, Greenwood, Arreaga-Mayer, Veerkamp, Utley, Tapia, ... & Bannister (2008) reveal that in CWPT learners are registered in many subject capacities like that of Math and reading and they show much better results with much quicker learning of related skills. They are found retaining better for their previous learning and showing larger improvements in their academic progress while comparing them with the traditional teaching approaches.

Presently education sector has become a significant part of the corporate sector. However, cutting down the financial expense is one of the chief priorities of the educational institutions at all levels. One means of achieving this goal and to manage with existing means is to favour and apply peer supported learning methodologies, offering an ancillary classroom organization where pupils play their instructional role with other students under teachers' supervision (Iyer, 2011). The teachers' instructional design works with 'peer-students' and 'peer-tutors' developing a sound relationship

between weak or less skillful with competent or more skillful students by working together. Researches favour individual as well as class-wide peer tutoring suites. They reflect that students with an unreliable performance or having minor incapability improve their learning proficiencies faster through peer tutoring. The strategy improves the retention level of the students and instigates their social aptitudes also in contrast with other traditional instructional methods like; teacher-pupil discussion, lectures, seat work, and the use of overhead projectors. This indicates the importance of such an applied research on an educational practice for upgrading academic outcomes which can be equally worthwhile to local schools and for parents, schools, and policy makers (Greenwood, 1997).

Results of a previous study on the effect of peer tutoring on deaf students reflect that by introducing peer tutoring, deaf learners as tutees also improved in their moderate to vigorous physical activity (MVPA) by 21.5%, and peer tutors improved their MVPA by 18% (Lieberman, Dunn, Van der Mars, & McCubbin, 2000) which presents its unavoidable role to the stakeholders and invite them to gain its maximum benefits. One of the studies shows that online type of activities notably effect the online peer collaborations and learners of such an online peer-assisted learning perform much better than those of direct or face-to-face peers in their reading abilities. Pupils' learning virtually remained substantial in improving their self-concept, especially for those participating passively (Tsuei, 2011). Another study reveals positive peer effect on pupils' self-conceptualization and their approach toward mathematics learning improves even through virtual synchronous education. The study outcomes specified that if the struggling students are engaged in online peer tutoring for a longer period of time, they are benefitted more from the process (Tsuei, 2012). Findings of another study present peer tutoring as an effective involvement irrespective of its quantity, class

level, or academic deficiency position. It remains most helpful to the learners with emotional and behavioural complaints (Bowman-Perrott et al., 2013) where peer association therapy works much effectively in addressing varied personality shortfalls including individuals' academics. The benefits of peer tutoring have drawn a worldwide attention of education policy makers and planners that they consider it vibrant to integrate peer tutoring strategies in the teacher preparation programs and courses for enhancing program effectiveness in achieving teaching and learning goals.

In the Pakistani context Rizve (2012) investigated students' achievement in English at secondary level through experimental method and found positive effects of peer tutoring as compared to the conventional teaching methods. In the Pakistani context, it seems a starter and a lot of work is needed in this context to familiarize the locals with the worth of this program if introduced at the individual or governmental level country wide. The adjustment of local educational settings for its national, ethnic, regional, and religious factors is also demanding if to carry a series of research works on the issue purposefully addressing Pakistani educational paradigms. Moreover, the previous researches on peer tutoring do not present any case where socialization has been dealt in especially in any of the teacher education study to explore its significant role in the peer tutoring program as it appears to be a principal factor influencing and designing the role of rest. Therefore, a series of investigations are essentially needed in the same direction in order to reveal many un-noticed or unattended educational problems and also to present their applied and acceptable solutions within the Pakistani educational settings.

1.1 Rationale of the Study

The study aims at exploring how peer tutoring dynamics work as an instructional technique to improve teaching-learning experiences for pupils' better

socialization and academic achievement in Geography (O level) at secondary level in Pakistan. This has been a very popular mode of improving pupils' learning with peers' help and involvement, in the west. Peer tutoring can also serve as an effective means of overcoming pupils' weaknesses in their academics and in other areas like their social interactions. The purpose of the present study is to make this option available to the O levels teachers especially and secondary level teachers of Pakistan generally to use this choice with confidence in uplifting students' social interactions and academic performance. Furthermore, the study intends to help in improving educational standards with less financial resources in Pakistan. This will also be opening ways to opt new instructional methodologies in the educational institutions of Pakistan leading towards its educational progress.

1.2 Statement of Problem

Educational concerns about pupils' achievement in academics and in developing positive attitudes have sensitized the researchers in the field to explore new and more competent means to address the related issues. They also aim to explore and invent realistic, reliable routine tasks which can be taken as better options to meet the challenges of pupils' better social behaviour and academic success. The educational system of Pakistan is not uniform and centralized in its true sense. It reflects a wide range of schools mainly divided into public and private streams but further sub-divisions of standards in both streams have made it a complicated setup which faces unique challenge of students' academic performance. Student performance is the major issue that teachers and parents face and usually opt costly means like private academies' coaching to fulfil gaps in the students' academic achievement. Moreover, a downfall in individuals' positive social sense is also alarming especially in educational

institutional environment at the secondary level which needs to be addressed at the earliest if to save positive socialization trends of the Pakistani society.

Low economy countries like Pakistan always fight with the challenges of low educational budget allocated by all the provincial governments in 1917-18 as 902.7 billion sharing about 2.2 percentage in the Gross Domestic Product (GDP). It effects its outcomes in terms of educational standards and students' academic achievement. Moreover, a national action program is direly needed to stimulate new generation to play their active and constructive role at large to be felt as a sense of responsibility. It is to play their role in nation building as a useful and devoted member of the society as in case of China. Introducing peer tutoring program at the state government level can be a meaningful support to address these challenges with low budget and also to train students at varied class levels to socialize themselves meaningfully by serving fellows. For this the major purpose of the present study was to apply, record, analyse, and explore the peer tutoring process in the Pakistani school setting along with its socialization patterns. It also measured the outcomes in terms of any improvement taken place in peer students' socialization and academic progress.

1.3 Objectives of the Study

The objectives of the study are as follows:

1. To find out the effect of peer tutoring on students' socialization at secondary level in Pakistan.

2. To examine the effect of peer tutoring on students' academic progress at secondary level in Pakistan.

3. To estimate the effect of peer tutoring on students' perception.

4. To explore the role of peer tutoring in students' socialization at secondary level in Pakistan.

5. To draw out the relationship between the perceptions of tutors and tutees about peer tutoring role in students' academic progress and their socialization at secondary level.

1.4 Significance of the Study

The present study is valuable in:

1. Suggesting peer tutoring for the Pakistani educational setting in order to improve academic output of the students in terms of grades, rate and time of completion of the course or level of study (FFullerton College, 2019), especially in the public sector institutions of Pakistan.

2. Offering peer-student learning at the university level to become goal oriented, motivated, analysing the situation, and also to develop a practice of following certain norms and rules (Rick, 2019). It will also help university teachers to perform better when Pakistani universities limited resources have increased performance demands upon staff.

3. Facilitating Pakistani educational set-up of Cambridge O level and Pakistani secondary level to come at par with the globalized trends in education for reducing gaps in Pakistani and western education systems.

4. Suggesting Pakistani public and private sector educational institutions of all levels to overcome their variety of issues effectively like; financial constraints, teacher shortages, teachers' lack of advanced training, large strength of the classes, students

discipline problems, parental concerns on their children's academic and personality development, etc.

5. Recommending administrators to develop their institutional environment through positive and meaningful interactions amongst their students and to control their institutional financial resources also by applying such a cost-effective plan.

6. Preparing the Pakistani society at large to initiate a culture of community service from the very young age that may in the long run help the government in bringing positive changes in the social network promoting good values.

7. Encouraging the culture of using practicum and student-friendly approach in the education sector of Pakistan.

8. Realizing the Pakistani educationists to improve their instructional designs through introducing such an innovative and practical ideas in their institutions.

1.5 Research Hypotheses

Following null hypotheses are the set of guiding research hypotheses of the study:

H_{01}: Peer tutoring does not significantly effect peer- students' academic progress.

H_{02}: Peer tutoring does not significantly effect peer- students' socialization.

H_{03}: There is no significant difference found between the perceptions of tutors and tutees about peer tutoring role in students' academic progress and their socialization at secondary level.

H_{04}: There is no significant effect of peer tutoring in improving peer- students' academics.

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H$_{05}$: There is no significant positive role of peer tutoring in peer- students' socialization.

H$_{06}$: There is no significant difference found between the academic progress of the students of Experimental group and that of the Control group.

H$_{07}$: There is no significant difference found between the socialization of the student of the Experimental group and that of the Control group.

H$_{0\,8}$: There is no significant difference found between tutors and tutees socialization.

H$_{0\,9}$: There is no significant effect of peer tutoring on the experimental group's perception than that of the control group.

H$_{0\,10}$: There is no significant relationship found between tutors' and tutees' perception on the role of peer tutoring on their academic progress and socialization.

1.6 Delimitations of the Study

The study being experimental was delimited to narrow down the scope of the study. It was carried as follows:

1. It was conducted in a high (secondary) school of Islamabad where the peer tutoring instructional method could be managed conveniently for the conduct of experiment. The City School Girls Satellite Town was chosen for the purpose.

2. The students of O level/ Matric usually show more interest in the improvement of their academic achievement for getting a respectable grade in their final first external or board exam, therefore the students O level I also named 9th were taken as the sample of the study.

3. As peer tutoring is not applicable in public or private sector schools of Pakistan officially, therefore it was not in practice in the secondary schools of Rawalpindi

and Islamabad. With this scenario the study was delimited to the single school where the researcher herself was working as the O level faculty.

4.   In the above school the experiment could also be conducted conveniently for a period of six months as the school authority permitted the researcher to conduct the related experiment on grade 9th at their school venue. Moreover, two groups could also be made by combining two sections each out of the four available with a strength of thirty as the sample of the study.

1.7 Methodology

1.7.1 Research Design

The study was Mixed-Method following its QUAN-QUAL design, also called triangulation mixed method design. It included the running of both quantitative and qualitative methods parallely.

1.7.2 Population

The students of The City School, secondary school/ O level branches of the twin cities of Rawalpindi and Islamabad were the population of the study.

1.7.3 Sample

Simple random probability sampling technique was applied for the selection of a secondary school in order to conduct the experiment. They offer the most real or reliable results as they reveal the features of the population from which they are chosen. 9th grade was selected through purposive sampling technique which can be very useful in circumstances when one wants to access a targeted sample quickly, whereas, the homogeneous purposive sampling was selected to choose tutors (the students tutoring their peers) and tutees (the students taught by the tutors) from the experimental group.

It is chosen to offer a various range of cases appropriate to a particular occurrence or incident (Crossman, 2018).

1.7.4 Research Instruments

Post Test

The post-test-only type of the pre-test-post-test-only test designs was selected for the conduct of the experiment. A pre-test was not needed in this design whereas a post-test had to be conducted at the end of the experiment. Sample students' previous sores were also attained for a clear reference to the actual academic state of the selected sample. A full-length exam-based test for the students of grade 9 was developed and post-test was organized after carrying a continuous peer tutoring of the treatment group for a period of six months. Other group served as the control group and was not subjected to the peer tutoring programme for the selected syllabus content of Cambridge Geography. It was useful in quantitative data gathering.

Questionnaire 1

A socio-metric questionnaire was also developed covering all the important areas of students' social behaviour before the treatment was started. It was used to collect tutors' and tutees' responses on the peer tutoring process after experiencing a six-month treatment. It contained fifty of the closed ended items as its section A covering all the possible socialization attributes like; interaction, modification of thought and actions, cultural diffusion, gender identity, sense of help and survival, obeying rules, improvement of physical ability, and globalization etc. (Sociology Group, 2018). Whereas ten of the open-ended questions were also included to cover peer tutoring programme's effect on students' academic progress as its section B. Questionnaire 1 (closed-ended, section A) served the main instrument of the study for descriptive data

collection. Its section A mainly focused socialization that was studied as the second dependent variable of the present research study providing a quantitative data set, whereas section B of the questionnaire 1 focused academic progress and sourced the collection of qualitative data.

Questionnaire 2

Questionnaire 2 was applied for the collection of students' responses on their perception as well as the relationship between tutors and tutees perception of peer tutoring effect on their academic progress and socialization. It was composed of twenty closed ended responses covering students' perception on peer tutoring effect on student socialization for both the groups. 50 % of the items addressed students' academic progress whereas rest of 50 % reflected students' socialization. It also provided quantitative data for the study.

Interview

A structured open-ended interview was conducted for tutors and tutees of the experimental group to gather qualitative data. It was to explore the role of peer tutoring in the student socialization and helped in addressing the in-depth and leftover areas in QUAN data collection.

1.7.5 Limitations of the Study

Study was designed to be only true experimental but later during the course of study it was need fully felt to opt other means of data collection if to address both the dependent variable equally along with the objectives of the study. Therefore, mixed method design was opted with its QUAN-QUAL model giving equal value to the quantitative as well as qualitative means of data collection. The instruments decided to be used for quantitative data collection were; an experiment, a survey questionnaire,

and a cross-sectional survey through an observation sheet. A number of limitations hindered the smooth collection of observational details which encouraged the researcher to use questionnaire 2 to address study objective 4. Therefore, the study was slightly modified by replacing observational data collection with 2nd survey questionnaire. On the other hand, interview helped in getting in-depth information for strengthening evidence of the study in a qualitative manner. The limitations were as mentioned below:

- Absence of the culture of officially organized peer tutoring in Pakistan.

- Non willingness of the institutional authority to adjust subject teacher's (researcher) time table for conducting observational procedures as par planning.

- Unavailability of the second observer.

1.7.6 Pilot Testing

The pilot testing was conducted to measure the data collection reliability and validity of all the instruments. It was administered on the Test questions, both of the survey questionnaires, and interview by engaging 20 subjects not included in the sample.

The face and content validities of data collection instruments were also checked and improved through the expert opinion and pilot results of the instruments. The less focused and weak items of the questionnaires were either completely removed or replaced with modified items to address the particular areas of concern regarding study variables. The shortfalls in the structure of question statements as well as in the choice of relevant vocabulary were also looked into further improvement. Moreover, the face and content validity of the Test questions was also taken into high consideration and was assured by taking help from the last 10 years Cambridge past papers as well as by

following their proper format along with varied question structures as best as possible. Cambridge senior subject teachers were also consulted for the same purpose.

SPSS (Statistical Package for Social Sciences) was used to compute the internal reliability of each item of both survey tools.

The reliability of questionnaire 1 = 0.947

The reliability of questionnaire 2 = 0.955

The reliability for both the Questionnaires was satisfactorily high. The intra-correlation of questionnaire 1 items was also positively significant as well as that of questionnaire 2, therefore both the questionnaires were seen reliable to be used as survey data collection instruments for descriptive research data.

The section B of the Questionnaire 1 was composed of open-ended items as well as the structured open-ended interview questionnaire. Their reliability was assured through the researcher's repeated review of the items keeping in view the areas of students' learning to be measured like; skills, interactions, attitudes, interest, etc. Experts' critical analyses was also involved and modifications as par their suggestions were carried, and pilot testing was also conducted on some of the students not included in the sample. Repeated and less meaningful items were replaced with the better and more focused items taking few rounds of check and balance before assuring a finally applicable interview questionnaire.

1.7.7 Data Collection

Data collection was based on only the post-test scores for both the groups which was later computed for their mean score and standard deviation. Tutors' and tutees' responses were collected with the help of socio-metric questionnaires 1 and 2, as well as with a structured interview. These data collection instruments were used to

supplement the main experimental data and also focused upon both of the dependent variables of the study. The data gathered from all instruments was organized and processed for the qualitative and quantitative analysis separately leading to its combining and comparison.

1.7.8 Data Analysis

The data analysis was carried by processing a variety of data collected through a variety of instruments like; test, a set of two questionnaires, and an interview. Data collected through each of the instrument was coded, loaded, and then computed by applying the appropriate statistical testing. For instance, the effect of Independent variable i.e. peer tutoring on one of the dependent variable i.e. academic progress was examined by the application of a treatment on one the randomly selected student sample experimental group of thirty students of grade 9. Whereas the other group not applied with the same treatment, instead taught in the traditional way was labelled as the control group.

The quantitative data collected from the post-test as well as the questionnaires was coded, tabulated, and calculated. The mean achievement scores of both groups were calculated from the experimental data and compared for their difference through t-test following their interpretation and qualitative analysis. The calculated data of the questionnaires was correlated by applying correlation coefficient Pearson's r and the relationship between the responses of the tutors and tutees was identified. The role of peer tutoring on student socialization was also studied through the data collected through an interview. The relative findings and conclusions were also deduced in the light of objectives and hypotheses of the study.

1.8 Operational Definition of Major Terms

1.8.1 Class-wide Peer Tutoring (CWPT)

Class-wide Peer Tutoring is a mutual, peer assisted teaching approach in which students of the same class coach each other on the content of the programmed curriculum (Abbott, Greenwood, Buzhardt, & Tapia, 2006). Its main feature is mutual tutoring between tutor and tutee and the both play both roles (tutor and tutee) at a time.

1.8.2 Peer Tutoring

Peer tutoring is a prepared learning involvement which comprises a student working as the teacher or instructor, and the other is the student or tutee. It provides a vital opportunity for the students to practice their previous learning in a much significant manner through social involvement (Conrad, 1974).

1.8.3 Tutee

Tutees is a student peer who gets individual attention and also improves in its self-confidence (Howard et al., 1986). A tutee is the student at the receiving end and is provided coaching by the student-tutor.

1.8.4 Tutor

A tutor is anyone who is of a similar status as the person being tutored. (https://en.wikipedia.org/wiki/Peer_tutor). Peer Tutors get advantage of strengthening their own learning through revising and reforming their previous knowledge (Howard et al., 1986). They are the ones who coach or tutor their peers.

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1.8.5 Socialization

It systematizes future partners to contribute in group by instructing them on the expectations of the other group members (Boundless, 2016).

1.8.6 Academic Progress

Academic progress is the advancement in students' academic performance at school, college or university level leading him to better academic achievement. It is a measurable achievement that may result due to helpful school environment and strong parental contribution (Linde, n.d). The school environment's care, respect, interaction, commitment, and academic opportunities all demonstrate to be vital aspects connected with learners' achievement (Davis, & Warner, 2018). Academic progress is students' academic achievement that may depend upon students' initial academic ability (Kuzmina, & Ivanova, 2018).

1.8.7 Dynamics

Dynamics mean the underlying working forces. These are the forces or factors which encourage progress, increase, or modification within an organization or practice (English Oxford Living Dictionaries, n.d).

1.9 Theoretical Approach

Vygotsky's theory of Social Constructivism and Cognitivism of Piaget serve as the theoretical foundation of the study. Peer tutoring process offers the integration of both to offer a diversified learning opportunity not only to the tutee but also to the tutor.

The constructivist theories consider learning as social improvement involving language, actual world conditions, interaction and relationship amongst learners. The learners are the main focus in the learning process (Ozer, 2004). Vygotsky is the

advocate of social constructivism and gives high status to the worth of culture and social perspective. He highlights the importance of the zone of proximal development which is the space between child's real development as decided by the independent problem solving, and the level of possible development as decided through problem solving under the guidance of elders or in their interaction with more peers (Vygotsky, 1978).

The Vygotskian classroom essentially projects the exploration of facts through teacher-student and student-student interaction. Some of the cognitive strategies acting as the indicators of the constructivist approach that group members share in the classroom include; questioning, forecasting, summarizing, and clarifying. In a Vygotskian classroom, vibrant backing and thoughtful supervision are ensured founded on the learner's wants, without any authoritative will or force. Students are open to dialogues, research relationships, electronic information resources, and project-group settings working on problem inquiry (Ozer, 2004). It also includes: listening, explaining, questioning, clarifying, simplifying, prompting, rehearsing, revising, summarizing, speculating and hypothesizing; affective development including motivational aspects of learning, self-disclosure, accountability and a developing ownership of learning. All these necessary strategies were a part of the conduct of present research experiment and ensured through initial guidance on a set of instructions for both, the tutors and the tutees.

Jean Piaget's theory works on the nature of knowledge itself and the ways of how individuals progressively come to attain, build, and practice it (Reynolds & Fletcher-Janzen, 2007). He called intellectual growth as a course of adaptation or getting adjusted in the world. He identifies that it is possible through; assimilation, accommodation, and equilibrium. Children build an understanding of their

environment, and then experience disagreements between their present knowledge and what they explore in their surroundings (MacLeod, 2009).

1.9.1 Conceptual Framework

DIVERSIFIED LEARNING

EFFECT ON PEER PSYCHOLOGY

Socialization

Emotional-Cognitive -Behavioral Engagement

CWPT PEER TUTURING

Social-Constructivism-Cognitivism

Emotional-Cognitive -Behavioural Engagement
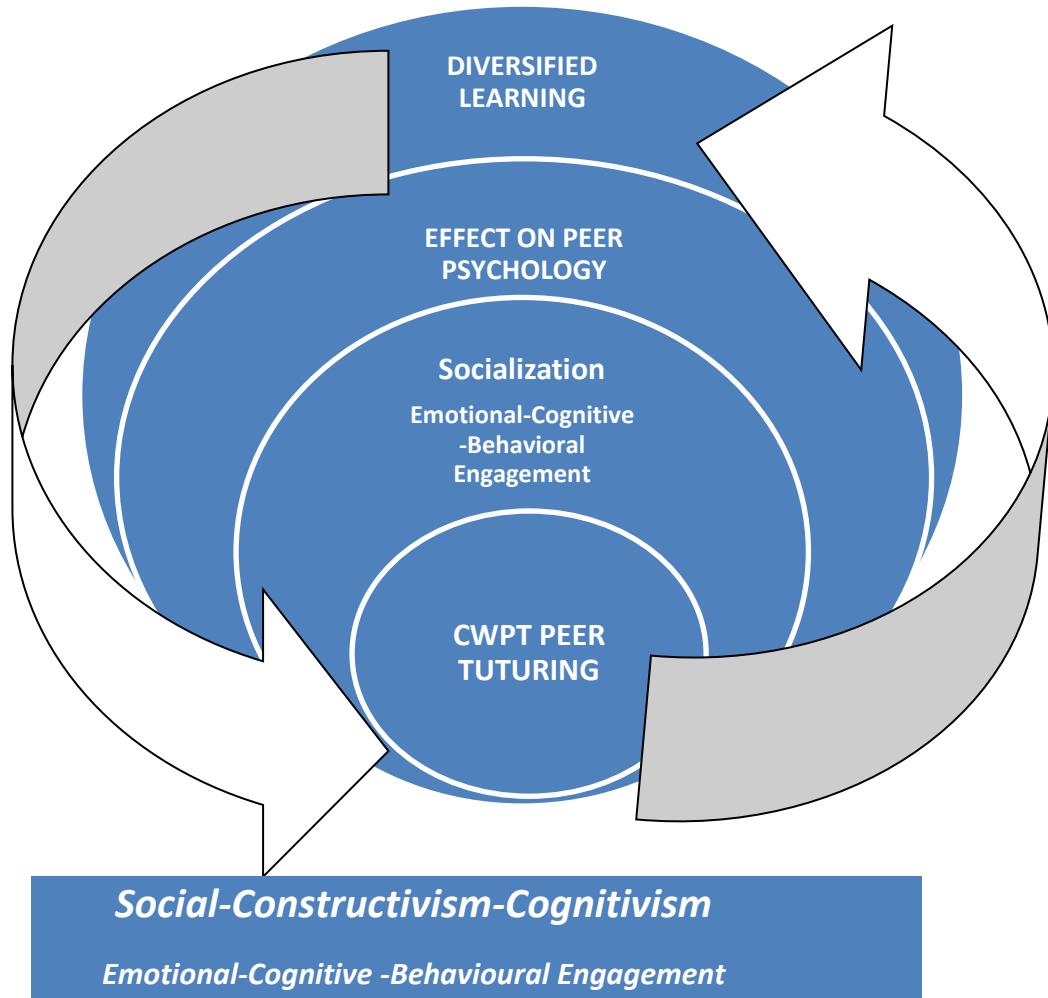
Figure 1.1. Conceptual Framework

The concepts in the theoretical approaches helped in the development of a conceptual framework which was (Figure: 2.1) founded on the idea of a peer association through the class wide -peer tutoring (CWPT) model. Tutee (student-peer) and tutor (coach-student) work in pairs not only with in the class time period continuously and regularly but other than their class association they also work together for one hour

thrice a week. The association of tutee with the tutor during tuting affects the socialization of both, the tutor and tutee. Socialization is reached through reaching cognition and meta-cognition.

The strength in cognition and meta-cognition enhances individuals' ability of awareness, self-control, and expression of emotions. It also helps in controlling interactions sensibly and sympathetically (Dictionary.com) nurturing and maturing emotional intelligence which helps reaching varied levels of socialization. Student diverse learning as better academic progress appears as the final outcome. Furthermore the theories of Social- Constructivism and Cognitivism integrate and set a strong footing for the conceptual framework.

CHAPTER 2

LITERATURE REVIEW

2.1 Peer Tutoring: An Overview

Student tutoring in its modern form was developed in the late eighteenth century. It was started by the British Army Chaplain, Andrew Bell in 1789. Some of the developing countries and inner-city North America revived the program during the sixth decade of the twentieth century. Development of the program remained highly inspiring in the United States of America. Potter (1997), reported that by 1988, above 63,000 colligates who were initially volunteers, worked with almost 200,000 school pupils. Alec Dickson, maker of community Service Volunteers (CSV) and Voluntary Service Oversees (VSO), took the concept of peer tutoring from Poland to UK and firstly practiced it there in 1975.

Peer tutoring offers one-on-one teaching and occurs when tutor and tutee are of the same age. In cross-age tutoring, the tutor is older than the tutee. However, sometimes the term 'peer tutoring' is used to include both types (Gaustad, 1993). Peer tutors' conduct has the influence to produce and improve learning prospects during a peer tutoring programs. Prior research studies reveal peer tutors efforts in embracing the approaches which help out learning problems and follow constructive approaches as they facilitate better learning (Berghmans, Neckebroeck, Dochy, & Struyven, 2013). Positive behaviour support (PBS) is an applied science that practices educational and organizational modification of approaches in terms of environmental redesigning to improve life value with reduced behavioural issues (Carr, Dunlap, Horner, Koegel, Turnbull, Sailor & Fox, 2002). The shortages in conceptual thoughtfulness can be

recovered through the use of collaborative peer-tutoring program (Çakiroglu, & Ongoz, 2017).

> *'Peer tutoring in Higher Education is being used with increasing frequency to aid in student learning, motivation, and empowerment. Although an extensive body of research documents the efficacy of such programs, it exhibits a surprising lack of awareness of the social dynamics involved.'* (Colvin, 2007)

Peer tutoring serves PBS, a means to improve students' whole accomplishment. Moreover, it is economical and comparatively convenient in its application. It is the formal or informal suite which brings the pupils belonging to the same community closer, to interact with each other. One of the two helps and the other partner for a certain class is helped to overcome his deficiencies in a subject or topic mending their behavior shortfalls. Peer tutoring's wider range of benefits are benefitting the education industry internationally but its internal dynamic needs to be explored more in-depth for its best results.

Learning is considered as a complete course of change involving a set dynamics to which one has to be adjustable and receptive usefully. Moreover, a complete learning process needs; an active communication involving all participants of the organization, making a systematic and organized arrangement to confirm accessibility of the essential institutional means, justifiable circulation of the learners' resources, and a smooth shift from the traditional instructional method to this practice of collaborative education (Qureshi, & Stormyhr, 2012) for better academic results. The underlying forces which regulate peer tutoring program successfully may include: an active communication,

systematic way of providing instructions, availability of necessary resources, teamwork, sense of responsibility, useful interactions, motivation, micro-level process analyses, collaborative problem-solving, verbal interaction, and the nature of cognitive working and social dealing, etc. (Kumpulainen & Kaartinen, 2003; Kumpulainen & Mutanen, 1999).

2.1.1 Tutor-Tutee Association

Under a peer tutoring program the tutor-tutee association has to be continuous, reforming and reciprocal. It also inspires students to display willingness to learning and develop cognitively. To distinguish the value of peer tutoring program, it is indispensable for the tutors to have comprehensive interpersonal abilities, comprising: relationship building, communication, collaboration and team-building. On the other hand prerequisites for the tutees are to exhibit their willingness to take remedial from the tutors. It is highly essential that the dynamics like: organized planning, training, evaluation, and problem solving should be integrated as a set of vital constituents of a peer tutoring program process (Chen & Liu, 2011). Additionally, the learners' readiness to teach as a tutor in a method they are educated is not as simple as anticipated. Though some learners show no reluctance in tutoring in the told teaching methods, yet commonly most of them follow thoughtful practices, take critical decisions, make or recommend modifications in the instructional techniques before adopting them as it is (Struyven, Dochy, & Janssens, 2010). It comprises a complicated setting of tutor-tutee collaborations which serves a scaffolding phenomenon of their communication, interaction, relationship, influence, inspiration, expression, and modification in thought and action.

2.1.2 Active Students' Involvement

Active students' involvement in their learning, offers more opportunities to them for better learning. The use of peer as tutors instead of remedial by the teachers enriches students with interest, which perfects their academic skills as acknowledged by the extended research studies in this field. There are several advantages that can be attached with peer tutoring in respect of attitude development and achievement (Rizve, 2012). The benefits for peer tutoring comprise the articulation, inquiring information and the systematic search of information through interacting socially and cognitively (Bailey, Baek, Meiling, Morris, Nelson, Rice, & Stockdale, 2018). The study results of Hayat & Wahyu (2018) reflect that the progress of cognitive talent is better when individuals are applied with the peer tutoring strategy.

The effective learning practices are best arranged by the teachers with the knowledge of human development and its relationship with learning. Students are noticed to be inclined to make more conscious effort in a positive environment than in the other type of environment (Arends, 2007). The directively-tutored learners showed more positivity than the facilitatively- tutored learners towards the tutored learning settings. Facilitatively-tutored learners seemed more critical on their peer tutors' tactics that they used in tutoring. It was due to the presence of ambiguity and unclear overview (Berghmans, Michiels, Salmon, Dochy, & Struyven, 2014). Some of the past research studies support the worth of a tutor who facilitates, others reflect differently and highlight the effectiveness of a tutor who works through the use of his administrative skills as well as gives clear directions (Berghmans, Dochy, & Struyven, 2011).

2.1.3 Peer Vital Support

The concepts which research studies attended more in the recent decades include peer assisted learning. It is so because it shows a strong connection with constructivism and especially the models emphasizing social interaction. Peers emphasizing academic learning express its standing, which then as a continuous activity can stimulate others in the community. Peer supported learning has shown its vital role in encouraging peers' progress (Rizve, 2012). Research has exposed the suitability of the elder students and peers with distinct requirements as tutor for younger having distinct requirements as a student. The review of the former research studies reflect evidences of improvement in the academic product and tutees' social conduct through peer tutoring. They endorse the significance of the Cross-Age tutoring (CAT) method in drawing academic and social benefits for both tutees and tutors with distinct requirements as a student (Iyer, 2011).

2.1.4 Peer Tutoring Helping Learning

Tutoring is not a new concept itself and has always remained in the human history in many forms. Student peer tutoring is initially a process of helping one another in learning and they also learn simultaneously themselves. It can be: one-on-one coaching, expedited study groups, whole classroom participation, virtual tutoring, and two-way tutoring (Brost, 2011). The range of monitored peer interaction decides how much it supported individuals' learning. Peers' influence is remarkable in releasing psychological threats, rebuilding confidence and trust on the environmental factors, and strengthening human relations which overhaul personality gaps and in turn accommodate them in varied challenging situations.

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2.1.5 Mutual Learning

Mutual learning is evident from the results recorded from every case and their support to assist each other in resolving issues related to: professional development, career development, and even those addressing the progress in effectiveness. Peer tutors are also called peer mentors which are not necessary to be friends, though usually the peer mentoring relationship is resultant in friendship (Holbeche, 1996).

Usually curriculum content is the chief focus of the peer tutoring programs. The related projects commonly follow a definite interactive procedure with a general or specific or both types of training for the participants. Moreover, the peer interaction can be a guided activity through the availability of the organized materials and the participants can also be provided with choice to an extent . It is to differentiate amongst the three types of learning: peer tutoring, peer cooperation and peer collaboration as important means of the major peer interaction. Two major fundamentals of such connections comprise; equal opportunity for both with reference to their opted roles, and sympathy in the cooperation, with reference to the form of association, complexity and two-way learning accomplished in the communications (Damon & Phelps, 1989).

2.1.6 Positive Behavior Support

Positive behaviour support evolved for working out developmental disabilities has been developed on a triple key foundations: pragmatic approaches of analysing behaviour, the regularization or attachment program, and individual-focused principles. It shares its attributes with many other approaches but it is well composed of the distinctive components like; broad alteration in the mode of life, a lifelong perception, environmental rationality, participants involvement, collective social strength, organizational modification and diversity of component involvements, stress on

avoidance, relaxed use of scientific actions, and numerous theoretical perceptions (Carr, Dunlap, Horner, Koegel, Turnbull, Sailor,... & Fox, 2002). Peer tutoring engages positive behavior support for the students through their behavior, cognition and emotions in a parallel manner. All the three dimensions of one's personality interact together and reflect in some level of modified response. The modified form of interaction serves the cause of improving students' academic achievement as well as a positive change in their personal interaction with others. Changed mode of interaction brings change in their individual impression not only in class or school but also in real life situations up to any level.

2.1.7 A Unique and Universal Typology

Peer tutoring or peer assisted learning is a unique programme of improving instructions as well as student learning. The welfare that Peer Assisted Learning (PAL) provides is well recognized and acknowledged for its constructive contribution to better examination marks, student contentment, their individual and proficient progress recorded (Glynn, MacFarlane, Kelly, Cantillon, & Murphy, 2006). In Higher Education peer tutoring is in wider use with its increased benefits in improving students by reaching better levels of learning, raising inspiration, and enabling them to work not only with peers but also independently. Although a detailed series of previous researches on the effectiveness of related programs shows an unexpected absence of mindfulness on the social dynamics involved in such a programmes (Colvin, 2007). Peer tutors' interactions have been recorded to have the capability of constructing and growing learning prospects while running peer tutoring programs. Though, past researches have revealed more peer tutors struggle in using strategies to facilitate learning, and they intend more to instructive and knowledge-telling approaches (Berghmans, Neckebroeck, Dochy, & Struyven, 2013).

2.1.8 An Academic Booster

A typology of peer tutoring can contain ten major factors to cater with: Curriculum Content based on knowledge or skills, or both; Interaction Pattern, some projects work with a combination of one tutor in work relationship with a group of tutees, but the group size can diverge from two to thirty or more; Study level, tutors and tutees may belong to the same or diverse levels or class of study; Capability, as various projects run on a cross-capability basis, concern in same-capability tutoring seems growing; Continuity of Role, particularly in same-capability tutoring, the tutor and tutee roles need not be stable; Place, Peer tutoring procedures can be carried in a variety of locations; Time, peer tutoring may be programmed in regular class timings, outside the class, or in both, reliant on the degree to which it is required or is helpful; Tutee Features, projects may focus upon the whole class or a fixed group of students, like; the exclusively capable or exceptional, those found at threat of achieving low or extra; Tutor Features, traditionally standards for them are that they should be the 'best learners' (Monaghan, 2014). Tutors and tutees discuss the rules of their commitment with reference to the after-school arranged program perspective. Role of humor is usually unnoticed but it acts significantly in handling the transactional and relational scopes of schoolwork support sittings. It also remains un-noticed while enlightening the continuing pressures and doubts at many stages of social association that tutors and tutees face during their interaction. Similarly, it displays how an emphasis on humorous conversation can enlighten the features of tutees' range of communication as developing the ability of becoming bilinguals that may go ignored while considering only the serious talk (Pomerantz, 2019). Along with other characteristic features of effective tutoring, integration of humor can help in accommodating the unwilling partner of the tutoring pair as well as may de-intensify the pressure of hard work and

staying back after-school. It may support in overcoming resentment in the attitudes and help in moving towards a situation to work productively.

Though very big differences in capability can be demotivating for the tutor objectives, peer tutoring projects may aim intelligent outcomes, proper educational accomplishment, emotional and attitudinal outcomes, social outcomes, self-esteem and self-concept outcomes, or in any of the combinations. Organizational objectives may comprise decreasing dropout, growing admittance, etc. . It appears to be an age, time, learner, teacher, and school friendly program which accommodates learners of all age by adjusting the rest of variables and improving students' as well as teachers' performance indicators like; better involvement, understanding, participation, partnership, ownership, relationship, work habits, work potential, thoughts, attitudes, practices, and academic achievement (Monaghan, 2014). Effective implementation and conduct of the program may multiply its academic benefits by not only improving students' grade average but also assures the completion of the level on time without any unnecessary delay in appearing for their expected exam.

2.1.9 Dual Benefit

Studies have reflected that Tutors also reinforced and extended their own content understanding. It added up to their confidence and usefulness and also advanced their sense of responsibility and sympathy. Research also revealed an improvement in student tutors attendance and decline in unpunctuality and absenteeism. Playing the role of a peer tutor, cross-age tutor or student classroom assistant also arranged for the students a chance to achieve awareness on the learning procedures as well as an improved understanding of the teaching skills (Monaghan, 2014). Tutoring partners opt peer tutoring to facilitate each other in better learning.

Tutoring arrangements at higher levels are aimed to promote higher level multifaceted learning, generally called as the creation of fresh knowledge. The ASK to THINK-TEL WHY model stresses upon the mutual roles of tutor-tutee, helpful communication, and clarification and inquisitive skills. Tutoring partners acquire the skill to practice a variety of questions to make their partners active in giving matching replies. Therefore, tutoring partners support each other's thoughtful and learning to increase to advanced levels (King, 1997).

The role of peer tutoring is diverse and covers not only the areas of tutees' concern in his academic accomplishments but enfolds those of tutors too for further improvement and clarity of action. It further enforces its influence in rectifying other areas of institutional concern like; regularity and punctuality to school, use of intelligence, emotional intelligence, social skills, aptitude and attitude building, sense of responsibility, and feeling for others, etc.

Past research studies have recognized the beneficial role of peer tutors for their peers but they can also get academic benefits for themselves from their tutoring involvements. However, researches also reveal that if tutor learning takes place in varied situations, the degree of these gains is often underwhelming (Roscoe, & Chi, 2007).

2.1.10 Addressing Deficiencies

Research studies have shown that involvement in tutoring plans fallout in both academic and emotional progresses for a range of performance-endangered learners containing; learning restricted, English language students, low accomplishing students, learners from deprived backgrounds and those with behavioral encounters (Monaghan, 2014). The results of a previous study show a vital role of leading collaborative peer-

tutoring procedures in remedying the insufficiencies in conceptual thoughtfulness. The study presents some facts that peer tutoring may arrange for a collaborative setting as it is carried in a planned environment (Çakiroğlu, & Öngöz, 2017) therefore helps in working on weaker areas of the learners' understanding and improves their general behaviour as well.

Students available with tutoring reflect improvement in their academics, abilities to follow a study plan, organization of their work, classroom interaction, input and enthusiasm with which they play their role (Monaghan, 2014) in a more constructive manner. Peer tutoring improves academic abilities and efficiently addresses the concerns of students as in case of both; the normal and those in impaired (Garcí-Vázquez & Ehly, 1992). It is also noticed that students seem helped due to the interaction they do with their class-mates or with their senior peers who also appear as role-models to be followed positively and productively. It showed an improvement of their social skills and time management of their work. These improvements are clearly observed and recorded in regular as well as special education learners throughout a range of various subjects and grade-levels like; elementary, middle, and high school as well as college etc. (Monaghan, 2014).

Reading comprehension is broadly recognized as a fundamental ability for people to participate meaningfully in their social setting as a vital component of their intellectual improvement, knowledge acquirement and contact to social ethos (Gil, 2011). Peer engaged learning covers various areas of educational concern and help in overhauling deficient areas of students' personality concerns. It recovers academic, social, and psychological disorders of a student which work together in his personality development at any level of educational system. The paradox of one's behavior

disorders can be made addressable to large extent if special sessions of peer teaching-learning are arranged along with their critical check on the constructive progress of the program. This progress would be reflected in terms of some positive change in students' academic behavior and achievement.

2.1.11 Modification of Student Attitude

Investigations on student appointment with learning usually converges on the focused areas of behavior and cognitive development like that of students' behavior-on-work and on the application of the learning approaches. The researches on student association with school usually look into the wider perspectives with which a learner has been engaged in terms of his behavior and emotions, like; contribution to school and the show of belongingness to school (Lee, 2008). The modification of students' attitude towards the areas of great concern matter a lot if to work out certain shortfalls in one's school or college life. If positive trend occurs through the exercise of peer tutoring, it rearranges students' approach and application of their skills. It not only makes them feel homely at their school or college but also develop a good sense of responsibility to return it better as enhanced mutual interaction and interpretation of the events and ethos.

Lao and Kuhn (2002) call cognitive engagement a thinking practice demonstrated by the level of mental association along with the forms of cognitive approaches that a learner applies while learning (Ravindran, Greene, & DeBacker, 2005). Cognitive engagement contains; searching, understanding, investigating, briefing, evaluating, reasoning, and deciding (Zhu, 2006). The approaches of cognitive processing in depth and those for its self-direction frequently have been applied to specify cognitive commitment and it is due to the complicated application and

measurement of the level of mental engagement (R. B. Miller, Greene, Montalvo, Ravindran, & Nichols, 1996). A previous research study shows that students' reflective assessment and association facilitated them to improve their meta-conceptual and epistemic consciousness as they went through the analysis of their understanding themselves as well as that of their partner (Chan, & Lam, 2010, June). The improvement in the level of individual's cognition means some improved patterns of meta-cognition which transfers the wave of change in the matters related to student's opinion, optimism, expression, and application.

Concerning behavioral appointments, emotional responses toward responsibilities, school, and individuals at school like instructors or peers may comprise; liking or disliking, feel interested or bored, happy, depressed, or concerned. All of such an emotional responses can be based on the individual involved or on the given task but can also be largely generalized (Goodenow & Grady, 1993; Willms, 2003). Changing negativity into positivity is similar as the change of a practice, which needs attention and exercise. The new trait in behaviour turns into individual's routine practice with the passage of time (Seligman, 2014). This is where peer tutoring plays a very constructive role to strengthen a set of such positive engagements emotionally under laying for healthy and improved behavioral engagements with peers particularly and also reflecting behavior modification in general.

2.1.12 Emotional Rehabilitation

Emotional responses reflected positively towards the given tasks or individuals involved may result as the preparation of learners with sound sense of belongingness at school. Such a feeling of belongingness reflects that students' feelings have been recognized, counted in, appreciated, and/or respected by the people within school

environment (Goodenow & Grady, 1993; Willms, 2003) which may include peers influentially helping in modifying his behavior patterns or engagements. This sense of belongingness also shows individuals' sympathy with his school (Finn, 1993), besides his involvement with school (Johnson, Crosnoe, & Elder Jr, 2001). Nonetheless, the concept of emotional engagement is valuable in understanding the general feelings of the learners about their school even not knowing the reason behind his involvement (Fredricks, Blumenfeld, & Paris, 2004). Advanced level of intellectual involvement needs higher-order thinking that can be seen in in-depth processing approaches and self-controlled learning (Craik & Lockhart, 1972). Self-controlled learning includes the practice of meta-intellectual tasks for example goal-making, formation of plan, self-checking, and self-appraisal throughout learning (Zimmerman, 1990), and all this operational setup is successfully managed through a well-designed and well operated peer tutoring program.

Emotional socialization is imperative to outline emotional intelligence for youngsters. Children having high levels of emotional intelligence tends to prevent himself from behaving violently. Children's elementary emotions like; rage, sorrow, and fright are universally considered as unsuitable emotions conveyed. A recent study results reflect that mother's age, approval aspect of emotional socialization, consciousness and self-regulation of emotional intelligence have noteworthy impacts on hostile behavior of school learners of countryside (Alfiasari & Rachmawati, 2017). Seeing the significance of the emotional dominion in complete and human carefulness, emotional intelligence talents developing preparations become essential for learners (Rahkare, Vahidi, & Jabraeili, 2015) that are best available through running peer tutoring programmes. These peer trainings sensitize the individuals about their role as peer, group, or community member to work for its improvement. It inserts in them a

feeling to serve others by lending their time, energy, skills, and above all a goodwill gesture as a peer fellow or near-to-age fellow.

2.1.13 Constructive Individual Experience

The PBS approaches are getting popularised generally in the field of education especially in social sciences trending away from the older models which had a limited value in terms of individual proficiency and environmental reliability (Carr, Etal, 2002). Peer Tutors are also at advantage by strengthening their own learning through revising and reforming their previous knowledge. Tutors also improve their self-confidence (Howard et al., 1986), by strengthening their feeling of self-competence in helping others. Peer tutors' learning can be supported through reflective knowledge-building techniques. They include; self-monitoring of understanding, new and past knowledge incorporation, and expansion and structuring of knowledge (Roscoe, & Chi, 2007). A learning of constructive individual experience, constructive individual characters, and positive associations give assurance to enhance value of existence and check the pathologies that develop as a result of desertification and emptiness in life (Seligman & Csikszentmihalyi, 2000). Tutors' tuting is useful in addressing learning weaknesses and disabilities not only of tutees but also helps tutors themselves to release their own doubts on certain areas of the knowledge, concepts or skills. It also addresses serious areas of human psychology to develop some constructive thinking and attitude towards life by viewing it with a different perspective. The tutee improves his confidence by accepting helpful peer reinforcement (Smith & Fowler, 1984). In the related studies asking more questions was the characteristic that best predicted exam performance (Bailey, Baek, Meiling, Morris, Nelson, Rice, & Stockdale, 2018). A tutor may or may not have learning deficiencies or disabilities but gets a valued opportunity of adaptability with certain unwanted situations. Tutee sometimes plays the part of a

tutor as well where there is a mutual tutoring situation, learning various other skills like flexibility according to his role, intra and interactive skills, and that of a meaningful cooperation. A tutor can be of the same age group, elder or younger than the tutee.

2.1.14 Student Perception

Perception is one's chief system of intellectual connection with his environment. Individual's concepts are mostly developed as well as emerge from this system of intellectual consciousness (Efron, 1969). It has also been noticed that tutors and tutees both achieve a lot when interact during tutoring sessions. Though, the level of benefit that tutors provide to their tutees depends upon the behavior type they have while attending these sessions. Related trainings can improve the tutors and tutees learning behavior types but following tutor training generalized models that are often used may not consider tutors' previous perceptions of tutoring. These previously developed perceptions may direct them during tutoring manufacturing better behaviours (Velasco & Stains, 2015).

Students' perceptions can be improved by incorporating a sense of care and support for the students. Felner, Seitsinger, Brand, Burns, & Bolton (2007) consider care as a core element of teaching and working best in the classroom for the students' progress. They encourage students to perform best in the class. Teachers' care for their students also demands to know them well (Alder, 2002), that also shows their familiarity with their students. In a compassionate atmosphere, teachers do a large range of effort to know their students well (Antrop-Gonzalez, 2006). Competency as the major aspect of teaching and learning can also be seen in such a classes (Tronto, 1993; Burnier, 2003). All these range of efforts develop a particular type of student perception

about their teacher and subject that has a significant impact on their academic progress or achievement.

Support is another major element that works for students' healthy perceptions and works two folded (Caza, Barker, and Cameron 2004, p. 169 [82]), i.e. doing necessary cushioning and strengthening their positive beliefs. Support safeguards students from taking negative effects from certain events and success in school (Bloomberg, Ganey, Alba, Quintero, & Alvarez-Alcantara, 2003; Demaray & Malecki, 2002 [84]). Encouragement is also a part of support (Balfanz, Herzog, & MacIver, 2007; Walker, 1993). Teacher-leaders are in a distinctive place to benefit students and to identify in them an ability of success (Crosnoe 2011, p. 186 [90]) which may be not clear to students themselves (Rodriguez, 2008). Support also involves observing the graph of student improvement at school, socially, emotionally, and educationally (Gray, Hopkins, Reynolds, Wilcox, Farrell, & Jesson, 1999; Quint, 2006), that appears to be a pro-active means of problem-solving (Raywid, 1995). It supports students in building certain thoughts at school which further designs their thinking modes or perceptions about the people to whom they use to interact in any environment.

Researchers have identified two categories of individual behaviours based on their reviews of studies exploring the relationships between tutor behaviours and tutor learning: knowledge-telling (KT) behaviours and reflective knowledge-building (KB) behaviours (Fuchs et al., 1996; Roscoe, 2007; Roscoe and Chi, 2008). Many studies have found that KB behaviours are connected to the learning of tutor and tutee both whereas, KT behaviours help in making tutee learn only at a superficial level. It means it is just the learning of fact-based knowledge and tutors learning does not take place (Roscoe, 2007; Roscoe and Chi, 2007, 2008). Likewise, other researches have revealed

that tutors usually prefer KT over KB behaviours (Ismail and Alexander, 2005; Roscoe and Chi, 2007; Bailey, 2010; Berghmans et al., 2013).

2.2 Guidelines for Tutors

Tutor needs to be an efficient individual who before initiating his tutor services, should be well prepared and well aware of; designing his preliminary meeting, planning succeeding sittings, record keeping, knowing tutee's learning style, knowing tutee's learning incompetence, interactive talents, consistency in joining trainings conducted by the subject teacher or academic director. It is important for the tutor to prepare for the tutoring session by going through the lecture notes and exploring the related subject topic by researching if required. Here it is also useful if teacher or instructor is contacted for some particular material important with reference to the topic or subject to be taught in the coming tutoring session to enhance some knowledge or skill (Guidelines for Tutors and Students Requesting a Tutor, 2016).

In the planned tutorials tutors check and mark submitted work assignments, give feedforward on peers written as well as verbal utterances. He also carries meaningful discussions helping their problem solving (Alpay, Cutler, Eisenbach, & Field, 2010). Conclusively the tutor would be a true resource to address tutee's concerns regarding that subject or of its one of the topic studied in a peer tutoring session. It should have built on the conceptual understanding, or a skill by feeling more confident and clear in its meaning and matter. The tutee feels free to ask for his problems and confusions and adds up to his confidence level as well as to the extent he reflects while working on the same (See Appendix A). Tutors also need to fill up a commitment form (Appendix C) in the beginning of the tutoring program so that they remember all the areas mentioned

in the form well and can see them for reference time to time as a copy of this form has to be provided to the tutors.

2.3 Guidelines for Tutee

Tutee has to develop a list of the difficulties he faces in his subject area before he has any opening communication with a participant of the Peer Tutor schedule. A tutees identifies these weak areas specifically in his basic dialogue with the participant and then gets ready for his initial and following meetings for the tutoring purpose. Tutees can get better results if take care of some preparatory actions before he joins any session which include; listing down of all the queries or questions during attempting his homework in routine, as well as noting down the page numbers of the weak parts of the topics or lesson that are to be discussed in the coming tutoring meeting. Tutee may underline or spot the problematic areas of the lesson while attending lectures and discuss them in tutoring session with the tutor.

It happens rarely that the problem is recovered by only attending one tutoring session but mostly consecutive sessions are required. In such cases benefit is nil or negligible without arranging many continuous sessions. Regularity rate of meetings can be a mutual decision depending upon the severity of the deficiency. Always maintain a record of all tutoring sessions and each session should lead to tutees' own observations that; how well the meeting went? How many queries or questions became clear for the tutee? How did the tutor interact? How much benefit tutee received from the session? Etc..

Tutee is instructed not to depend upon his tutor for the sack of copying his work as it is but to take his help or guidance to clarify the concepts and complete home works at his own. Tutor's assistance will be helping tutee comprehend the concepts and help

him solve the problem or lead tutee to the procedure of solving and answering it. Tutor will not be solving it for the tutee. Tutor supplements tutee like all other class resources and enhances his capability to perform any work successfully like other students. Tutee should not take these sessions as a replacement of attending class, teacher assisted class sessions, or the teacher's missed teaching hours. Tutee has to strive hard during his tutoring session with a tutor, he should be ready to work hard, if to progress his skills and thoughtfulness about the class material. Moreover a tutee also has to make himself better in the manipulation of the class material. A tutee must not anticipate tutoring sessions as homework solving meetings, so should attend each meeting with the tutor well prepared. Tutee should also not expect to get an answer to all of his concerns in single meeting, or a quick perfection in his grades. Record keeping carried on regular basis following every tutoring session, can benefit in keeping trail of progress and also to adjust according to the situation's need (See Appendix B).

2.4   Peer Tutoring: An Effective Socio-Psychological Therapy

Human psychology is divided into general and special psychology. General psychology deals with the factors common in all whereas special psychology works on the difference marking one mind different from others. General Psychology may in turn be divided into Intra-Individual and Inter-individual, the former concerned with mind as acted upon by things and experiences, the later with mind as acted upon by other minds. The later, embracing as it does every possible mode of association of human beings, belongs to Social Psychology. Inter-individual psychology deals with the two types of problems, one dealing with personal relationships and other with social groupings. Human grouping is very important in sociology. Individuals flourish not only through their cooperation but also through the modification of their nature.

Society reacts upon, transforms and even socializes its members (Ross, 1905). Class-wide peer tutoring (CWPT) is a peer-mediated teaching strategy that has proven to be effective across a variety of subjects and grade levels in increasing academic achievement for students with and without disabilities. CWPT programs are those in which all students work together in tutor learner pairs on a classwide basis (Carta, Greenwood, Dinwiddie, Kohler, & Delquadri, 1987; Greenwood, 1991) following the same relationship and principle of social psychology (Greenwood, 1991). Peer teaching or peer learning encourages collaboration among students in an environment in which they can test their own understanding and examine the understanding of others when communicating with their peers (Starr, 2009). A research study reveals that Heterogeneous peer tutoring (HPT) or mixed peer tutoring programs empower the students for having a feeling of ownership of their learning, enrich their skills to communicate in mathematical exercises, begin with a reciprocal associations with their peers, and cultivate a positive approach concerning mathematics (Worley, & Naresh, 2014). The studies also determine that the provision of a controlled tutoring program is highly supplementary for achieving specific positive outcomes in terms of students' better academic accomplishment for undergraduates as well (Colver, & Fry, 2016). Using varied programmes of peer assisted teaching can widen the horizon of students learning and to understand what they learn. Healthy monitored collaborations between peers enrich them with a sense of responsibility as well as that of achievement, and through this they are able to play positive role in the society as a person who cares for it.

Emotional involvement is also known as affective engagement or psychological Engagement. It contains emotional responses as well as has a feeling of belongingness at school (Finn, 1993; Willms, 2003). The measurement of emotional involvement

usually doesn't reflect the cause of the sensation or sentiment (Fredricks et al., 2004). There can be a variety of reasons for a student feeling happy at school like; because of participating in co-curricular activities, or he likes to interact with his school peers or teachers, etc. The reasons for the emotional involvement if are not known, still the concept of emotional engagement or involvement is meaningful in knowing how learners usually feel about their school.

Learners' behavioral involvement generally includes a wider variety of students' school behaviors, just displaying active participation in academic or non-academic activities (Lee, 2008). According to Fredricks et al. (2004) behavioral involvement has three forms: positive behavior, involvement in learning and in school-based events. Positive behavior involves ones' presence in class, avoiding troublemaking behaviors, following instructions and classroom rules. Moreover, learning engagement includes; to be attentive, struggling, determined, participating in class discussion, questioning, solving home assignment, and spending additional time on class-based learning. Contribution in the activities related to school consists of the participation in co-curricular events like sports or student societies.

Students' involvement seems complete if they involve behaviorally, emotionally, and cognitively, as all the three constituents rely upon each other therefore affect each other. Students are expected more to display behavioral as well as cognitive involvement, for example, their likeness of the work and individuals make them feel happy and they feel near to the people at school, so develop a feeling of belongingness to school. Thus meaningful behavioral and cognitive engagement of the learners make them engage to the people at school and school showing their emotional engagement (Lee, 2008). Peer useful interactions create better opportunities for the students to get engaged in their academic uplift along with their enhanced emotional strength as they

find themselves in some level of comfort. Indifferent and purposeful peer relationships always reflect a positive trend in students' achievement in academics along with a distinct level of socialization. This is social constructivism that works by a productive association of emotions, cognition, and development of behavior patterns, which otherwise becomes a negative association.

Wisdom, optimism, imagination, fore-sightedness, resolution, spirituality, accountability, and determination are usually unnoticed in an educational setup. They are also taken as the modifications of truly undesirable instincts (Seligman & Csikszentmihalyi, 2014). The negative effect of unresponsive schools has been recorded appearing only when learners have paid an important time quantity in such schools. It can be likely that students in such schools usually bear worst consequences. This might be due to the deficiency in being responsible and demanding to the students. Here the situation might make the students encounter dissimilar school socialization styles than at their previous schools (Goodenow & Grady, 1993; Willms, 2003). It might have affected the progress of their positive socialization through disturbing their emotions with declined cognitive activity and further adding to behavior distortions.

Several Minority school children in liberal and unresponsive schools exhibited poorer behavioral involvement as compared to the schools that were firm, though the reverse form was seen in the schools belonging to racial/ethnic groups (Lee, 2008). Recorded facts show that socialization style symmetry between the home and school settings is linked to learners' academic products (Paulson, Marchant, & Rothlisberg, 1998) if not for all but at least for some learners (Lee, 2008). Similarly, students performing better at more demanding schools might perform better because they belong

to the families which demand more from them like Pakistani society which is in general trending same. The case with majority of schools is also the same.

Normative developmental tendencies in students' peer involvements offer a base for knowing the spirit of peer associations as developmental psychopathology viewpoint. In some preparations, peer involvements are proposed to add to progress in unique means of students' involvements with adults (Peer, 2006). Consistent age developments have not been witnessed in the middle age childhood in children's general personality to act in a supportive, cooperative, or significant manner with their peers. It had been the researchers' observation that social behavior improves with age through this period (Fabes et al., 1999). Those inspired by cognitive-social learning theory have stressed the methods promoting peers' relations, enhance and modify learners' social skills, behavioral trends, and self-ascriptions. Agreeing with the social learning theory, learners develop their own inner directions which connect their social actions to their outcomes likely to be; compliment, condemnation, censure, and dismissal. It directs their performance in line with these rules. Partly, direct exposure of peer reprimand and reinforcement helps in learning these rules. It is very simple that learners seem inclined to repeat actions their peers accept, and knowingly they tend to avoid such actions that peers disapprove (Peer, 2006). Appreciation or reprimand motivate learners to reinforce their actions but sometimes the response seems altogether opposite. Here it becomes essential to revisit individuals' psycho-social personality trends which may be exceptional causing normative emotional and behavioral patterns developed differently. In such cases teachers' guidance for the tutors sounds much more significant if to draw out maximum from peer tutoring routine sessions.

2.5 Socialization Process

'Socialization or socialisation, is a word that sociologists, social psychologists, anthropologists, political scientists, and educationists often opted while discussing the constant practice of inheritance and diffusion of social standards, traditions, morals and beliefs, providing an individual with the abilities and practices (wikipedia), required for his social adjustment. It systematizes future partners to contribute in group by instructing them on the expectations of the other group members (Boundless, 2014). The results of a previous study of Hislop & Lane (2015) show that all learners recognised the worth of mutual learning in the development of self-efficacy and forming a secure opportunity of learning. Student tutors also acknowledged the welfares of tutoring in supplementing their proficiency with respected and esteemed feelings other than combining practical abilities and theoretic understanding.

Socialization is the course of forming standards for an individual. It is the chain of practices that develops an individual's consciousness of social standards and morals. It also permits an individual to develop a unique sense of identifying oneself. These practices and processes are mostly remarkable through early stages after birth and childhood, and last during the course of life (The Socialization of Girls, 2016). Understanding social standards is helpful in practising them and to mould behaviour accordingly. Therefore, socialization is a useful and an essential means of developing adjustability in the society or ones' environment by understanding, learning, and following social principles and practices.

Findings of previous researches indicate that effect of cultural beliefs upon learners' socialization and upon how these beliefs are transformed into their routine

exercise (Pearson & Rao, 2003). Socialization is the course which makes children gain the necessary abilities to execute their role as an active participant of their social group, and is the most effective learning practice (Billingham, 2007). Though inconsistency in culture is reflected through the activities, traditions, and conducts of entire social groups or societies, the most significant appearance of culture is reflected through an individual. According to the many scientists socialization fundamentally characterizes the lifelong process of learning having major impact on the behaviour, views, and actions in adulthood and childhood (Britannica, 2010). More sound and influential are the social traits, better would be socialization. It enhances further the degree of being an active member of the group or society reflecting particular social make-ups of the groups or societies. It is actually a process to make an individual more interactive in his social group which let him express himself in his social environment more positively. This can be other way too.

Socialisation continues all through life and occurs through a variety of stimulus of socialisation. Ones' family serves as the most important of these agents. This main mode of socialisation makes an individual learn the foundational social attributes of life. It is a general reality of life that the teachings of our parents always remain with us throughout our life. During the course of child development, he comes across a number of other influences which add up to his socialization for example when his schooling starts. This is called secondary socialisation, but it establishes itself on the family beliefs and actions. It helps in developing such a set of new social skills, which design tolerable behaviour patterns while interacting in bigger groups. These childhood foundational socialization patterns serve as the rules which establish themselves as norms to be taken with people all through their life. The rules of a group tolerable in teenage may not be considered adequate behaviour for adult life, thus people are

persistently adjusting their behaviour all through their life. Adult socialisation appears to be the ultimate phase of socialisation which usually puts emphases on work, along with the continuity of interaction with their social groups of peer. In adult age the rules of measuring social status vary and it is more important and usually judged through wealth, which can be improved through selecting a suitable career. Adult socialisation comprises the learning of particular opportunities connected with new roles, like that of parenthood. The role of social control is continuous for an adult as he is expected to follow the laws. Socialisation becomes a means of meeting their social expectations, even though that people present themselves only as individuals, hence socialisation cannot be an unchanging practice (The socialisation Process, 2016). Socialization is a continuous process that can be constructive in a supporting environment whereas becomes destructive where indifferent situation prevails and ignores individuals' emotional needs coming in clash with their norms. Such a clash brings out such behaviour patterns which are usually unacceptable in ones' social groups, therefore outcomes appear to be intolerable and deteriorating.

2.5.1 Socialization Goals

A sociologist, Arnett (1995) drew out his analysis on the three main aims of socialization in his research study "Broad and Narrow Socialization: The Family in the Context of a Cultural Theory". According to Arnett (1995), the first goal of socialization is to teach how to control ones' desire and it assists individuals to develop morality. This goal is achieved through the natural course of life as individuals' upbringing takes place in a specific society, they collect rules from the expectations of people round them and adapt with these expectations to control their desires and improve morality. Second goal of socialization imparts in individuals the ability to

arrange for and execute some social roles like those of his occupation, gender, marital and parenting. Thirdly its goal is to focus upon the development of collective sources of sense and value as socialization makes the individuals learn how to recognize important and valued things in different cultures (Boundless, 2014). In evolutionary psychology, socialization aims seem integrated with the parental ethno-theories, necessities enabling the speedy implementation of care and socialization approaches which had been practical in the latest past (Lordelo, Roethle, & Mochizuki, 2012). Transition of sound psychological trends into those of socialization reflects a strong link between individual's cognition and meta-cognition, deciding how his sense of critique works and influences his ability of decision making. It further helps in opting better standards of social values and practices expected from him by his society. It presents him as a better individual by reducing his personality clashes with his environment.

2.5.2 Socialization Theories

There is a wide range of theoretical background for the present-day socialization paradigm which strengthens its foundational ideas through a range of successful interactions in individual's particular setup.

Late 1980s had been the era linking sociological and psychological theories with socialization. Klaus Hurrelmann's theory is one of the type containing this integration. In one of his book *"Social Structure and Personality Development"* (Hurrelmann, 1988/2009), he developed *The "Model of Productive Processing of Reality* (PPR)" which shows a strong relationship between one's social setup and his personality make-up. The major idea about socialization is that it is related to the personality development of an individual. It is the product of the meaningful development of individual's

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internal and external realities. Reality development is useful as humans aggressively struggle for their survival and try to handle the associated growing responsibilities. The accomplishment of such a development is dependent upon the existing individual and social means.

Lawrence Kohlberg study was based on moral reasoning and introduced a theory that covers the phases of moral development and works on the reasoning of how individuals differentiate right from wrong. The primary stage is pre-conventional stage, in which individuals are mostly children who see the world as a source of discomfort and pleasure, and their decisions merely show this aspect of understanding. Secondly, the conventional stage covers the age group of adolescents and adults. It reflects the acceptance of social norms in differentiating right and wrong, even in case of the absence of any outcome as obedience or disobedience. Third is the post-conventional stage which seems rare and exists in situations when an individual goes against giving importance to some intellectual ethical ideologies in moral decision making (Macionis & Gerber, 2010). These phases of moral development mature one's sense of reasoning while going through a continuous process of social interactions therefore keeping themselves at par with the social norms. It shows healthy trends of socialization achieved through the maturity of moral understanding.

A comparison of the girls' and boys' moral progress was carried by Carol Gilligan who devised the theory of gender and moral development. She identified the difference in the perspective of both and declared (Gilligan, 1982) that boys believe in justice relying on the recognized rules to express right and wrong. Whereas girls' perspective is care and concern and give importance to their own relationships while judging a situation. Gilligan also probed into the gender influence on self-esteem. She

revealed that society's socialization of its females results in the decrease of girls' self-esteem in the later stages of their life. Girls fight to reclaim their individual power during adolescence as they experience less female instructors mostly and gents are considered as the most authoritative figures than females (Macionis & Gerber, 2010). Gender difference entertains moral development of individuals at different levels. Difference in individuals' perspective leads to different level of moral development in both genders.

Scheidlinger (1994) elaborated Erik H. Erikson (1902–1994) theory on the challenges faced by an individual throughout his life. Infancy is the initial stage in the life when infants learn the feeling of trust and mistrust. In the second stage that is called toddlers children up to two years struggle to establish independence against doubt. The third stage that is of preschool, young children struggle to differentiate between initiative and fault. Stage four as pre-adolescence, makes children conscious about sincerity and weakness. The fifth stage, covers adolescence when teenagers experience leads them to strive for getting identity against confusion. The sixth stage is that of young adulthood, where experiences teach young individuals to get understanding of life while encountering the challenge of relationship and loneliness. Middle adulthood as stage seven makes individuals practice the challenge of trying to be different against self-preoccupation. The final and eighth stage is of old age when individuals still learn to face the challenge of reliability and dejection (Macionis & Gerber, 2010)

Simpson (2014) related George Herbert Mead (1863–1931) who had the foundation of his theory based on the Vygotsky's concept of social behaviourism which explains the development of individual's self-concept through social experience. The core concept of Mead's theory is 'self'. It is comprised of two self-dimensions; self-

awareness and self-image. He believed in the absence of self at birth stage, instead it seemed established through individuals' social experiences. As social experience is found to be the interchange of codes or signs, therefore people are sensitive in getting sense in all acts of an individual. Interpreting sense or meaning in others' actions makes us understand ones' intention. Comprehending ones' intention needs to visualize the expected circumstances or situation from others' view point. In conclusion, one sees himself in others as a reflection.

Chales Horten Cooley (1992) in his previous study (1902-1983) created 'looking glass self'' as a new terminology, a concept of self-image founded on the sense that how others observe us. Mead considers taking role of others as the key to developing the 'self' that is learning. Newborns are only able to develop a sense of self or individuality through imitating their elders or others that is actually a narrow experience of social interaction. Then it becomes progressive for the children to learn how to play many other roles. Generalization is the final phase according to Cooley's theory, where widespread cultural norms and values are referred in order to evaluate others.

According to the theory projects of Harris (1995) the concept of group socialization is usually termed as GS theory. It relates judging child's adult personality through observing his peer associations out from home during childhood and adolescence. The theory also states that children as adults won't be having any impact of their parent's behaviours on their psychological features. Harris claims his theory to be founded on the integrated concepts of; behavioural genetics, sociological opinions of group practices, context-based learning, and evolutionary theory (Harris, 1995).

Harris took the actual idea from Eleanor E. Maccoby and John A. Martin and presented her theory. Maccoby and Martin (1983) were of the view point after they reviewed their research directed on parent-child interactions in detail that parental behaviour along with child's home atmosphere had reflected either no effect on individuals' social development, or if so then the effect contrasts considerably among children. Harris (1995), also states that developing long-term personality characteristics away from the home environment would be evolutionarily beneficial because future success is more likely to depend on interactions with peers than interactions with parents and siblings.

Linguistic anthropologists named as Ochs and Schieffelin (1989) and Ochs (1988) presented their work as the theory of language socialization based on comparative research in different societies, where they focused upon the role of language in the development of a child. They revealed out of their study that the procedures of enculturation and socialization occur in a parallel manner with the process of language learning, but the amount to which it had been an integrated process decides how much learning of culture and language has taken place. Wikipedia in the year 2016 states that It is practiced in every society that individuals are socialized mutually to and by the language practice, obtaining language mastery as well as get socialized with their environment and norms of the social culture which in turn, provide the norms for language usage.

2.5.3 Socialization Types

Varied socialization types include; primary, secondary, anticipation, re-socialization, organizational, group, gender, racial, planned, natural, positive, and negative socialization. Child's primary socialization is very basic and sets a foundation

for whole of the child's socialization in future. This type of socialization takes place during child's learning of the attitudes, beliefs, and practices which seems suitable to individuals as the participant of a certain culture. Direct family and friends majorly influence child's primary socialization. Secondary socialization relates the individuals' learning process through which they recognize the most suitable behavior as a group participant of the society. Fundamentally, this phase reinforces the accepted behavioral patterns serving as the socializing agents of society. It takes place externally other than home (Editors, 2006) and is linked with teenage and adult age groups and also includes minor modifications as compared to those of the primary socialization. It shows that as individual passes through his age levels, his socialization is more demanding, difficult, and gradual, therefore educational stakeholders have to work hard on making initial stages of education for the students more meaningful and productive if to produce ideally acceptable human resource for future.

Anticipatory socialization denotes the socialization of an individual through practices for forthcoming situations, careers, and social associations (Levine & Hoffner, 2006).

Re-socialization speaks of socializing individuals by going through the process of replacing previous behavior forms and responses with the new ones as piece of alteration in their life. This is practiced throughout the life (L. Gerber & Macionis, 2011) and can appear as a strong experience resulting in an exceptional change in ones' life which completely disconnects him from his past, exposing him to the need of learning completely dissimilar norms and ideals (Alvenfors, 2010).

Organizational socialization makes the employee of an organization learn the required knowledge and skills to accept his role in the organization (Kammeyer-

Mueller & Wanberg, 2003). Newly recruited employees get socialized through this by learning the organizational past, ethics, don'ts, ethos, and processes. The extent to which employees are involved in following institutional code of life, it marks the level of their socialization (Bester, 2007).

Group socialization is individuals' socialization by their peer groups, instead of their parental involvement, which effects their behavior and outlook as adults (Harris, 1995). Teenagers use more time to be spent with their peers instead of parents that is why their peer groups influence correlate significantly with personality development than others including parents (Grier, 2000). Richard L Moreland and Levine (1982) presented a model of group socialization that elaborates the relationships of individuals in groups which is expected to bring alteration in an organized manner in a period of time. In this situation both participants i.e. the individual and his group are regarded as active agents of social stimulus (Richard L. Moreland, Hogg, & Hains, 1994).

Gender socialization, according to (Henslin, 1999) is a view that learning culturally distinct gender characters are vital fragments of socialization. Gender socialization is the learning of behavior and approaches that are considered suitable for a specified sex. Boys acquire the role of boys and girls that of girls through their learning. This learning takes place through a variety of mediators of socialization. Sociologists relate four means through which parents do their children gender socialization; Modeling gender associated characteristics with the help of toys and actions, opposing their contact with children depending upon the child's sex, becoming role-models as primary gender models, and cooperating gender principles and opportunities (Rotheram & Phinney, 1987).

Racial socialization is the process of the development in which children attain behaviors, opinions, standards, and approaches of an ethnic group, and want to recognize themselves along with others as the participants of the group (Hughes et al., 2006). The current works indicate racial socialization with numerous facets and investigators have recognized five of them usually revealed by the racial socialization writings; traditional socialization, training for partiality, raise distrust and impartiality. Planned socialization proceed when others take engagements aimed to communicate or train others since early stages (Duff & Hornberger, 2008).

Natural socialization take place when newborns and adolescents realize, show and discover the social world around them. Planned socialization is generally a human sensation; and all through history, people have been making plans for teaching or training others.

Positive socialization takes place when individuals' social learning happens by building it on agreeable and stimulating involvements. The people motivating positively through love, care, and reward and enhance social learning practices are considered important.

Negative socialization appears through the application of reprimand, severe condemnations or resentment in teaching a lesson. In such situations usually people disregard both negative socialization and the individuals enforcing it on them. It leads a person to displeasure, being conquered or suspicious about life (Duff & Hornberger, 2008).

2.5.4 Peers: Agents of Socialization

Socialization is a constant practice which makes the people learn about social anticipations and how to develop interaction with others. Almost all patterns of behavior making human nature are essentially cultured by socialization. Socialization in its continuous process helps us how to walk, discourse, and nurse ourselves. It also makes us learn the set behavioral norms helping us to adjust in our society etc. Socialization is a life-long activity with its childhood playing the most significant role and sets the foundation for the rest. So family, school, peers, and mass media become the most influential agents of socialization, and also very responsible in socializing individuals during this stage (Socialization, 2016).

Peer impact on conduct slowly prevails more strongly. Studies (Harris, 2011; Rowe, 1994) relate that the influence of peer groups is much stronger than that of parents, while according to (Berk, 2005), many researchers are of the different viewpoint in extreme situation. Another study has detected variations in peers social associations, problem-solving abilities, and commitment with learning (Willis, Bland, Manka, & Craft, 2012). The peer tutoring programmes have also remained effective in improving reading comprehension and reading articulacy of the contributors (Zambrano & Gisbert, 2015; Hattie, 2006; & Shegar, 2009) which served the teachers as a problem solver specially at the junior level helping other areas of academics like; confidence, understanding, pronunciation, expression, etc.

Positive emotional conditions can stimulate dynamic opinions, beliefs, and physical comfort for the individuals. Hippocrates estimated that constructive feelings and healthy results of the individuals may be associated in many ways (Salovey, Rothman, Detweiler, & Steward, 2000). The peer group functions as an indicator for teenagers inspecting themselves and their emotional state about themselves as a person

and family. The group of peers also effects progress of individuals' abilities to socialize. These primary relationships assist children in learning negotiation skills and communicate others like to their relatives and other family members. Peers are always a source of learning cooperation skills and to get socialized keep them in track with group norms and group-approved approaches of performance. The peer group may affect child's beliefs, knowledge, style, meal, and studies' likes and dislikes. Many other situational limitations have their impact on the extent to which this peer group inspiration works, for example; age and character of peers as well as the nature of the group (Hartup, 1983; Mussen & Hetherington, 1983).

Socialization is predominantly vital for the individuals carrying disabilities, therefore numerous programs are comprised of the peers. It is usually included in special education programs or contain those with incapacities in general education schoolrooms (Barbour, Barbour, & Scully, 2002). Adolescence is an important age group when peer groups usually experience dramatic modifications. These are the age groups which are more inclined to pass maximum time in the peer company so have limited adult control. Adolescents show a change in their communication style during their routine peer group interaction. Gatherings of peers also play their role as peer groups and reserve good company more than in any of the age level importance in individuals' early adolescence that declines towards the later stages of adolescence (Laurence, 1996,2010). Peer interactions lead to quick results in changed behavior especially during adolescence when individuals start enjoying their peers. Moral values are followed more while choosing or interacting with friends or peers in early adolescence than in the later stages.

Peer group act as a source of enculturation and learning but works parallel with the community traditions. The sense of self-consciousness may be seen even in very

small children which is based on their observations of chief participants in their environment like; families, instructors, and class fellows (Bornstein, 2005). The most adequate arrangement of the peer group is a strong coming-of-age mediator, which makes individuals of this age learn discussion skills and know how to tackle aggression leading to develop problem solving skills in a particular social background. The damaging approach of the peer group can claim non-questionable submission of will to a group rule. It can produce socially isolated teams having unreasonable impression (Horton, 1987). It is negative socialization of groups where individuals are well socialized within their own group but the type of their social ideology comes in clash with that of the society in general deviating from the set norms and standards followed in a society. Here the results can be alarming in terms of non-mixing trends of the individuals of a group that makes them more to resist parental and teachers' instructions developing more complex behavior and socialization patterns.

2.5.5 Socialization: A Dynamic Philosophy behind Peer Tutoring

Socialization is a means of working as a complete human being. It has made it possible for us to structure our society, ethos, and social interactions as the road to socialization. Socialization is the way how one learns the culture but it is also vital for number of other significant reasons. Absence of healthy and helpful social interactions leads to an incomplete personality in many ways. He may appear to be a frightened individual that would reflect abnormal development of his personality, and being less able would just follow commands (Lane, 1979). Sound social relationships are greatly influential in structuring individual's personality and the role that an individual plays in varied social settings. The tone and intensity of the social inter-relationships decide in which shape the individual will be developed.

Higher Education is applying peer tutoring extensively to support student learning, inspiration, and enabling them to work on their own deficiencies. Although it is applied extensively, yet the stakeholders involved do not exhibit complete awareness of the social dynamics involved. Results of a research study show that the tutor-tutee interaction may not be a convenient one that can be handled easily. It is also indicated that impression management becomes the chief pursuit of both of the students involved especially tutors who use to spend a considerable amount of time in it. Moreover, research findings also reflect that tutor-tutee interaction can go with some misunderstanding and struggle for dominance undermining their social development. On the whole, results show the key role of tutor-tutee interactions as well as their type of relationship in both unfolding and applying a peer tutoring program (Colvin, 2007). Therefore, it becomes very essential for the meaningful and useful conduct of the peer tutoring that all the people involved in it like the instructor, tutor, tutee etc. are trained on the set principles and then engaged in the program process finally resulting in some level of socialization.

The tutor-tutee association is continuing, progressive and mutual. It also encourages students to show readiness to learning and mature cognitively. To recognize the worth of peer tutoring program, it is essential for the tutors to have sound interpersonal talents, involving: bond building, communication and team-making which are all core social skills. On the other hand tutees need to exercise their skill to provide remedial response to tutors. It is considered important that the factors like: controlled planning, training, evaluation, and problem solving are all essential constituents in the planning of peer tutoring program process (Chen & Liu, 2011). Tutor-tutee continuous association makes them work progressively and help them feel

easy to work in a conducive environment, thus encouraging learning and adjustment with each other that means socializing themselves.

According to the theories proposed in the studies (Charles H Cooley, 1902; Erikson, 1980; Freud, Sprott, & Strachey, 1933; Gilligan, 1982; Kohlberg, 1969; Mead, 1934; Piaget, 1954), important assumptions can be; children receive an impression that how people recognize them when their interaction takes place with other children. So as a consequence, they "*see*" themselves during their interaction with others, same as looking in a mirror. Children apply others' perceptions about them and develop judgments and emotions for themselves. While playing, children act in the role of other people and in performing so they learn others' expectations from them informally training themselves as a social being.

Human personality is comprised of the *id, ego, and superego*. Antisocial behavior is the outcome of the abnormal development of a child. In this case, the superego does not get a chance to gain strength and then to overcome the *id*. Thus strong id causes problematic behavior in an individual creating problems for him in his socialization.

Cognitive development goes through four steps. Formal operational stage starts at 12 years as the last step of cognitive development. Children initiate the application of general principles in the solution of varied problems. Appropriate maturation of the brain and socialization are compulsory for suitable development (Piaget, 1954). Our self changes continuously regardless to whom we interact socially like: friends, relatives, co-workers, supervisors, or even strangers. Vygotsky's theory highlights the part that social environment plays in the understanding building (Vygotsky, 1978, 1987). Peers are also an important part of the social environment and it has always

played the role of a vital stimulus for an individual in all ages in his healthy socialization process. Peer company plays miracles and brings huge changes in individuals' life by stimulating change in their behavior through experiential constructivism.

Education serves vital in socializing us and plays its role as a social organization. Social collaboration is completely compulsory for an individual to become self- conscious and also to develop coherence in his personality. The logic of self is something developed in a parallel manner throughout ones' life stages that gives us an understanding of ourselves along with that of the people around us. Therefore, it is not inherited or a part of our instinctive consciousness. Social interaction plays the role of a mirror to us which gives us true recognition of our 'self'. It reflects our inner-selves through the type of interactions that we have in routine with ourselves or with the entire society. Schools offer a constant behavioural learning arrangement involving socialization that is not available inside many families. This assists children attain a social similar setting that helps them to link their associations and collaborations among each other (Socialization Test, 2016). Meta-Cognition influences ones inner self which helps in deciding the type of interaction the individual tends to develop with the people around him. Absence of effective interaction at home with the family members and family environment may result in the dominance of trends found in school or college or within the peer group. This may help individuals adjust themselves in some healthy or unhealthy associations with peers and collaborate in a very noteworthy manner.

The ability of thinking and acting on moral grounds develops in a child while going through many steps of his development. Boys are more inclined towards using formal procedures in deciding for right or wrong, whereas girls consider personal relationships as the most important in their socialization process.

Development of identity takes place in eight steps throughout the course of one's life. The most critical fifth stage appears in adolescence when identity crisis seems to be the main problem of the adolescents. This is the age of transformation from childhood to adulthood. At this age, individuals are usually more socialized and experience the development of self, or one's identity, self-concept, and self-image. Cooley (2013) is of the view that our interaction with others develops our own impression in front of us.

The students carry varied learning styles, so it is not possible for them to absorb knowledge just from teachers' lecture. Thus it becomes essential to accommodate our students by applying various learning approaches. A formal or informal peer tutoring program can be one of the best time- tested approaches with some variations and modifications. These programs need more attention on their structure, administration, and feasibility in whatever form they are conducted like: one-on-one, in groups, class-wide, or whole school interaction (Brost, 2011). Life aspects for instance family arrangement, upbringing, faiths and regional dissimilarities have their influence on ones' socialisation (The Socialization Process, 2016). Our peer groups socialise us other than our parental and socialization by our relatives. This is how individuals show changes in their speaking style, style of getting dressed up, or eating habits, or even other life choices or opinions etc. Therefore, it is said that peer groups are more influential being more important than that of parental socialization contribution for teenagers especially. Media like T.V also seems quite influential by showing us lots of things not known before to many of us. It helps us by telling the ways of approaching those things and also for doing them (The Importance of Peer Groups in the Process of Socialization and Learning Gender Roles, 2016). All external means of socialization which are outside the home are termed as fragments of secondary socialization resting

on the primary arrangement of socialization experiencing with family, therefore resulting in the development of similar set of behaviour in an individual.

The Problem of Youth's Education and Socialization (2016) relates that the socialization of adolescence is presently in disaster. Education is suffering from problems throughout the world. The relationship in socialization and education is a critical hypothetical and everyday problem. Schools contribute as the major platforms for socialization. Education performs dual jobs: to produce social replica and its progress. The lifestyle of a solid society needs constant practices of socialization. McElroy-Heltzel, Jordan, Futris, Barton, Landor, & Sheats, (2019) found out of their study that most of the adolescents considered interpersonal trust developed on the feeling of honesty and loyalty in their relationship. Adolescents also recognized that family's positive messages also support their individual association understandings as a source of their socialization intended for interpersonal trust.

Previous research studies like that of Gueguen, Jacob, & Martin, (2009) relate that mimicking and imitation of the verbal and non-verbal forms of people's interactions is evident in the social interaction but it has also been revealed in these studies that mimicry is linked with higher positive assessment of the person involved in the process, which is a meaningful and successful mode of learning through the course of individuals' interaction with every factor of his social environment. Peer tutoring serves as a useful means of socio-therapy enabling an individual to work on the weak areas of his social capabilities and underlying psychological issues which usually generate a variety of behavior disorders.

2.6 Psychological Remedies

Peer tutoring offers an informal form of psychotherapy to the students involved in the tutoring experience. Psychological ailments are diagnosed through the study of difficult learning experiences of individuals' life history. However, other than the simplistic view of behavioral therapy, Álvarez (2007), states that in the therapeutic settings, problems are accessed and solved in the natural social perspective. Psychotherapy embraces interaction of the individual or group of individuals with a qualified psychologist, psychiatrist, clinical social worker, certified counsellor, or other qualified consultant. The aim of this interactive session includes the digging out of thoughts, feelings and behaviour of the individual under therapy for assuring his best functioning through the solution of his problem. These sessions actually work on the principles of the psychological theories and intend to correct the flaws lying in individuals' social environment comprised of a variety of primary, secondary or any level of relations.

Psychotherapy targets at the improvement of individual's thought and willingness for his own well-being. Psychotherapists use varied methodologies grounded in experiential association development, dialogue, communication and behaviour change aimed to recover the mental fitness of a customer or patient. According to the web source, it may focus on the betterment of the group relationships as well like those in a family.

Some therapeutic techniques of behavioural treatment linked with peer tutoring approach include: Exposure techniques, Relaxation training, Aversive techniques, Reinforcement programs, Modelling, Behavioral trial. The main therapeutic strategies used in cognitive therapy naturally endowed in peer tutoring are: Cognitive

restructuring, Training on problem-solving, Behavioral experiments (Wellness.com, 2016).

According to the Psychotherapeutic Techniques given in the Appendix 7 of the Clinical Practice Guidelines in the Social Network Sites (SNS), Cognitive therapy mainly stresses upon the modification of difficult cognitive patterns causing problems for the individual like spontaneous undesirable thoughts and, eventually, the beliefs or thought patterns causing such thoughts are made inactive. It intends to enable the individual suffering from such a crisis to get adjusted with the circumstances that cause emotional disturbance. Resultantly, it raises his quality of life and develops his lasting emotional and psychosocial corrections which helps him to adjust better in the related life situations.

This is what happens in case of peer tutoring that the tutee finds himself in a comfortable situation with another student and tries to imitate him consciously or unconsciously, interacts in varied situations, share views, discusses and debates on different issues (academic and non-academic), receives stimulus for a cognitive modification in thought and ways for the treatment of the problems. It in turn, helps him in getting strong psychologically and also well socialized that drives him to develop positive attitude towards his tutor thus enhancing his socio-psychological behavior. Such a natural therapeutic relationship plays constructively in addressing a problem by healing or restructuring the mal-functioning area of the pupils' personality, thus improving the desired area that is focused through this type of association. Therefore, peer association works through webbing socialization, touching psychological domain for healing or prompting actions, triggering cognition, and finally constructing one's behavior through experience and environmental interaction. The strength of such an interrelationship and coordination is amongst the important factors with which human

personality interacts and responds as change, as used through peer tutoring to improve students' academic progress as well as their overall personality development.

2.7 Pedagogical Concerns and Constructs of the 21st Century

2.7.1 Diversified Learning

Today's fast and ever-changing life patterns urges educationists and psychologists to look for better substitutes to the old learning strategies like; interpersonal learning, personalized learning, second life learning, 3d learning, collaborative learning and virtual learning. Old approaches and pedagogies appear not to be more effective in their application. The teacher-dominant learning styles having ready-made information and delivered in an official and homogeneous classroom environment is seen as superfluous. Here a question on the reasons of this great change in learning arises and also on the need of a new pedagogy for the improvement of learning in a better manner. Technical developments and especially, the techniques of social networking have brought a huge change in the overall educational setup.

The two learning prototypes of 20th and 21st century have completely varied regarding their recommended skills, objectives, and instructional strategies. Thus, the education system of the 21st century demands for a review in order to introduce 21st century-friendly paradigm of education to look deep into the changed nature of schooling, its goals, pedagogies, curriculum, structures, and situations. The core skills needed to attain the targets of 21st century pedagogy are: critical thinking, active learning, and problem solving skills, communicating, making connections, creating and expressing oneself in a variety of ways, contextualized knowledge. All of the above skills emerge from the depth of experiential learning. Un-contextualized and non-activity based learning are a way to weak retention (Kharbach, 2014). Studies have

shown that acquiring peer tutors and their students help throughout the class providing instructors improved prospects to distinguish teaching and interval to accomplish behaviours successfully and help in solving learners' problems. It also supported an additionally helpful classroom atmosphere which led to upgraded student responses concerning the content (Monaghan, 2014). An identical approach between a student's instructional perceptions and the instructor's instructional involvements offers the finest instructive scope (Struyven, Dochy, & Janssens, 2008). Instructional strategies and learners' interpersonal familiarity facilitate healthy and meaningful relations in peer assisted learning. Progress in educational pedagogy through peer tutoring paradigm has made possible for the teachers and administrative authorities to work more usefully on the academic problems of the students. It has also helped them to bring back motivation and volunteer in education equally benefitting learner, teacher, and administration.

Studies have also reflected the useful effects of self-supervised educational precision and output concurrently for every aimed and observed behaviours, including upgraded behaviour at work (Leis, 2005). Experiential learning is always helpful in offering interaction of the individuals with their environment and that facilitates life-long learning. Continuous peer tutoring experience for tutor and tutee is a vital means of experiential learning including all the core skills of the 21st century. A number of benefits emerge from this interactive programme for 21st century's pedagogy but with the organization of a programmed setup. The diagram below reflects the expected features of the 21st century pedagogy:
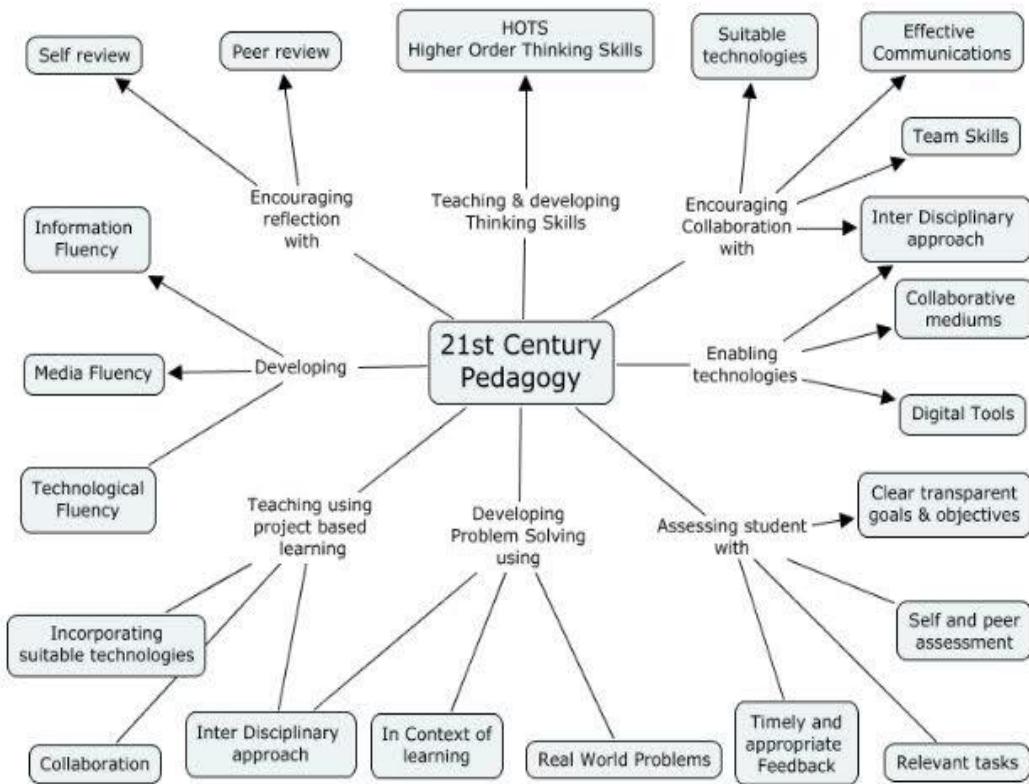
Figure 2.1. 21st century pedagogy

(Churches, 2014)

2.7.2 Strategic Dialogue

Presently, the world is facing bigger challenges of a pedagogical and technological uprising, expecting long-lasting and significant outcomes of education, training, economy, and society. In future, this revolution is expected to merge in the newly evolving pedagogies, for example, 'structured dialogue'. No doubt, a dialogue designed for knowledge-building and problem-solving serves as a meaningful and strong tool to bring planned modification and also for enhancing the performance level of all organizations, but still many of them including educational institutions are not completely exploiting the influence of dialogue. Dialogue is a planned and prolonged process of discussion or talk that develops different perceptions, depth of knowledge and thoughtfulness that finally results in improved life practice. Dialogue is a planned

activity of enhancing participants' basic levels of knowledge and belief (Abbey, 2014). The dialogue is not predominantly consisted of; narrative, explanation, disagreement, and encouragement which are the common factors making traditional talk but it lays emphasis on the problem-solving approach and also heeds the development of new ideas (Alexander, 2005).

In the process of strategic dialogue, the participation is more varied. It is not just to recall facts but their talk seems more expository, explanatory, justificatory or speculative. Evolving dialogic teaching needs continued input, sustenance, and proficient learning. Relationship-construction becomes a dynamic approach of best raising individual development through high level of communication, interaction, and relationship building (Abbey, 2014).

Dialogue acts as a strong means of taming the innate self-shaping mutual intelligence of groups of people and also of both expanding the cooperative inquiry process (William, 1999). Peers are mostly in a better position to inquire, discuss, debate and finally improve their partner's thinking (Iyer, 2011).

Dialogue opens the way to find means of overcoming the problems in governing themselves in public or private spheres. It proves itself as an inventive substitute approach to generate harmonized action among the collection of factors (William, 1999). The teachers' discourse with the participants while planning the work serves the main element to develop an agreement. This is so because a teacher is capable of observing and guiding students' comprehension practices, solving problems and leading towards the knowledge building (Coll & Onrubia, 1999). These benefits of dialogue are drawn out of the strategic teaching where teacher plays his part as the authority who conducts dialogue strategically. In peer tutoring, teacher shifts his role

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to the peer-tutor to carry the same and himself supervises the dialogue between peer-tutor and peer-tutee. The gaps between a student-teacher dialogues can be reduced even more while replacing it with peer-tutor and peer-student to ensure the reduction of socio-psychological barriers which puts positive influence on students' academic achievement and on their social interactions.

2.7.3 Evolutionary Approach

Learning enhancement through student interaction counts amongst the modern approaches and is said to be a permanent capability that is given high value at the offices all over the world. It is itself not essentially distinct to the evolving economic framework (Karoly & Panis, 2004). Collaboration is of great value for its inclusion as an important factor in the 21st century performance variables because presently it has become even more essential for the student to work as an adult. For this, he has been demanded fine accommodating interpersonal competences more than they were needed in the prior industrial era. Topping and Ehly model present the procedures which include; inter-subjectivity, mainly in proposing suggestions and presenting details by strengthening them with the help of their peers. Additionally, if there seems a case of an error, an urgent correction response through effective peer learning, or positive or corroborative response intended to support the right models, are included in the major characteristics of the peer's feedback (Thurston et al., 2008).

Clinton, Purushotma, Robison, and Weigel (2006) demarcate a group of unique abilities that are also centered on new form of media including: collective intelligence, the knowledge sharing capability and comparing class notes with peers while focusing upon mutual goal, finding, and the capacity of evaluating the consistency and integrity of various knowledge sources, interconnection amongst various sources of media,

cooperation, the capability to visit different communities, discriminating and valuing many viewpoints, and understanding and adapting to other customs (Dede, 2007). Social pedagogy is taken as an extensive, composite, indistinct and challenging concept that can be applied to a diversity of things according to certain classifications. All this is because of its use of simple instruments for the treatment of a complicated area. The transformed standpoint to understand social pedagogy as a mixture and compound business is expected to change its assumed weaknesses into its assets and assurance (Usar, 2013). Educational settings have significant impact on different aspects of learners' collaborations and the way how they develop communication since their initial levels (Tarchi, & Pinto, 2015). Peer tutoring, as an important factor of social pedagogy is a broad subject that encircles diverse concepts with evolutionary approaches of extended cooperation and interaction with the environment. It works to develop an environment of social interaction and collaboration, cooperation, discussion, accepting and rejecting of peers' views and adapting to the accepted ideas and ideologies that, in turn, interacts with the peers' way to think and act thus to perform in a better manner.

Peer tutoring can entertain the financial and changeable solution to a variety of complications like; number of student in the class, deficiency in giving separate attention to the pupils, shortages in money and physical means, etc. It serves as an efficient means of accommodating students with special wants in the normal classrooms and giving equal attention to the academic achievement of the rest of students. Researchers find extended evidence in the favour of peer tutoring methodologies and acknowledge that they qualify instructors or teachers to meaningfully adjust a varied collection of students (Cohen, Kulik, & Kulik, 1982; Cook, Scruggs, Mastropieri, & Casto, 1985) and more particularly focusing the students with distinct needs. The present economic setup of the educational environment needs

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to find ways to manage its financial resources at its best, utilizing its resources of all types and for this, exploiting peer supported learning procedures in the classroom can be a reasonable choice which is manageable with the limited situations of resources but usefully and productively (Iyer, 2011). It can equally benefit learners by earning stipend, parents by getting rid of paying to tuitions and academies, teachers and school authorities with limited finances to spend less on arranging various lesson supplementing resources, etc.

Western universities and colleges are developing the culture of student tutoring for its better cash of advantages, and they have made it a part of their normal education setup for students. For instance, London University's medical scholars and also those of speech therapy are inclined towards choosing tutoring as their future career that will make it compulsory for them to work with school students. Similarly, scientists and engineers are also stimulated to pick the same for the sake of enhancing their communication skills with the people who do not belong to their professions (Potter, 1997).

An educators' necessity will be to thoroughly supervise learners' improvement for ensuring the follow up of the decided procedures, learners use their interactive abilities, and cover the subject matter (Hott, Walker, & Sahni, 2012). Some of the approaches to evade behavioral encounters may contain those agreeing to Sutherland and Snyder (2007) that for avoiding such an encounters one can use several data sources to form groups. While choosing tutors, instructors have to be conscious about making groups that are the most appropriate with learners who can play their most helpful role. It is important for the instructors to remain sensitive in understanding students' different qualities, necessities, and favorites, therefore groups should be made accordingly (Hott et al., 2012). If diverse groups are preferred, then it is important to

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decide the total number of members for each group. The learners' list can then be numbered in a group and continued till the inclusion of whole class (Harper & Maheady, 2007). Groups sized reasonably and developed on the rule of mixed ability are always better in performance on the set goals. They produce reasonably acceptable results and meet the challenges of the global trends.

One of the known technique for making dyads or groups, includes placing learners in a sequence in terms of their performance that is students' with highest performance to those with the lowest related to specific activity or topic. Students' pairs can be made dividing student list into two and then corresponding the student with highest performance with that of the lowest performance, the second highest performance paired with the second lowest, and so on (Fuchs, Fuchs, & Kazdan, 1999). A peer teaching schedule of a tutor is not fixed but can be changed accordingly, but, it has to be continuous. Meaningful pairs would help in developing meaningful peer relations that may work beneficially in terms of achieving targets, set for the relationship.

Other ways to make peer tutoring group work useful and productive are; using sign cards, post processes, evaluation and model stages for assuring useful opinion, strengthen learners by giving focused and unambiguous feedback, see challenges as learning points, repeatedly assess student pairs to regulate achievement, and if needed, reorder them in a needful manner. Tutor preparation and guidance is too very crucial in order to achieve best result and it must be built through training peer tutors, how to give opinion on the right and improper peer reactions, like on praise.

A prerequisite for the tutors is also to know cautious monitoring not only their own improvement but also that of their partner. It is also vital to share students'

achievement with them due to peer tutoring to establish connection of peer tutoring with their increased achievement. Peer tutoring can be conducted twice or thrice every week, starting with more guidance from the tutor and then increasing peer-student or tutee's duty to be responsible for maximum work himself. It finally leads to declining student-tutor's support as the peer- student gets mastery over the selected part of content or skill. It is essential to continuously record tutee's progress and peer tutoring processes, and also to constantly supervise the occurrence of accuracy analysis and inaccuracy adjustment (Hott et al., 2012), if to achieve results appropriate with the learning objectives. It would be more productive and positively directed if tutor and aide commitment form (see Appendix C) is filled in the beginning of the program so that the actions seen during the program are brought in line with the commitment for its best outcome. Peer-tutor strong relationship with peer-student gradually makes the peer-student independent as he gets mastery over the academic area of concern. Adjustment and improvement of student's concerns takes place side by side depending upon the individual difference that he exhibits.

It is crucial to create guidelines and processes for a peer tutoring program. These guidelines need to reflect on the way peer- students and peer- tutors would be interacting with each other, and identify the kind of collaborations not adequate. Besides this, careful monitoring of the peer tutoring program sessions is required while program application along with the continuous administration and adjustment of set rules and regulations as required. Frequent program assessment is also needed as well as its modification for its efficacy. Assembling data during the peer tutoring program is also considered significant, and help in predicting its success. In case improvement aims are not achieved, the program needs to be modified (Mastropieri & Scruggs, 2017) and repeated. Other than all these factors it is also very

vital to make appropriate pairs of tutees with tutors. In class-wide peer tutoring teachers know well about individual personalities of the learners, so it is always useful to make such a pairs which are better accommodating each other. It is equally important that their collaboration is meaningful in achieving the objectives of their peer-pairing in terms of improvement of a particular academic area as well as interactive skills.

2.7.4 Important Contributions to the Models

The dual conditions to bring progress in the value of teaching while working with limited resources has signified the worth of peer tutoring and its use in higher and further education has become a widely growing and interesting option. The development of research trends on the related concepts in various forms of peer tutoring has increased in the recent years, and it is clear from their outcomes that peer tutoring is not necessarily a one way process of transmitting skill and knowledge and can be a mutual activity (Topping, 1996). Vygotsky is of the view that the quality of interaction between or amongst the peers is different from that which takes place between a teacher and a student. Vygotsky holds a different viewpoint on the peer supported learning as compared to its old concept, which recognizes peer tutors as substitute teachers (Topping, 2005). In the Topping and Ehly model, that is founded on cognition, peer interactions should constitute: separate goals for every individual and planning to assure interaction, diversity, time estimation including the time to be spent on the task as well as the time of task involvement; solution of cognitive conflicts on old ideas on it; support and management of inaccuracy through peer modelling; emotional growth with stimulating characteristics of learning, self-exposure, answerability and a growing sense of possession of learning. The development of language skills is the necessary part of the tutoring process and includes; listening, explaining, questioning, clarifying,

simplifying, prompting, rehearsing, revising, summarizing, speculating and hypothesizing (Thurston et al., 2007). Miller, & Miller, (1995) observed that peer tutoring can confer both social and academic benefits.

2.7.5 Learning Cascade Model

Alec Dickson is the pioneer in the field to conceive the idea of peer tutoring as a cascade, and he phrased it as "Each one, teach one" which means each individual has to teach one peer. The places like; Glasgow, Rotherham, Bath, Birmingham, and some parts of Surrey are now using this cascade model of peer tutoring in universities and in further education (FE) as well as in schools. According to him tutoring appears to be an infectious activity (Potter, 1997) when every student has to do tutoring for another as a compulsory part of their academic needs that develops a growing culture of helping each other. It intends to reshape societies through introducing the concept of social pedagogy in education where an individual is not alone but lives with his environment in a useful manner to launch a sense of community service. Cascade model extends the canvas of this service as a continuous activity to play 'each one teach one' in a more approved and constructive part of a student's school life.

2.7.6 Class wide Peer Tutoring Model

Class wide peer tutoring includes the division of the whole class into groups based on two to five learners having varied levels of capability. Students play their role as tutors or tutees, or even of both tutors and tutees. Normally, CWPT contains highly organized measures, thorough practice, reasonable groups, and appointment of marks or scores (Maheady, Harper, & Mallette, 2001). The entire class participates in structured peer tutoring activities two or more times per week for approximately 30 (Harper & Maheady, 2007) or 20 minutes (Hott et al., 2012). Class-wide Peer Tutoring

as a popular instructional approach, is originated for the sake of enhancing teachers' role through individualized instruction, equally managing with the provision of enough chance for students' involvement in the class during the course of instruction. The model works on the development of student-tutor pairs. Each individual of the pair is marked for his participation in the task and they switch over from their role as a tutor or student after interval. CWPT model accommodates the students to learn both roles, developing an attitude of interacting usefully with their peers. Research studies have been able to collect enough evidence from the research outcomes of more than a decade that such a peer association has proven to be very helpful in solving the literacy problems of the academically handicapped or at risk students. It is seen that students exhibit literacy skills with a faster pace and show better retention, and are able to progress better in becoming socially more capable as compared to the outcomes of using other diversity of standard methods of teaching. It also highlighted the need for engaging special education, and its vibrant role in declining the dropout rate of students (Greenwood, 1997) at different levels but especially after high school in higher education and further education. CWPT seemed to effect learners publically by adding to the time interval of social contact while going through free-time undertakings directly next to the gatherings. In interviews, all the three teachers in the class "strongly agreed" on the easy application of CWPT. It also showed that learners with autism which had the capacity to get disturbed by perceptions and relationships as well as their consistent class peers got helped educationally and socially from the program platform. They also felt excited while achieving tutoring points (Maheady et al., 2001). The results of previous studies have revealed that learners displayed comparatively better cognitive practice of understanding while working through peer assessment and peer tutoring instructional approaches (Wang, Hou, & Wu, 2017).

2.7.7 Cross- Age Tutoring (CAT)

The major characteristics of cross-age tutoring include; amorphous processes of tutoring and tutors' normal involvement in some sort of training (Center, 2004). Cross-Age Tutoring is a peer tutoring association where age wise or level wise bigger students play as the tutors whereas the younger students appear to be their peer-students or tutee (Hall & Stegila, 2003). Student combinations may have different types of pairing, for example; those of elementary level may be paired with high school students or academically deficient senior peers with junior peers having academic deficiencies (Hall & Stegila, 2003; Miller, & Miller, 1995). Tutors' role includes: becoming ideal with suitable behavior, shaping the task, questioning, displaying self-management skills, inspiring social collaboration, and smoothing improved study practices (Cohen, 1986; Gaustad, 1993; Miller, & Miller, 1995). Cross-Age Tutoring offers full involvement of the tutor and tutee both bearing some educational deficiencies and helps both to learn how to control their academic results (Page Kalkowski, 1995).

It develops a sense of realization in both to identify their weak areas in education and to identify appropriate opportunities and also to learn how to apply them to overhaul their deficient areas. Cross-age tutoring equally benefits the tutor and tutee by giving them a sense of useful interaction with their environment for the solution of their desired problems. It also helps to achieve perfection in their concepts and skills by a different type of repeated social interaction that they are offered through the pairing of two cross aged peers. It makes the younger to get benefitted from the experiences of the elders and the elders to fix the errors not only in younger's thought and action but also in their own.

The useful consequences of the Cross-Age Tutoring appear to be; skilfulness in academic learning, promotion of the behaviour that promotes socialization and self-control, and increasing peer associations (Greenwood, Carta, & Hall, 1988). Cross-Age Tutoring can offer the enrichment of self-respect to the senior peers to tutees that flourishes greater cooperation in the class leading to a developed school environment (Gaustad, 1993; Gerber & Kauffman, 1981; Kalkowski, 2001; Schrader & Valus, 1990; Topping, 1988; Utley, 1997).

2.7.8 Peer-Assisted Learning Strategies (PALS)

PALS is an organized method to improve math and reading skills of the students. It needs a fix time period of 25 to 35 minutes twice or thrice a week for its enforcement (Center, 2004). L. S. Fuchs, Fuchs, Hosp, and Jenkins (2001), introduced PALS along with Dr. Deborah Simmons. The PALS strategies include; Class-Wide Peer Tutoring (CWPT), Classroom-Based Measurement (CBM), Cooperative Integrated Reading and Composition (CIRC), and Reciprocal Teaching. All of these strategies were used to cover a larger number and diversity of students and to enhance their performance in school (Access Center, 2004).

The program involves the peer-pairing between higher and lower-achieving peers and is arranged for mutual sharing of knowledge from each other but through exercise and revision (Fuchs et al., 2001). PALS organizes reading systematically in pairs. Pair making is carried between one higher- and one lower-achieving peer. The higher-achieving peer is given reading opportunity prior than the other and appears to be a model for the other. Students' monitoring is done continuously by the teacher (Access Center, 2004). According to D. Fuchs, Fuchs, Mathes, and Martinez (2002), this approach caters for an organized peer interactions to achieve quality feedback from

the pairs (Access Center, 2004). PALS focuses on the betterment of students' academic abilities and provides many students a chance to apply their social skills while interacting with their peers in a natural environment (Fuchs et al., 2001; Rivera, 1997). PALS organized programme, student mutual interaction, and repetition of the task target in assisting learning (Fantuzzo, King, & Heller, 1992).

2.7.9 Reciprocal Peer Tutoring (RPT)

RPT is characterized as the grouping of two or more than two individuals, planned and organized set-up, and the supervision and assessment of pupils for each other (Access Center, 2004). Reciprocal Peer Tutoring is considered as integrated technique of blending the techniques of self-management, the possibilities of the interdependence of the groups for reward, and mutual tutoring between the pair of peers for enhancing academic and community proficiency (Fantuzzo et al., 1992). Tutorial collaboration can be shaped for the purpose of making pupils of same-capability and age to scaffold each other's higher order thoughtfulness and learning (King, Staffieri, & Adelgais, 1998). It is a notion for improving pupils' opportunity to choose and participate in controlling their group's, mutually supporting reward possibilities and mutual peer teaching methodologies (Fantuzzo et al., 1992). Results of a previous research study reveal the role of RPT as a good means of promoting metacognitive instructions. The students engaged in the research experiment progressively accepted checking, appraisal, and direction and meaningfully progressed in their in-depth understanding (De Backer, Van Keer, & Valcke, 2015). RPT groups progressively accept metacognitive instructions like orientation and evaluation with the progress of RPT involvement (De Backer, Van Keer, Moerkerke, & Valcke, 2016). Results of another study reflected no noteworthy pre to post test changes in learners'

metacognitive knowledge, nor did it find any difference in the awareness of using metacognitive skill. In contrary, substantial variations were seen in learners' real metacognitive instructions (De Backer, Van Keer, & Valcke, 2012 a). RPT also shows its significant influence on students' practice of metacognitive checking, mainly on their contribution in comprehension checking (De Backer, Van Keer, & Valcke, 2012 b).

RPT has been used in the normal education set up and in the programmes focusing child academic uplift in the recent decades with students having minor debilities to address the personalized wants of students (Maheady et al., 2001). The peer supportive role shifts render useful results as both take a chance to play both roles; the role of tutor and that of tutee (Fantuzzo et al., 1992). Encouragement through rewards can be positive to structure correct academic and communal behaviors in the classroom setting (Heller & Fantuzzo, 1993). RPT played victoriously on students at risk and those with minor deficiencies (Maheady et al., 2001). Students get able to practice better self-control over them for commanding their academic improvement (Fantuzzo et al., 1992). The sense of consciousness about the deficient areas of a student plays a key role in developing his willingness to work upon them by exercising better options that he explores through his purposeful interaction with the peer. Here he feels himself with an equal status as a student discussing his concerns with the peer comfortably as compared to the situation that he may find in his dialogue with the teacher. Mutual understanding and rapport between the tutor and tutee is the watermark in making reciprocal peer tutoring a successful method.

2.7.10 Constructivist Understanding

Constructivist understanding is a thought of knowledge construction by the pupils themselves where every pupil constructs meaning from the knowledge he gets for himself individually as well as socially which leads to his learning. Here the terminology 'Constructing' only relates to learning. The dual two way outcomes of this standpoint are;

1) The concerned stakeholders are more inclined to make the students think about their learning instead of other factors.

2) Every piece of knowledge is based on experience that the student, or a group of students go through instead of the routine meaning attached to that experience.

Learning is not accepting the "correct" nature of things, as Plato proposed, nor is it recalling weakly understood faultless philosophies or thoughts. Instead building of meaning takes place out of an experience purely on the basis of one's own and social meaning building through one's own feelings and perceptions that is above any explanation and justification (Hein, 1991).

The essential component of the peer tutoring process is the use of language skills which allows this modelling to take place including listening, explaining, questioning, clarifying, simplifying, prompting, rehearsing, revising, summarizing, speculating and hypothesizing; affective development including motivational aspects of learning, self-disclosure, accountability and a developing ownership of learning. These elements embedded in a process of co-construction have a potential to enhance meta-cognition, self-monitoring and self-regulation of the learning process, with consequential self-

attribution of the learning success and thereby enhancement of the self-esteem of a learner (Thurston et al., 2008).

We need various methods and strategies to develop an environment that supports learning. For instance, such academic sustenance has to be well-ordered and helpful to the wants and programs of African-American male pupils, which highlights the importance of time in this type of academic support (Rafi & Karagiannis, 2013) where social pedagogical standards are observed for the sake of developing peer-help culture by utilizing students' energies positively in their routine sessions of school studies.

2.7.11 Academic Achievement and its Concerns

Parental involvement at home as well as with school for their child's progress, teachers' subject proficiency and skillfulness in instructional technologies, and school administration's association in keeping all stakeholders intact are all essential factors to work for better academic achievement of the students specially at the secondary level.

Academic concerns may comprise the problems related to: students' learning complications or disabilities, low achievement, teachers' deficiency of giving attention to their students, and mistreatment. These concerns may upset many students during their academics from elementary school to college level. These academic deficiencies may effect negatively on the student's class performance and also likely to affect his interaction at his home, work, and sports. A few common academic concerns are: Learning disabilities, attention deficit from school representatives, Maltreatment at school, Failure or delay in paying for schooling, lack of interest in the subject or topic, misunderstanding of topic, low scoring, delay and time management problems (GoodTherapy, 2019). Teachers' areas of concern also include; time management,

motivation and homework (Fulk, 2003). Parents and classroom instructors having awareness of their children difficulties may identify an academic concern in its initial stage of development (GoodTherapy, 2019). Fulk's study (2003), also reflected that students rated themselves lowest on study habits, self-regulation, and test anxiety, therefore require special focus from the required stakeholders to attend it for its suitable solution to these disabilities.

Teenagers are mostly susceptible to the difficulties related to the academic anxiety as they encounter certain changes individually and socially (Reddy, Menon & Thattil, (2018). Academic stress is the foremost source of psychological problems in adolescents both in Asian as well as western countries effecting their beliefs, emotions and the behaviour of an individual. Although to some extent stress is essential to motivate and recover deficiencies improving academic achievement, but its increased amount leads to adverse results (Behere, Yadav & Behere, 2011). It develops in the confronting situations usually perceived as overpowering but the individual remains unsuccessful to cope with (Agolla, & Ongori, (2009). United States Department of Health and Human Services report reveals that 21% of school-age children's mental health disorders are diagnosable (GoodTherapy, 2019). Male contributors vary considerably in coping with their academic stress than the female contributors (Busari, (2014). Academic system can support significantly in addressing academic concerns. A struggling student may get benefitted from the dedicated study or a tutor. Whereas the one with some learning disability may complete tasks accurately but needs more time for its completion as compared to his peers. School tutoring programs can help children but teachers have to assure all students to be conscious of the counseling facilities, adjustments for disabilities, and tutoring facilities available to them (GoodTherapy, 2019).

Learning disabilities (LDs) are the hidden factors of students' learning paradigm that are not openly recognizable. They may be the outcome of; emotional disorder, sensual illness, mental sickness, financial difficulty, linguistic variety, or insufficient instructions (Fletcher, Lyon, Fuchs & Barnes, 2018). Trauma and stress experience may be connected with changes in the brain function and structure (Lupien, McEwen, Gunnar, & Heim, 2009; McEwen & Morrison, 2013) and continued experience of stress results in the damage of neurons, mainly in the hippocampus (McEwen & Sapolsky 1995). It is the part of brain linked to memory and cognition and many recent studies in the field of human psychology reveal that stress effects the hippocampus atrophy (Sapolsky, 1996). A special education program is not needed for some students with learning disabilities and they may improve academically by using other strategies but the students recognized as "exceptional" are committed to possibly gain more advantage from such an assistance (GoodTherapy, 2019). It is vital to not only identify students' academic concerns but also to address their diagnosed learning disabilities in the most appropriate manner depending upon the intensity of the disability. The foremost aim of the school educational setup is to make students achieve better preferably in terms of their academics and then in other areas of students' school life.

2.7.12 Strategies for Academic Progress

Low academic performance or a complete failure in academics has been listed down as one of the major causes of the students' stress or anxiety. Ignoring students' individual needs and demands also makes students' individual learning experiences difficult resulting in raising many mishaps and ambiguities during the course of learning. These experiences drop down the students' level of interest and motivation, later becoming a serious cause of learning disabilities. Consistent, unattended, and

prolonged varied learning disabilities with the passage of time create complicated psychological disorders which sometimes are very difficult to address. According to Al-Dubai, Al-Naggar, AlShagga & Rampal (2011) the strategies useful for the academic progress of stressed students are reported to be different in order to manage the stress as compared to that of the students not stressed, therefore it is significant to identify the sources of student anxiety and the ways students opt to encounter it. Knowing these would be helpful in improving; lecturers, career-counselling centres, and administrators of higher education institutions to monitor and regulate these dynamics to control students' anxiety. It is imperative to continue a harmonious academic atmosphere for students' better educational practices. An emphasis on students' wants and difficulties can also assist in preventing the damaging effects of student anxiety on their health and academic outcome.

The present world needs socio-emotional learning (SEL) to be efficiently introduced in school teaching that can decrease the frequency and influence of children and youth emotional and behavioral problems (EBP). The encouraging impact of SEL on each student's emotional, behavioral, and academic results have been studied recently to some extent. Whereas, the major focus of most of the studies has remained in assessing those programs which intended the direct training of socio-emotional proficiencies emphasising students' individual. It is seen that still much more has to be explored about the contribution of interpersonal group underlying forces and systems running in the peer groups, classroom, and school community (Trach, Lee & Hymel, 2018). There is a solid and increasingly emerging belief that families contribute effectively in the advanced academic output of their children at school which also positively influences on students' behaviour and regularity at school. Family and community involvement can also provide additional support to the children at risk of

poor academic output or failure (Henderson & Mapp, 2002). Findings of the study Liew, Cao, Hughes & Deutz (2018) conducted, advocate that students with primary academic difficulty, flexibility serves as a factor defending them against forthcoming academic difficulties. Peer competency assists such children in their academic commitment and accomplishment. Smithikrai, Homklin, Pusapanich, Wongpinpech & Kreausukon's study (2018) reflects that the students' educational commitments have a strong relationship to their academic accomplishments as well as it completely facilitates the impact of purpose in life, peer assistance, and contentment with instructional excellence on academic accomplishment.

Lerner's model of positive youth development is a strong idea comprised of five Cs: caring, confidence, competence, character and connection (Damon, 2004). The concurrent family association, along with school and peers, help students which are deficient in socially adept behavior, while also keeping their self-respect and self-efficacy protected (Sun & Shek, 2010).

2.7.13 Concerns of the Secondary Level Students

In developing countries students' educational achievement at secondary school level is usually influenced by a variety of factors like those of the developed countries. In rustic school situations shortage of means is one of the important element. Other factors can be; shortage of competent educators, insufficient science apparatus and deficiency of inspiration, etc. These can adversely affect students' academic outcome in terms of their achievement (Ezron, Mangwaya & Johnson, 2018). The leading concern of the high school learner is all that he would face after high school as well as following graduation (Prieto, 2017). The biggest concern of the students at the secondary or high school level are also their relationships, future, public image

including race, etc. (Jeau, 2016). Problems between peers are common in .middle and high school. They may also misbehave frequently to their teachers (Mazarin, n.d).

The findings of the research study direct that the effective use of learning approaches appears to put a constructive influence on students' self-confidence and ability to communicate (Forbes & Fisher, 2018). Teacher inspiration seem to have a solid association with academic accomplishment of the pupils (Akhtar, Tatlah & Iqbal, 2018). Professional proficiencies, abilities, instructional methodologies, hard work, commitment and passion of educator boost their students' academic outcome leading to the expected brilliance and educational worth (Compbell and Pritchard, 1976). Davidson's study (2007), affirmed that teachers' deficiency of inspiration can put an adverse effect on the students' performance.

Motivation can be considered as the elementary part of an individual's social experience. The need based psychological element can drive an individual to exert in the completion of his desires and involve himself in some needful behaviours. Likewise, encouragements and some types of incentives develop interest in them and convince them to join certain accomplishments. Such an involvement of an individual reflects the presence of motivation (McKenna, 2000). Many researchers have recommended the practice of providing external motivation if to uphold a sufficient level of motivation even amongst the employees (Osterloh & Frey, 2000). Although there is a wide difference amongst the countries regarding how they perceive disability and how they apply it in their educational systems, yet the educators exhibit reasonably high self-proficiency for wide range of activities even though they have a limited level of training and experience with pupils having distinctive wants (Hauerwas & Mahon, 2018).

2.7.14 Geography at O Levels

Geography is a constituent of social sciences at upper primary stage (Classes VI–VIII) in the curriculum of Indian schools. It is compulsory for all levels up to class X and elective for the higher secondary stage (Classes XI–XII). A thematic approach has been followed in introducing students with the desired content of geography at all stages (Pandey, 2018).

> *"Global issues such as climate change, global warming, sustainable development, freshwater scarcity, conservation of resources, natural hazards and disasters, renewable sources of energy, national and international migration, slums, urbanization, human development index, child labour, etc. covered in geography curriculum provide numerous opportunities for global understanding through debate and discussion."* (Pandey, 2018, pp 215-221)

A similar approach is followed in Pakistan as in India at the public as well as private level of institutions. A research on the relation between classroom settings and student results exposed that the classrooms having better student collaborations had improved examination results. On the other hand the classes with better teacher support demonstrated well in self-esteem, favourable attitudes, task direction and fairness (Chionh & Fraser, 2009). Crucial fundamentals of geographical investigation comprise; developing a want to know, spending geographical sources as proof, creating logic of geographical data that means thinking in a geographical manner, and reproducing on what they have learnt (Roberts, 2013). Geospatial technologies (GST) have been used since long in various fields; but for the very first time they were applied in higher education in early 1980s and later during the decade of 1990 introduced at

the secondary schools (Solari, Demirci & Schee, 2015). Instructional scaffolding exhibits its effectiveness in enhancing teachers' capability to incorporate technology in academically useful means leading towards improving students' geographic investigation abilities (Doering, Koseoglu, Scharber, Henrickson & Lanegran, 2014).

Global difficulties demand their solution through the application of global approaches, affordability, and means. As compared to other disciplines, Geography can better explore the spatial associations of societal and physical occurrences on large scale and propose suitable solutions to noteworthy and permanently prevailing problems. Therefore, introducing or advancing geography teaching at primary and secondary level of schools has a remarkable prospective to arrange for the next generation better understanding, attitudes, and behaviors needed to work for solving the global glitches (de Miguel González, Bednarz & Demirci, 2018). Working on the GeoCapabilities approach we can improve teacher's practice of webGIS in developing their students' thinking and reasoning capabilities with geographical information and concepts (Fargher, 2018). Geography at O levels is quite an advanced subject demanding teacher and students' skillfulness in the subject knowledge as well as geo-spatial skills. Moreover in Pakistan it is taught with History under a single subject of Pakistan Studies and both are limited to the Geography and History of Pakistan. There is a big difference between the Pakistan Studies content and in its complexity at the Matric and O level in Pakistan. Students use to appear in this paper as paper I History and paper II Geography in the class 10th of their secondary level from the Cambridge board of UK. It becomes a very demanding subject at O levels in terms of its content complexity as well as Cambridge paper pattern for Pakistani students and requires high level of teachers' expertise in the related information, Cambridge policy, past papers, and respective paper pattern and revisions in it time to time.

2.8 Foundations of Models

The research effort carried in the initial part of the twentieth century resulted in the development of the learning theories by popular psychologists that in turn introduced modern peer assisted learning methods. Lev Vygotsky and Jean Piaget (1964) hold prominent position amongst those. The Vygotsky's and Piaget's theories seem supporting various approaches; Piaget accepts peers' equal role as more effective, whereas Vygotsky emphasizes more on the role of tutor as a more skilful and capable partner of the tutee (Hogan & Tudge, 1999). Perhaps, Vygotsky's views appear more relevant to the situations where students with special needs are dealt with through peer assisted learning (Iyer, 2011). Vygotsky's theory is harmonizing to Bandura's theoretical effort on the idea of social learning and also a fundamental constituent of the situated learning theory. As Vygotsky's emphasis remained on the development of cognition, therefore it seems stimulating to associate his vision with that of Bruner, a constructivist and Piaget, a genetic epistemologist (Social Development Theory). The function of experiential learning based on child's interaction with his environment especially peer factor seems dominant in Vygotsky's theoretical model that holds a strong process of thought and manipulates it for the construction of useful change in thought and action. Bringing change through such a way is convenient and long lasting as compared to other means.

Vygotsky's theories focus upon the major and essential part that social interaction plays in the cognitive development of a child (Vygotsky, 1978; Wertsch, 1985), par with his strong belief on the main role of a community towards its processing of 'meaning'. Wertsch relates Vygotsky's chief conviction that language acts as a means to develop individual's inter-psychological, and intra-psychological domains,

moving his inter-subjectivity. It shows again that this effort positioned in social setting, allows child-adult interface to lead the course. This effort achieved the major focus of social constructivism, now sighted as a great revival in educational trends in its research as well as practices. Vygotsky got the credit to own and include psychology as an important contribution to the unified social science that detached his methodology from that of others but having finer emphasis (Galloway, 2001).

The key subject of Vygotsky's theoretical structure is the vital effect of social interaction in the development of cognition. According to Vygotsky (1978) all roles in the individual's social progress appear two times. Firstly, it occurs at the social level, and then secondly, at the individual level which means amongst people addressing one's inter-psychological domain and then within the individual himself covering intra-psychological domain of child's personality. This is equally applicable to intended consideration, to rational memory, and to the development of thoughts and perceptions. Every complex role is played as real associations between personalities or characters.

Vygotsky's theory brought psychologists' attention towards explaining 'awareness' as the final outcome of socialization. For instance, in the language learning, the initial expressions while conversing peers or adults are for the sake of communication but once learnt well they get adopted internally by the individual permitting 'internal speech' (Social Development Theory, www.intructionaldesign.org). The theory of social constructivism is comprised of four structural components: the mediation of social, historical, and cultural practices; thought and language, social interaction with others, and zone of proximal development and instructional scaffolding (Fig: 2). The concept of scaffolding which means supporting an individual in accomplishing the recognized goals, signifies the perfect

means to aid a child to experience true learning. It helps in building blocks of learning through progressing individual's thought and language which leads to his constructive interaction with his environment as well as develops in him an improved understanding for himself. Both domains when work progressively together, result in the combination of all as socialization.
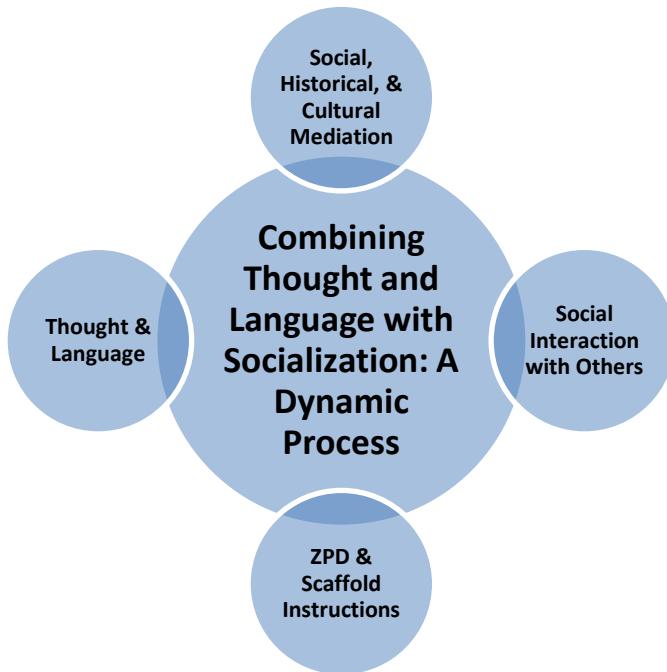
Figure 2.2. Major components of Vygotsky's theory

2.9 Summary

Student tutoring in its modern form was developed in the late eighteenth century. Peer tutoring offers one-on-one teaching with the tutor having the similar age group, grade, or academic position like that of the tutee (Gaustad, 1993). Positive behaviour support (PBS) is an applied science that practices educational and organizational modification of approaches in terms of environmental redesigning to improve life value with reduced behavioural issues (Carr, Dunlap, Horner, Koegel, Turnbull, Sailor &

Fox, 2002). The shortages in conceptual thoughtfulness can be recovered through the use of collaborative peer-tutoring program (Çakiroglu, & Ongoz, 2017).

It is highly essential that the dynamics like; organized planning, training, evaluation, and problem solving should be integrated as a set of vital constituents of a peer tutoring program process (Chen & Liu, 2011). Usually curriculum content is the chief focus of the peer tutoring programs. Moreover, the peer interaction can be a guided activity (Topping, 1996). It comprises a complicated setting of tutor-tutee collaborations which serves a scaffolding phenomenon of their communication, interaction, relationship, influence, inspiration, expression, and modification in thought and action.

The concepts research studies attended more in the recent decades include peer assisted learning because it shows a strong connection with constructivism and especially the models emphasizing social interaction (Rizve, 2012). Some of the past research studies support the worth of a tutor who facilitates, others reflect differently and highlight the effectiveness of a tutor who works through the use of his administrative skills as well as gives clear directions (Berghmans, Dochy, & Struyven, 2011). This interaction can be; one-on-one coaching, expedited study groups, whole classroom participation, virtual tutoring, and two-way tutoring (Brost, 2011). Peer tutoring engages positive behavior support for the students through their behavior, cognition and emotions in a parallel manner.

Changing negativity into positivity is similar as the change of a practice, which needs attention and exercise. The new trait in behaviour turns into individual's routine practice with the passage of time (Seligman, 2014). Emotional socialization is imperative to outline emotional intelligence for youngsters (Alfiasari & Rachmawati,

2017). Peer Tutors are also at advantage by strengthening their own learning through revising and reforming their previous knowledge (Howard et al., 1986). The tutee improves his confidence by accepting helpful peer reinforcement (Smith & Fowler, 1984). Indifferent and purposeful peer relationships always reflect a positive trend in students' achievement in academics along with a distinct level of socialization.

Socialization is a constant practice which makes the people learn about social anticipations and how to develop interaction with others. Almost all patterns of behavior making human nature are essentially cultured by socialization (Socialization, 2016). Peer impact on conduct slowly prevails more strongly. Studies (Harris, 2011; Rowe, 1994) relate that the influence of peer groups is much stronger than that of parents. The peer group may effect child's beliefs, knowledge, style, meal, and studies' likes and dislikes (Hartup, 1983; Mussen & Hetherington, 1983). Peer interactions lead to quick results in changed behavior especially during adolescence when individuals start enjoying their peers. Sound social relationships are greatly influential in structuring individual's personality and the role that an individual plays in varied social settings (Colvin, 2007). Therefore, it becomes very essential for the meaningful and useful conduct of the peer tutoring that all the people involved in it like the instructor, tutor, tutee, etc are trained on the set principles and then engaged in the program process finally resulting in some level of socialization. Peer tutoring offers an informal form of psychotherapy to the students involved in the tutoring experience. However, other than the simplistic view of behavioral therapy, Álvarez (2007), states that in the therapeutic settings, problems are accessed and solved in the natural social perspective. Some therapeutic techniques of behavioral treatment linked with peer tutoring approach include; Exposure techniques, Relaxation training, Aversive techniques, Reinforcement programs, Modelling, Behavioral trial (Wellness.com, 2016).

Dialogue is a planned activity of enhancing participants' basic levels of knowledge and belief (Abbey, 2014). The gaps between a student-teacher dialogues can be reduced even more while replacing it with peer-tutor and peer-student to ensure the reduction of socio-psychological barriers which puts positive influence on students' academic achievement and on their social interactions. Educational settings have significant impact on different aspects of learners' collaborations and the way how they develop communication since their initial levels (Tarchi, & Pinto, 2015). Peer tutoring, as an important factor of social pedagogy is a broad subject that encircles diverse concepts with evolutionary approaches of extended cooperation and interaction with the environment.

The present economic setup of the educational environment needs to find ways to manage its financial resources at its best, utilizing its resources of all types and for this, exploiting peer supported learning procedures in the classroom can be a reasonable choice which is manageable with the limited situations of resources but usefully and productively (Iyer, 2011). Western universities and colleges are developing the culture of student tutoring for its better cash of advantages, and they have made it a part of their normal education setup for students. Similarly, scientists and engineers are also stimulated to pick the same for the sake of enhancing their communication skills with the people who do not belong to their professions (Potter, 1997). It is crucial to create guidelines and processes for a peer tutoring program. These guidelines need to reflect on the way peer- students and peer- tutors would be interacting with each other, and identify the kind of collaborations not adequate (Mastropieri & Scruggs, 2017). Constructivist understanding is a thought of knowledge construction by the pupils themselves where every pupil constructs meaning

from the knowledge he gets for himself individually as well as socially which leads to his learning (Hein, 1991).

The Vygotsky's and Piaget's theories seem supporting various approaches; Piaget accepts peers' equal role as more effective, whereas Vygotsky emphasizes more on the role of tutor as a more skilful and capable partner of the tutee (Hogan & Tudge, 1999). Better socialization helps in managing emotions and learn to work better by realizing one's own capability and responsibility leading to improved work patterns and results.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Research Design

The study was Mixed-Method following its QUAN-QUAL design, also called convergent parallel mixed method design according to Creswell (2014). Whereas, Denzin (1973) calls this model of mixed-method as triangulation. Previous writings on the use of related designs stated them as multi-method, integrated, hybrid, combined, and mixed methodology research (Creswell & Clark, 2007). This design was employed to best serve the theoretical perspective of the study such as: to cover both dependent variables (socialization and academic progress) simultaneously, to provide a complete statistical view of peer tutoring's effect on socialization and academic progress as well as to enable in-depth investigation on the peer tutoring dynamics helping both dependent variables work positively.

It was also used to rise the generality of all findings, by displaying how qualitative data (Open-ended section of questionnaire 1 and interview) gave clarifications for the quantitative data (experiment and survey). It also extended the scope of the study topic, as qualitative data collection allowed exploration of the elements of peer tutoring dynamics more largely after measuring the students' academic progress at the end of the treatment. Moreover, it improved the procedural details as results in both stages of data collection could be related for uniformity (Chow, Quine, & Li, 2010).

It was also preferred: to reduce the limitations of qualitative and quantitative methods and integrate the strengths of both, to measure results numerically as well as

to relate the details of the underlying story for the clarity of results, to dig out the in-depth details which may be left ignored by opting only one method, in identifying tutors' and tutees' perception, to combine and relate the results achieved out of each method addressing a broader set of research questions, to provide more data for understanding the dynamics involved in peer tutoring, and also to follow the present research trend of preferring Mixed-Method design internationally.

Multimethod research is taken as a very suitable research design while studying difficult involvements where more than one research methods are needed collectively (Drabble, & O'Cathain, 2015; Hesse-Biber, & Johnson, (Eds.). 2015; Christ, 2014; Strudsholm, Meadows, Robinson Vollman, Thurston, & Henderson, 2016). In a variety of researches both qualitative and quantitative data collection were carried from the same individuals so that the comparison of the collected data becomes easy (Driscoll, Appiah-Yeboah, Salib, & Rupert, 2007). However, it is recommended that this terminology (mixed method) and the thoughts and perceptions it refers to should be opted for any design that associated many dissimilar data components, which may be quantitative, qualitative or a combination of both (Busetto, Luijkx, Calciolari, Ortiz, & Vrijhoef, 2017). The same is followed in the present study where the components included; Experiment and survey (quantitative), and Interview (qualitative). Furthermore in this method both quantitative and qualitative means of data collection were also equally weighted. The both types of data were collected concurrently throughout the same study unlike the other two mixed method models. This model gives equal value to the use of both types of data collection methods. The QUAN-QUAL model had three phases;

i) QUAN and QUAL separate data collection

ii) Separate data analysis, and

iii) Data combining for comparison (Creswell, 2006).
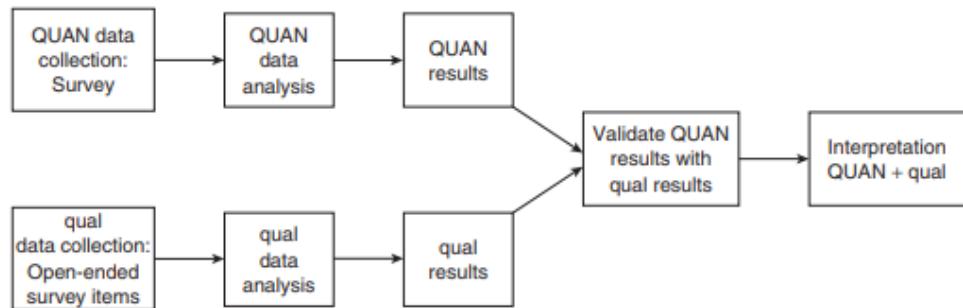
Figure 3.1. QUAN-QUAL Model

In quantitative method, post-test only control group true experimental design was used to measure students' academic progress as the first dependent variable. Survey was also (two questionnaires) used as another source of quantitative data collection for the second dependent variable socialization. Whereas open-ended responses of the questionnaire 1 along with the students' (tutors and tutees) structured interviews were used to collect qualitative data.

Creswell (2013) recommends mixed methods approach of research design as we require various viewpoints, or more comprehensive thoughtfulness through confirming our quantitative procedures with qualitative practices. He calls this mixed method model as Convergent Parallel mixed method.

Denzin (1973) calls triangulation as the necessity of a research if to collect all that is relevant and important to evidence reliable outcomes of a research study. He insists upon the need of synthesizing theory with methods and believe that different methods have their limitations and effect research results. Therefore, his idea of

combining different methodologies is considered as the most popular in collecting, manipulating, interpreting, and analysing research data for reporting more clear results with in-depth understanding.

Kennedy (2009) relate Denzin to recommend; enriching, refuting, confirming, and explaining as the four significant aims of using triangulation. It also helps in controlling bias related to the measurement, sampling and procedure. Mixed methods designs have practical benefits when discovering complicated research problems. The qualitative data arrange for an in-depth thoughtfulness of a survey, and statistical analysis may lead to a thorough assessment of responses' configurations. In the end, these designs appear to be the best for the research studies not involving detailed and in-depth analysis of qualitative data or multivariate investigation of quantifiable data (Driscoll et al., 2007). Researcher also had to work on two dependent variables. Academic progress was tested mainly through post-test only control group whereas socialization was measured through survey. Secondary source of evidence was the qualitative data collected through open-ended section of questionnaire 1 and interview as well. All this fulfilled the needs for conducting a mixed method study.

3.2 Population

The students of The City School, secondary school/ O level branches of the twin cities of Rawalpindi and Islamabad were the population of the study. This population was selected for the experiment as this level of education is significant and students appear in their lives' first external exam. The academic issues of this level are diverse and need serious attention for researchers.

3.3 Sample

Class 9th of the "The City School", Satellite Town Girls Campus was taken as the sample of the study. While assessing population parameters sample size have to be at least 30 and must be as big as time and cost allow. Moreover, for experimental studies the best sample size can be different from study to study.

3.3.1 Sampling

Sampling is the course of choosing a group of people in a research study in such a manner that the persons characterize the bigger group from which they were chosen (Gay, 1987), therefore simple random probability sampling technique was applied for the selection of a secondary school in order to conduct the experiment where peer tutoring could be applied as an instructional technique. They offer the most real or reliable results as they reveal the features of the population from which they are chosen. In this technique every member of the subset had the equal chance of being chosen. 9th grade was selected through purposive sampling technique which can be very useful in circumstances when one wants to access a targeted sample quickly as two classes of 30 students were needed for the experiment (Gay, Mills, & Airasian, 1992). Whereas, the homogeneous purposes sampling was selected to choose tutors (the students tutoring their peers) and tutees (the students taught by the tutors) from the experimental group. It is chosen to offer a various range of cases appropriate to a particular occurrence or incident (Crossman, 2018).

Two combined sections of grade 9 by joining two were taken separately, one as the treatment group and other as the comparative, each comprised of 30 students. The treatment group and control group were randomly selected by head and tail method.

Experimental group contained 10 Tutors and 20 Tutees, with two tutees assigned to one tutor thus making triplets.

As there is no formal or informal tradition of peer tutoring followed in the schools of Pakistan so the researcher took The City School Girls, Satellite Town, Rawalpindi at random to fulfil the purpose of conducting related experiment. The researcher had been teaching at this school for last 18 years. She had been the subject coordinator of the school branch and using the peer tutoring methodology with school administration's consent for last 4 years. It had remained worthwhile for the struggling students at O levels. Therefore, the researcher chose it purposefully to administer the program in a formal order so that other teachers and schools may also get benefitted by it once reported through a formal research study.

The sample statistics are given as under:

Table 3.1. Sample Statistics of the Study

Groups	Size of Treatment Group (Experimental group)			Size of Non-Treatment Group (Control Group)	Total Sample Size
	10	**20**	**30**	**30 students**	**60 students**
	Tutors	Tutees	**students**		

The participants of the experimental group were trained before conducting peer tutoring program on set guidelines (Appendices A & B). A tutor and aide (assistant) commitment form was filled by the tutor participants before the conduct of the experiment. The form contained main areas of tutors' conduct to be given due attention by the tutors during tutoring sessions (Appendix C). Through the individual training

meetings, 1 tutor was paired off with 2 tutees making 10 Tutor-Tutee triplets. The role of the researcher was to monitor and reinforce class-wide student performance and behaviour as the subject teacher as well as subject coordinator. The independent (Peer tutoring) and dependent (Socialization and academic progress) variables remained constant throughout the intervention: all the students were taught by the same teacher from the same textbook, tutors were trained by the researcher by means of the same multi-sensory approach including the use of subject's basic skills like maps, histograms, pictograms, etc.

> "*It means presenting all information to students via three sensory modalities: visual, auditory, and tactile. Visual presentation techniques include graphic organizers for structuring writing and pictures for reinforcing instruction; auditory presentation techniques include conducting thorough discussions and reading aloud; tactile presentation techniques include manipulating blocks and creating paragraphs about objects students can hold in their hands.*" (Use Multisensory Approaches, (n.d)

Same assignments were given at the same time each day. Moreover, the tutors were checked for their progress regarding their peer students' improvement. Necessary changes were carried to fix inaccuracy of peer action and interaction. These changes included; shifting tutors to more appropriate peer students or vice versa, increase or decrease of tutoring time by opting other means of guidance like; telephonic contact, WhatsApp communication and guidance on tutees routine academic issues, etc. The use of point cards helped tutors and tutees to get quantitative feedback from the teacher on weekly basis which reinforced appropriate behaviours.

The researcher had been registered online with a blog working on Peer Tutoring. She had been sent with useful updates on the related material on regular basis. She also took special permission from the peer tutoring blog to use or reproduce their material in her study and asked them for a formal permission in written. They permitted the researcher simply in their reply and didn't use any special letterhead. The researcher trained the tutors by following peer tutoring blog's training literature. She also consulted experts while making certain modifications according to the needs of the students and setup available at the school.

3.4 Instrumentation

3.4.1 Post Test

The post-test-only control group type of the true experimental design was chosen for the present study. A pre-test was not needed for this design as students previous exam achievement scores were referred as the base-line scores. Only a post-test had to be conducted at the end of the experiment conducted for the period of 6 months. According to Bell (2014), there is no specific time needed for an experiment if one has to perform a thorough procedure. It depends upon the experiment's requirement and even if the researcher is provided with a specified time still most often he would not be able to meet the deadline strictly. Whereas, a schedule has to be developed to monitor the progress of the work periodically and even the researcher should force himself to move from one stage to the next.

Students' most recent previous sores were used for a solid reference to their previous state of academic performance. A full length exam based test of 1hr and 30 min was developed for conducting post-test after going through a continuous teaching of six months with peer tutoring to the treatment group and without peer tutoring to the

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other group for the subject of Geography at O levels. Geography is taught as paper II with History as paper I under Pakistan Studies in the international schools like the school taken as sample. The students of class 10 (O level) appear for this subject under Cambridge Assessment International Education (CAIE) UK. The units of Geography mentioned in the table of specification (Table: 3.1) were chosen from the syllabus content of class 9 which had to be covered in the second term of the class. The units were taught with peer tutoring. It was helpful in quantitative data collection (See Appendix D). The selected subject was considered important as Pakistan's matric Pakistan studies' syllabus contains a similar content but in a limited and simple manner excluding focus on the subject's basic skills, detailed information, and needs. In an effort to equalize the standard of education it is more likely possible that government of Pakistan in the near future implements the same syllabus in matric setup as well. Therefore, a research study of Pakistan on the subject would provide confidence in their decision making.

The key difficulty with the post-test only control group design is that it has a strong internal validity but compromises external validity. The pre-test confirms the equivalence of the both groups. There is an absence of the means of knowing whether the course of pre-testing essentially effected the outcomes as having no reference line to measure on the groups which stayed entirely untreated. The students who take a learning pre-test may seem motivated to do harder in the classes before a pre-test, or both groups may perform better in the post-test, so it turns out to be tough to generalize the grades involving all students. It is also difficult and immoral to segregate all of the members fully but students' previous achievement scores of the most recent exam helped out the purpose largely in equalizing the two groups. Tutors were selected on the bases of their previous scores showing better performance. Moreover, if both of the

student groups belong to the same educational institution, it becomes obvious to accept this notion that they interact outside their classes and exchange views possibly effecting their results (Shuttle worth, 2009) but as the researcher knew the participants individually, therefore she could make necessary arrangements to control it like; the treatment and control groups were placed in two sections of the school building, front block and the one at the back separated by the main playground. The control group was restricted to play in the front lawn during break whereas, the treatment group was restricted to the playground at the back.

Moreover, the treatment and control groups were chosen randomly which helped in anticipating that the four sections of class 9 had equal chance to be in either of the groups. It also supported the notion that all sections of class 9 were equal in their extraneous factors (Mertens, 2014). Though the post-test only design is very useful, but its scope is narrow and poses various threats to the validity. It contains wider assignment bias, as usually the researcher does not recognize the individual differences of the students of the control group (Shuttle worth, 2009) but the researcher followed CAIE policy for subject instructions and paper checking.

In the light of the research studies, three significant benefits of performing as an insider researcher can be revealed: bearing a better understanding of the group to be investigated, not changing the method social collaboration unusually, and having a recognized familiarity with the group which endorses the collection of more truthful responses (Bonner, & Tolhurst, 2002). Such a familiarity removes the bias factor in many cases if the researcher holds sound understanding of the ways to distinguish amongst the individual differences and considers them important.

Moreover, such a researcher is aware of the institutional politics and policies in their real sense. They can also distinguish the better ways to contact people, therefore generally they are more knowledgeable to handle the situations and carry procedures usefully which is otherwise hard for an outsider to understand as well as needs a longer time period (Smyth & Holian, 2008), therefore the researcher herself remained convenient in conducting the experiment while controlling all these factors. Generally the natural flow of events continued and the researcher could well identify the variations and diversity in students' interactions leading towards the constructions of better and more realistic interpretations and outcomes.

Inspite of having varied merits being an insider researcher, many demerits may fall in truthful data collection thus highlighting bias. For instance, more acquaintance and familiarity with the environment, students, policies, practices, etc. may harm objectivity. Instinctively or unknowingly constructing incorrect expectations from the research procedure which are mainly influenced by the researcher's prior knowledge (DeLyser, 2001; Hewitt-Taylor, 2002) would include bias in deducing truthful results. In the present study situation, the researcher herself monitored all throughout the procedure, therefore the bias reduced to minimum as she knew all students well with their respective individual differences. If on one side she had greater familiarity with students, school, situations, etc. on the other side she was well aware of the CAIE (Cambridge Assessment International Education) pattern. The researcher being a British Council of Pakistan, Islamabad's certified Cambridge faculty made her capable of marking student post-tests on the set Cambridge criteria reducing teacher's bias in scoring and grading students of both groups to almost nil.

Table 3.2. Table of Specification for the Test

Objectives

Sr #	Units	AO1 Recall, select, use and communicate knowledge and understanding	AO2 Demonstrate an understanding through explanation, interpretation, analysis and evaluation	AO3 Apply knowledge and understanding of physical and human environments and issues through explanation, analysis and evaluation	AO4 Apply skills and interpret a variety of environmental and historical resources/sources	Total
1	Fishing	3	4	4	4	15
2	Mineral Resources	4	4	4	4	20
3	Agriculture	4	6	6	6	20
4	Power Resources	4	6	6	6	20
	Total	15	20	20	20	75

3.4.2 Questionnaire 1

A socio-metric questionnaire (See Appendix E) was developed covering 10 important areas of participants' social behaviour indicators like: relationship, power, resistance, confusion, cooperation, responsibility, expectation, interaction, interpretation, and expression/ impression management. It was used to collect tutors' and tutees' responses on the effect of peer tutoring process on students' socialization after experiencing a six month treatment. It contained fifty of the closed ended items as its section A and ten open-ended questions as its section B. It served the second quantitative source of data collection from both of the participants of the experimental group i.e. tutors and tutees. It mainly focused socialization that was studied as the second dependent variable of the present research study. The open-ended question items of Questionnaire 1 section B were used to get in-depth qualitative information

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about the effect of peer tutoring on students' academic progress. They were dealt as those of the interview questions for checking their reliability, taking out themes, and calculating their percentages. The open-ended section of the questionnaire gave qualitative research data addressing the indicators of the students' academic progress such as: experience as tutor/tutee, help in developing academic skills, addition to the academic performance in class, relationship with peer tutor/tutee during peer tutoring, academic help for the partner during peer tutoring, academic help for themselves during peer tutoring, core factor in tutor-tutee relationship that made them achieve their academic aim, best thing in the peer partner helping improve one's academics, and further suggestions. The open-ended section of the questionnaire 1 served both descriptive and interpretative purposes.

Moreover, tutors and tutees independently filled up their individual questionnaires. Those having problem in understanding the spirit of a question item were explained openly and equally. The researcher as a teacher was in a better position to assume that both groups were probably equivalent.

3.4.3 Questionnaire 2

Another questionnaire (See Appendix G) was used to collect participants' (experimental group) responses on their perception on the role of peer tutoring on their academic progress as well as on their socialization. It also helped to explore relationship between tutors and tutees perception (Objective 5) about the role of peer tutoring on their academic progress as well as socialization. It contained twenty closed ended responses covering students' perception on peer tutoring for both of the groups on both dependent variables i.e. academic progress and socialization. 10 items were grouped under 'Peer tutoring: A convenient means of academic progress' whereas, and the rest

of 10 items were kept under 'Peer tutoring: A convenient means of student socialization'. 50 % of the items were addressing students' academic progress whereas rest of 50 % addressed students' socialization. Later students' responses through this questionnaire were acquired as a data support to that of the questionnaire 1 and experiment as a strong set of evidence of the study results.

Questionnaire 2 was a completely closed-ended survey instrument only meant to focus perception as one of the study construct as in Bird's (2009) view, questionnaire is a comprehensively made instrument used for obtaining data on contributors' social attributes, behavior ideals or approaches and their views and the causes to take certain action with reference to the topic of study.

Leading surveys is an impartial method of making judgements. A respondent can be accessed through using questionnaire as a survey instrument of data collection with three types of questions; factual, behavioral, and attitudinal (Ong'anya, Ododa, 2009) as included in the administered questionnaires of the present study. Largely, questionnaires serve as a useful tool for a proficient gathering of some type of data as the researcher was able to gather data on tutors' and tutees' individual perceptions about the peer tutoring program with reference to its two dependent variables. The role of the questionnaires in the present study affixed important attributes to cover an important part of the present study as well as supplementing the overall set of data and its better evaluation.

Gillham (2008) considers questionnaires as being highly popular due to the fact that they offer a "quick fix" for research methodology. This also supports their handling comparatively in a convenient manner once they are developed successfully on set objectives of the study. Moreover, in case of questionnaires 2 as well tutors and tutees

independently filled up their individual questionnaires. Those having problem in understanding the spirit of a question item were explained openly and equally. The researcher as a teacher was in a better position to assume that both groups were probably equivalent.

3.4.4 Interview

Interviews comprise social interactions (McLeod, 2014) that was very relevant to the present study, so a structured interview was also devised for the students' (tutors and tutees of the experimental group). It was a personal face-to-face interview that was conducted for all the participants of the treatment group (tutors and tutees). It was to see the role of peer tutoring in student socialization while addressing objective 5 of the study. The subsequent open-ended personalized structured interview tool was designed to discover in-depth information for the survey (questionnaire 1 section A) responses. It was to know more about socialization under peer tutoring dynamics like; help in class interaction, help in social interaction, improvement in some personality weaknesses, development of some positive or negative traits, core factor in tutor-tutee relationship, best factor in peer helping in improving other, sense of achievement after tutoring, good feelings after tutoring, the ways how peer tutoring helped students' socialization, level of success in realizing self-deficiencies and ways to overcome them.

It also covered the standard items discovering common perspectives on the problem. The purpose of leading a structured interview was to discover the responses of the experimental groups' students interviewing face-to-face to unfold supplementary and deeper evidence. Characteristics of the structured interview included as in the research study of Cohen & Crabtree (2006):

'The interviewer asks each respondent the same series of questions. The questions are created prior to the interview, and often have a limited set of response categories. There is generally little room for variation in responses. Questioning is standardized and the ordering and phrasing of the questions are kept consistent from interview to interview. The interviewer plays a neutral role and acts casual and friendly, but does not insert his or her opinion in the interview. Self-administered questionnaires are a type of structured interview."

Structured interviews can be conducted in a short time period which makes the conduct of many interviews quite quickly (McLeod, 2014). Therefore, the interview was self-administered. Respondents' answers were recorded on the structured interview form (usually with pre-specified response formats) during the interview process, relevant 10 themes were identified from the participants' responses. Then they were coded, interpreted and analysed finally.

In the face-to-face interviews tutors and tutees of the experimental group were inquired about their socialization trends under peer tutoring programme to cover the unfolded dimensions of the data collection. Interviews were conducted on the daily bases for each of the triplets to make it conveniently paced. The open-ended structured interview helped in collecting qualitative research data like that of the open-ended section B of the questionnaire 1 serving both descriptive and interpretative purposes. All the participants of the treatment group were interviewed because of the following reasons:

- As the participants were heterogeneous as tutors and tutors so according to Guest et al. (2006); more heterogeneous groups require more interviews.

- The number of interviews done in the beginning were reflecting weaker and vague responses, therefore more interviews were needed for a clear picture of the story. It was decided in accordance with Ryan and Bernard (2016) who stated that if the interview responses seem weaker in their sense, therefore it is preferable to conduct more interviews for data saturation.

- It was also found suitable to get stronger evidence by conducting more interviews, as Mason (2010) also found it better for more defensible research.

A structured interview layout helps in an impartial evaluation of the participants. The questions of such an interview questionnaire are pre-planned, and have less chance of partiality in assessing participants' views. It also permits the interviewer to concentrate upon the particular abilities and skills that are needed to be studied. It also allows the assessment of the skills which are difficult to measure like interactions and oral communication. All these attributes make a structured interview a more useful means (Doyle, 2018) of knowing the probable experiences, views, or performances of all the participants uniformly in order to get the same information from each one of them. Here everyone is given the same opportunity to respond the same questions, which are also asked in the same order.

Researcher's cautious and evidence based practices to conduct, record, code, and analyse tutors' and tutees' (Experimental group) interviews were comprised of; the choosing of an area of inquiry for in-depth information or not fully attended in the

quantitative data collection by the conduct of experiment and survey and needed clarification, collection of the proof or evidence by asking open-ended questions individually but structured uniformly in the beginning, searching clues systematically for the evidence collected in the form of participants responses during their interviews, developing the findings on the bases of all sources of responses as the participants' responses in a unified whole, and relating the evidence collected from the interview results correctly to the study's final results (Hewitt-Taylor, 2002). That is how specific themes were drawn out of the interview responses and then the rest of procedure was followed for further data processing.

Moreover, open-ended questions are helpful to gather complete detail of the required data like; on the individual feelings, practices etc. of the participant. This technique generates valid outcomes in terms of the participants' insufficient or extensive peace of expression as a response (Rutter, 2011). Open-ended questions of the interview helped the researcher to collect varied individual responses on each of the same questions opening wider opportunity for the participants to express more or differently.

Boynton (2016) commends that study procedures should permit researchers to take time to have a dialogue with the respondents after their completion of the instrument. This would help in picking gaps within the content and structuring of the instrument. This is what the researcher was keen to do before a formal interview could be conducted. Here in case of the present study the identified gaps during routine teacher-students' dialogue were then filled by administering a short interview of the tutors and tutees of the experimental group so that the planned structured interview could be finalized.

3.5 Variables

They are as follows:

Table 3.3. Study Variables

Variable Type	Nature of Variable
Independent	Peer Tutoring
Dependent	Socialization Academic progress

3.6 Pilot Testing

The pilot testing was carried on both of the questionnaires and internal reliability of each item was computed on the SPSS software. The reliability found was high (3.4 and 3.7) for both of the questionnaires, therefore the questionnaires were found reliable for the collection of descriptive research data. The reliability of the 10 open-ended items (section B) of the questionnaire was assured by opting the same strategy as in case of interviews.

The face and content validities of data collection instruments were also checked and improved through the pilot results of the instruments. The less focused and weak items of the questionnaires were either completely removed or replaced with modified items to address the particular areas of concern regarding study variables. The shortfalls in the structure of question statements as well as in the choice of relevant vocabulary were also looked into further improvement. Moreover, the validity of the Test questions was also taken into great consideration and was assured by taking help from the Cambridge past papers as well as by following their proper format along with varied question structures as best as possible.

The extraneous variables like participant variables were controlled by minimizing dissimilarities amongst the participants e.g. as they were belonging to the same age group of 14 to 16 and studying at the same level i.e. class 9th , therefore the participant variable was in control. The sections were selected randomly by head and tail method. Their randomization helped in controlling these variables. The other external variables were related to the researcher. These were the factors which included researcher's behavior, outlook or gender which could influence participant responses. As a researcher herself, was their subject teacher so followed uniformity in terms of her behavior and outlook. The researcher led the instructions in the class as well as monitored tutors and tutees herself in peer tutoring sessions, so the procedures remained consistent throughout the experiment. Situational variables were also in control as participants routine classrooms were used for the conduct of experiment where all the necessary physical needs like light, space, sound and temperature levels could be well maintained throughout according to the participants' needs (tutor2u Psychology, 2018).

The reliability results of the closed- ended (section A) set of items as shown in SPSS computation are as under:

3.6.1 Questionnaire 1

Table 3.4. Reliability Statistics of Questionnaire 1

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.947	.948	50

In Table 3.4 the value of the Cronbach's alpha is .947 which shows the covariance among the questionnaire's items, whereas the alpha based on standardized items

reflects the correlations among items. The latter alpha is grounded on the supposition that all of the items have the same variances (Tavakoli, n.d). The value of Cronbach's alpha shows high reliability of the questionnaire.

Table 3.5. Scale Statistics of Questionnaire 1

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
136.47	924.999	30.414	50

Table 3.6. Intra-Class Correlation of Questionnaire 1

Intra-class Correlation Coefficient

	Intraclass Correlation[b]	95% Confidence Interval		F Test with True Value			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.264[a]	.200	.352	18.913	59	2891	.000
Average Measures	.947[c]	.926	.965	18.913	59	2891	.000

3.6.2 Questionnaire 2

Table 3.7. Reliability Statistics of Questionnaire 2

Reliability Statistics

Cronbach's Alpha	N of Items
.955	20

In the table 3.7 the value of Cronbach's Alpha is .955 which shows high level of questionnaire reliability.

Table 3.8. Scale Statistics of Questionnaire 2

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
56.45	289.879	17.026	20

Table 3.9. Intra-Class Correlation of Questionnaire 2

Intra-class Correlation Coefficient

	Intra-class Correlation[b]	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.515[a]	.426	.618	22.271	59	1121	.000
Average Measures	.955[c]	.937	.970	22.271	59	1121	.000

3.6.3 Interview

The structured interview was composed of open-ended items like that of section B of the Questionnaire 1. Their reliability was assured through the researcher's repeated review of the items keeping in view the areas of students' learning to be measured like; skills, interactions, attitudes, interest, etc. Experts' critical analyses was also involved and modifications as par their suggestions were carried, and also pilot testing was conducted on some of the students not included in the sample. Repeated, incorrect or less focused items were replaced with the better and more focused items taking a few rounds of check and balance before assuring a finally applicable interview questionnaire.

3.7 Data Collection

The data collection was carried by following the three phases of the QUAN-QUAL model of the mixed method research design as follows:

Phase 1: QUAN-QUAL Data Collection

It contained QUAN and QUAL parallel data collection.

QUAN Data Collection

In QUAN data collection the two-group post-test-only randomized research design was used to collect quantitative data in a more reliable and generalized manner. The two groups were randomly assigned. Section A and B of class 9th were combined to get 30 number of students to make the treatment or experimental group to be treated for peer tutoring. Whereas, section C and D were combined to make the control or comparative group of 30 students, therefore the sample size consisted of 60 students of 9th grade, with 30 students allotted to each of the two groups. The group given the treatment of peer tutoring was named as X, whereas the other group which served as the comparison group was labelled as Y and it did not get the treatment. This design did not require a pre-test as random assignment was applied. Therefore, it was assumed that both groups were probably equivalent to start with and thus the pre-test was not needed. The previous academic achievement scores of the recent exam of the students were used as reference point to decide the roles of tutors and tutees for the students of treatment group and to compare their academic progress in the post-test as well.

The treatment of the experimental group included; tutors' continuous coaching to their tutees' during their interaction in the Geography class and after the class whenever needed. Tutors and tutees were provided with related instructions and guidelines in their training before the start of tutoring program as well as during its routine sessions

to improve their respective role. The participants of the treatment group received their subject teacher's instructions as routine teaching sessions along with their role as tutors assisting tutees in the class in their class discussions, group works, class presentations, written classwork or question solutions according to the CAIE paper pattern and subject needs, class activities based on subject based skills. Peer help to their peers in their deficiencies in routine let the teachers receive more time to focus on the next lesson (Briggs, 2013). The tutors also used to discuss the next day homework assignment with their tutees at any time during the school hours or even if tutees needed their help from home they could contact them on their subject WhatsApp group. The subject teacher was also the group member and it was made for subject assistance of the students. On the other hand the control group was receiving routine teaching sessions without any peer assistance program.

The design needed the researcher to determine the difference between the two groups after the treatment on one and the other group without treatment. Characteristically the groups were measured on the treatment on one or more measures (the Qs in notation). They were also compared on testing to find out the difference between their means through the application of a t-test (Trochim, 2006).

The academic position of the students was the same as both the tutors and tutees were belonging to the same level i.e. grade 9. The effect of class wide peer tutoring was checked on both, the tutors as well as the tutees. The grouping of tutors and tutees were carried on the bases of their previous academic achievement scores of the recent exam and strength and weaknesses in the respective topics were focused during the experiment. Four extended units of O level Geography, The Environment of Pakistan by Huma Naz Sethi (Table 3.5.1.2) were taught and examined within a period of six

months or one term. The same time period was also available to the participants for the development of social interactions.

A socio-metric survey was also conducted for collecting tutors and tutees responses from the same sections of grade 9 on the class wide peer tutoring process. For this survey, questionnaire 1 was administered to collect responses of the participants of experimental group to study the effect of peer tutoring on their socialization. Whereas, Questionnaire 2 was administered to record students' responses on students' (tutors and tutees) perception on the role of peer tutoring in their academic progress as well as socialization.

QUAL Data Collection

In QUAL data collection a structured open-ended interview was planned and structured in order to address the in-depth and leftover concerns of the study inquiry.

Phase 2: QUAN-QUAL Data Analysis

The collected data from both of the methods was then coded separately. The coded data was later tabulated and calculated according to the test applied on each type on SPSS. It was then interpreted and analysed in order to check whether it met the level of significance or not.

Phase 3: QUAN-QUAL Data Combining for Comparison

The respective findings of the data from each of the data source were listed down to draw out the results in terms of the list of conclusions for the experimental, survey, and interview investigations. The results from each of the source were then combined for comparison.

3.8 Descriptive statistics

The descriptive statistics of the study were based on a variety of data including that of an experiment, two sociometrist survey questionnaires, and an interview. The quantitative as well as qualitative data was collected and used for appropriate statistical analysis. SPSS was used to compute the quantitative data variety. Research findings and conclusions were drawn on the statistical results where significance level for the effect and relationship between the independent variable with dependent variables was calculated by referring to Cronbach's α standard values. The same reference scale was also used to test the reliability of the questionnaires as one of the instrument. Themes of the interview were identified and then percentages and means of the interview items in each theme were also calculated to derive study results' interpretations.

3.8.1 QUAN Data Analysis

Experimental Data

The quantitative data collected from the post-test was coded, tabulated, and calculated. The mean achievement scores of both groups were calculated at the end of the experiment and compared for their difference through t-test following their interpretation and qualitative analysis.

Descriptive Data

The second instrument of quantitative data collection was a set of two questionnaires. The responses gathered from each of the questionnaire were coded, calculated and tabulated separately. T-test was applied for comparing treatment group with control group for their academic progress as well as socialization. Pearson's correlation coefficient (r) is used when one deals with two quantitative variables (either calculated on an interval or ratio scale), and it is applied to identify the presence of a linear relationship between the variables (Fok, 2017). The calculated data of the

questionnaires 1 and 2 was then correlated separately by applying correlation coefficient Pearson's r and the relationship between the responses of treatment group with that of control group on their socialization (questionnaire 1) was measured. The relationship between the perception of the tutors and tutees was also identified on their academic progress and socialization. The relative findings and conclusions were also deduced in the light of objectives and hypotheses of the study.

3.8.2 QUAL Data Analysis

QUAL data helped in knowing students' live views about the role of peer tutoring in their socialization. The data collected by running a structured open-ended questionnaire on the same group of students which experienced peer tutoring was organized. The organized data was used for developing related themes of each questionnaire item. Frequency of responses, their percentage, and mean for each of the theme was calculated.

The qualitative analysis of the whole set of data was also carried afterwards for the overall variety of data including open ended section of the questionnaire 1 and interview respectively.

The computation was carried overall for the following types of testing and for meeting the purpose of analysis which is presented in detail in chapter 4 of the thesis draft:

Table 3.10. Statistical Applications in the Study

Analysis	Purpose
Percentages	analysis of Descriptive and inferential Statistics
Mean Score	analysis of Descriptive and inferential Statistics
Standard Deviation	is of Descriptive and inferential Statistics
t-test , two-tailed	to find out the significance of cause and effect on the two groups to give inferential statistics and analysis
Pearson's Correlation r	to find out the significance of relationship between two groups to give inferential statistics and analysis

The present study gathered experimental as well as descriptive data on two groups; control and treatment so t-test was needed to compare both group scores. The mean provided the average of a group of scores; which means the scores were added up and divided by the number of scores. The mean value is sensitive to extreme scores when population samples are small. Standard deviation (SD) is a widely used measurement of variability used in statistics. It shows how much variation there is from the average (mean) (Bland, Altman, 1996). The study statistical analysis needed to compare test scores for two groups, and the SD was applied in telling how diverse the scores were. Pearson's Correlation Coefficient r is a method of inspecting the relationship between two quantitative, constant variables, for example, peer tutoring an independent variable, academic progress and socialization as dependent variables in case of the present study (Kendall & Gibbons, 1990). So Pearson's correlation coefficient (r) helped the study in measuring the strength of the relationship between the two dependent variables individually with the independent variable.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

4.1 Data Analysis

The data analysis was carried by processing the quantitative data collected from the experiment in the form of exam paper achievement scores and also from the survey questionnaire 1 and 2. The qualitative data was available from the conduct of interviews as well as from the 10 open-ended items of the questionnaire 1. Data collected from all these sources was coded, loaded, and then computed on SPSS (Statistical Package for Social Sciences) software program by applying the appropriate statistical testing separately.

4.1.1 QUAN Data

Experimental

It included the data collected through an experiment conducted on the 30 randomly selected students' sample of grade 9th for a period of six months. Whereas the other group of 30 randomly selected students of grade 9th were considered as control group taught in the routine methodology and did not get the application of peer tutoring for the same period of time. In the chosen post-test-only study design only the scores of students after getting peer tutoring treatment was required. For referring and justifying students' results after getting treatment a record of their most recent scores before the experiment was also maintained. It was to differentiate the results of both groups and also to record the actual level of academic progress. The detail of the necessary computation carried on the reserved previous and final students' scores (objective 3) is tabulated as displayed below:

Post Test-Only

Table 4.1. Post-Test: Group Statistics

Group Statistics					
	Group	N	Mean	Std. Deviation	Std. Error Mean
POSTTEST	experimental	30	75.00	16.905	3.086
	Control	30	63.73	21.817	3.983

Table 4.2. Level of Significance of Post-Test

	Levene's Test for the Equality of Variance		t-test for equality of means				
POSTTEST	F	Sig.	T	Df	Sig. (two tailed)	Mean difference	Std error difference
Equal variance assumed	1.999	.163	2.136	58	.029	11.267	5.039
Equal variance not assumed			2.236	54.596	.029	11.267	5.039

Objective 2: To examine the effect of peer tutoring on students' academic progress at secondary level in Pakistan.

H_{01}: Peer tutoring does not significantly effect peer- students' academic progress.

The group statistics (Table 4.1, 4.2) of the post-test only while focusing upon the objective 3 of the study show the computed values of mean, standard deviation and standard error mean of the two groups. The respective data reflects the mean score of experimental group higher than that of the control group. T-test for the equality of means shows that the difference in the mean scores of the two groups is 11.267 that is

quite reasonable to show that the performance of the treatment group remained better than that of the control group. Whereas the level of significance according to Cronbach alpha for two-tailed test remained .029 which is also significant as it is below the standard level of .05. H_{01} is rejected as the results show better performance of the control group participants.

Table 4.3. Group Statistical Difference of Post-Test

Post-Test Statistics

		Post-test exp	Post-test control
N	Valid	30	30
	Missing	31	31
Mean		75.0000	63.7333
Median		80.0000	66.5000
Std. Deviation		16.90542	21.81732
Variance		285.793	475.995
Range		60.00	78.00
Minimum		38.00	20.00
Maximum		98.00	98.00
		2250.00	1912.00

Objective: 2 To examine the effect of peer tutoring on students' academic progress at secondary level in Pakistan.

H_{06}**:** There is no significant difference found between the academic progress of the students of Experimental group and that of the Control group.

The group statistical differences (Table 4.3) between the two groups also present the differences in other areas between the two groups other than mean as well. A small value of standard deviation for post-test result of the experimental group that is 16.90542 shows that on average the statistical data set's values are close to the mean of the data set. Whereas, a large value of standard deviation for control group reflects that on average the data set values are far away from the mean. It means the experimental

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group's data values are more concentrated around the mean score, supporting experimental group's data set results to be better than that of control group's data set's values concentration and results. The range value of control group is higher than that of the experimental group showing more difference between the minimum and maximum score value. With this statistical interpretation it can be stated that the null hypothesis 1 of the study is rejected because a significant effect of peer tutoring has been seen on students' academic progress as compared to the other group not applied with the same strategy. The post-test statistical values of other measurements for the experimental and control groups are also displayed as under in Table 4.4 and 4.5 respectively. Objectives 2 is very relevant to the above results, whereas H_{06} is rejected as post-test scores of the treatment group are higher than those of the control group.

Table 4.4. Experimental Frequencies of Post-Test

Posttest Experimental Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	38.00	1	1.6	3.3	3.3
	41.00	1	1.6	3.3	6.7
	44.00	1	1.6	3.3	10.0
	47.00	1	1.6	3.3	13.3
	59.00	2	3.3	6.7	20.0
	60.00	1	1.6	3.3	23.3
	61.00	1	1.6	3.3	26.7
	68.00	1	1.6	3.3	30.0
	69.00	1	1.6	3.3	33.3
	74.00	1	1.6	3.3	36.7
	75.00	2	3.3	6.7	43.3
	79.00	2	3.3	6.7	50.0
	81.00	2	3.3	6.7	56.7
	82.00	1	1.6	3.3	60.0
	85.00	1	1.6	3.3	63.3
	86.00	2	3.3	6.7	70.0
	87.00	2	3.3	6.7	76.7
	88.00	1	1.6	3.3	80.0
	89.00	2	3.3	6.7	86.7
	93.00	1	1.6	3.3	90.0
	94.00	1	1.6	3.3	93.3
	96.00	1	1.6	3.3	96.7
	98.00	1	1.6	3.3	100.0
	Total	30	49.2	100.0	
Missing	System	31	50.8		
Total		61	100.0		

Table 4.5. Control Group Frequencies of Post-Test

Posttest Control Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20.00	2	3.3	6.7	6.7
	24.00	1	1.6	3.3	10.0
	36.00	1	1.6	3.3	13.3
	38.00	1	1.6	3.3	16.7
	44.00	1	1.6	3.3	20.0
	45.00	1	1.6	3.3	23.3
	46.00	1	1.6	3.3	26.7
	56.00	2	3.3	6.7	33.3
	58.00	1	1.6	3.3	36.7
	60.00	2	3.3	6.7	43.3
	64.00	1	1.6	3.3	46.7
	65.00	1	1.6	3.3	50.0
	68.00	1	1.6	3.3	53.3
	72.00	1	1.6	3.3	56.7
	74.00	1	1.6	3.3	60.0
	76.00	2	3.3	6.7	66.7
	78.00	3	4.9	10.0	76.7
	80.00	1	1.6	3.3	80.0
	82.00	1	1.6	3.3	83.3
	86.00	2	3.3	6.7	90.0
	90.00	1	1.6	3.3	93.3
	98.00	2	3.3	6.7	100.0
	Total	30	49.2	100.0	
Missing	System	31	50.8		
Total		61	100.0		

In continuity with the above statistics of Table 4.4 and 4.5, Figure 4.1 and 4.2 project the relative trend in the experimental and control group frequencies as well as summarizes the situation.
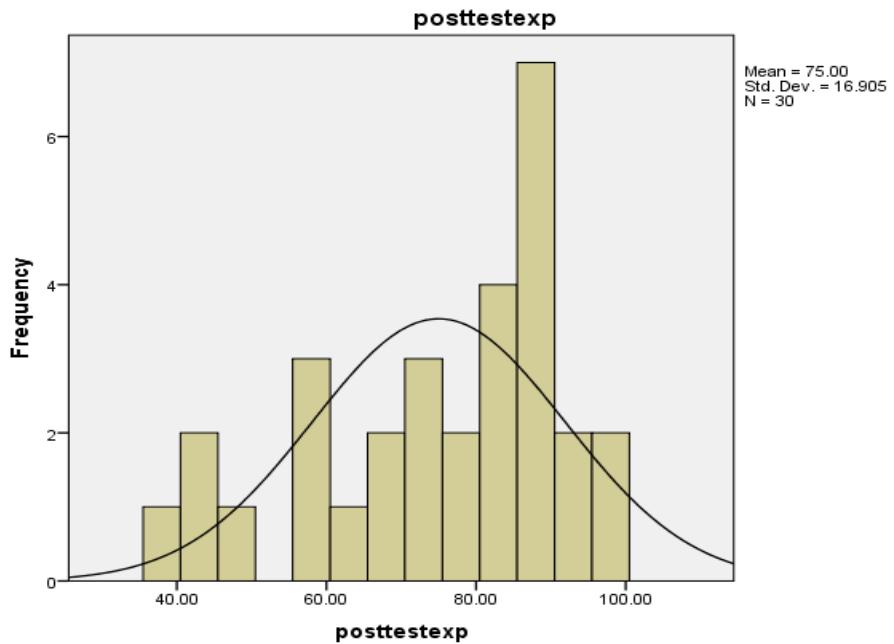
Figure 4.1. Frequencies of Post-test of experimental group

Figure 4.1 shows a normal distribution of the students' scores. The students'

score range remained between 38 to 100 %. The center of the curve reflects the mean

scores as 75 % and the short width and height of the curve is synonymous to the low

value of standard deviation re-enforcing the above interpretation of the data tables 9,

10, and 11. Moreover, the center of the curve shows the greatest number of a value or

score and therefore is the highest point on the arc of the line which shows an average

score of 75 %, achieved by most of the students of the experimental group. The positive

values of the normal distribution curve also reflect a very positive trend in the academic

progress of the experimental group.
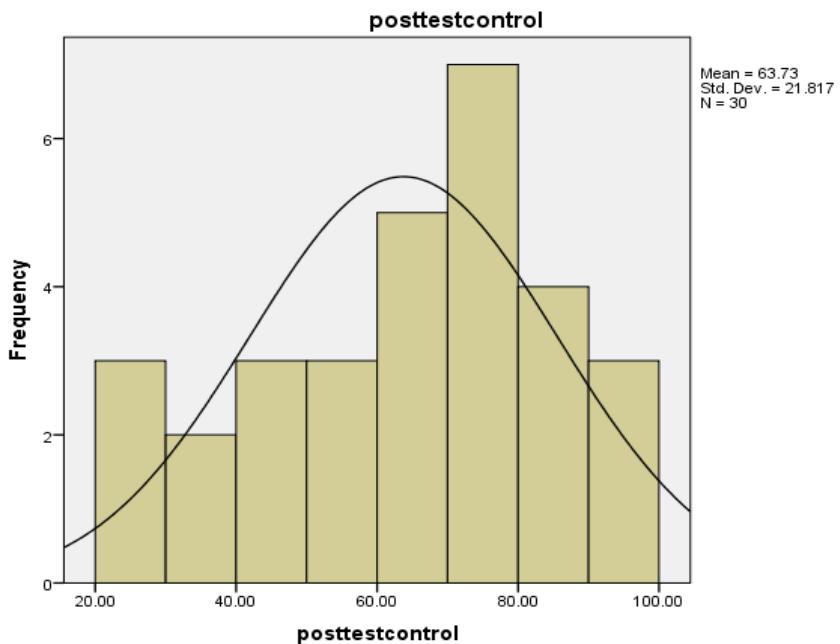
Figure 4.2. Frequencies of Post-Test for Control Group

The summary of the related statistical data in fig 4.2 shows that the range of students' scores in control group remained 20 to 98 % that shows the wider range of students' scores in this group's post-test scores as compared to that of other group. Bell shaped curve of the histogram reflects a normal distribution of the students' scores but the height and width of the curve is more than that of the previous figure 5. The later reflects a higher standard deviation relating a weaker position in this case. The bell curve's center shows an average score value of 63.73 which has higher frequency than other values. Moreover, the academic progress trend is positive in this group as well.

Previous Achievement Score

The students' scores of both of the groups before starting the application of peer tutoring on experimental group were also recorded for reference. Previous scores were also computed to clarify the situation before the conduct of experiment regarding academic position of the students of both groups. The data statistics are as under:

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Table 4.6. Group Statistics of Previous Achievement Scores

	Group	N	Mean	Std. Deviation	Std. Error Mean
Group Statistics					
Previous Achievement Scores	experimental	30	52.87	16.933	3.092
	Control	30	49.13	22.134	4.041

Table 4.7. Significance Level of Previous Achievement Scores

	Levene's Test for the Equality of Variance		t-test for equality of means				
PREVIOUS ACHIEVEMENT SCORES	F	Sig.	T	D$_f$	Sig. (two tailed)	Mean difference	Std error difference
	5.491	.023	.734	58	.466	3.733	5.088
Equal variance assumed							
			.734	54.285	.466	3.733	5.088
Equal variance not assumed							

The group statistics (Table 4.6, 4.7) of the previous achievement scores taken as a reference to students' previous performance also show the calculated values of mean, standard deviation and standard error mean of the two groups. The related data reveals that the mean score of experimental group higher than that of the control group but the difference is nominal. T-test for the equality of means shows that the difference in the mean scores of the two groups is only 3.733 that is quite less to show that the performance of the treatment group as well as that of the control group before the application of peer tutoring on experimental group was not very different. The level of

significance for the previous achievement scores remained .466 which is not significant as it is above the standard level of .05. It further shows that the academic state of achievement for both of the groups according to their first term test scores was almost the same, so their difference was not significant.

Previous Achievement -Post Test Difference

Table 4.8. Difference in Previous Achievement-Post-Test Frequencies

	DIFFERENCE			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-36	1	1.6	1.7	1.7
	-8	1	1.6	1.7	3.3
	-6	2	3.3	3.3	6.7
	-3	1	1.6	1.7	8.3
	-2	2	3.3	3.3	11.7
	0	1	1.6	1.7	13.3
	2	2	3.3	3.3	16.7
	3	1	1.6	1.7	18.3
	4	3	4.9	5.0	23.3
	6	1	1.6	1.7	25.0
	7	2	3.3	3.3	28.3
	10	1	1.6	1.7	30.0
	11	1	1.6	1.7	31.7
	12	1	1.6	1.7	33.3
	15	3	4.9	5.0	38.3
	16	2	3.3	3.3	41.7
	17	1	1.6	1.7	43.3
	18	1	1.6	1.7	45.0
	19	1	1.6	1.7	46.7
	20	3	4.9	5.0	51.7
	21	1	1.6	1.7	53.3
	22	1	1.6	1.7	55.0
	23	1	1.6	1.7	56.7
	25	2	3.3	3.3	60.0
	26	3	4.9	5.0	65.0
	27	2	3.3	3.3	68.3
	28	4	6.6	6.7	75.0
	29	2	3.3	3.3	78.3
	30	2	3.3	3.3	81.7
	31	2	3.3	3.3	85.0
	33	1	1.6	1.7	86.7
	34	1	1.6	1.7	88.3

	36	1	1.6	1.7	90.0
	38	2	3.3	3.3	93.3
	40	2	3.3	3.3	96.7
	49	1	1.6	1.7	98.3
	54	1	1.6	1.7	100.0
	Total	60	98.4	100.0	
Missing	System	1	1.6		
Total		61	100.0		
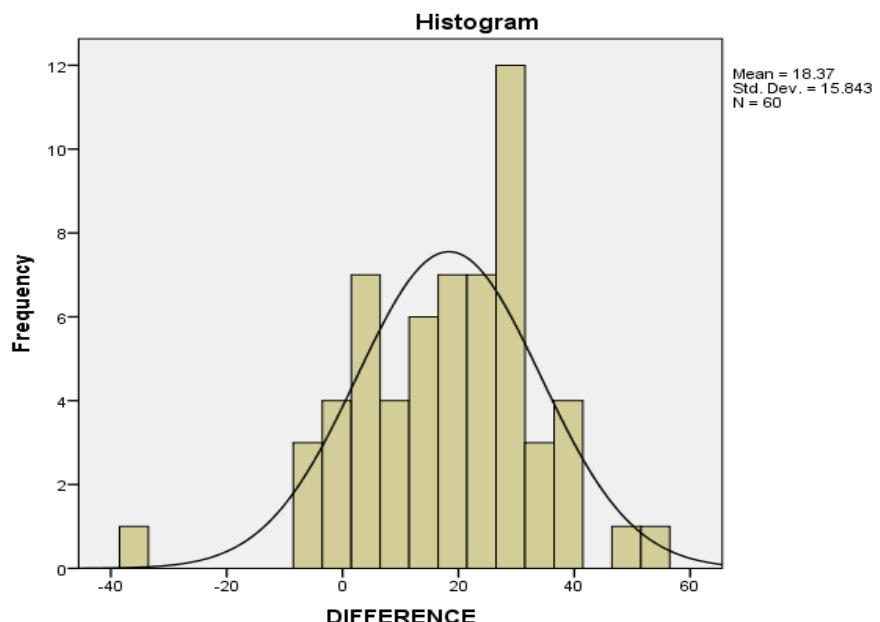
Figure 4.3. Difference in Previous Achievement Post-Test Frequencies

Reinforcing Table 4.6 the bell curve of the Figure 4.3 summarizes the statistics and reflects normal distribution of students' scores' difference but highest point is the mean score difference of 18.37. The bell curve indicates that the data is well proportioned and therefore, there are quite reasonable prospects of a score product which lies within a range of – 40 to + 60 to the left or right of the curve centre.

Descriptive Data

It included the data collected through a set of two standardized questionnaires. The first questionnaire covered the peer tutoring effect on socialization attributes

through its closed ended list of fifty reliable items. Its open ended items were dealt with separately through their coding, loading, interpretation and qualitative analysis. The open-ended section of the questionnaire gave qualitative research data serving both descriptive and interpretative purposes. Whereas the second questionnaire recorded students' responses on the students' perception of peer tutoring. It contained a set of twenty reliable items covering their academic progress as well as their socialization.

Questionnaire 1

The statistical representation of the peer tutoring effect on socialization (objective 2) after computing the available data of closed ended section of the questionnaire is displayed as under:

T-Test Application

Table 4.9. T-test Group Statistics of Questionnaire 1

Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
SUMSOC	experimental	30	179.5333	24.93403	4.55231
	Control	30	144.9333	13.65570	2.49318

The group statistics (Table 4.9, 4.10) of the t-test application on questionnaire 1 while focusing upon the objective 1 of the study illustrate the work out values of mean, standard deviation and standard error mean of the two groups. The given figures reveal a relatively high value of the mean score of experimental group that is 179.5333 than that of the control group as 144.9333.

Table 4.10. Significance Level of Questionnaire 1

SUMSOC	Levene's Test for the Equality of Variance		t-test for equality of means				
	F	Sig.	T	Df	Sig. (two tailed)	Mean difference	Std error difference
Equal variance assumed	12.738	.001	6.666	58	.000	34.60000	5.19032
Equal variance not assumed			6.666	44.961	.000	34.60000	5.19032

Objective 1: To study the effect of peer tutoring on students' socialization at secondary level in Pakistan.

H₀2: Peer tutoring does not significantly effect peer- students' socialization.

T-test for the equality of means shows that the difference in the mean scores of the two groups is 34.60000 which confirms a reasonable socialization difference of the treatment group than that of the control group. The level of significance with reference to the standard level of significance for two-tailed test remained .000 which is highly significant revealing a significant positive socialization which was helpful in improving students' academic performance of the experimental group after the application of peer tutoring. This statistical outcome rejects the null hypothesis 2 and confirms its alternative hypothesis that peer tutoring has a significant effect on students' socialization.

Table 4.11. Experimental -Control Statistical Difference of Questionnaire 1

	Statistics		
		ExpQ1	ConQ1
N	Valid	30	30
	Missing	31	31
Mean		179.53	144.93
Median		177.00	143.50
Std. Deviation		24.934	13.656
Variance		621.706	186.478
Range		84	54
Minimum		142	125
Maximum		226	179
Sum		5386	4348

Objective 1: To find out the effect of peer tutoring on students' socialization at secondary level in Pakistan.

$H_0 7$: There is no significant difference is found between the socialization of the student group applied with peer-tutoring and that not applied with it.

The group statistical differences (Table 4.11) between the two groups are tabulated to see the differences between the two groups also other than mean score. 24.934 as high value of standard deviation for experimental group reveals a wider average spread of the data set values not much closer to the mean. Whereas, the small value of standard deviation as 13.656 for control group results demonstrates that on average the statistical data set values are closer to the mean data set value. It means the experimental groups' data values are not more concentrated around the mean score, than those of the control group. The experimental group's significantly high mean score shows quite better level of socialization than that of the other group but with a wider range of scores between minimum and maximum scores. Higher value of mean

179.53 than that of median 177.00 for experimental group and as mean 144.93 and median as 143.50 for the control group reveals a positive trend. The range value of treatment group as 84 is higher than that of the control group which is 54, revealing more difference between the minimum and maximum score value. The statistical values of other measurements for the experimental and control groups are also displayed for questionnaire 1 as under in Table 4.12 and 4.13 respectively.

Table 4.12. Frequency Table of Experimental Group of Questionnaire 1

		Frequency	Percent	Valid Percent	Cumulative Percent
			ExpQ1		
Valid	142	1	1.6	3.3	3.3
	144	1	1.6	3.3	6.7
	146	2	3.3	6.7	13.3
	150	1	1.6	3.3	16.7
	152	1	1.6	3.3	20.0
	157	1	1.6	3.3	23.3
	159	1	1.6	3.3	26.7
	162	1	1.6	3.3	30.0
	166	1	1.6	3.3	33.3
	167	1	1.6	3.3	36.7
	169	1	1.6	3.3	40.0
	171	1	1.6	3.3	43.3
	174	1	1.6	3.3	46.7
	177	2	3.3	6.7	53.3
	185	1	1.6	3.3	56.7
	187	2	3.3	6.7	63.3
	192	1	1.6	3.3	66.7
	195	2	3.3	6.7	73.3
	196	1	1.6	3.3	76.7
	197	1	1.6	3.3	80.0
	202	1	1.6	3.3	83.3
	203	1	1.6	3.3	86.7
	217	1	1.6	3.3	90.0
	220	1	1.6	3.3	93.3
	225	1	1.6	3.3	96.7
	226	1	1.6	3.3	100.0
	Total	30	49.2	100.0	
Missing	System	31	50.8		
Total		61	100.0		

Table 4.13. Frequency Table of Control Group of Questionnaire 1

		Frequency	Percent	Valid Percent	Cumulative Percent
				ConQ1	
Valid	125	1	1.6	3.3	3.3
	127	1	1.6	3.3	6.7
	130	1	1.6	3.3	10.0
	133	4	6.6	13.3	23.3
	134	1	1.6	3.3	26.7
	135	3	4.9	10.0	36.7
	138	3	4.9	10.0	46.7
	143	1	1.6	3.3	50.0
	144	1	1.6	3.3	53.3
	145	2	3.3	6.7	60.0
	146	1	1.6	3.3	63.3
	149	1	1.6	3.3	66.7
	151	1	1.6	3.3	70.0
	153	1	1.6	3.3	73.3
	155	1	1.6	3.3	76.7
	156	1	1.6	3.3	80.0
	158	2	3.3	6.7	86.7
	162	2	3.3	6.7	93.3
	175	1	1.6	3.3	96.7
	179	1	1.6	3.3	100.0
	Total	30	49.2	100.0	
Missing	System	31	50.8		
Total		61	100.0		

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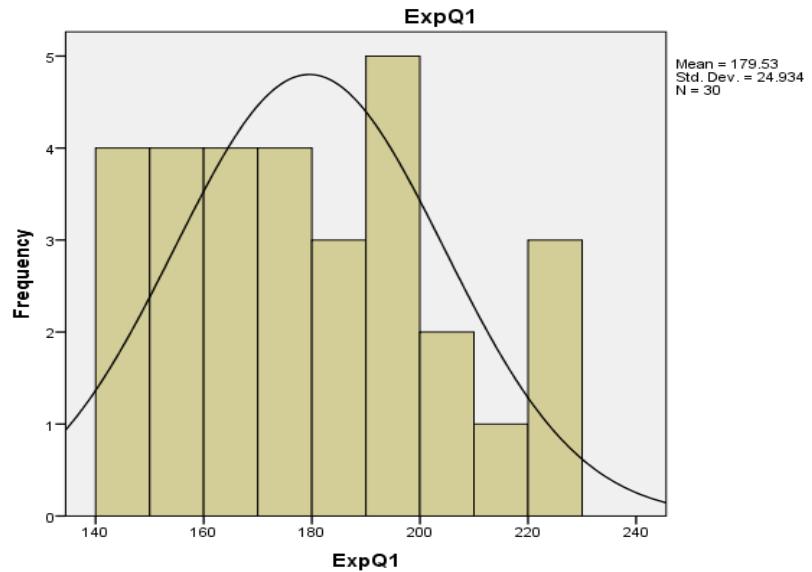
Figure 4.4. Frequency Trend of Experimental Group of Questionnaire 1

Figure 4.4 summarizes the above related statistics' and shows a bell curve with relatively smaller means shifted more to the left than those with higher means skewing right and has a positive trend. The students' score range for experimental group questionnaire 1 responses remained 140 to 230 with an average of 179. The center of the curve presents the average or mean scores as 179.53 and the short width and height of the curve is synonymous to the low value of standard deviation showing most of the scores concentrated around the mean but trending more towards the right side of the bell curve. It shows a positive trend in the score. The positive values of the distribution curve also reflect a very positive trend in the socialization of the experimental group.
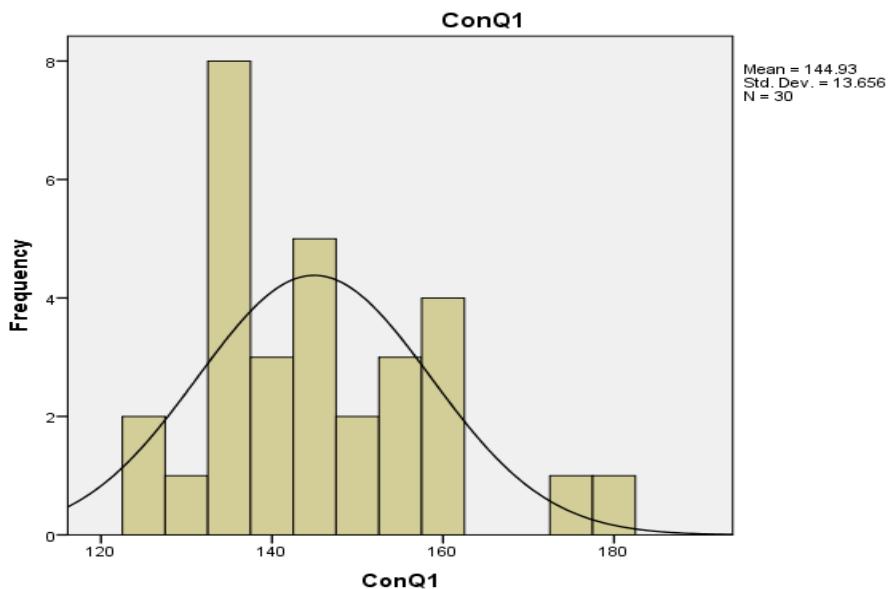
Figure 4.5. Frequency Trend of Control Group of Questionnaire 1

Figure 4.5 also shows a bell curve with relatively smaller means shifted more to the left than those with higher means projecting a curve slightly right-skewed. A dispersal of scores that is skewed right or positively skewed is shown above which reveals that figure 8 is not very symmetric around the mean anymore. For a right skewed distribution, the mean is typically greater than the median. The students' score range for control group questionnaire 1 responses remained 120 to 185 with an average of 144. The score distribution is not exactly equal on both sides of the bell center having more distribution of scores towards right side of the bell skewing its tail towards right. The center of the curve presents the mean scores as 144.83 and the short width and height of the curve is revealing the low value of standard deviation where most of the scores concentrate around the mean but not equally distributed on both sides. The positive values of the distribution curve also shows positive trend in the socialization of the control group. The mean score value difference of both groups clarifies that no doubt both groups showed socialization trends positively but the socialization trend exhibited by the experimental group remained much better than that of the control group.

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Difference between Tutors' and Tutees' responses Questionnaire 1

Experimental Group

The difference between the results of tutors and tutees experimental group with reference to the instrument questionnaire 1 was computed through SPSS and the statistical representation of the test is displayed as under:

Table 4.14. Descriptive Statistics of Tutors-Tutees of Exp

Descriptive Statistics

	Mean	Std. Deviation	N
TutorsExpQ1	176.10	30.647	10
TuteesExpQ1	181.25	22.242	20

Objective 1: To find out the effect of peer tutoring on students' socialization at secondary level in Pakistan.

H_0 **8:** There is no significant difference found between tutors and tutees socialization.

The group descriptive statistics (Table 4.14) of the two groups are tabulated to see the difference between the two groups. Tutees have a high value of mean as 181.25 than that of tutors 176.10, which shows better socialization amongst them than that of tutors. Low value of standard deviation for the tutees as 22.242 also reveals that most of the tutees' scores are concentrated around their mean as compared to the tutors that is 30.647.

Table 4.15. Experimental Group Tutors' Frequency Table of Questionnaire 1

		Frequency	Percent	Valid Percent	Cumulative Percent
			Tutor Experimental		
Valid	142	1	1.6	10.0	10.0
	144	1	1.6	10.0	20.0
	146	1	1.6	10.0	30.0
	159	1	1.6	10.0	40.0
	167	1	1.6	10.0	50.0
	171	1	1.6	10.0	60.0
	187	1	1.6	10.0	70.0
	202	1	1.6	10.0	80.0
	217	1	1.6	10.0	90.0
	226	1	1.6	10.0	100.0
	Total	10	16.4	100.0	
Missing	System	51	83.6		
Total		61	100.0		

Table 4.16. Experimental Group Tutees' Frequency Table of Questionnaire 1

Tutee Experimental Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	146	1	1.6	5.0	5.0
	150	1	1.6	5.0	10.0
	152	1	1.6	5.0	15.0
	157	1	1.6	5.0	20.0
	162	1	1.6	5.0	25.0
	166	1	1.6	5.0	30.0
	169	1	1.6	5.0	35.0
	174	1	1.6	5.0	40.0
	177	2	3.3	10.0	50.0
	185	1	1.6	5.0	55.0
	187	1	1.6	5.0	60.0
	192	1	1.6	5.0	65.0
	195	2	3.3	10.0	75.0
	196	1	1.6	5.0	80.0
	197	1	1.6	5.0	85.0
	203	1	1.6	5.0	90.0
	220	1	1.6	5.0	95.0
	225	1	1.6	5.0	100.0
	Total	20	32.8	100.0	
Missing	System	41	67.2		
Total		61	100.0		

Figure 4.6. Experimental Group Tutors' Frequency Trend of Questionnaire 1

Fig: 4.6 presents the summary of the above related statistics and projects a bell curve with relatively smaller mean shifted more to the left than that with higher mean skewing right and has a positive trend. The tutors' score range for experimental group questionnaire 1 responses remained 140 to 240 with an average of 176. The center of the curve presents the average or mean scores as 176.1 and the short width and height of the curve reflects the low value of standard deviation. It declares that most of the scores are closer to the mean but trending more towards the right side of the bell curve. It confirms a positive trend in the score. The positive values of the distribution curve also reflect a positive trend in the socialization of the tutors' (experimental group).

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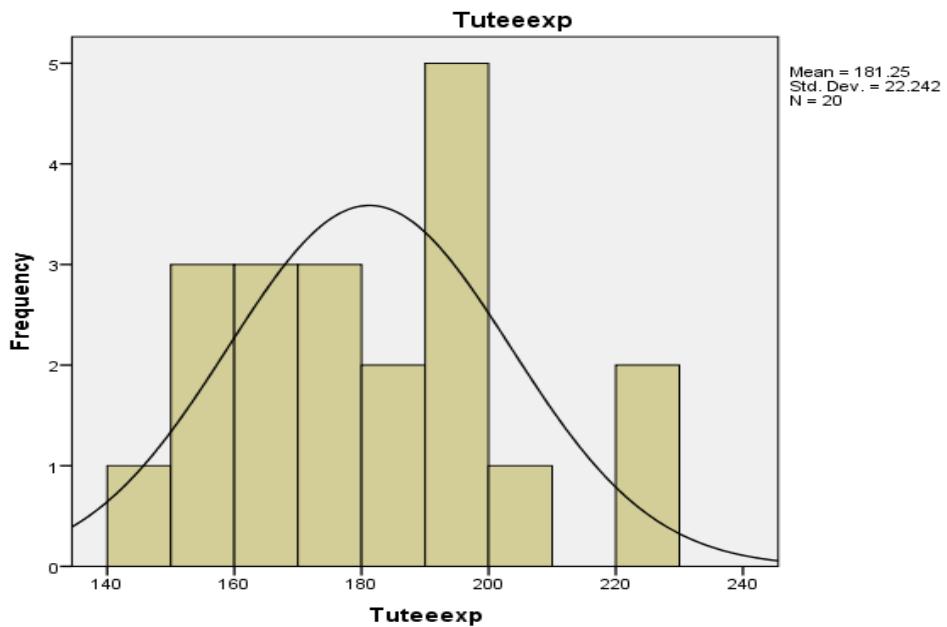
Figure 4.7. Experimental Group Tutees' Frequency of Questionnaire 1

The summary of the statistical data in Fig: 4.7 shows that the bell curve is mildly centralized towards the left and skewed right. Relatively greater mean value of the tutees has a positive trend. The tutees' score range for experimental group questionnaire 1 responses remained 140 to 240 with an average of 181. The center of the curve presents the average or mean scores as 181.25 and the short width and height of the curve reflects the low value of standard deviation as compared to that of the tutors' responses. It shows the nearness of most of the scores to the mean but trending more towards the right side of the bell curve as the right tail of the curve is slightly skewed. It also confirms a positive trend in the tutees' score on the effect of peer tutoring on their socialization rejecting H_o8 as though weak but significant difference is seen. The positive values of the distribution curve also reflect a positive trend in the socialization of the tutees' (experimental group).

Questionnaire 2

The questionnaire 2 was used to support the evidence collected for the present research study. It was designed to collect further detail of students' understanding about the use of peer tutoring programme for their academic progress and better socialization. It contained two sections bringing different areas of students' experience of peer tutoring and also addressing the main two concerns of the study i.e. academic progress and socialization of the students when exposed to the treatment of class wide peer tutoring. It covered objectives 4 and 6 of the study.

T-Test Application

Application of t-test on the questionnaire 2 addressed objective 4 of the study, whereas second test, Pearson product movement *r* was applied on the same questionnaire to observe objective 6 of the study. The group statistics and that of t-test are displayed as below:

Table 4.17. Group Statistics of Questionnaire 2

Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
PercepT	Experimental	30	73.07	9.713	1.773
	Control	30	50.13	7.816	1.427

Table 4.18. Significance Level of Questionnaire 2

	Levene's Test for the Equality of Variance		t-test for equality of means				
Percep T Equal variance assumed	F	Sig.	T	Df	Sig. (two tailed)	Mean difference	Std error difference
Equal variance not assumed	1.866	.177	10.076	58	.000	22.933	2.276
			10.076	55.461	.000	22.933	2.276

Objective 3: To estimate the effect of peer tutoring on students' perception.

H₀ 9: There is no significant effect of peer tutoring on the experimental group's perception than that of the control group.

H₀3: There is no significant difference found between the tutors' and tutees' perception about the role of peer tutoring in their academic progress and socialization.

The group statistical difference (Table: 4.17, 4.18) in the perception of the students of experimental as well as those of control group is tabulated to see the difference between the two groups also other than mean score. Percep T means perception total (perception of all students of both groups). 73.07 is the mean score of the experimental group's perceptions whereas, 50.13 stands as the mean value of control group's perception. The difference of about 22.933 reveals a stronger level of experimental groups' positive perception of peer tutoring than that of the control group.

A high value of standard deviation for experimental group 9.713 reveals a wider average spread of the data set values not much closer to the mean as compared to that of the control group. Whereas, 7.816 as the small value of standard deviation for control

group results demonstrates that on average the statistical data set values are closer to the mean data set value. The experimental group's significantly high mean score shows better level of positive perception of the students than that of the other group's perception but comparatively with a wider range of scores between minimum and maximum. The significance level for Cronbach alpha for the two-tailed test is .000 which is below .05 confirming a highly significant effect of peer tutoring on the experimental group's perception which had been applied with peer tutoring than that of the other group. Therefore, the null hypothesis $H_0 9$ of the study is strongly rejected, accepting the alternative hypothesis that peer tutoring has a significant effect on the experimental group's perception than that of the control group. The statistical values of other measurements for the experimental and control groups are also displayed for questionnaire 2 as under in Table 4.22, 4.23 respectively.

Table 4.19. Perception Frequencies of Experimental Group of Questionnaire 2

Perception Experimental Group

		Frequency	Percent	Valid Percent	Cumulative Percent
	49	1	1.6	3.3	3.3
	59	1	1.6	3.3	6.7
	61	1	1.6	3.3	10.0
	63	1	1.6	3.3	13.3
	64	2	3.3	6.7	20.0
	65	1	1.6	3.3	23.3
	66	1	1.6	3.3	26.7
	67	1	1.6	3.3	30.0
	68	1	1.6	3.3	33.3
	69	1	1.6	3.3	36.7
	70	1	1.6	3.3	40.0
Valid	71	2	3.3	6.7	46.7
	73	1	1.6	3.3	50.0
	74	1	1.6	3.3	53.3
	75	1	1.6	3.3	56.7
	76	2	3.3	6.7	63.3
	78	3	4.9	10.0	73.3
	80	3	4.9	10.0	83.3
	82	1	1.6	3.3	86.7
	85	1	1.6	3.3	90.0
	87	1	1.6	3.3	93.3
	91	1	1.6	3.3	96.7
	92	1	1.6	3.3	100.0
	Total	30	49.2	100.0	
Missing	System	31	50.8		
Total		61	100.0		

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Table 4.20. Perception Frequencies of Control Group of Questionnaire 2

		Frequency	Percent	Valid Percent	Cumulative Percent
	39	1	1.6	3.3	3.3
	41	1	1.6	3.3	6.7
	42	1	1.6	3.3	10.0
	43	5	8.2	16.7	26.7
	45	2	3.3	6.7	33.3
	46	1	1.6	3.3	36.7
	48	3	4.9	10.0	46.7
	49	2	3.3	6.7	53.3
	50	2	3.3	6.7	60.0
Valid	51	2	3.3	6.7	66.7
	53	2	3.3	6.7	73.3
	54	1	1.6	3.3	76.7
	55	2	3.3	6.7	83.3
	56	1	1.6	3.3	86.7
	57	1	1.6	3.3	90.0
	63	1	1.6	3.3	93.3
	70	1	1.6	3.3	96.7
	71	1	1.6	3.3	100.0
	Total	30	49.2	100.0	
Missing	System	31	50.8		
Total		61	100.0		

Perception Control Group
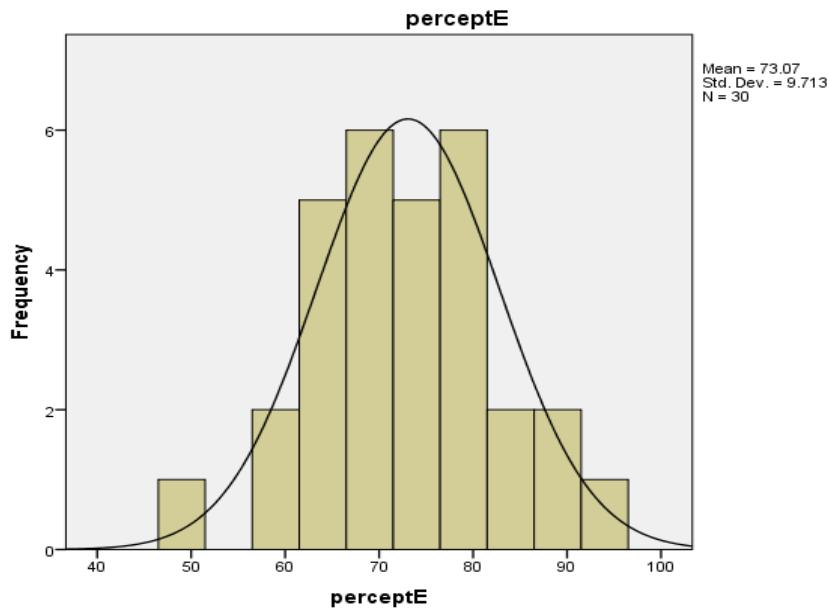
Figure 4.8. Perception Trend of Experimental Group of Questionnaire 2

The above Fig: 4.8 also gives a concise picture of the related statistics supporting the results interpreted from the statistics displayed above. A balanced bell curve with a mean figured exactly at the centre shows a very balanced situation where students' response values are mostly concentrated near the average score of the group.
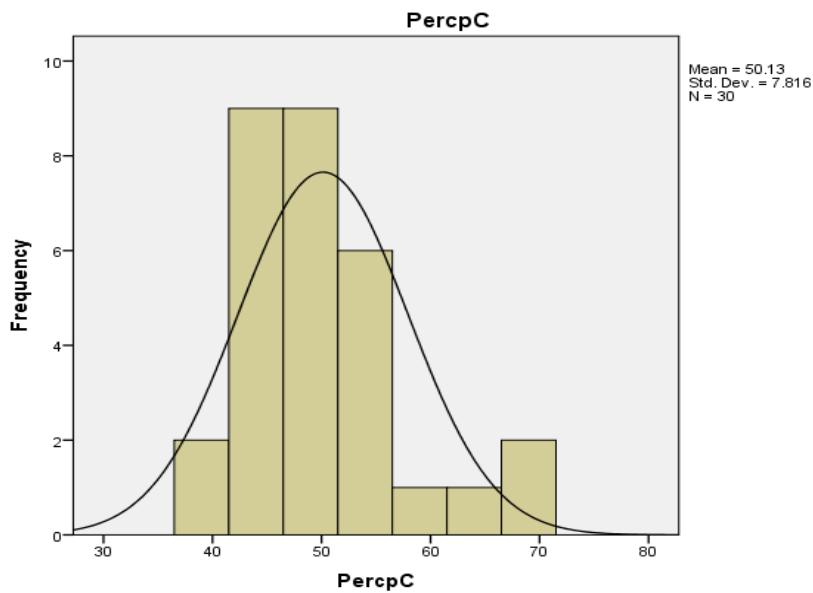
Figure 44.9 Perception trend of control group of questionnaire 2

Fig: 4.9's bell curve is not centralized and to some extent skews towards right. The control group's perception has a positive trend but a relatively smaller mean. The perception score range of control group questionnaire 2 remained 36 to 72 with an average of 50. The center of the curve presents the average or mean scores as 50.13 and the short width and long height of the curve reflects the low value of standard deviation as compared to that of the experimental group's perception. It shows the nearness of most of the scores to the mean but trending more towards the right side of the bell curve as the right tail of the curve is slightly skewed. It also confirms a positive trend in the student perception of peer tutoring in the experimental group. This interpretation also seconds the statistical figures presented in tables 4.17 to 4.20.

Pearson Product Movement Application

Correlation between the Tutors Perception on their Academic Progress and Socialization, Questionnaire 2

Table 4.21. Tutor (Experimental) Perception Correlation Questionnaire 2

Correlations

		Tutor Academic Progress	Tutor Socialization
Tutor Academic Progress	Pearson Correlation	1	.632[*]
	Sig. (2-tailed)		.050
	N	10	10
Tutor Socialization	Pearson Correlation	.632[*]	1
	Sig. (2-tailed)	.050	
	N	10	10

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

Objective 5: To draw out the relationship between the perceptions of tutors and tutees about peer tutoring role in students' academic progress and their socialization at secondary level.

H₀ 10: There is no significant relationship found between tutors' and tutees' perception on the role of peer tutoring on their academic progress and socialization.

The group (tutors) Pearson correlation (Table 4.21) statistics are tabulated to observe the relationship between the tutors' perception on the role of peer tutoring on their academic performance and socialization. The correlation value of r is .050 that shows a positive trend in the relationship which is also significant. The positive trend also shows that increase in one variable is correlated with the increase in the other variable. We can deduce from these interpretations that when the level of tutors' socialization increases, tutors' academic progress also increases significantly. This means a positive relationship between the perceptions of both variables. On the basis of this finding the null hypothesis H_{010} is rejected and its alternative accepted that a significant relationship is found between tutors' perception on the role of peer tutoring in students' academic progress as well as socialization.

Correlation between the Tutees Perception on their Academic Progress and

Socialization, Questionnaire 2

Table 4.22. Tutee (Experimental) Perception Correlation Questionnaire 2

Correlations

		Tutee Academic Progress	Tutee Socialization
Tutee Academic Progress	Pearson Correlation	1	.834**
	Sig. (2-tailed)		.000
	N	19	19
Tutee Socialization	Pearson Correlation	.834**	1
	Sig. (2-tailed)	.000	
	N	19	19

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

Objective 5: To draw out the relationship between the perceptions of tutors and tutees about peer tutoring role in students' academic progress and their socialization at secondary level.

H_0 10: There is no significant relationship is found between tutors' and tutees' perception on the role of peer tutoring on their academic progress and socialization.

The group (tutees) Pearson correlation (Table 4.22) statistics are also tabulated separately to see the relationship between the tutees' perception on the role of peer tutoring in their academic performance and socialization. The correlation value of *r* is .000 that also shows a positive trend in the relationship which is highly significant. The positive trend also shows that increase in one variable is correlated with the increase in the other variable. We can conclude from these explanations that the level of tutees' socialization increases with the increase of tutors' academic progress very significantly. This reflects a very positive relationship between the perceptions of both variables (academic progress and socialization). Therefore, the null hypothesis H_{010} is rejected

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and its alternative recognized that a significant relationship is found between tutees' perception on the role of peer tutoring in students' academic progress as well as socialization.

Table 4.23. Tutor-Tutee Perception Descriptive Statistics of Questionnaire 2

Statistics		tutorexpQ2	tuteeexpQ2
N	Valid	10	20
	Missing	51	41
Mean		72.00	73.60
Median		72.50	73.50
Std. Deviation		5.185	11.417
Variance		26.889	130.358
Range		14	43
Minimum		64	49
Maximum		78	92
Sum		720	1472

Objective 3: To estimate the effect of peer tutoring on students' perception.

H_{03}: There is no significant difference found between the perceptions of tutors and tutees about peer tutoring role in students' academic progress and their socialization at secondary level.

It is also concluded from the descriptive statistics of questionnaire 2 (Table: 4.23) that tutors' and tutees' (experimental group) same mean scores show quite similar level of effect on student perception in the experimental group. There is a wider difference in the range of scores in case of both variables like tutors show a score range of 14 between minimum and maximum, whereas that of tutees is 43. The statistical values of other measurements for the tutors and tutees of the experimental group are also displayed for questionnaire 2 as under in Table 4.24 and 4.25 respectively. The difference in the values of tutors and tutees scores on questionnaire 2 reveals no significant difference found between the perception of both and the relationship is also

positive and shows parallel increase with each other. Objective 3 and **H$_{03}$** are very relevant to the above results.

Table 4.24. Experimental Group Tutors' Perception Frequencies of

Questionnaire 2

		Frequency	Percent	Valid Percent	Cumulative Percent
		tutorexpQ2			
Valid	64	1	1.6	10.0	10.0
	66	1	1.6	10.0	20.0
	68	1	1.6	10.0	30.0
	69	1	1.6	10.0	40.0
	70	1	1.6	10.0	50.0
	75	1	1.6	10.0	60.0
	76	2	3.3	20.0	80.0
	78	2	3.3	20.0	100.0
	Total	10	16.4	100.0	
Missing	System	51	83.6		
Total		61	100.0		

Table 4.25. Experimental Group Tutors' Perception Frequencies of

Questionnaire 2

		tuteeexpQ2			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	49	1	1.6	5.0	5.0
	59	1	1.6	5.0	10.0
	61	1	1.6	5.0	15.0
	63	1	1.6	5.0	20.0
	64	1	1.6	5.0	25.0
	65	1	1.6	5.0	30.0
	67	1	1.6	5.0	35.0
	71	2	3.3	10.0	45.0
	73	1	1.6	5.0	50.0
	74	1	1.6	5.0	55.0
	78	1	1.6	5.0	60.0
	80	3	4.9	15.0	75.0
	82	1	1.6	5.0	80.0
	85	1	1.6	5.0	85.0
	87	1	1.6	5.0	90.0
	91	1	1.6	5.0	95.0
	92	1	1.6	5.0	100.0
	Total	20	32.8	100.0	
Missing	System	41	67.2		
Total		61	100.0		

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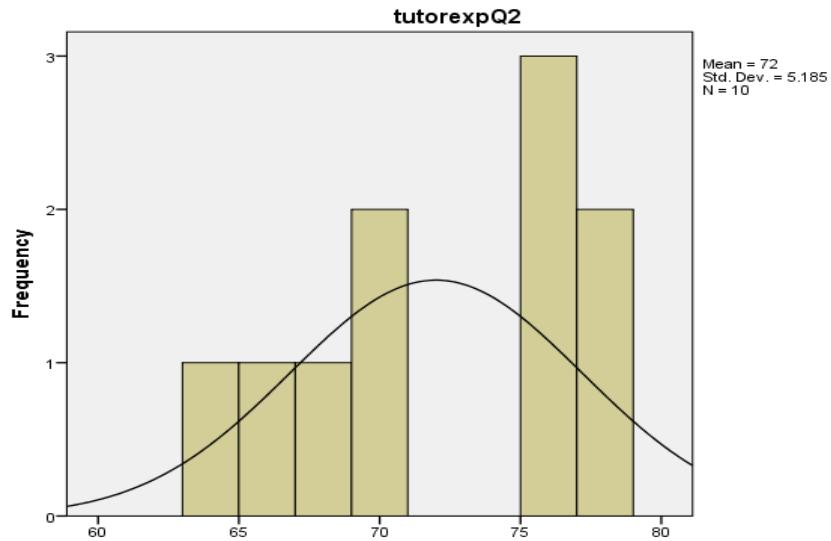
Figure 4.10. Experimental Group Tutors' Perception Frequency Trend
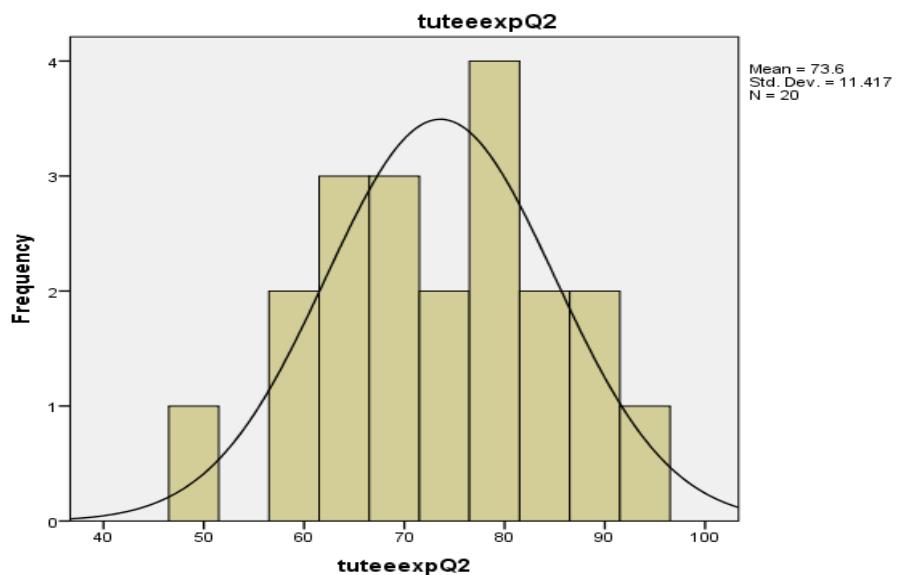
of Questionnaire 2

Figure 4.11. Experimental Group Tutees' Perception Frequency Trend of

Questionnaire 2

Figures 4.10 and 4.11 also reinforce the above result.

QUAL Data

Open-ended Responses: Questionnaire 1

A set of ten open ended items (See Appendix F) were taken as qualitative data to be interpreted and analyzed separately like that of interview. Students' responses were recorded, their themes were worked out along with their frequency and ratio in %. The findings for each of the interview item are tabulated below in relevance with objective 5. Whereas, null hypotheses 2 and 5 seem rejected as peer tutoring effect and role in students' socialization is prominent. The relative trends in the responses are also displayed in terms of histograms given as under:

Objective 4: To explore the role of peer tutoring in students' socialization at secondary level in Pakistan.

H_{02}: Peer tutoring does not significantly effect peer- students' socialization.

H_{05}: There is no significant positive role of peer tutoring in peer- students' socialization.

Item 1

How was your experience as a tutor/tutee?

Table 4.26. Open-Ended Qs 1: Experience as a Tutor

Response Variables	Statistics Frequency	Proportion
Excellent experience	8	26.6
Very Good experience	11	36.6
Good Experience	8	26.6
Satisfactory Experience	2	6.6
Disappointing Experience	1	3.6
Total	30	100
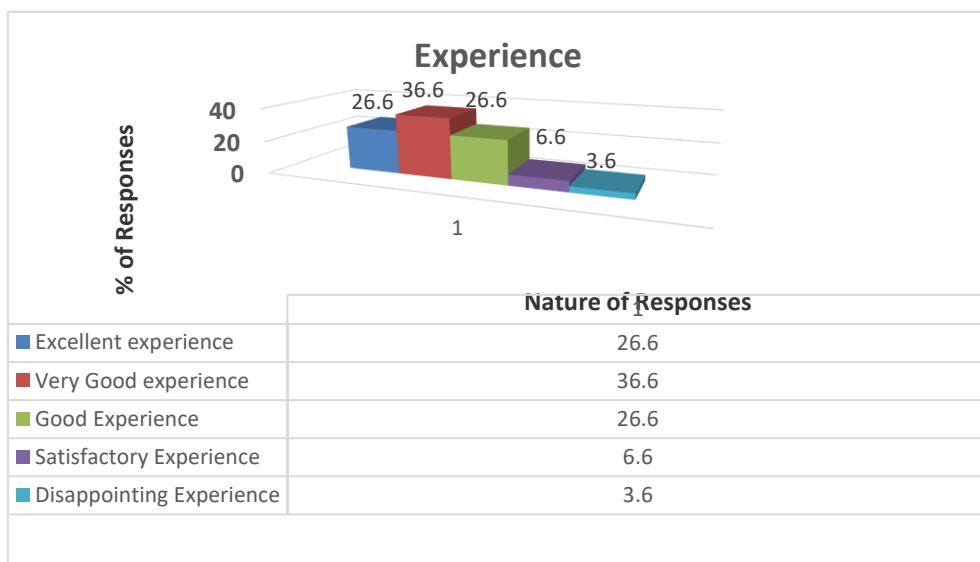
Figure 4.12. Open-Ended Q1: Experience as a Tutor

Students' responses on their open ended question 1 of the questionnaire 1 according to Table 4.26 and Figure 4.12 relate that amongst the response variables the second variable that is *very good experience* remained 36.6 % which is the highest

proportion amongst all. The lowest remained for disappointing experience that is 3.6%

amongst all. The findings reflect that under the peer tutoring program the experience of

students to play either the role of tutor or tutee remained a very good experience overall.

Item 2

How it helped you in your academics?

Table 4.27. Open-Ended Qs 2: Help in Academics

Response Variables	Statistics Frequency	Proportion
comfortable activity	4	13.3
clarity of mind	10	33.3
problem solver	6	20
increased confidence	6	20
not very useful	4	13.3
Total	30	100
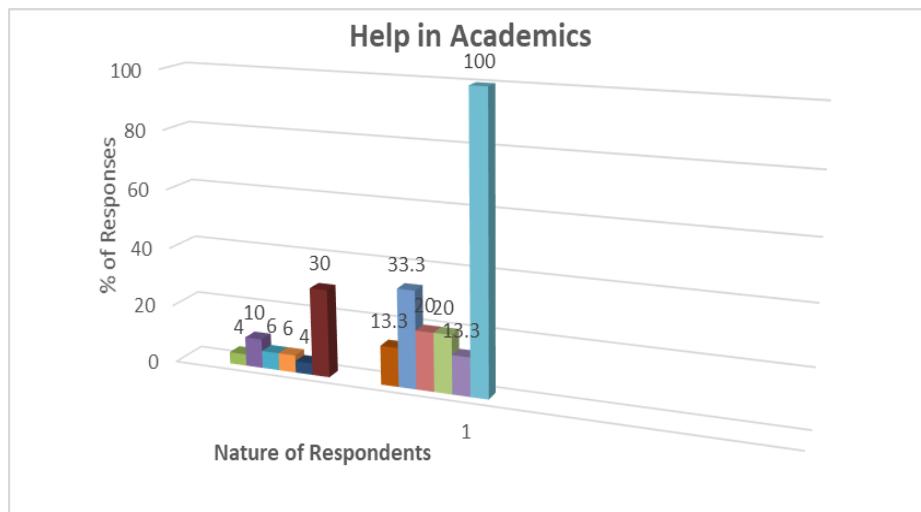
Figure 4.13. Open-Ended Q2: Help in Academics

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Students' responses on their open ended question 2 of the questionnaire 1 (Table 4.27, Figure 4.13) reflect that amongst the response variables the second variable that is *clarity of mind* remained 33.3% which is the highest proportion amongst all. The lowest remained for those who found it a *comfortable activity* that is 13.3% as well as those *not finding it much useful* were also of the same proportion as 13.3%. 20% of the student responses were in favor of peer tutoring as a source of *confidence building* as well as served as a *problem solver* for both of the tutors and tutees. The findings reflect that under the peer tutoring program the students found it helpful in academics by giving them an opportunity to get the clarity of mind which helped them improve their academics.

Item 3

How peer tutoring added up to your academic experience?

Table 4.28. Open-ended Qs 3: Addition of Academic Performance

Response Variables	Statistics Frequency	Proportion
	2	6.66
Not very comfortable		
Clarity of mind	11	36.66
Problem solver	13	43.33
Increased confidence	1	3.33
Not very useful	3	10
Total	30	100

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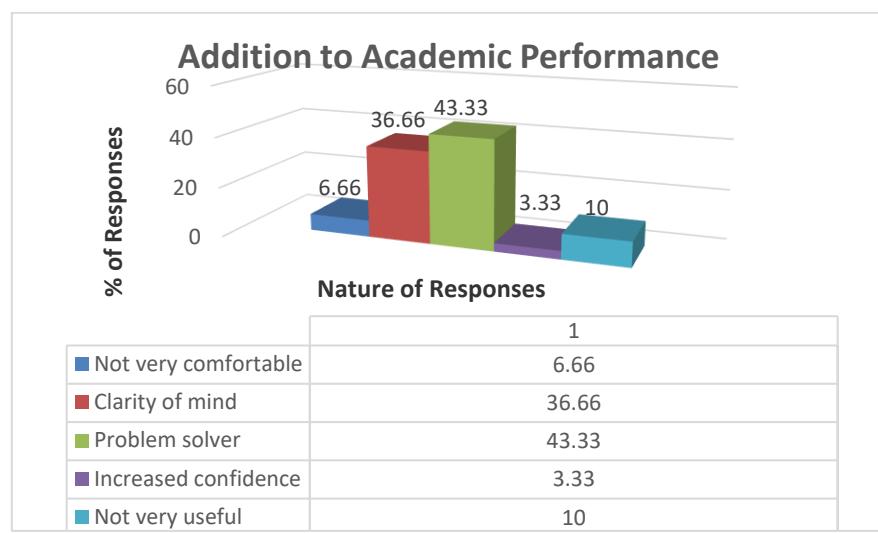
Figure 4.14 Open-ended Q 3: addition to academic performance

Students' responses on their open ended question 3 of the questionnaire 1 (Table 4.28 and Figure 4.14) relate that amongst the response variables the third variable that is problem solver remained 43.33% which is the highest proportion amongst all. The second variable with 36.66% is to play for the *clarity of mind*, 6.66% of the responses were *not very comfortable*, 3.33 took it as a source of *increasing confidence*, and 10 % of the respondents found it *not very useful*. The findings show that the major role of the peer tutoring program for the involved tutors and tutees was a source of solving their problems related to academics as well as socialization.

Item 4

How it was helpful in improving your performance in class?

Table 4.29. Open-ended Qs 4: Helpful in Class Performance

Response Variables Frequency	Statistics	Proportion
Not very comfortable	0	0
Clarity of mind	2	6.6
Problem solver	12	40
Increased confidence	11	36.6
Not very useful	5	16.6
Total	30	100
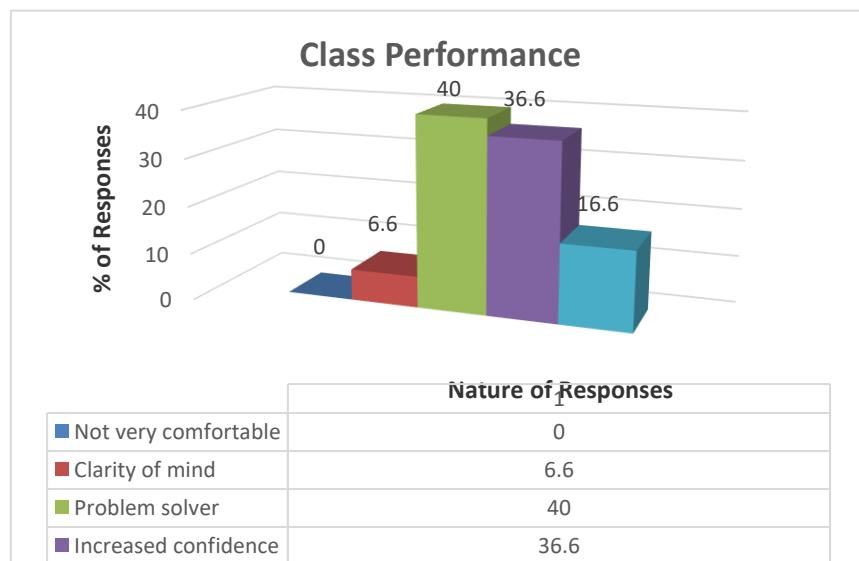
Figure 4.15. Open-Ended Q 4: Helpful in Improving Class Performance

Students' responses on their open ended question 4 of the questionnaire 1 (Table 4.29 and Figure 4.15) relate that amongst the response variables the third variable that is problem solver remained 43.33% which is the highest proportion amongst all. The

second variable with 36.66% is to play for the *clarity of mind*, 6.66% of the responses were *not very comfortable*, 3.33 took it as a source of *increasing confidence*, and 10 % of the respondents found it *not very useful*. The findings show that the major role of the peer tutoring program for the involved tutors and tutees was a source of solving their problems related to academics as well as socialization.

Item 5

Explain your relationship with your tutor.

Table 4.30. Open-ended Qs 5: Relationship with Peers

Response Variables	Statistics Frequency	Proportion
comfortable activity	9	30
Clarity of mind	0	0
Problem solver	4	13.3
Improved relations	14	46.6
Not very useful	3	10
Total	30	100

Students' responses on their open ended question 5 of the questionnaire 1 (Table 4.30 and Figure 4.16) reflect that amongst the response variables the third variable that is *improved relations* remained 46.6% which is the highest proportion amongst all. The relationship between the tutor and tutees remained not very comfortable to about 30%. The responses in favor of peer tutoring as problem solver are 13.3% whereas 10% of the respondents found it not very useful. These findings show that the major role of the peer tutoring program for the involved tutors and tutees was to *improve their*

relationship which helped them work in a positive relationship developing better socialization as well as supporting academics.
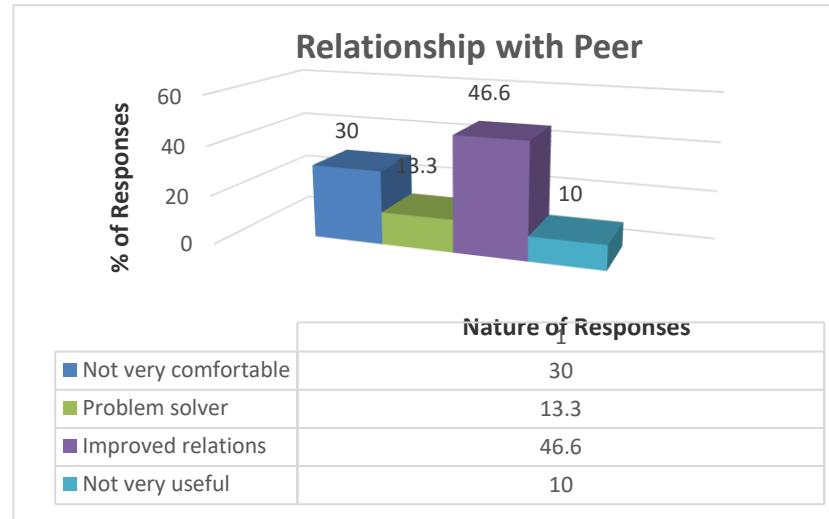
Figure 4.16. Open-ended Q5: Improvement in relationship with peers

Item 6

How you helped your partner through peer tutoring?

Table 4.31. Open-ended Qs 6: Helping Others

| Statistics Frequency	Statistics Frequency	Proportion
Supportive	9	
		30
Clarity of mind	4	
		13.3
Problem solver	8	
		26.6
Worked hard	7	
		23.3
Not very useful	2	
		6.6
Total	30	100

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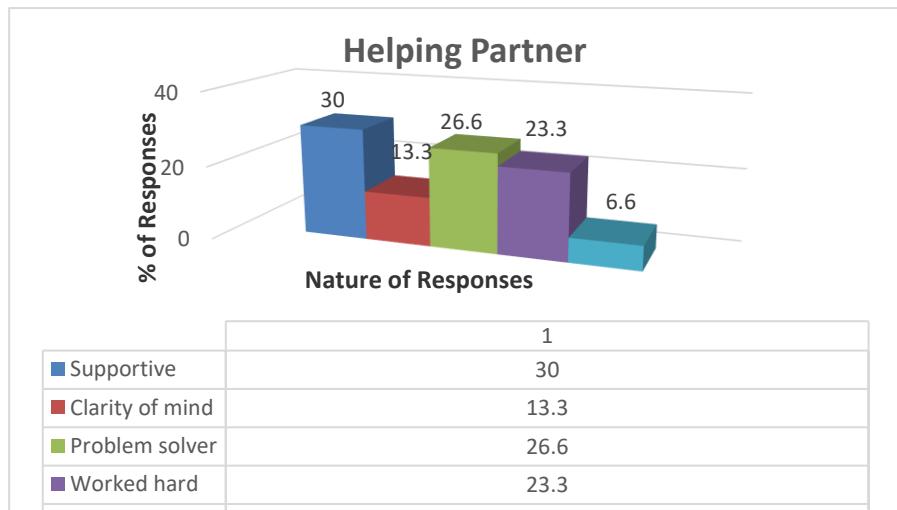
Figure 4.17. Open-Ended Q6: Helping Others

Students' responses on their open ended question 6 of the questionnaire 1 (Table 4.31 and Figure 4.17) reflect that amongst the response variables the third variable that is *problem solver* remained 26.6% which is the highest proportion amongst all. The help they rendered each other in peer tutoring program in terms of developing a habit of *working hard* remained 23.3%, developing *clarity of mind* as 13.3%, and they were a great *support* for each other for about 30% of the overall proportion. Only 6.6% of the student responses were of the view that it was *not very useful*. These findings reflect that the major role of tutors and tutees in the peer tutoring program remained that of a *problem solver* other than in any other capacity like *working hard* which helped them work in a positive relationship developing better socialization as well as supporting academics.

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Item 7

How you helped yourself through it?

Table 4.32. Open-ended Qs 7: Self-help.

Response Variable	Statistics Frequency	Proportion
Supportive		
	12	40
Clarity of mind		
	3	10
Problem solver		
	3	10
Worked hard		
	8	26.6
Not very useful		
	4	23.3
Total		
	30	100

Self Help

■ Supportive	40
■ Clarity of mind	10
■ Problem solver	10
■ Worked hard	26.6
■ Not very useful	23.3
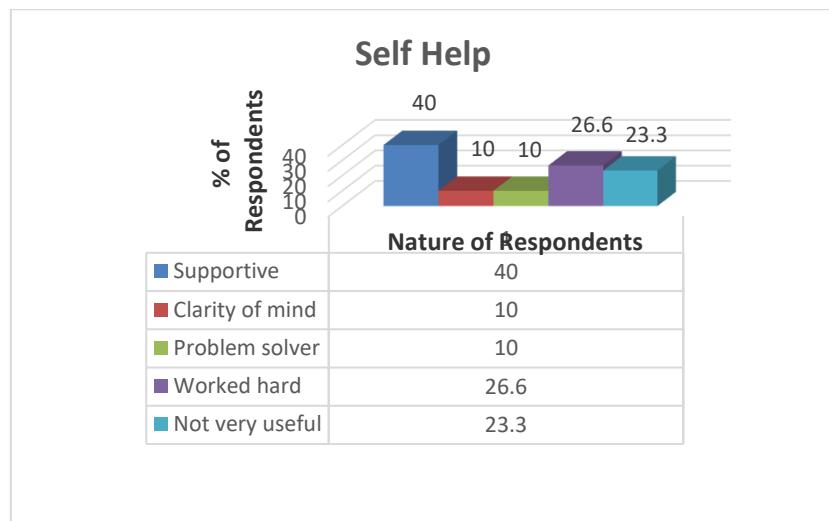
Figure 4.18. Open-Ended Q7: Self-Help

Students' responses on their open ended question 7 of the questionnaire 1 (Table 4.32 and Figure 4.18) reflect that amongst the response variables the first variable that is *supportive* remained 40% as the highest proportion amongst all. It helped them in developing their own *clarity of mind* to about 10%, 10% helping them in *solving their problems*, 26.6% developed a habit to *work hard*, and 23.3% did find it *not very useful*.

Therefore, these findings reflect that peer tutoring remained *a great support* to help oneself in getting more socialized as well as helped them by supporting academic progress.

Item 8

What was the core factor in your tutor-tutee relationship which made you successful in your aim?

Table 4.33. Open-ended Qs 8: Core Factor in Tutor-Tutee Relationship

Response Variables Frequency	Statistics	Proportion
Cooperative	20	66.6
Committed	2	6.6
Motivated	2	6.6
Worked hard	5	16.6
Not very useful	1	3.3
Total	30	100

Students' responses on their open ended question 8 of the questionnaire 1 (Table 4.33 and Figure 4.19) reflect that amongst the response variables the first variable that is role of the peer to be *cooperative* remained 66.6% as the highest proportion amongst all. Other than this the factors helping tutor-tutee relationship such as being *committed* reached at 6.6%, being *motivated* also as 6.6%, being helpful to *work hard* as 16.6%, and only 3.3% of responses remained *not very useful*. These findings reflect that the major contribution of tutors and tutees in the peer tutoring program was their *cooperation* for each other which helped them work in a positive relationship developing better socialization as well as supporting academics.
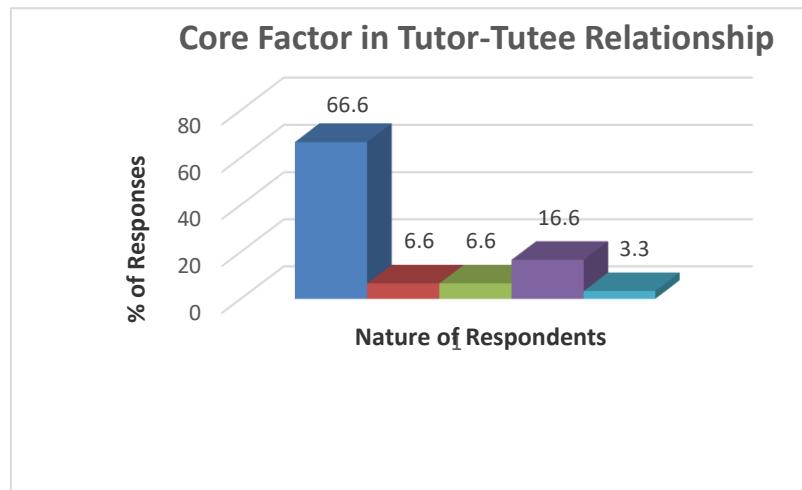
Figure 4.19. Open-Ended Q 8: Core Factor in Tutor-Tutee

Relationship

Item 9

What was the best thing with your partner that helped you improve your academics?

Table 4.34. Open-ended Qs 9: The Best Trait in Partner Helping In Academic Improvement

Responses Variables Frequency	Statistics	Proportion
Cooperative	12	
		40
Committed	6	
		20
Motivated	3	
		10
Worked hard	7	
		23.3
Not very useful	2	
		6.6
Total	30	100

The Best Trait in Partner Helping Improvement

	Nature of Responses
■ Cooperative	40
■ Committed	20
■ Motivated	10
■ Worked hard	23.3
■ Not very useful	6.6
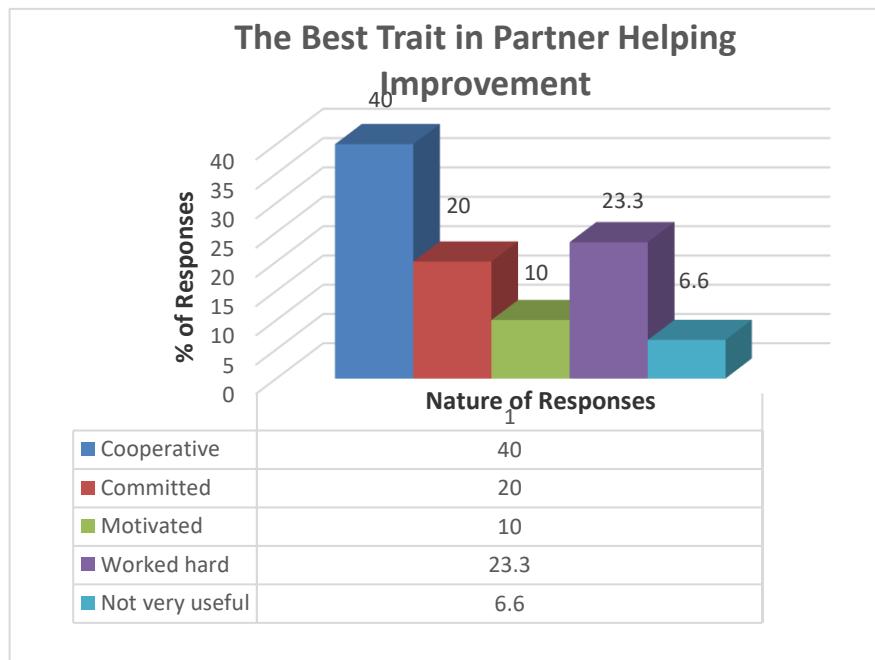
Figure 4.20. Open-Ended Q 9: The Best Trait in Partner

Helping in Academic Improvement

Students' responses on their open ended question 9 of the questionnaire 1 (Table 4.34 and Figure 4.20) reflect that amongst the response variables the first variable is *cooperative* that remained 40% which is the highest proportion amongst all. The rest of variables like; *committed* received 20% support, *motivated* as 10%, *work hard* as 23.3%, and only 6.6% of the responses remained *not very useful*. These findings show that the best trait in partner helping progress was that he remained *cooperative* that helped the cause of his tutoring or tutee-ship. It helped them work in a positive setting as a result developing better socialization as well as improving academics.

Item 10

Any suggestion for future?

Table 4.35. Open-ended Qs 10: Future Suggestions

| Response Variables	Statistics Frequency	Proportion
Motivation Session	3	10
Formal Planning	3	10
Made compulsory	19	63.3
Students willingness needed	1	3.3
should be paid	1	3.3
Not relevant	3	10
Total	30	100
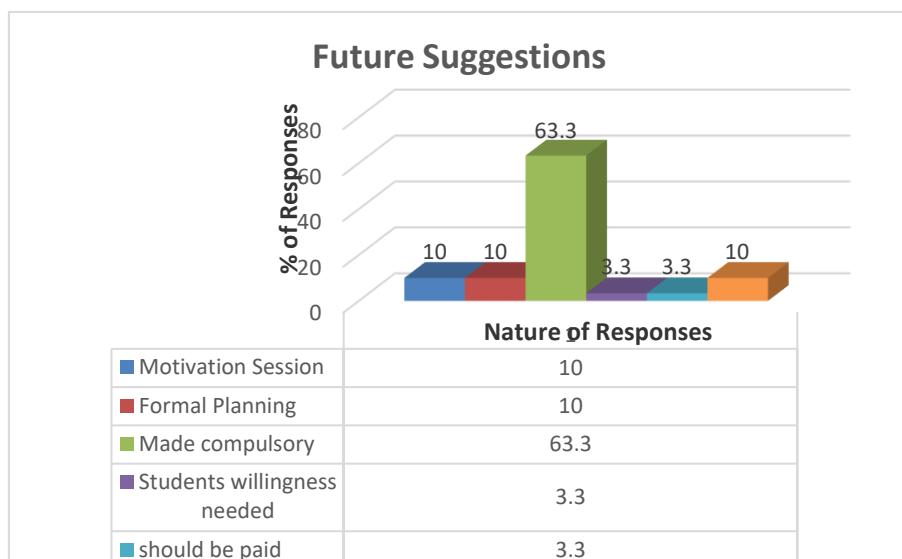
Figure 4.21. Open-Ended Q 10: Future Suggestion

Students' responses on their open ended question 10 of the questionnaire 1 (Table 4.35 and Figure 4.21) reflect that amongst the response variables the third variable that is *made compulsory* remained 63.6% being the highest proportion amongst all. Other variables received response weightage as; *motivation session* should be

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arranged before its start as 10%, more *formal planning* needed also 10%, 10% found

it not relevant, whereas 3.3% was the response rate for the two variables of *students'*

willingness needed and *should be paid*. The findings results appear to be that most of

the participants of the peer tutoring program as the tutors and tutees wanted peer

tutoring *to be a compulsory part* of school teaching which significantly helped them

work in a positive role and relationship further developing better socialization as well

as supporting academics.

Interview

The interview (See Appendix I) was organized for covering the deeper

information on the role of peer tutoring on student socialization to support the evidence

collected from other sources of data collection. It was also incorporated in the data

collection procedure in order to carry a more reliable analysis. A structured interview

was designed containing total number of ten open-ended items. The open-ended items

of the interview gave qualitative research data covering QUAL part of the model

serving both descriptive and interpretative purposes like those of Questionnaire 1.

How was it helpful in improving your interaction in class?

Table 4.36. Interview Item 1: Helpful in Improving Class Interaction

Response Variables	Tutors' Response Statistics		Tutees' Response Statistics	
	Statistics Frequency	Proportion	Statistics Frequency	Proportion
Strong relations	3	30	5	25
Social network increased	2	20	1	5
Developed socializing skills	4	40	11	55
Positive communication	1	10	2	10
Not useful	0	0	1	5
Total	10	100	20	100
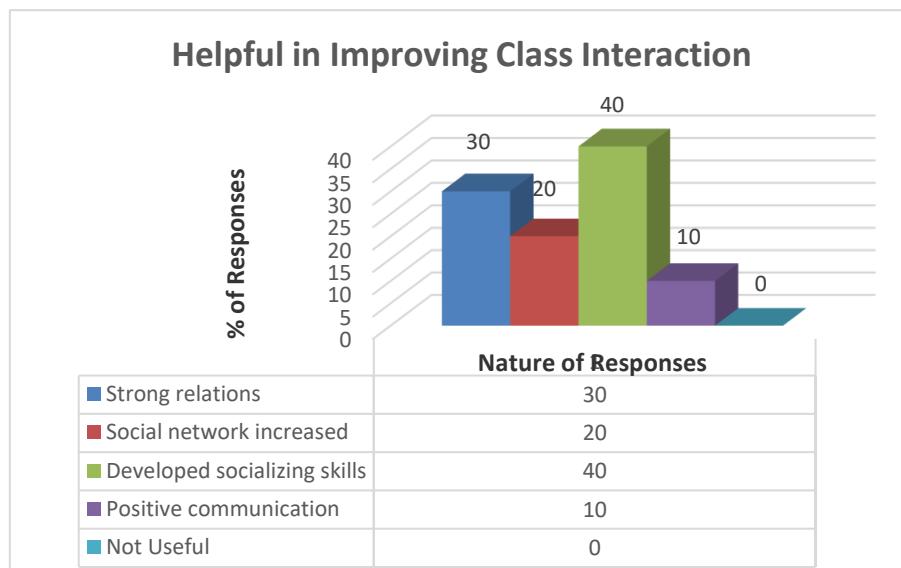
Figure 4.22. Item 1 tutors' response

Tutors' responses on their interview item 1 (Table 4.36 and Figure 4.22) reflect that amongst the response variables, the variable *developed socializing skills* remained 40% as the strongest response amongst all. The rest of variables like; *strong relations* received 30%, *social network increased* got 20%, positive communication as 10%, and not useful remained 0%. These findings show that tutors found peer tutoring as the

best source of *developing socializing skills* amongst all other traits which could be helpful in improving class interaction.
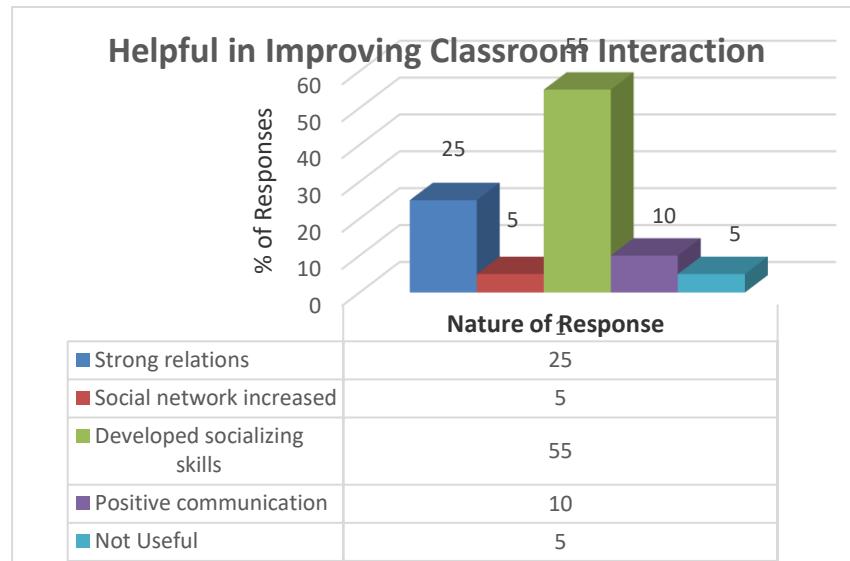
Figure 4.23. Item 1 Tutees' Response

Tutees' responses on their interview item 1 (Table 4.36 and Figure 4.23) show 55% for the *developed socializing skills* as the strongest response amongst all, *strong relations* received 25%, positive communication 10%, and 5% each of the two variables were not very useful and social network increased. These findings show that tutees also found peer tutoring as the best source of *developing socializing skills* amongst all other traits which could be helpful in improving class interaction.

How peer tutoring helped you in your social interactions?

Table 4.37. Interview Item 2: Peer Tutoring Help in Social Interaction

Response Variables	Tutors' Response Statistics		Tutees' Response Statistics	
	Statistics Frequency	Proportion	Statistics Frequency	Proportion
Interaction improved	2	20	2	10
Social Behavior improved	6	60	9	45
Relations improved	1	10	4	20
Better communication	1	10	4	20
Not useful	0	0	1	5
Total	10	100	20	100
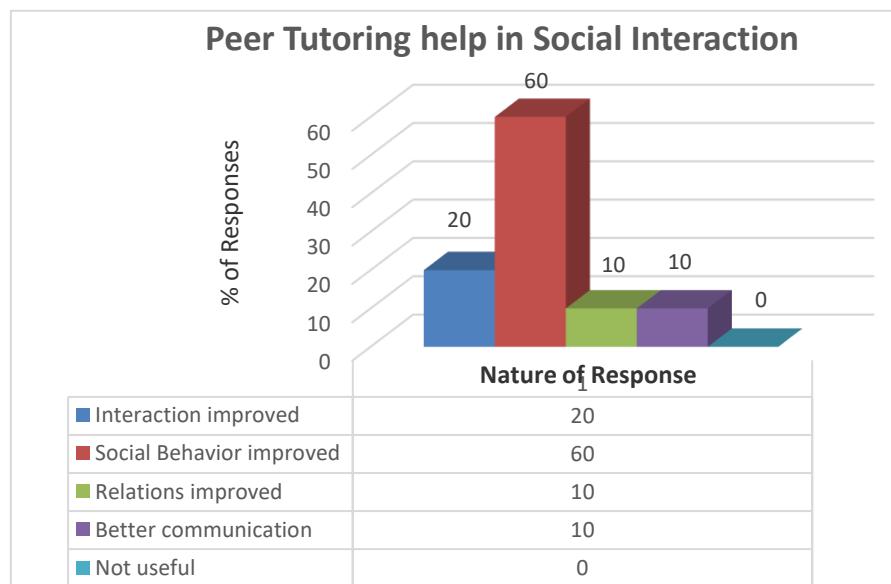
Figure 4.24. Item 2 Tutors' Response

Tutors' responses on their interview item 2 (Table 4.37 and Figure 4.24) show that amongst the response variables, the variable *social behaviour improved* remained 60% as the strongest response amongst all, interaction improved to about 20%, *relations improved* to 10% as well as better communication, whereas none of the tutor found it *not useful*. These findings reveal that tutors found peer tutoring helping in social interaction most by *improving social behaviour* than all of the other socializing factors.

Peer Tutoring Help in Social Interaction

Nature of Responses	
■ Interaction improved	10
■ Social Behavior improved	45
■ Relations improved	20
■ Better communication	20
■ Not useful	5
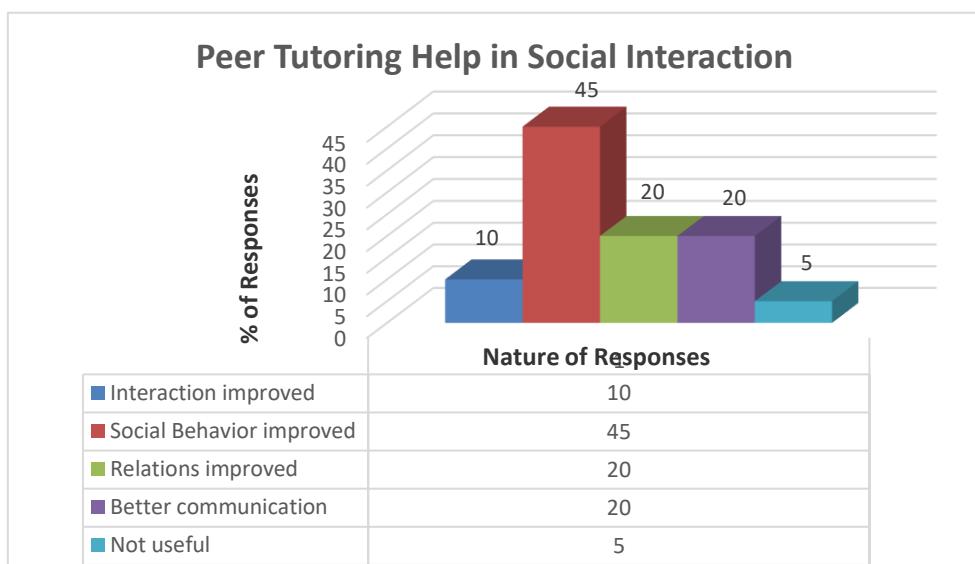
Figure 4.25. Item 2 Tutees' Response

Tutees' responses on their interview question 2 (Table 4.37 and Figure 4.25) show 45% for the *social behavior improved* as the strongest response amongst all, *relations improved and better communication* received 20%, interaction improved 10%, and 5% found it *not very useful* in socializing. These findings show that tutees found peer tutoring helped the tutees in socializing by *improving their social behavior* the most than all other socializing factors.

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Item 3

Which of your personality interactions were removed /worked out through your role as tutor/tutee?

Table 4.38. Interview Item 3: Role of Partner in the Removal of Personality Weakness

Response Variables	Tutors' Response Statistics		Tutees' Response Statistics	
	Statistics Frequency	Proportion	Statistics Frequency	Proportion
Confusion	2	20	6	30
Lack of confidence	6	60	12	60
Lack of interaction	1	10	2	10
No response	1	10	0	0
Total	10	100	20	100

Personality Weakness Removed

■ Confusion	20
■ Lack of confidence	60
■ Lack of interaction	10
■ No response	10
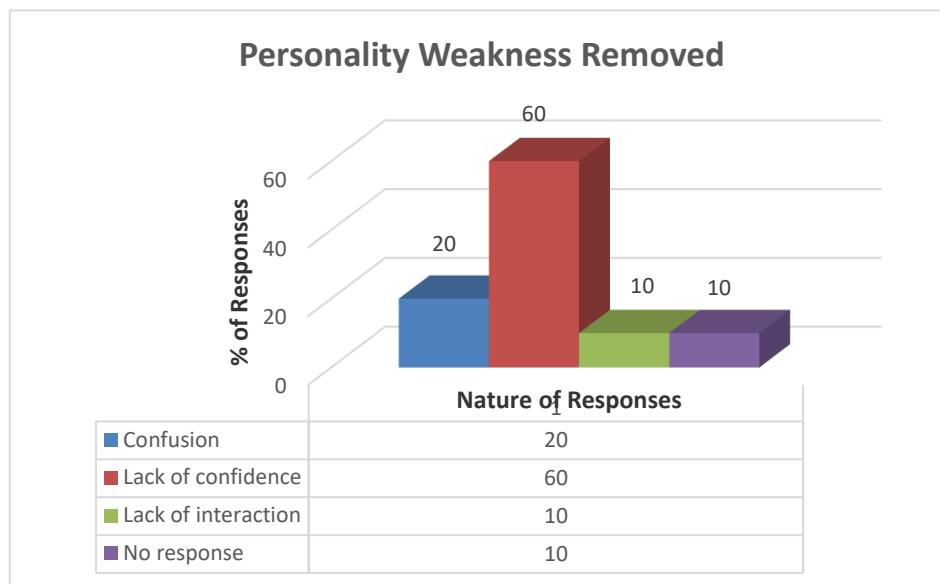
Figure 4.26. Item 3 Tutors' Response

Tutors' responses on their interview question 3 (Table 4.38 and Figure 4.26) show that amongst the response variables, the variable *lack of confidence* remained 60% as the strongest response amongst all, *confusion* improved to about 20%, lack *of interaction* to 10%. 10% did not give any response. These findings reveal that tutors found peer tutoring helping in social interaction most by reducing their *lack of confidence* than all of the other socializing factors.

Personality Weakness removed

	% of Response
■ Confusion	30
■ Lack of confidence	60
■ Lack of interaction	10
■ No response	0
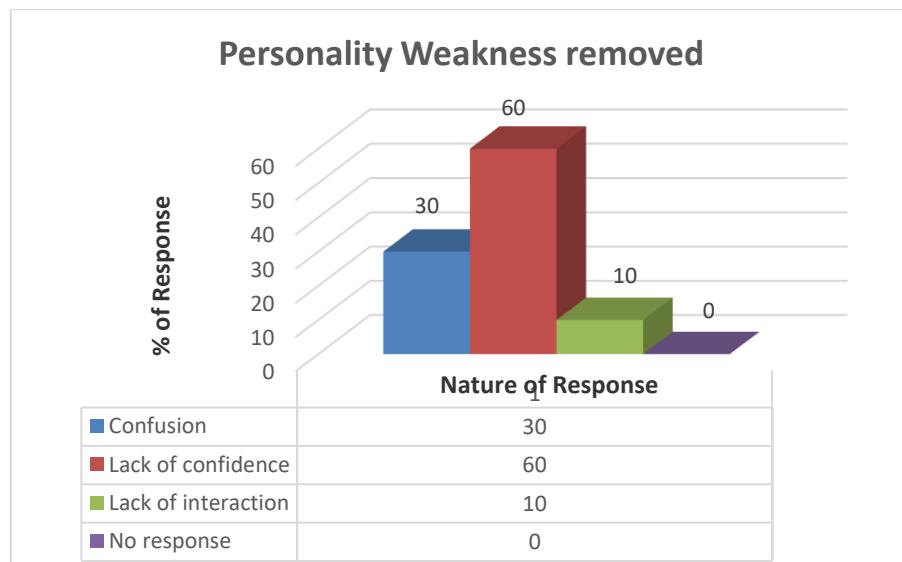
Figure 4.27. Item 3 Tutees' Response

Tutees' responses on their interview question 3 (Table 4.38 and Figure 4.27) show 60% for the *lack of confidence* as the strongest response amongst all, confusion 30%, and *lack of interaction* 10%. These findings show that tutees found peer tutoring helped the tutees in socializing by improving their *confidence* the most than all other socializing factors.

How it was helpful in improving your performance in class?

Table 4.39. Interview Item 4: Positive- Negative Traits helping in The Improvement of Class Performance

Response Variables	Tutors' Response Statistics		Tutees' Response Statistics	
	Statistics Frequency	Proportion	Statistics Frequency	Proportion
Confidence	4	40	6	30
Socialization	2	20	12	60
Passion of social work	2	20	1	5
No Response	2	20	1	5
Total	10	100	20	100
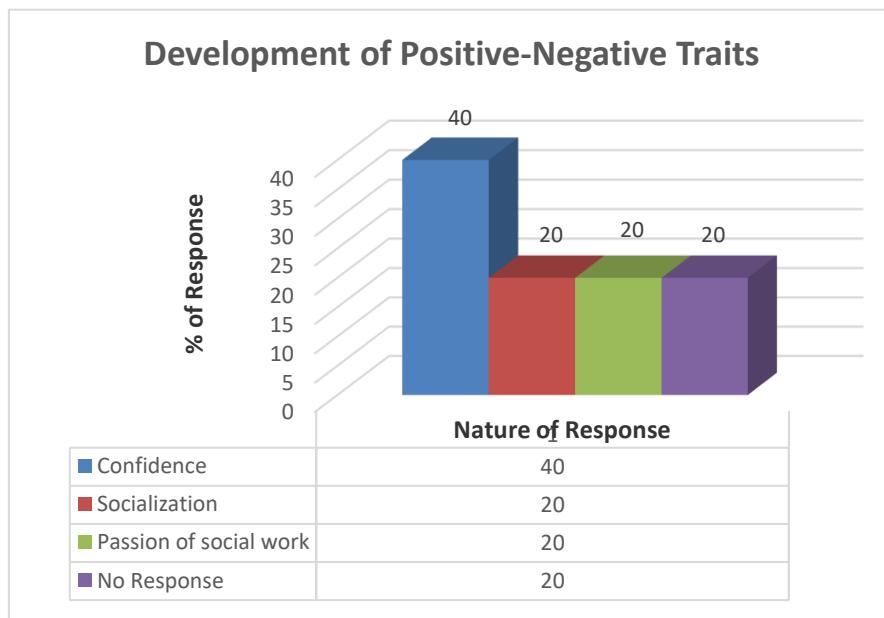
Figure 4.28. Item 4 Tutors' Response

Tutors' responses on their interview question 4 (Table 4.39 and Figure 4.28) show that the variable *confidence* remained 40% appearing as the strongest response amongst all, socialization and passion of social work both remained 20% whereas about 20% didn't respond. These findings reveal that tutors found peer tutoring helping in social interaction most by improving their *confidence* the most than all of the other socializing factors.

Development of Positive-Negative Traits

|	% of Response
Confidence	30
Socialization	60
Passion of social work	5
No Response	5

Nature of Response
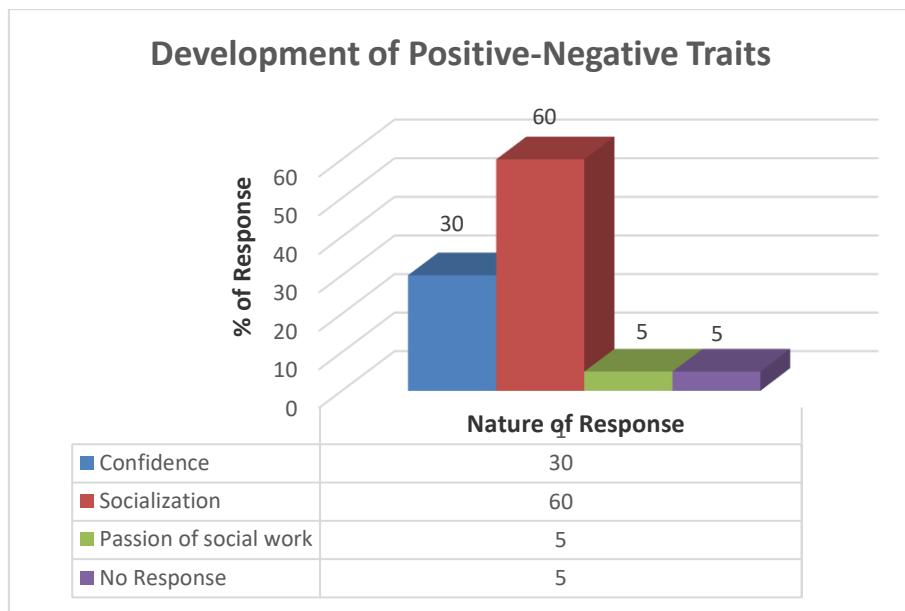
Figure 4.29. Item 4 Tutees' Response

Tutees' responses on their interview question 4 (Table 4.39 and Figure 4.29) show 60% for the *socialization* as the strongest response amongst all, *confidence* as 30%, *passion of social work* as 5%, whereas 5% didn't give any response. These findings reveal that tutees found peer tutoring helped the tutees in socializing by improving their *social behavior* the most than all other socializing factors.

Item 5

What was the core factors in your tutor-tutee relationship which made you successful in accomplishing your aim?

Table 4.40. Interview Item 5: Core Factor in the Tutor- Tutee Relationship

Leading to Success

| Response Variables	Tutors' Response Statistics		Tutees' Response Statistics	
	Statistics Frequency	Proportion	Statistics Frequency	Proportion
Friendly relationship	4	40	10	50
Mutual understanding	3	30	7	35
strong communication	1	10	3	15
Self-realization	0	0	0	0
Motivation	2	20	0	0
Total	10	100	20	100
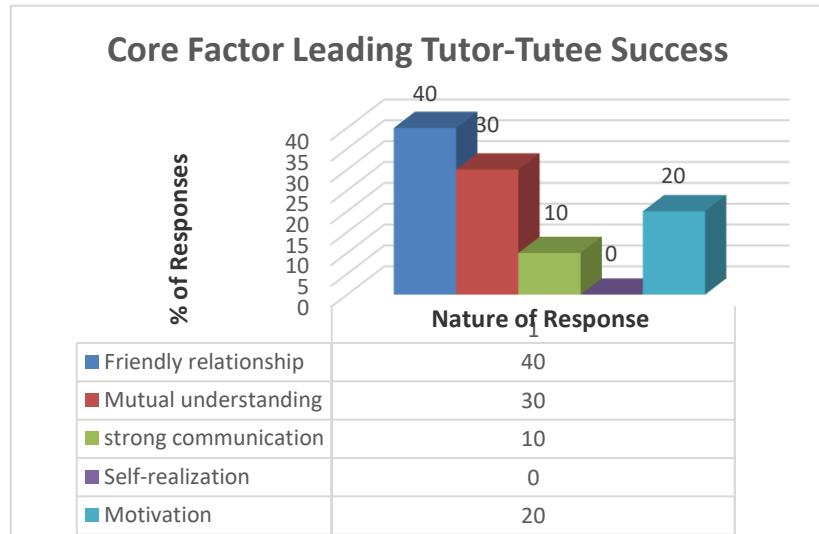
Figure 4.30. Item 5 Tutors' Response

Tutors' responses on their interview question 5 (Table 4.40 and Figure 4.30) show that amongst the response variables, the most supporting variable is *friendly relations which* remained 40%, *mutual understanding* to about 20%, motivation *to 20%*, whereas none of the tutor found self-realization playing any role. These findings reveal that tutors found peer tutoring helping in social interaction most by improving *friendly relations* than all of the other socializing factors.
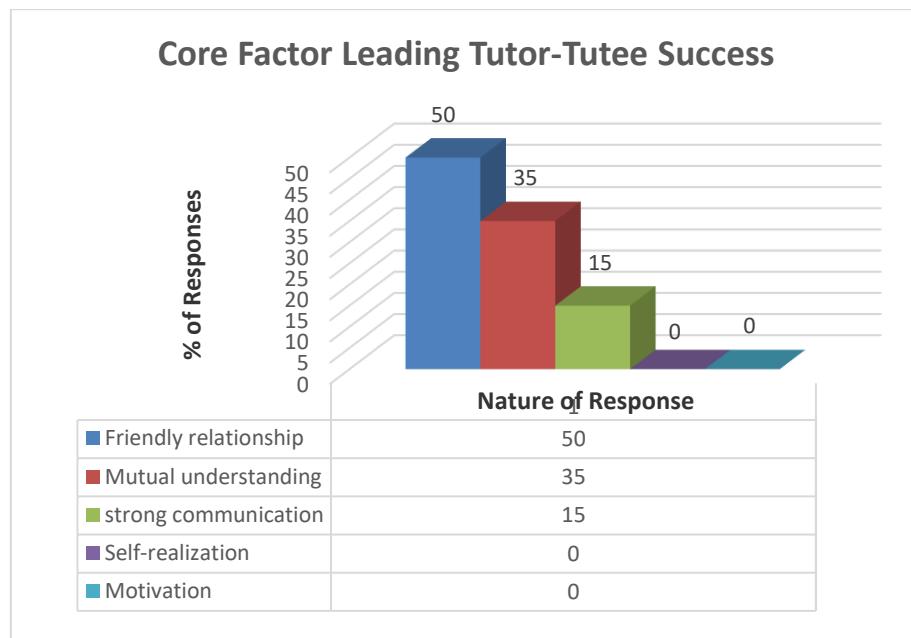

Figure 4.31. Item 5 Tutees' Response

Tutees' responses on their interview question 5 (Table 4.40 and Figure 4.31) show 50% for the *friendly relations* as the strongest response amongst all, *mutual understanding* received 35%, *strong communication* improved to 15%, self-realization and motivation both remained 0%. These findings show that tutees found peer tutoring helped the tutees in socializing by improving their friendly relations the most amongst the social behaviors.

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Item 6

What was the best thing with your partner that helped you improve yourself as a class mate?

Table 4.41. Interview Item 6: Best Trait Helping Partner's Improvement

| Response Variables	Tutors' Response Statistics		Tutees' Response Statistics	
	Statistics Frequency	Proportion	Statistics Frequency	Proportion
Good listener	2	20	1	5
Willingness	2	20	3	15
Good comprehension	1	10	0	0
Cooperative	5	50	14	70
Not useful	0	0	2	10
Total	10	100	20	100
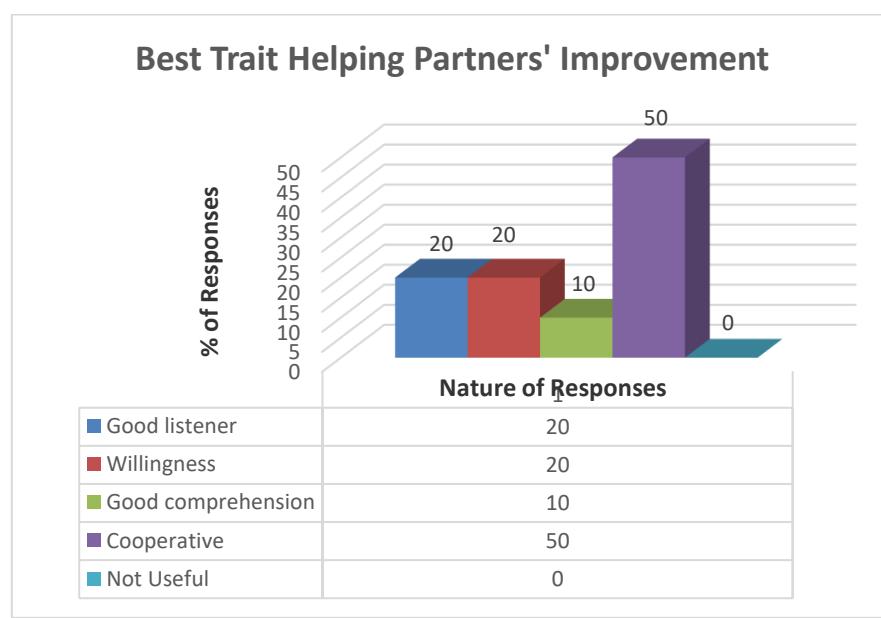
Figure 4.32. Item 6 Tutors' Response

Tutors' responses on their interview question 6 (Table 4.41 and Figure 4.32) show that amongst the response variables, the variable *cooperative* remained 50% as the

strongest response amongst all, *good listener* and *willingness* improved to about 20%, *good comprehension* to 10%, whereas none of the tutor found it *not useful*. These findings reveal that tutors found peer tutoring helping in social interaction most by being cooperative amongst other social behaviours.

Best Trait Helping Partners' Improvement

|	Nature of Responses
■ Good listener	5
■ Willingness	15
■ Good comprehension	0
■ Cooperative	70
■ Not Useful	10
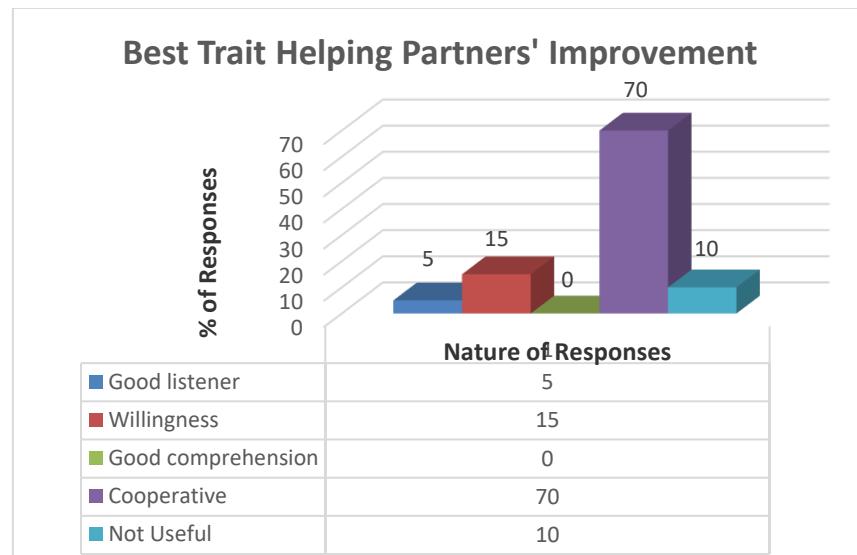
Figure 4.33. Item 6 Tutees' Response

Tutees' responses on their interview question 6 (Table 4.41 and Figure 4.33) show 70% for the cooperative as the strongest area in Figure 4.33. Item 6 tutees' responses response amongst all, willingness received 15%, 10% found it not useful, 5% found good listeners as a supporting attribute in socializing. These findings show that tutees found peer tutoring helped the tutees in socializing by improving their cooperative response the most in their social behaviour than all other socializing factors.

Was there any sense of achievement with you out of this experience as a tutor/

tutee?

Table 4.42. Interview Item 7: Sense of Achievement Gained as a Result of Peer

Tutoring Experience

Response Variables	Tutors' Response Statistics		Tutees' Response Statistics	
	Statistics Frequency	Proportion	Statistics Frequency	Proportion
Developed willingness to work hard	1	10	10	50
Helping others is great	4	40	0	0
Changing others positively is great	3	30	0	0
Self-socialized	1	10	9	45
No Response	1	10	1	5
Not useful	0	0	0	0
Total	10	100	20	100

Sense of Achievement?

■ Developed willingness to workhard	10
■ Helping others is great	40
■ Changing others positively is great	30
■ Self-socialized	10
■ No Response	10
■ Not useful	0
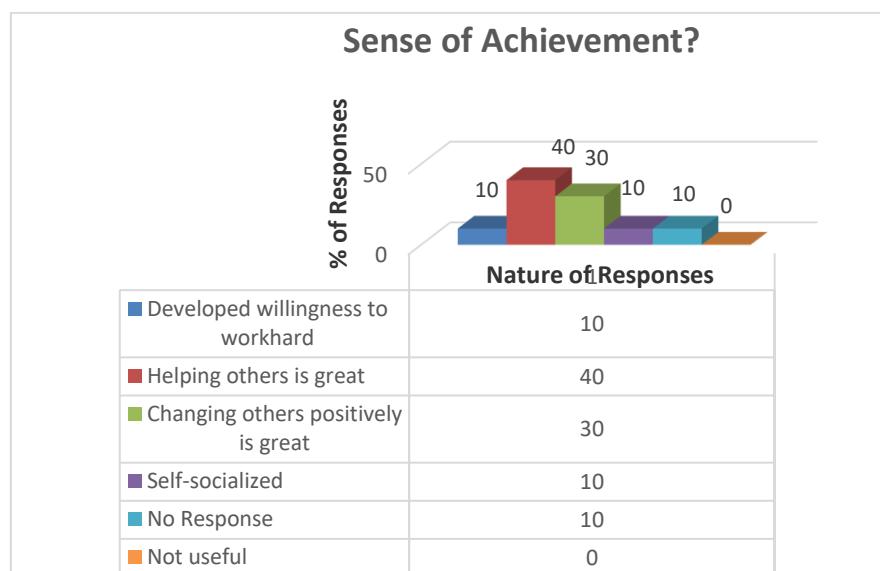
Figure 4.34. Item 7 Tutors' Response

Tutors' responses on their interview question 7 (Table 4.42 and Figure 4.34) reveal that amongst the response variables, the variable *helping others is great* remained 40% as the strongest response amongst all, *changing others positively is great* to about 30%, *developing willingness to work hard* to about 10% as well as *self-socialized*, whereas 10% did not give any response. These findings reveal that tutors found peer tutoring helping in social interaction most by improving the social behaviour of *helping others* than all of the other socializing factors.
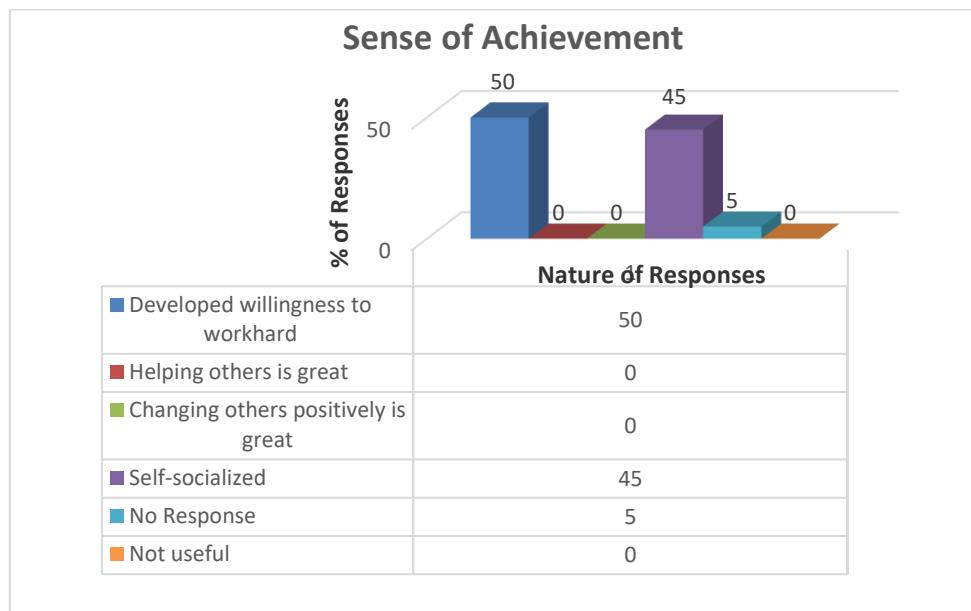
Figure 4.35. Item 7 Tutees' Response

Tutees' responses on their interview question 7 (Table 4.42 and Figure 4.35) show that *developing willingness* remained about 50% as the strongest response amongst all, self-socialized received 45%, 5% did not respond, whereas the rest received no response at all. These findings show that tutees found peer tutoring helped the tutees in socializing by improving their social behavior of *developing willingness* the most than all other socializing factors.

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Item 8

How has this experience made you earn some good feeling?

Table 4.43. Interview Item 8: Good Feelings were earned as a Result of Peer Tutoring Experience?

Response Variables	Tutors' Response Statistics		Tutees' Response Statistics	
	Statistics Frequency	Proportion	Statistics Frequency	Proportion
Helping others	5	50	4	20
Serious attitude to life	1	10	7	35
Satisfaction	2	20	4	20
Positivity	2	20	5	25
Total	10	100	20	100

How Good Feelings Earned

|	
■ Helping others	50
■ Serious attitude to life	10
■ satisfaction	20
■ Positivity	20
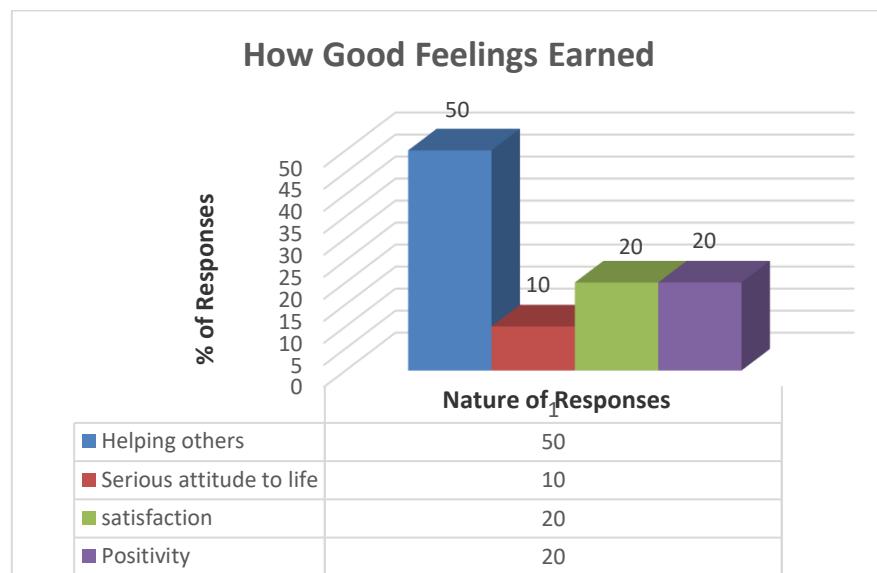
Figure 4.36. Item 8 Tutors' Response

Tutors' responses on their interview question 8 (Table 4.43 and Figure 4.36) show that amongst the response variables *helping others* remained 50% as the strongest response amongst all, satisfaction and positivity both remained 20%, serious attitude to life got 10%. These findings disclose that tutors found peer tutoring helping in social interaction most by improving social behaviour of *helping others* the most than all other socializing factors.

How Good Feeling Earned

	Nature of Responses
■ Helping others	20
■ Serious attitude to life	35
■ satisfaction	20
■ Positivity	25
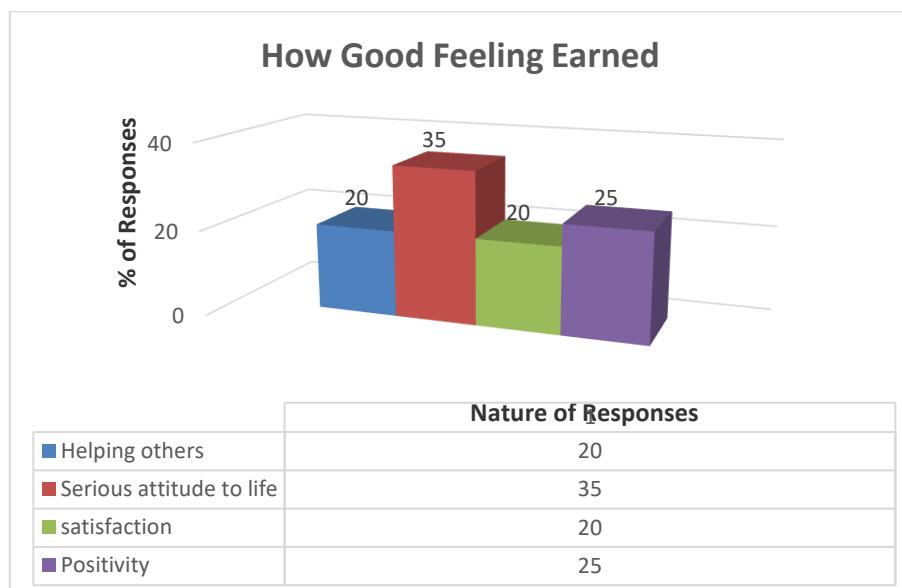
Figure 4.37. Item 8 Tutees' Response

Tutees' responses on their interview question 8 (Table 4.43 and Figure 4.37) illustrate that 35% improvement was due to the development of the serious attitude to life, 20% due to helping others as well as satisfaction, whereas it was 25% due to their positivity. These findings indicate that tutees found peer tutoring helped the tutees in socializing by improving their social behavior of showing *serious attitude* to life the most than all other socializing factors.

Item 9

How was peer tutoring a good mean of socialization for you?

Table 4.44. Interview Item 9: Tutoring was a Good Mean of Socialization

Response Variables	Tutors' Response Statistics		Tutees' Response Statistics	
	Statistics Frequency	Proportion	Statistics Frequency	Proportion
Realisation of weak interaction	2	20	6	30
Raised confidence	3	30	3	15
Developed sensible behaviour	5	50	11	55
Total	10	100	20	100
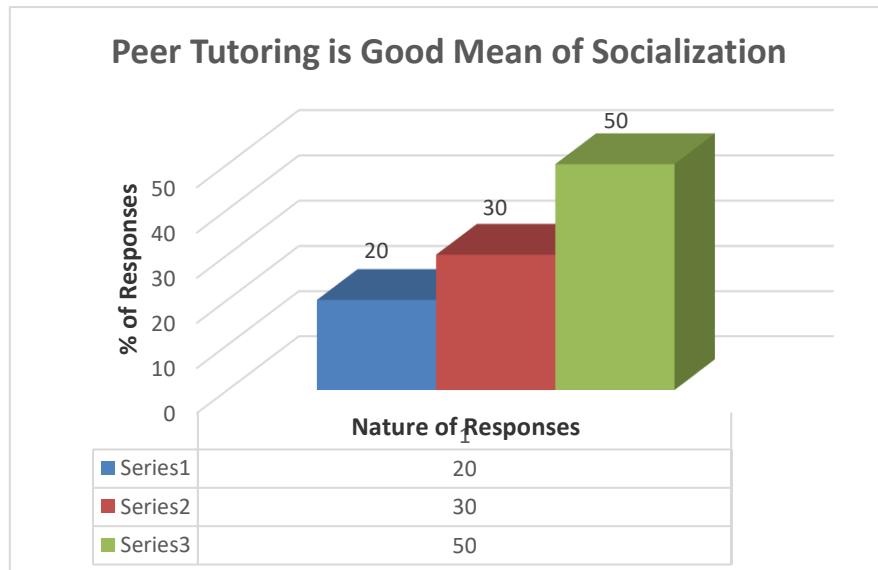
Figure 4.38. Item 9 Tutors' Response

Tutors' responses on their interview question 9 (Table 4.44 and Figure 4.38) show that amongst the response variables, *developed sensible behaviour* remained 60% as the strongest response amongst all, raised confidence as 30%, and the *realisation of weak interaction* about 20%. These findings reveal that tutors found peer tutoring

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helping in social interaction most by improving the social behaviour of *developing sensible behaviour* than all of the other socializing factors.
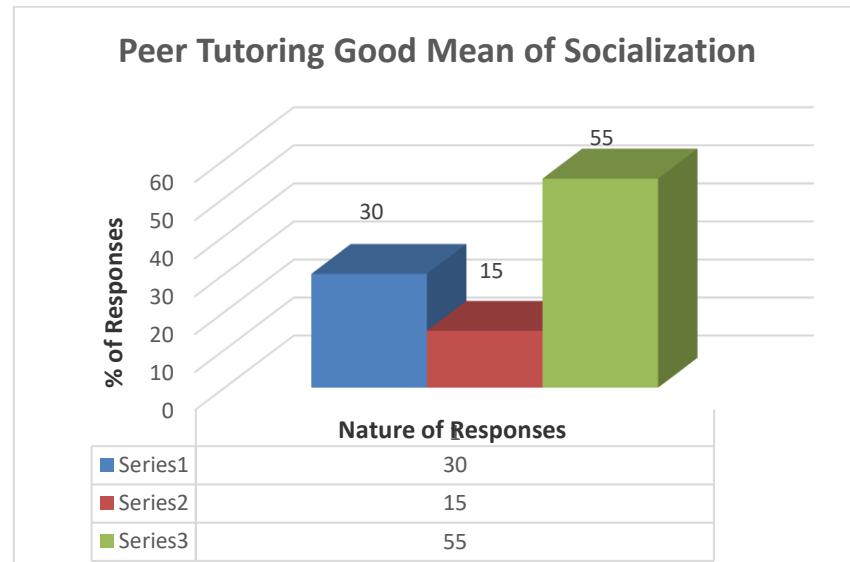

Figure 4.39. Item 9 Tutors' Responses

Tutees' responses on their interview question 9 (Table 4.44 and Figure 4.39) demonstrate that *developed sensible behavior* remained 55%, *realization of weak interaction* as 35%, whereas *raised confidence* remained 15%. These findings show that tutees found peer tutoring helped the tutees in socializing by improving their social behavior of *developing sensible behavior* the most than all other socializing factors.

Item 10

How much successful you are in realizing your deficiencies and overcoming them?

Table 4.45. Interview Item 10: Success in the Realization of Deficiencies and Over-coming them

Response Variables	Tutors' Response Statistics		Tutees' Response Statistics	
	Statistics Frequency	Proportion	Statistics Frequency	Proportion
Realised deficiencies largely	5	50	8	40
Feel Responsible for others	1	10	0	0
Feel Responsible for myself	3	30	6	30
Got socialized more	1	10	6	30
Total	10	100	10	100

Success in Realizing Deficiencies and Overcoming them

|	
Realised deficiencies largly	50
Feel Responsible for others	10
Feel Responsible for myself	30
Got socialized more	10
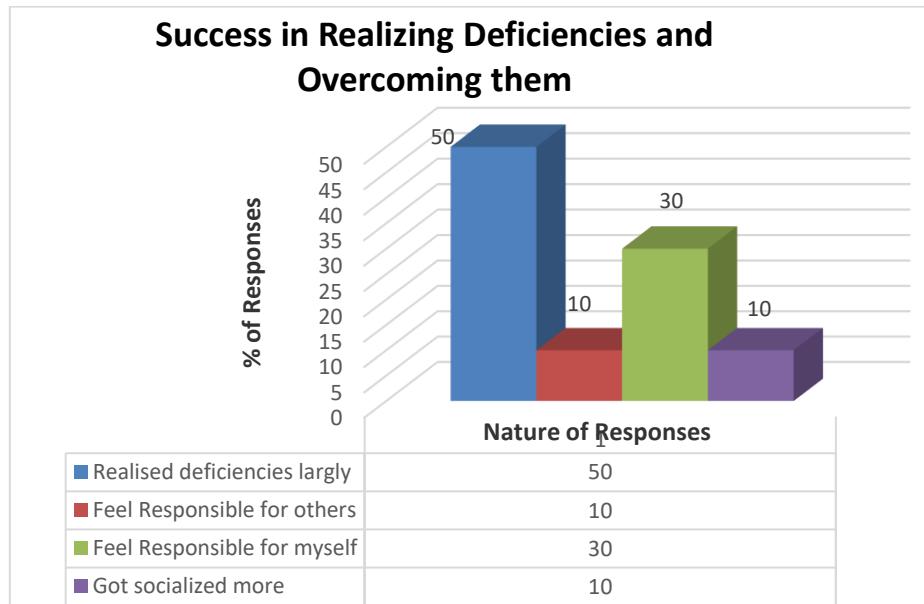
Figure 4.40. Item 10 Tutors' Responses

Tutors' responses on their interview question 10 (Table 4.45 and Figure 4.40) illustrate that amongst the response variables, the variable *realised deficiencies largely* remained 60% as the strongest response amongst all, *feel responsible for myself* to about 30%, *feel responsible for others* as well as *got socialized more remained 10% each.* These findings expose that tutors found peer tutoring helping in social interaction most by improving the social behaviour of realization of one's own deficiencies than all of the other socializing factors.


	Nature of Responses
■ Realised deficiencies largly	40
■ Feel Responsible for others	0
■ Feel Responsible for myself	30
■ Got socialized more	30
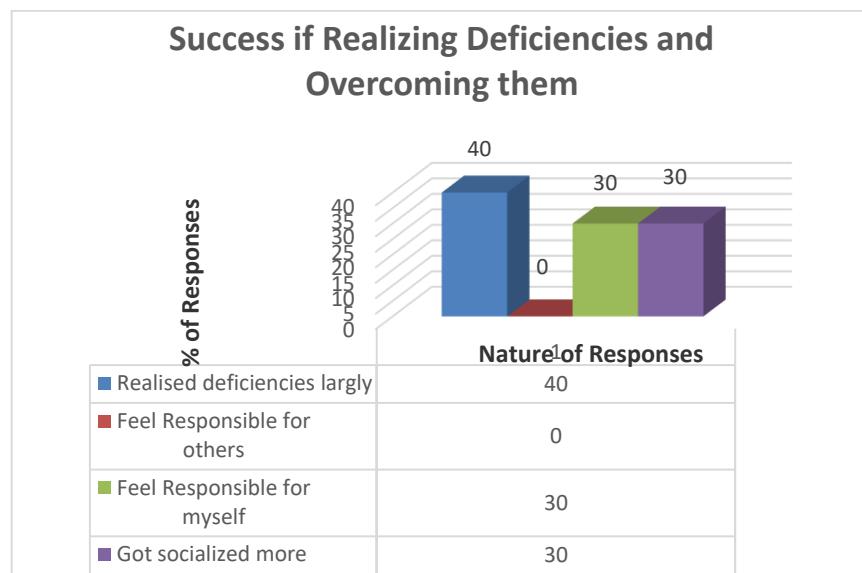
Figure 4.41. Item 10 Tutees' Responses

Tutees' responses on their interview question 10 (Table 4.45 and Figure 4.41) display 40% response for the *realized deficiencies largely* as the strongest response amongst all, feel *responsible for myself* as well as *got socialized more to 3*0% each. Whereas, feel responsible for others remained nil. These findings show that tutees found peer tutoring helped the tutees in socializing by improving their social behavior of *realization of one's own deficiencies* the most than all other socializing factors.

CHAPTER 5

SUMMARY, FINDINGS, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Chapter 5 sums up the conclusions and recommendations deriving from the present study. It is initiating by viewing at a summary of the primary aims and objectives, its basis, and an outline of the literature outcomes. It is also comprised of a concise presentation of the discussion with reference to the major and recent researches addressing present studies main research questions and also revealing on the study outcomes. The learning points, the strong and weak areas of the study are enclosed in this chapter. It closes with a list of recommendations (Rahimi, 2010) and implications for the future researchers.

5.1 Summary

The historical journey of educational developments carries with it a dynamic variety of philosophies and theories. One of the popular philosophies to enhance pupils' educational dynamics is peer tutoring that sufficiently suffices the purpose and is in wider application in the West. Present study is also conducted to reinforce the usefulness of peer tutoring along with its application in Pakistani setting. It is based mainly on the Vygotsky's social constructivist approach where Cognitivism of Piaget also serves as the theoretical foundation of the study. Peer tutoring process offers the integration of both to offer a diversified learning opportunity not only to the tutee but also to the tutor.

Peer tutoring is a prepared learning involvement which comprises a student working as the teacher or instructor, and the other is the student or tutee. It provides a vital opportunity for the students to practice their previous learning in a much

significant manner through social involvement (Conrad, 1974). Class wide Peer Tutoring is a mutual, peer assisted teaching approach in which students of the same class coach each other on the content of the programmed curriculum (Abbott, Greenwood, Buzhardt, & Tapia, 2006). Its main feature is mutual tutoring between tutor and tutee and both play both roles (tutor and tutee) at a time.

Socialization is the course of forming standards for an individual. It is the chain of practices that develops an individual's consciousness of social standards and morals. It also permits an individual to develop a unique sense of identifying oneself (The Socialization of Girls, 2016). Peer impact on conduct slowly prevails more strongly. Studies (Harris, 1995, 2011; Rowe, 1994) relate that the influence of peer groups is much stronger than that of parents, while many researchers are of the different viewpoint in extreme situation (Berk, 2005). Sound social relationships are greatly influential in structuring individual's personality and the role that an individual plays in varied social settings. The tone and intensity of the social inter-relationships decide in which shape the individual will be developed. In a Vygotskian classroom, students are open to dialogues, research relationships, electronic information resources, and project-group settings working on problem inquiry (Ozer, 2004).

The present study was mixed method and followed its QUAN-QUAL model. It followed quantitative as well as qualitative data collection and followed by data combining for comparison. The two-group post-test-only randomized experimental research design was used to collect data in a more reliable and generalized manner. The two groups were randomly assigned. They were also compared on testing to find out the difference between their means through the application of a t-test (Trochim, 2006). The academic position of the students was the same as both the tutors and tutees were belonging to the same level i.e. grade 9. Tutors' and tutees' responses were also

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collected through socio-metric questionnaires 1 and 2 and a structured interview to support the main experimental data as well to cover students' socialization. The collected quantitative and qualitative data from all instruments was arranged and organized for its detailed processing for qualitative and quantitative analysis and comparison.

The data analysis was carried by processing a variety of data collected through a variety of instruments like; test, questionnaires 1 and 2, and an interview. The quantitative data collected from the post-test as well as the questionnaires was coded, tabulated, and calculated. The mean achievement scores of both groups were calculated from the experimental data and compared for their difference through t-test following their interpretation and qualitative analysis. The calculated data of the questionnaires was correlated by applying correlation coefficient Pearson's *r* and the relationship between the responses of the tutors and tutees was identified. The relative findings and conclusions were also deduced in the light of objectives and hypotheses of the study.

5.1.1 Achievement of Objectives

The study objectives were achieved by taking the following steps:

- **Objectives 2** was worked out through the post-test only experiment and focused students' academic progress.
- **Objectives; 1, 3, 5, 6** of the study were addressed through; Questionnaires 1 Section A and Questionnaire 2. Questionnaire 1 focused all the important aspects of socialization under peer tutoring exercise whereas Questionnaire 2 was used to explore tutors' and tutees' perspective on peer tutoring.
  •**Objective 4** was taken into consideration while working with the interview phase of the study as well as open-ended section B of the Questionnaire 1 and focused the role of peer tutoring.

5.2 Findings

There are number of important findings which are listed below after interpreting and analyzing the study data:

5.2.1 QUAN Data

Experimental

1. The group statistics (Table 4.1, 4.2) of the post-test only while focusing upon the objective 2 of the study rejecting H_{o1} showed that the mean score of experimental group was higher than that of the control group.

2. T-test for the equality of means showed that the difference in the mean scores of the two groups was 11.267 that was quite reasonable to show that the performance of the treatment group remained better than that of the control group.

3. The group statistical differences (Table 4.3) between the two groups also presented a small value of standard deviation for post-test result of the experimental group that was 16.90542 which showed that on average the statistical data set's values were close to the mean of the data set (Objectives: 2). It also means that there was less variation in the scores of the treatment group as compared to the control group. A small range value for the treatment group indicates that there is less dispersal of scores from the mean in the data.

4. A large value of standard deviation for control group that was 21.817 reflected that on average the data set values were far away from the mean. It meant the experimental groups' data values being small as 16.905 were more concentrated around the mean score, supporting experimental group's data set results to be better than that of control group's data set's values concentration and results. With this statistical interpretation it could be stated that the null hypothesis 1 of the study was rejected because a significant effect of peer tutoring had been seen

on students' academic progress as compared to the other group not applied with the same strategy.

5. The frequency distribution of post-test only experimental as well as control group (Table: 4.4, 4.5 and Fig: 4.1, 4.2) was showing a normal trend which means most of the data values in a normal distribution tend to cluster around the mean.

6. The group statistics (Table: 4.6, 4.7) of the participants' previous achievement scores also showed that the mean score of experimental group was higher than that of the control group but the difference was nominal. T-test for the equality of means showed that the difference in the mean scores of the two groups was only 3.733 that was quite less to show that the performance of the treatment group as well as that of the control group before the application of peer tutoring on experimental group was not very different.

7. The level of significance for pre-test remained .466, (Table: 4.6, 4.7) which was not significant as it was above the standard level of .05. It further meant that the academic state of achievement for both of the groups according to their first term test scores was almost the same, as their difference was not significant.

8. Previous-Post-tests frequencies difference (Table: 4.8) had normal distribution. Re-enforcing Table: 4.8 the bell curve of the Fig: 4.3 reflected normal distribution of students' scores' difference but highest point was the mean score difference of 18.37 which means mostly the scores are close to the mean score.

Descriptive Data

Questionnaire 1

<div align="center">

Closed-Ended Responses

</div>

1. The group statistics (Table 4.9, 4.10) of the t-test application on questionnaire 1 while focusing upon the objective 1 of the study revealed a relatively high value of the mean score of experimental group that was 179.5333 than that of the control group as 144.9333. It means results favoring experimental group with high score value and showing better socialization in it.

2. T-test for the equality of means showed that the difference in the mean scores of the two groups was 34.60000 which confirmed a reasonable socialization difference of the treatment group than that of the control group (Table 4.9, 4.10).

3. The level of significance with reference to the standard level of significance for two-tailed test remained .000 which was highly significant revealing a significant positive socialization which was also helpful in improving students' academic performance of the experimental group after the application of peer tutoring. This statistical outcome rejected the null hypothesis 2 whereas confirmed its alternative hypothesis that peer tutoring had a significant effect on students' socialization (Table 4.9, 4.10).

4. The group statistical difference (Questionnaire 1 Experimental-Control Statistical Difference, Table 4.11) in different areas between the two groups showed 24.934 as high value of standard deviation for experimental group revealing a wider average spread of the data set values not much closer to the mean. Whereas, the small value of standard deviation as 13.656 for control group results demonstrated that on average the statistical data set values were closer to the mean data set

value. It meant the experimental groups' data values were not more concentrated around the mean score, than those of the control group (Objective 1).

5. The experimental group's significantly high mean score (Table 4.11) that was 179.5333 which showed quite better level of socialization than that of the other group which was 144.9000 but with a wider range of scores between minimum and maximum scores.   Higher value of mean 179.53 than that of median 177.00 for experimental group and mean 144.93 and median as 143.50 for the control group revealed a positive trend. The range value of treatment group as 84 was higher than that of the control group which was 54, revealing more difference between the minimum and maximum score value.

6. Fig: 4.4 showed a bell curve with relatively smaller means shifted more to the left than those with higher means skewing right and had a positive trend.   The students' score range for experimental group questionnaire 1 responses remained 140 to 230 with an average of 179. It showed a positive trend in the score (Table 4.11). The positive values of the distribution curve also reflected a very positive trend in the socialization of the experimental group (Objective 1, H_{o7}).

7. Fig: 4.5 also showed a bell curve with relatively smaller means shifted more to the left than those with higher means projecting a curve slightly right-skewed. A dispersal of scores that was skewed right or positively skewed was shown above which revealed that fig: 4.5 was not very symmetric around the mean anymore. For a right skewed distribution, the mean was typically greater than the median.

8. The students' score range for control group questionnaire 1 responses remained 120 to 185 with an average of 144 (Table 4.11). The score distribution was not exactly equal on both sides of the bell center having more distribution of scores towards right side of the bell skewing its tail towards right. The center of the

curve presented the mean scores as 144.83 and the short width and height of the curve was revealing the low value of standard deviation where most of the scores concentrated around the mean but not equally distributed on both sides. The positive values of the distribution curve also showed positive trend in the socialization of the control group (Objective 1, H_{o7}).

9. The mean score value difference of both groups clarified that no doubt both groups showed socialization trends positively but the socialization trend exhibited by the experimental group remained much better than that of the control group (Objective 1, H_{o7}).

10. The group descriptive statistics of the two groups in Table 4.14 show the difference between the two groups (Objective 1, H_{o8}). Tutees have a high value of mean as 181.25 than that of tutors 176.10, which shows better socialization amongst them than that of tutors.

11. Low value of standard deviation for the tutees as 22.242 also reveals that most of the tutees' scores are concentrated around their mean as compared to the tutors that is 30.647 (Table 4.14).

12. Fig: 4.7 projected a bell curve with relatively smaller mean shifted more to the left than that with higher mean skewing right and had a positive trend (Table 4.15, 4.16). The tutors' score range for experimental group questionnaire 1 responses remained 140 to 240 with an average of 17. The center of the curve presented the average or mean scores as 176.1 and the short width and height of the curve reflected the low value of standard deviation. It confirmed a positive trend in the score.

13. The positive values of the distribution curve (Fig: 4.8) in relevance with Table 4.14 also reflected a positive trend in the socialization of the tutors' (experimental group).

14. Fig: 4.8's bell curve was mildly centralized and skewed right. Relatively greater mean value of the tutees had a positive trend. The tutees' score range for experimental group questionnaire 1 responses remained 140 to 240 with an average of 181. The center of the curve presented the average or mean scores as 181.25 and the short width and height of the curve reflected the low value of standard deviation as compared to that of the tutors' responses. It also confirmed a positive trend in the tutees' score.

15. The positive values of the distribution curve (Fig: 4.8) also reflected a positive trend in the socialization of the tutees' (experimental group).

16. Frequencies distribution tables 4.15, 4.16 also showed a slightly skewed distribution but towards right reflecting a positive trend.

Questionnaire 2

1. The group statistical difference (Table: 4.17, 4.18) in the perception of the students of experimental as well as those of control group revealed that 73.07 was the mean score of the experimental group's perceptions whereas, 50.13 stood as the mean value of control group's perception. The difference of about 22.933 revealed a stronger level of experimental groups' positive perception of peer tutoring than that of the control group (Objective 3, H_{o3}, H_{o9}).

2. A high value of standard deviation for experimental group 9.713 revealed a wider average spread of the data set values not much closer to the mean as compared to that of the control group. Whereas, 7.816 as the small value of standard deviation for control group results demonstrated that on average the statistical

data set values were closer to the mean data set value. The experimental group's significantly high mean score showed better level of positive perception of the students than that of the other group's perception but comparatively with a wider range of scores between minimum and maximum which shows more variation in the scores (Table: 4.17, 4.18).

3. The significance level for Cronbach alpha for the two-tailed test was .000 which was below .05 confirming a highly significant effect of peer tutoring on the experimental group's perception which had been applied with peer tutoring than that of the other group. Therefore, the null hypothesis H_09 of the study was strongly rejected, accepting the alternative hypothesis that peer tutoring had a significant effect on the experimental group's perception than that of the control group (Table: 4.17, 4.18).

4. Frequency distribution according to Table 4.19, 4.20 showed a normal distribution in the bell curve of experimental group's perception whereas that of control groups was mildly skewed towards right. It reflected a positive trend in both but more in the perception of experimental group than that of the control group.

5. Figure 4.9 and 4.10 reinforced the above results (Table: 4.19, 4.20).

6. The group (tutors) Pearson correlation (Table 4.21) statistics are tabulated to observe the relationship between the tutors' perception on the role of peer tutoring on their academic performance and socialization (Objective 5, H_{o10}).

7. The correlation value of *r* is .050 (Table 4.21) that shows a positive trend in the relationship which is also significant. The positive trend also shows that increase in one variable is correlated with the increase in the other variable. On the basis of this finding the null hypothesis H_{010} is rejected and its alternative

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accepted that a significant relationship is found between tutors' perception on the role of peer tutoring in students' academic progress as well as socialization (objective 5).

8. The group (tutees) Pearson correlation (Table 4.22) statistics are also tabulated separately to see the relationship between the tutees' perception on the role of peer tutoring in their academic performance and socialization (Objective 5, H_{o10}).

9. The correlation value of r is .000 that also shows a positive trend in the relationship which is highly significant (Table 4.22). The positive trend also shows that increase in one variable is correlated with the increase in the other variable. This reflects a very positive relationship between the perceptions of both variables (academic progress and socialization). Therefore, the null hypothesis H_{o10} is rejected and its alternative recognized that a significant relationship is found between tutees' perception on the role of peer tutoring in students' academic progress as well as socialization.

10. The descriptive statistics of questionnaire 2 (Table 4.23) shows tutors' and tutees' (experimental group) almost same mean scores i.e. 72.00 and 73.60. It shows quite similar level of effect on student perception in the experimental group. It shows parallel increase with each other. Objective 3 and H_{03} are very relevant to the above results.

11. In Fig: 4.12, Questionnaire 2 tutor-exp frequency trend was slightly negative as it was skewed slightly left which meant tutors of the experimental groups did not feel very comfortable in terms of getting much benefit from the peer tutoring program. Whereas, the tutees-exp frequency trend showed a normal distribution and reflected a beneficial input from the peer tutoring program.

12.   Table: 4.24, 4.25 also reinforced the findings given above.

5.2.2 QUAL Data

Questionnaire 1

It covered Objective 5 and H_{02}, H_{05} **of the study.**

Open-ended Responses

1. Findings for the students' responses on their open ended question 1 of the questionnaire 1 (Table: 4.26, Fig: 4.15) were that amongst the response variables the second variable that was *very good experience* remained 36.6 % which was the highest proportion amongst all. The lowest remained for disappointing experience that was 3.6% amongst all.

2. Students' responses on their open ended question 2 of the questionnaire 1 (Table: 4.27, Fig: 4.16) reflected that amongst the response variables the second variable that was *clarity of mind* remained 33.3%, the highest proportion amongst all, a *comfortable activity* as 13.3% as well as those *not finding it much useful* as 13.3% as the lowest.   20% of the student responses were in favor of peer tutoring as a source of *confidence building* as well as served as a *problem solver* for both of the tutors and tutees.

3. Students' responses on their open ended question 3 of the questionnaire 1 (Table: 4.28 and Fig: 4.17) related that *problem solver* remained 43.33%, the highest proportion amongst all. The variable with 36.66% is the *clarity of mind*, 6.66% of the responses were favoring *not very comfortable*, 3.33 took it as a source of *increasing confidence*, and 10 % of the respondents found it *not very useful*.

4. Students' responses on their open ended question 4 of the questionnaire 1 (Table: 4.29 and Fig: 4.18) related that variable *problem solver* remained 43.33% which was the highest proportion amongst all, 36.66% remained for the *clarity of mind*,

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6.66% of the responses were *not very comfortable*, 3.33 took it as a source of *increasing confidence*, and 10 % of the respondents found it *not very useful*.

5. Students' responses on their open ended question 5 of the questionnaire 1 (Table: 4.30 and Fig: 4.19) reflected that *improved relations* remained 46.6% as the highest proportion amongst all. The relationship between the tutor and tutees remained *not very comfortable* to about 30%. The responses in favor of peer tutoring as problem solver were 13.3% whereas 10% of the respondents found it not very useful.

6. Students' responses on their open ended question 6 of the questionnaire 1 (Table: 4.31 and Fig: 4.20) reflected that variable *problem solver* remained 26.6% which was the highest proportion amongst all. The help in developing a habit of *working hard* remained 23.3%, developing *clarity of mind* as 13.3%, and they were a great *support* for each other for about 30%. Only 6.6% of the student responses were of the view that it was *not very useful*.

7. Students' responses on their open ended question 7 of the questionnaire 1 (Table: 4.32 and Fig: 4.21) reflected that the first variable *supportive* remained 40% as the highest proportion amongst all. It helped them in developing their own *clarity of mind* to about 10%, 10% helping them in *solving their problems*, 26.6% developed a habit to *work hard*, and 23.3% did find it *not very useful*.

8. Students' responses on their open ended question 8 of the questionnaire 1 (Table: 4.33 and Fig: 4.22) reflected that amongst the response variables the role of the peer to be *cooperative* remained 66.6% as the highest proportion amongst all. Other than this the factors helping tutor-tutee relationship such as being *committed* reached at 6.6%, being *motivated* also as 6.6%, being helpful to *work hard* as 16.6%, and only 3.3% of responses remained *not very useful*.

9. Students' responses on their open ended question 9 of the questionnaire 1 (Table: 4.34 and Fig: 4.23) reflected that amongst the response variables *cooperative* remained 40% as the highest proportion, *committed* received 20% support, *motivated* as 10%, *work hard* as 23.3%, and only 6.6% of the responses remained *not very useful*.

10. Students' responses on their open ended question 10 of the questionnaire 1 (Table: 4.35 and Fig: 4.24) showed that amongst the response variables the third variable that was *made compulsory* remained 63.6% as the highest proportion, *motivation session* should be arranged before its start as 10%, more *formal planning* needed as 10%, 10% found it *not relevant*, whereas 3.3% was the response rate for the two variables of *students' willingness needed* and *should be paid*.

11. All the above data findings further supported the previously carried interpretations regarding experimental results (Table: 4.1 to 4.8 and Fig: 4.1, 4.2, 4.3) in favor of peer tutoring's positive effect on student academic progress as well as an effective means of socialization studied through questionnaire 1 (closed-ended section).

Interview

1. Tutors' responses on their interview Item 1 (Table: 4.36 and Fig: 4.25) reflected that amongst the response variables, the variable *developed socializing skills* remained 40% as the strongest response amongst all. Whereas Tutees' responses on their interview item 1 (Table: 4.36 and Fig: 4.26) showed 55% for the *developed socializing skills* as the strongest response amongst all. The rest of variables with reference to tutors' responses were found as; *strong relations* received 30%, *social network increased* got 20%, positive communication as

10%, and not useful remained 0% whereas for tutees the findings were as; *strong relations* received 25%, positive communication 10%, and 5% each of the two variables were not very useful and social network increased.

2. Tutors' responses on their interview item 2 (Table: 4.37 and Fig: 4.27) showed that amongst the response variables, the variable *social behavior improved* remained 60% as the strongest response amongst all, *interaction improved* to about 20%, *relations improved* to 10% as well as *better communication*, whereas none of the tutor found it not useful. Whereas, Tutees' responses on their interview item 2 (Table 4.37 and Figure 4.28) showed 45% for the *social behavior improved* as the strongest response amongst all, *relations improved and better communication* received 20%, interaction improved 10%, and 5% found it *not very useful* in socializing.

3. Tutors' responses on their interview item 3 (Table: 4.38 and Fig: 4.29) show that amongst the response variables, the variable *lack of confidence* remained 60% as the strongest response amongst all, *confusion improved* to about 20%, *lack of interaction* to 10%. 10% did not give any response. On the other hand Tutees' responses on their interview item 3 (Table: 4.38 and Fig: 4.30) displayed 60% for the *lack of confidence* as the strongest response amongst all, *confusion* 30%, and *lack of interaction* 10%.

4. Tutors' responses on their interview item 4 (Table: 4.39 and Fig: 4.31) show that the variable *confidence* remained 40% appearing as the strongest response amongst all, *socialization and passion of social work* both remained 20% whereas about 20% didn't respond. Tutees' responses on their interview item 4 (Table: 4.39 and Fig: 4.32) showed 60% for the *socialization* as the strongest

response amongst all, confidence as 30%, passion of social work as 5%, whereas 5% didn't give any response.

5.   Tutors' responses on their interview item 5 (Table: 4.40 and Fig: 4.33) showed that amongst the response variables, the most supporting variable was *friendly relations* which remained 40%, *mutual understanding* to about 20%, motivation to 20%, whereas none of the tutor found self-realization playing any role. Tutees' responses on their interview item 5 (Table: 4.40 and Fig: 4.34) showed 50% for the *friendly relations* as the strongest response amongst all, *mutual understanding* received 35%, strong *communication improved* to 15%, *self-realization* and *motivation* both remained 0%.

6.   Tutors' responses on their interview item 6 (Table: 4.41 and Fig: 4.32) showed that amongst the response variables, the variable *cooperative* remained 50% as the strongest response amongst all, *good listener* and *willingness improved* to about 20%, *good comprehension* to 10%, whereas none of the tutor found it *not useful*. Tutees' responses on their interview item 6 (Table: 4.41 and Fig: 4.33) show 70% for the *cooperative* as the strongest response amongst all, *willingness* received 15%, 10% found it *not useful*, 5% found *good listeners* as a supporting attribute in socializing.

7.   Tutors' responses on their interview item 7 (Table: 4.42 and Fig: 4.34) revealed that amongst the response variables, the variable *helping others is great* remained 40% as the strongest response amongst all, *changing others positively is great* to about 30%, *developing willingness to work hard* to about 10% as well as *self-socialized*, whereas 10% did not give any response. Tutees' responses on their interview item 7 (Table: 4.42 and Fig: 4.35) showed that *developing willingness* remained about 50% as the strongest response amongst all, *self-*

socialized received 45%, 5% did *not respond*, whereas the rest received no response at all.

8. Tutors' responses on their interview question item 8 (Table: 4.43 and Fig: 4.36) showed that amongst the response variables *helping others* remained 50% as the strongest response amongst all, satisfaction and positivity both remained 20%, serious attitude to life got 10%. Tutees' responses on their interview question 8 (Table: 4.43 and Fig: 4.37) illustrated that 35% improvement was due to the development of the *serious attitude to life*, 20% due to helping others as well as satisfaction, whereas it was 25% due to their positivity.

9. Tutors' responses on their interview item 9 (Table: 4.44 and Fig: 4.38) showed that amongst the response variables, *developed sensible behavior* remained 60% as the strongest response amongst all, *raised confidence* as 30%, and the *realization of weak interaction* about 20%. Tutees' responses on their interview item 9 (Table: 4.44 and Fig: 4.39) demonstrated that *developed sensible behavior* remained 55%, realization of weak interaction as 35%, whereas raised confidence remained 15%.

10. Tutors' responses on their interview item 10 (Table: 4.45 and Figure: 4.40) illustrated that amongst the response variables, the variable *realized deficiencies largely* remained 60% as the strongest response amongst all, *feel responsible for myself* to about 30%, *feel responsible for others* as well as *got socialized more* remained 10% each. Tutees' responses on their interview item 10 (Table: 4.45 and Figure: 4.41) displayed 40% response for the *realized deficiencies largely* as the strongest response amongst all, *feel responsible for myself* as well as *got socialized more* to 30% each. Whereas, feel *responsible for others* remained nil.

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5.2.3 QUAN-QUAL Data Combining and Comparison

1. The group statistics (Table 4.1, 4.2) of the post-test only exhibited a higher mean score of experimental group than that of the control group. T-test for the equality of means disclosed the difference in the mean scores of the two groups as 11.267 reasonably showing the treatment group's better performance as compared to that of the control group. The frequency distribution of post-test only experimental and control groups (Table: 4.4, 4.5 and Fig: 4.1, 4.2) also had a normal trend. The group statistics (Table 4.9, 4.10) of the t-test application on questionnaire 1 revealed a relatively high value of the mean score of experimental group as 179.5333 than that of the control group as 144.9333.

2. T-test for the equality of means presented the difference in the mean scores of the two groups as 34.60000 which confirmed a reasonable socialization difference between the treatment group and the control group. The level of significance for two-tailed test remained .000 as highly significant which confirmed a significant positive socialization that also helped in improving experimental group students' academic performance when applied with peer tutoring. The mean score value difference of both groups for the closed ended section responses of questionnaire 1 clarified that no doubt both groups showed socialization trends positively but the socialization trend exhibited by the experimental group remained much better than that of the control group. Tables 4.26 to 4.35 and Figures 4.15 to 4.24 depicting qualitative data of open-ended section of the questionnaire 1 are also in favour of peer tutoring's positive effect on student academic progress.

3. Table 4.14 presented the difference between the tutors and tutees of the experimental group on their socialization (Questionnaire 1). Tutees high value of mean as 181.25 and that of tutors as 176.10 reflect tutees better socialization than

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that of tutors. The group (tutors) Pearson correlation presented in Table 4.21 shows correlation value of *r* as .050 reflecting a significant positive trend in the relationship between the tutors' perception on the role of peer tutoring on their academic performance and socialization. The positive trend also shows that increase in one variable is correlated with the increase in the other variable. Table 4.22 shows the relationship between the tutees' perception same with correlation value of *r* as .000 also exhibiting a highly significant positive trend in the relationship. Interview data presented in Tables 4.36 to 4.45 and Figures 4.25 to 4.44 also enforce findings strengthening those of questionnaire 1 and 2 on the positive effect as well as relationship of peer tutoring with better student socialization. Moreover, value difference of findings from questionnaire 2 also show a significant relationship between both variables (socialization and academic progress).

4. Findings for the students' responses on their open ended questionnaire 1 (Table: 4.29 to 4.38 and Fig: 4.15 to 4.24) showed that the students of the experimental group found peer tutoring: a *very good experience as a tutor/tutee* according to 36.6 % responses, helped in academics by developing *clarity of mind in* 33.3% responses, added in the academic performance as a *problem solver* in 43.33% views, improved class performance by becoming a *problem solver* in 40 % responses, *improved relations* with peers in 46.6% views, helped others as a *problem solver* in 26.6% responses,   peer tutoring provided self-help opportunities through being *supportive* in 40% views, core factor in tutor-tutees relationship was being *cooperative in* 66.6% views, best thing in the partner to improve academics was that of being *cooperative* in 40% responses, and 63.6%

responses were of the view that peer tutoring should be *made compulsory* in Pakistani schools.

5. Findings from the students' interview responses (Tables: 4.39 to 4.48 and Fig: 4.25 to 4.45) showed that the tutors of the experimental group found peer tutoring: helpful in improving class interactions as it *developed socializing skills* in them according to 40% respondents, peer tutoring helped in social interaction *by improving social behavior* in 60% views, removed their personality weakness as *lack of confidence* in 60% views, helped them in improving performance in class by giving them *confidence* in 40% responses, *friendly relations* was the core factor in tutor-tutee relationship making them successful according to 40% views, 50% agreed that the best thing helping partners' improvement was becoming *cooperative*, sense of achievement in the peer tutoring experience was *helping others is great* 40% agreed, the good feelings were earned by *helping others* 50% agreed, peer tutoring was a good mean of socialization as it *developed sensible behaviour* 60%, 60% agreed that they were successful to *realize their deficiencies largely* and overcame them through peer tutoring.

6. Findings from the students' interview responses (Tables: 4.39 to 4.48 and Fig: 4.25 to 4.45) showed that the tutees' of the experimental group found peer tutoring: helpful in improving class interactions as it *developed socializing skills* to 55%, peer tutoring helped in social interaction by *improving social behaviour* to 45%, personality weakness *lack of confidence* was improved 60% agreed, 60% agreed that socialization was helpful in improving their class performance, 50% agreed that core factor in tutor-tutee relation that made them successful was their *friendly relations,* 70% agreed that the best thing helping partners' improvement was to be *cooperative ,* sense of achievement in the peer tutoring

experience was *developing willingness to hard work* 50% agreed, good feelings were earned in 35% responses due to the development of the *serious attitude to life*, peer tutoring was a good mean of socialization as it *developed sensible behaviour* 55% agreed, 40% respondents found that they *realized* their *deficiencies largely* and overcame them through peer tutoring.

7. Comparing QUAN data (post-test only experiment, descriptive datasets of questionnaire 1 closed-ended section, questionnaire 2,) and QUAL data (questionnaire 1 open-ended section, interview) findings show a significant relevance in the results in terms of peer tutoring effect on students' academic achievement and socialization. The results of quantitative data supported the students' academic progress as well as socialization due to the application of peer tutoring program. Moreover, the qualitative sources of data collection like; their questionnaire 1 open-ended section and interview responses also reinforced the similar results as the findings drawn from the thematic analysis reflected a positive change in students' (mainly amongst tutees) overall attitude. It included their attitude towards their academics and improvement in their sensible approach to life by taking the responsibility of their own academics. Majority of responses also supported the role of socialization in improving their class performance by refining their sense of cooperation and friendly relations. Experimental group was much stronger in not only academic progress but also in socialization. Moreover, within the experimental group, tutees were much convinced and supported peer tutoring's positive role in helping improve both variables (academic progress and socialization) as compared to the tutors of the same group.

5.3 Conclusions

The following conclusions were drawn out of the above lists of findings:

5.3.1 Quantitative

1. The treatment group's participants' academic performance remained better than those of the control group (Finding No 1 to 8: Experimental Data).

2. The socialization trend exhibited by the experimental group remained much better than that of the control group (Finding No 1, 2: Descriptive Data, Questionnaire 1, Closed-ended responses).

3. It was due to the better socialization of the experimental group that it supported experimental groups' academic progress (Finding No 3, 5: Descriptive Data, Questionnaire 1, Closed-ended responses).

4. In case of experimental group socialization played positively as compared to that in control group (Finding No 5, 6: Descriptive Data, Questionnaire 1, Closed-ended responses).

5. As control group was not introduced and applied with peer tutoring program, therefore it could not perceive better on it as compared to the experimental groups' student positive perception (Finding No 8, 9: Descriptive Data, Questionnaire 1, Closed-ended responses).

6. As the students of the experimental group were applied with a complete six months program of peer tutoring, therefore they were the ones who experienced it actually and were benefited in terms of their academic progress as well as socialization (Finding No 9: Descriptive Data, Questionnaire 1, Closed-ended responses).

7. Students belonging to control as well as experimental groups displayed variations in their academic percentages.   Whereas, the students of the experimental group remained consistent in their progress as compared to the other group,   therefore had shown better and significant mean score as compared to the control group (Finding No 7, 9: Descriptive Data, Questionnaire 1, Closed-ended responses).

8. The Tutors as well as tutees (experimental group) both reflected a positive trend in their socialization when engaged in peer tutoring though tutees were having stronger views and better progress as compared to those of tutors (Finding No 10 to 16: Descriptive Data, Questionnaire 1, Closed-ended responses).

9. The perception of the experimental group's students remained much better as well as positive on peer tutoring than those of the control group (Finding No 1 to 5: Descriptive Data, Questionnaire 2, Closed-ended responses).

10. The relationship between the tutors' perception on the role of peer tutoring on their academic performance and socialization remained positive. Tutees perception also remained positive but strongly significant as compared to those of tutees (Finding No 1 to 12: Descriptive Data, Questionnaire 2, Closed-ended responses).   .

11. The perception trends of the experimental group's tutees on the worth of peer tutoring were very positive whereas those of some tutors of the same group remained not strongly in its favor as they thought tutoring over-burdened them effecting their further progress (Finding No 11, 12: Descriptive Data, Questionnaire 2, Closed-ended responses)

5.3.2 Qualitative

1. Peer tutoring routine sessions between the peer tutors and their assigned tutees were useful in overcoming certain academic deficiencies. Their effective socialization while working with their peers as tutors or tutees added up to the level of social interaction between them which supported their academic progress during the experiment (Finding No 1 to 11: Descriptive Data, Questionnaire 1, Open-ended responses).

2. On the whole the participants of the treatment group considered peer tutoring *'a very good experience'* which gave them more *'clarity of mind',* played the role of *'problem solver',* helped them in *'improving relations',* within the class and outside and developed the skills of being *'supportive'* and *'cooperative'* to the class peers (Finding No 1 to 11: Descriptive Data, Questionnaire 1, Open-ended responses).

3. Mostly the tutors agreed with the worth of peer tutoring in socializing them more than before, adding up to their confidence, becoming more friendly, developing a better sense of helping others, realizing a better sense of responsibility, and behaving more sensibly as a class mate. They were of the view that even though they were high academic achievers before the application of peer tutoring still they had many weak areas in them as an individual like weak socializing skills (Finding No 1 to 11: Descriptive Data, Questionnaire 1, Open-ended responses).

4. The tutors also acknowledged the positive role of peer tutoring application in not only realizing and identifying those weaknesses but also to bring improvement in that particular area of concern like less social or weak friendly relations with the weak class mates. It ultimately if not more but to an extent brought improvement in their overall class attitude and interaction, progressing them in

academics as well as socializing skills (Finding No1 to 11: Descriptive Data, Questionnaire 1, Open-ended responses).

5. On the whole majority of the participants were of the viewpoint to make peer tutoring program compulsory in the schools for the best interest of students (Finding No 1 to 11: Descriptive Data, Questionnaire 1, Open-ended responses).

6. Overall the tutors were more convinced of the increased role of peer tutoring in their socialization skills but with limited benefits for them in terms of their academic progress (Finding No 1 to 10: Interview responses).

7. Many of the tutors being very committed for their tutees' academic progress reported their subject teacher on their non-serious responses if experienced in routine sessions (Finding No 1 to 10: Interview responses).

8. Mainly the tutees were having a much stronger view to support peer tutoring's role in their overall improvement in not only academic achievement but also in socializing skills mainly due to confidence building (Finding No 1 to 10: Interview responses). .

9. The interviewees found it very helpful in gaining confidence to interact better with not only their tutors but also with others and teachers. They also realized to have a serious attitude to life and became more sensible to various matters of life like their academics (Finding No 1 to 10: Interview responses).

10. Peer tutoring helped the participants realize their academic weaknesses as well as many others related to their routine interactions and beliefs like; keeping distance with the peers other than very close friends, sense of superiority, weak sense of responsibility, etc. (Finding No 1 to 10: Interview responses).

Many of the tutees being very conscious of their academic progress also reported their subject teachers on their tutors' non-serious responses if experienced in routine sessions (Finding No 1 to 10: Interview responses).

5.3.3 Quantitative and Qualitative Data Combining and Comparison

1. The respondents of experimental group applied with peer tutoring when tested for academic progress as well as when surveyed and compared with control group's survey responses (Questionnaire 1 and 2) were found better in both of the variables positive trends. It was also revealed from the results that as experimental group showed better socialization their academic progress was also trending positively which confirmed a positive association between students' socialization and academic progress (Findings: Experimental Data, Descriptive Data, Open-ended Qs, & Interview).

2. The study results also revealed that tutees' perception on peer tutoring's positive role in their academic improvement as well as in socialization was more positively stronger than those of the tutors (Findings: Descriptive Data, Questionnaire 2).

3. The study results also supported the view point to introduce such a program officially for students' wellbeing in the educational institutions of Pakistan. Furthermore, tutors found such a program beneficial more in developing their socialization skills whereas tutees found them highly useful not only in their academic progress but also in developing their positive socialization skills (Findings: Experimental Data, Descriptive Data, Open-ended Qs, & Interview).

5.4 Discussion

Peer tutoring is being used as an effective teaching strategy presently as well as in the past for treating students' academic shortfalls which helps in recovering their behavioral disorders as well. John Potter, an education manager and a volunteer of London UK reflects in his one of the research study that student tutoring is acknowledged widely and fastly and is considered as a valuable measure in UK's education system. There are numerous higher and other educational institutions where student tutoring has become common and compulsory all over the UK. The related statistics show a figure of over 15,000 students volunteering for about 600,000 hours to support children of different age groups as well as the youngsters in their academics under teachers' supervision as well (Potter, 1997). Gillies and Ashman (2003) related John Dewey's belief in their book that education was the course of existing and schools were responsible to catch their attention to increase and improve their prospects, and support them in replying to fresh philosophies and inspirations. By cooperating with others students get response on their undertakings and acquire socially suitable conducts, and they appreciate the things which are the result of collaborating and functioning together (Dewey, 1940, 1966). CWPT showed constructive influence on learner's knowledge of syllabus content and on their capability to link course content to historic themes. CWPT also correlated positively with the 8th grade learners' academic outcome in social studies calculated on their weekly quizzes (Constantini, 2015). Amaka's (2013) study results indicated higher student achievement when taught Home Economics applying peer tutoring in comparison to the use of traditional lecture method. Present study added up to this conviction by applying the same in Pakistani school setting and received satisfactory results in terms of students' academic progress.

The results of a recent study also revealed peer tutoring approach's enhanced product on students' learning accomplishment when compared with the direct learning method. It also disclosed that pupils having better social abilities achieved higher academic score average than those bearing weak social skills (Degeng, Setyosari, Yudiernawati, & Nugroho, 2018). The post-test scores of an experimental study also confirmed that the treatment group's contributors executed better in terms of their knowledge, understanding and application phases of cognition (Ullah, Tabassum & Kaleem, 2018). The present study results also support these studies in terms of improving students' academic shortfalls. Moreover, the study also witnessed the effect of peer tutoring on the participants socialization and disclosed its very significant effect on many behavior disorders like; sense of superiority or inferiority, lack of confidence, weak sense of responsibility, lack of clarity, lack of self- confidence, lack of self-consciousness, weak intra-active and interactive skills. The study revealed a positive change in participants' socialization that in turn was helping them in realizing their own deficiencies and then developing a sense of self-help as well.

Peer tutoring program provides such an opportunities of healthy socialization to the learners which the present study also arranged by experimenting and later surveying the same treated students. The results of the investigations showed that it was an interesting philosophy for the students involved and they also enjoyed the task suitably acquiring better attitudes towards their peers and academics. It is considered as an effective, affordable, and the most productive means of achieving the targets of students' educational progress as a whole. In an informal setting peer tutoring seems quite into the educational structure of higher education institutions of Pakistan where students have developed a practice of combine-study especially during exam or when preparing for their project submissions and presentations. Whereas, it is direly needed

to be added in their scheme of studies as a compulsory component to workout not just the academic dimensions of educational settings but also to fix diverse malfunctions of the overall system. It would allow the involvement of the whole society for its maximum multidimensional outcomes.

Constructivist approach of learning introduced by Vygotsky and supplemented by the basics of Piaget's cognitivism have much in common to support the idea of peer tutoring as a valuable means of transforming modern education system at all levels. Both of the psychologists believe that it is essential for a learner to engage himself in active learning by actively organizing new information with the present if to achieve a balanced state of learning (Hurst, 2017). This is what the present study findings reflect. The active learning was supported by tutor-tutee regular interactions inside and outside the class which strengthened cognitive baseline skills like comprehending a question or concept well as well as their healthy relationship helped them in improving their higher order skills of analysis, evaluation, and synthesis of their useful responses. It helps in playing with the emotional factors of an individual's life which progress as the time goes. The emotional attachment of the tutors and tutees of the present study facilitated them in raising their positive attributes like confidence to interact well within their class as well as with those outside. It was noticed significantly that very shy tutors and tutees both achieved better socialization level and were into new purposeful and helping friendships. This socialization provided them to move through a phenomenon of scaffolding students' individual learning needs and had let them tackled sophisticatedly. It was to continue it on some solid footings as well as if to achieve a clear outcome in terms of positive learning which also helped them in building their individual personality traits.

Effective independent learning rests on a many external and internal dynamics. External elements comprise a solid teacher-student relationship and the creation of a facilitating environment. Internal elements are the individual learners' abilities to be achieved which comprise cognitive abilities like memory, attention and problem-solving, whereas metacognitive abilities are linked to knowing how learning happens, and emotional abilities associated to learners' feelings and emotions (Meyer, Haywood, Sachdev. & Faraday, 2008). Presently, the status of pupils' learning cognitive and metacognitive talents has become very vital, therefore shifting from the instructional methods involving whole class to a tutoring approach has been seen promoting independent learning. Peer tutoring is also helpful in promoting independent learning initially assisted by the peers as witnessed by the present study.

Learners execute high academic performance if provided the prospects of independent learning and this leads them to discover anything themselves by providing them help only to a required level and time. Personality also plays its major role in this process of learning. Vigilant pairing or grouping of the learners leads to a better level of success even for the students which appear to be shy and reserved. Rewarding to learners involved in the peer tutoring program is also important but a sensitive matter. The present study experienced that even a very petty reward like gifting a chocolate to a tutee-peer for his healthy participation brought great margin in his progress. With such a boost better social rapport was seen as an expected outcome. In this case tutor was equally entertained with the same reward for his positive efforts and contribution. With this positive side of rewarding its negative side also needs special care. It has to be administered in such a careful manner which inspires everyone involved towards better accomplishment. Another important area to pay attention is the sense of cooperation and togetherness within a group or pair.

Occasionally it happens that the learners get irritated or unsatisfied with each other and also with their general behavior. Properly planned training, demonstrating, and accountability of their work participation helps in achieving the finest participation of the students. This peer cooperated learning cannot achieve program's objectives if experiences the shortfall in training. Tutoring partners can be reassigned their roles depending upon their capability as well as personality during the program intervals. The same strategy was opted in the present study and useful outcomes were achieved in terms of tutor-tutee better collaborations, level of satisfaction, cooperation, relationship, and improvement in not only academic outcome but also in developing better traits as a member of class, peer partner, taking responsibility for his progress, willingness to work with others, willingness to work on the weak areas of the subject, better confidence level and class participation, etc. Another research study has shown that the students involved in the peer tutoring use to feel delighted mostly while working in groups or pairs (Grimm, 2004). The challenges faced by the tutors and tutees also make them come across certain opportunities which benefit them in their practical life (Hurst, 2017). Another recent study executed the peer tutoring program to test its influence in rural Chinese middle schools. The outcome was a significant improvement of the Math scores of tutors. Another outcome was the improvement of learners' study approach as well their social conducts. Though, the study results did not contain similar progress in the Math scores of the tutees but they experienced increased learning stress (Song, Loewenstein & Shi, 2018). This is how in case of the present study the parental and other teachers' feedback during next parent-teacher meeting remained encouraging. The parents of many students expressed their positive views about the improvement of their children not only in their academics but also in their general attitude at home. The other subject teachers also expressed their positive views

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about the improvement of the general attitude of many participants (tutors and tutees) towards their academics as well as in their interaction within class. Whereas, the other outcomes of the study of Song, Loewenstein & Shi (2018) included the progress of tutors' Math skills but lack of similar progress in case of tutees which seems reversed in the case of present study. In the present study tutees improvement was very significant in case of their Geography's achievement scores as compared to the tutors' achievement scores of the same subject. It opens a new dimension to explore further in the field of related study in the forthcoming research.

People and communities need to develop the knowledge required to anticipate and understand what they could have to contend with and proactively develop strategies that can minimize their risk and afford ways to cope with and adapt to adverse situations in an effective manner (Feng, Hossain, & Paton, 2018). Academic worries appear to be the most common cause learners are recommended for distinctive support by the school authorities. To work on the needs of struggling students various peer tutoring programs have been developed widely. They are opted as an effective and inexpensive choice to workout deficiencies in all areas of academics. Certain limitations and drawbacks of the program according to various research studies may include inconsistent follow-up of the teachers with adequate precision to confirm encouraging results. This drawback can be removed or limited by a direct monitoring of the consultant. A research study reflects that the students in need of remedial teaching can correctly and efficiently tutor each other (Esteve, 2005) helping their teacher to improve his instructional procedures as well as the learning outcomes. The researcher remained engaged throughout the whole peer tutoring programme as the teacher so was able to carry regular follow-up of the related affairs and guided students whenever needed. It was helpful in leading the programme usefully and successfully.

To attach informal adversity to education for communal flexibility, another recent study recommend four implementation approaches with the parallel implications. These are: develop social atmosphere for dialogues, debates, reproductions and learning; create social events for helping and inspiring informal learning; suitable involvements by informal instructors in social activities; and obvious resources and networks for data and social backings (Feng, Hossain, & Paton, 2018). In case of the present study, teachers of other subjects coming in contact with the arranged peer tutoring situations and their effect on the general attitude of the involved students were convinced and opted it for their subjects as well. It also accommodated academically deficient students in their class effectively by involving other students better in academics through a sense of responsibility and commitment. They tried to play their role as a responsible member of the class and usually seem motivated with a good sense of serving their society. It in turn provided them a real sense of achievement and parallely improved their socialization trends as well.

The instructional practice is a course of communication that raises social intelligence, inspires self-knowledge and expands one's learning capabilities. Teachers experience this regularly and students themselves can also experience similar positive outcomes of teaching. The teaching student and the learning student roles can be accepted and exchanged under teacher's supervision. The participants of this experimental study reached a high level of enthusiasm, support and joint respect (Bernal, 2018). Many other researches also reflected that mostly the highly efficient students were self-motivated and expected higher in terms of their academic achievement. They were also able to show better academic grades. Their self-efficacy could be certainly improved through reinforcement and diversity of experiences, social influences, and physiological conditions. In peer tutoring the peer tutors generate

prospects for peer students for the fulfillment of their work effectively. It also raises the chance of progress in peer students' performance through the availability of peer tutors' to address queries. They are also seen as role models, and are a positive trend in comparing students (Schramm, 2009). The present study revealed that students' can improve in building better social relationships if guided accordingly. It supports in mending their behavior as well as in modifying general attitude towards themselves as a member of the class and a responsible partner in a class activity.

A study revealed that physiological conditions appear to be less significant. It specified that students involved in peer tutoring are helpful and certainly influential in accomplishments even in the professional studies courses. While analyzing the conceptual map of peer tutoring complex interactions have been noted between peer students and peer tutors during their in-class tasks. The common theme found in these remained their positive interactions in terms of their variety of experiences and command (Schramm, 2009). In case of the present study peer tutors and tutees were found to reach a level of more friendly relations helping them in a variety of associations that showed their healthy social bonding reinforcing the above study. The present study found that students as participants of study also developed willingness to work in some less comfortable physical situations and managed to help each other in their routine tasks. They were also able to go through difficult situations of being irregular to school due to sickness or any other reasons but remained in some level of contact for peer assistance. This can be a new dimension to explore in the future research on peer tutoring.

The benefits of student tutoring are manifold and confirmed. Teachers improve their instructional designs and make their lessons easy and amusing, providing supplementary learning prospects to their students. Their students also give high value

to the added individual care, find instructions more stimulating and amusing. They are also able to achieve better while employed with encouraging role models (Potter, 1997). One of the recent study approved several other of the kind endorsing that behavior skills training (BST) is an influential communication talent involvement for students with Autism Spectrum Disorder (ASD), providing supplementary confirmation of the fact that peer inclusion in the involvement is central to the generality of abilities to other situations and partners (Gross, 2018). In addition to this strategy, the instructor of the peer tutoring program in the present study kept modifying individuals' behavior e.g. by encouraging the better performers as tutors as well as tutees. It was to bring student role models in front so that some other tutoring partners could get some motivation, or ideas as BST to play their role in a more purposeful manner. Such a role models ignited some others to be a better tutor and were ready to find better ways to engage their peers as tutees and showed better role as tutors. On the other hand the better engagement of tutees helped them to improve their general attitude towards peers and their any type of help in academics as well as socialization. Collectively most of the tutees were benefited in academic uplift whereas, some tutors found tutoring engagement not very useful in their academics. They justified it by expressing that they had to spare their time for tutoring which they could have spent in working on their own needs or shortfalls. Burgess, McGregor, & Mellis, (2014) deduced at the end of their study that the program resulted in many learning assistances for peer tutors. On the other hand, varied outcomes were seen concerning the correctness of peer assessment and feedback, along with the absence of significant proof to confirm that peer's contribution as a tutor recovers his own examination outcome. The present study also opens another dimension to carry some special research studies only to explore tutors' improvement levels at various levels of education and subjects.

Most of the student tutors also increase their capability through the tutoring experiences as in the present study. They enjoy and find it as an opportunity to perform usefully which improves their confidence and communications skills. They also find it helpful in getting a better grip over their own learning (Potter, 1997) by playing a partial role as teachers. Students of high grade like 11 and 12 can be trained to play a significant role in shepherding the fresh students of high school in a routine casual manner that it becomes a very convenient mentoring for the freshmen as undergoing at the California school (Gewertz 2018). Mentoring their peers develop in them some practical skills and offer them to play better roles in their studentship as well as human-ship. They also tend to exhibit leadership roles in future. This is what is supported by the previous studies mostly. On the other hand the present study like many of the previous studies revealed the other argument that student tutors may not find their tutoring experience very comfortable. The uncomfortable relation may disturb their academic consistency or growth. An essential component for a successful peer learning is peer matching and the peers' personality and abilities are the most central components in the matching decision making. The decision-maker essentially recognizes the subjects, their competencies, and their temperaments (Boz Yaman, 2019). In the present study the teacher being the researcher was able to identify such a cases and adjusted those not comfortable with their pairs. These when suggested to continue their role as a tutor but with one or both different partners they exhibited better association and level of comfortability. Tutors who were having their peer tutoring experience not very comfortable were mostly conscious about their own academic performance, were less socialized, were not willing to cut down the time they wanted to spend with their previous friend/s, or tutees gave them tough time or did not cooperate much. Pakistani researchers can work on such a scopes and find better ways to suggest how tutors can

be systematically trained to play their effective role in accommodating fresh batches of students to cope up not only with their academic level needs but also in having better social skills at this level, as in the above study conducted on California school.

The evaluation of the numerous research studies have established the exact role of peer tutoring in terms of administrative concerns for students' academics and overall progress. They have reached to the conclusion that the basic process of making tutoring groups or pairs must be rationalized and stimulated more so that it gives a better understanding and acceptance of the plan's administration and schedule to both faculty and students. This may lead to the application of any one form of the tutoring program like that of one-on one, groups, class wide, and whole school tutoring. Since years higher education institutions in the west have prepared and introduced peer tutoring programs for helping struggling students to attain a higher level of achievement. The idea of students assisting students under a peer tutoring program seems to be a win-win for those engaged in the program and are occasionally evaluated. The achievement level of the program is respectable but can be improved to higher levels of progress if it continues to be a goal of the program (Brost, 2011). Tutors and tutees have three kinds of relationships that are dependent on the skills of the tutors and the personality of the peers. These relationships are; to be dependent upon each other, support each other, and tutoring (Boz Yaman, 2019). The present study was structured on the Classwide peer tutoring model but added up with the varied strategies involving Tele-communication gadgets like; telephonic communication, e-mails, WhatsApp. In the present study these options with the tutor-tutees triplets helped them to remain in guided regular communication other than their in-class and out-class tutoring time. It was noticed that it was very supportive for the tutors who were really very committed to the improvement of their tutees' academics, as well as it also enhanced varied socialization

traits of all partners. It really helped them to keep their tutees on board and guide them when needed even at home making steady progress possible. On the other hand the findings also revealed that if such a communication is left unattended for some time, students may get involved into useless communications not only wasting time but also leading to negative socialization. So this can also be another direction to work on in future.

The effective use of grant money by the administration is also valuable but increasing the overall budget would be an expression of provision for the program from the governance (Brost, 2011). This very dimension of the peer tutoring program has remained unattended directly as the study objectives did not need them to be addressed. The teacher researcher, however noticed that if such a program is implemented widely it would be a less expensive or much cheaper mean of working on the struggling students and in improving educational uplift, therefore can attract many researcher in future.

No doubt the exceptional cases of very weak level of cooperation and progress were there in the present study situation but on the whole a positive impression remained constructive for students' as well as teachers' wellbeing through engaging students in their peer and self-progress. Peer tutoring offered the integration of social constructivism with cognitivism and previous strengthening the later. It offered a diversified learning opportunity not only to the tutee but also to the tutor. It supported the Vygotskian classroom concept which related fundamentally the probing of facts by promoting students interaction either with their peers or teachers. Such an interactions in the present study situation made use of some of the essential cognitive strategies like; questioning, forecasting, summarizing, and clarifying, that developed; confidence, understanding, clarity of concepts, reflection, willingness to learn, self-disclosure,

self-discourse, sense of accountability and ownership of one's own learning amongst the students applied with peer tutoring.

The study experiment reflected a Vygotskian classroom situation, where energetic peer assistance and caring and attentive supervision were tried to be made sure depending upon the needs of the learners, within a very conducive, helpful, and accommodating peer assisted interactions. Students were openly carrying discussions, had useful dialogues, working in positive work- relationships, using off-class electronic guidance resources like telephonic guidance, WhatsApp routine assistance, in-class and out-class continuous tutor-tutee interaction, project-group settings, and class subject-related activities and presentations, etc. Such a healthy collaborative, conscious, and caring peer association resulted in better class environment where if many were willing to remove and resolve disputes, some were hard to handle comparatively. In such a demanding cases, strategies were modified and tutee/s were attached with a tutor that a tutee found more comfortable to work and it really proved beneficial in many cases and showed tutee improvement significantly.

The present study would be a next step in the series of related studies where an idea of discovering the constructional components of the theories underlying peer tutoring was launched and the concept of diversified learning through focusing *Emotional-Cognitive-Behavioral Engagement* under *Social-Constructivism-Cognitivism.* The study was valuable in revealing a strong relationship between students' socialization and academic progress. Healthy social interactions addressed individuals' psychological gaps and promoted emotional satisfaction which helped in their behavior modifications. Modified behavior of the students was grounded in their realization and willingness which in turn led to better cognition and supported diverse learning. Present study has remained a positive addition in the favor of previous

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investigations in terms of the role and significance of peer tutoring programs to address students' performance issues and deficits. It also promoted the idea of student positive socialization especially in Pakistani educational settings for a diverse level of benefits to the Pakistani society. It has also identified many dimensions to be attended for future studies in the field.

5.5 Recommendations

The researcher developed the following set of recommendations for the peer tutoring program to be used as a reasonable choice in Pakistan and to work out the problems faced in improving students' academic achievement especially at O level and generally at the secondary and other levels of education:

5.5.1 Students

1.   Students are needed to get a clear sense of becoming the responsible members of the society from the very beginning and this can be effectively developed through involving them in peer tutoring programs as tutors and tutees (Objective 2; Findings Descriptive Data- Questionnaire 1- closed-ended responses). .

2.   They are needed to take the responsibility of their own academics as well as get ready to help others in their educational uplift. Peer tutoring programs can be helpful to large extent to achieve these objectives (Objective 1, 2 ; Findings Experimental-Descriptive-Questionnaire 1 & 2).

3.   The socialization skills of our students for a positive outcome are a dire need of the time to address many socio-cultural and political concerns of the Pakistani nation. These can be addressed well if peer tutoring programs are introduced at wider scale throughout Pakistan. These programs should be set on some clear targets and follow

proper trainings and follow up programs (Objective 1 & 5; Findings1-16, Descriptive Qrs 1).

4.   Healthy involvement of students in a social activity like peer tutoring is seriously needed to initiate healthy interaction on wider scale and to improve social discourse in educational settings (Objective 1 & 3; Findings1-16, Descriptive Qrs 1).

5.   Peer tutoring can also serve as a remarkable source of training young individuals with socio-practical problem-solving and positive leadership skills (Objective 3 & 4; Findings 1-8 Exp; Findings1-16, Descriptive Qrs 1).

5.5.2 Teachers/ Instructors

1.   O level faculty is very committed to make their students achieve best grades in CAIE keeping their as well as their institutional reputation high to retain their professional position secured in the market. Peer tutoring can assist them in widening the scope of their achievement (Objective 4 & 5; Findings 1-8, Exp).

2.   Secondary level teachers in Pakistan no doubt get the teacher trainings but training standards are not up to the mark especially in the public sector educational set up. The gaps in teaching skills can be effectively filled by launching effective peer tutoring programs officially on large scale in Pakistan (Objective 2; Findings 1-8, Exp).

3.   Such a programs are the significant need of the time if to take out our educational institutions from the crises of teacher performance deficit due to weak educational infrastructure especially in rural and generally in urban areas (Objective 1, 2; Findings 1-8, Exp; Findings 1-11,Open-ended, Qrs 1).

4.   Teachers or instructors can enhance their instructional strategies by involving them with student tutoring programs and can take lead in interacting internationally (Objective 1, 2; Findings 1-8, Exp; Findings 1-11,Open-ended, Qrs 1).

5.   Teachers' involvement of students to add up to their role can be highly useful to address the individual needs of the week students. It can also be a useful source of involving students with high energy level in helping their peers in the solution of their academic problems which otherwise tend to create behavior problems in the class (Objective 1, 2; Findings 1-8, Exp; Findings 1-11,Open-ended, Qrs 1).

6.   Teachers facing lack of resources tend to show low rates of student involvement in their academic progress. This issue can also be handled well if such a teachers follow peer tutoring strategies for achieving reasonable student performance ratio (Objective 1, 2; Findings 1-8, Exp; Findings 1-11,Open-ended, Qrs 1).

5.5.3 Government/ School/ College/ University Management

1.   Serious steps are needed to be introduced for introducing peer tutoring program in Pakistan especially at secondary level in public as well as private educational institutions. Pakistan government also shows some concerns to upgrade educational standards therefore a secondary school of Islamabad (IMCG, I-10)/1) introduced O level program a few years back. Such an initiatives can be taken on wider scale blended with peer tutoring (public-private collaboration) that may help in the success of such a plan significantly (Objective 1, 2; Findings 1-8, Exp, Findings1-16, Descriptive Qrs 1).

2.   As it is widely used internationally so it can be taken as an innovative idea to be introduced at all levels of education in Pakistan to make students useful individuals of the society even during their early and other stages of the academic life (Objective 2; Findings 1-11, Open-ended Qr).

3.   Teachers'/ Instructors' trainings for conducting or leading peer tutoring programs need to be started on large scale throughout Pakistan for an effective running of the program. They need to know the aims and importance of such an education-

supporting programs very well (Objective 2; Findings 1-8, Exp; Findings 1-11, Open-ended Qr 1) .

4.   Restructuring and rationalization of such a program has to be taken very seriously according to Pakistan's cultural and moral setup so that maximum benefits can be drawn out for students' improvement in learning standards as well as in other socio-psychological aspects (Objective 1, 2; Findings 1-12, Descriptive Qr 2)..

5.   Special arrangements are essential to be made for tutors' and tutees' training so that program can be carried productively for maximum output (Objectives 3 to 5; Findings 1-12, Descriptive Qr 2).

6.   Special incentives for the students working as tutors are needed if to run the program effectively like; some stipend or wages in return of tutoring in each session. It would increase the volunteering as well as performance ratio of tutoring (Objectives 1 to 5; Findings 1-12, Descriptive Qr 2).

7.   Some national and international NGO's (Non-governmental organizations) can be contacted for funding if there are such shortages seen in the complete and successful follow up of the program (Objectives 1 to 5; Findings 1-12, Descriptive Qr 2).

5.5.4 Researchers

1.   Research studies carried in such a scenario are still not enough, therefore there is a large margin left for inviting researchers to explore the related facts and solve local educational issues through recommending such a programs in their true sense and form especially at secondary level of education (Objectives 1 to 5; Findings Exp-Des).

2.   Researchers in Pakistan have wider prospects to perform in the area through action research and help in solving the academic and related problems of the Pakistani young generation (Objectives 1 to 5; Findings Exp-Des).

3.   They can work on introducing a variety of solutions to the living problems faced by Pakistani education sector, through conducting studies on peer tutoring at varied levels of education (Objectives 1 to 5; Findings 1-8 Experimental).

4.   They have a broader scope to find out the most appropriate ways to address the challenges faced by the Pakistani Education sector as well as to globalize it in a more generalized manner (Objectives 1 to 5; Findings 1-8 Experimental).

Peer tutoring being a peer mediating learning program since ages has shown wider benefits worldwide. It is the program that strongly believes in healthy peer relationship and cooperation helping social terms through routine mild to motivated collaborations. This exploitation of purposeful human relationship has been seen a remarkable breakthrough in enhancing students capability in addressing their behavioral disorders in a very suitable and natural manner. Better socialization leads to improved levels of self-realization which becomes an eye-opener for peer tutees especially and for peer tutors too though to a varied level. The researcher experienced in her present study the related worth of peer tutoring that can be multiplied if carried on large scale country-wide especially at O level and secondary level. This can be a conveniently useful mean to work on students' psycho-social issues generally seen at all levels of schooling in Pakistan as well as is experienced globally everywhere. Its wider implementation in Pakistan at all levels of Education would help out the related crises in education industry like; academic outcome, need of public sector schools for better student tutoring due to limited resources, for healthy collaboration and coordination between public and private sector schools and other level of institutions, to reduce gap in educational standards due to the multiplicity of education in Pakistan, etc. and largely building better society as a nation and human race.

Peer tutoring program's integration in the secondary, higher secondary, and university level academic program as a compulsory part of practical social work in all faculties and at all levels of school can be an efficient part of the education policy of Pakistan. The researcher was able to identify diversity of positive affects in exhibiting such a program, therefore can expect it to play diversely in not only uplifting educational standards but also its outcomes and practicality to benefit nationally and internationally both.

Multiplicity of education has become a growing menace in Pakistan to keep it bonded as a nation in its ideological as well as in general perspective. The researcher as a teacher notices a wider gap between the public sector and private sector education systems in Pakistan along with a notable variety in each of the two is really very challenging for the citizens of Pakistan to think and play as a nation. It does not encourage a required level of unity and increases differences amongst them in terms of educational standard, social status, level of cognition, capability to reflect educational learning in the practical life, success in finding better employment, leadership role, and much more. The present study found peer tutoring program very supportive as attitude modifier for individuals in interaction with each other as tutors and tutees. It made their environment accommodating for all as well as made the participants learn adjustability which improved their social terms more than before. A public-private joint venture in connecting their students through peer tutoring program would bring huge benefit in this regard and bridge the gap that is otherwise increasing to its dangerous levels. A well thought, well planned, and well implemented peer tutoring program tailored according to the national goals would be a very valuable supporting agenda to address all of the above concerns for the best interest of Pakistan.

Globalization challenges can also be addressed meaningfully by adding such a programs in the national educational agenda. The researcher found the exhibition of peer tutoring program a very cost effective option as compared to many other student performance improvement programs. Therefore, as a low economy country it would help Pakistan to carry international collaborations on large scale but it needs to be planned on mutual goals for a good check and balance according to the national ideology. It would also help in organizing related educational expos etc. in Pakistan or in her related partner country enhancing an environment of healthy competition not only within Pakistani educational community but also within countries as collaborating partners. It would definitely help in exchanging mutual competencies in the field as well as diversify educational trends in Pakistan leading to incorporate revolutionary changes in the education system of Pakistan.

5.6 Practical Implications

5.6.1 Students

1. Peer tutoring would not only be a valuable opportunity to interact with their society as a responsible individual as well as a side source of earning for themselves to bear their study expense.

2. It would serve as the best internship option during semester break for making themselves involved in the educational as well as social platform addressing many personality issues of the new generation.

3. It would help them train themselves as a responsible member of the society at large as well as for their own future in leadership role.

4. They would be available with a positive opportunity to release their energy in helping others instead of wasting time for just fun. It would give them a good

sense of self-realization encouraging to lead various socio-educational campaigns and causes.

5. It would help in curing various socio-psychological problems of the individuals which otherwise reflect and promote negatively.

5.6.2 Teachers/ Instructors

1. Teachers would be available with a better option to cover up the gaps in their class instructions and to face time shortages better.

2.   It would also help them work effectively on the discipline issues of their class by involving student in some healthy task.

3. They would be able to perform better in terms of student learning goals.

4. Shortage of AV aids and other aids would be recovered through peer tutoring effectively.

5. Teachers' involvement in students' affairs would be seen more, improving their relationship as well.

5.6.3 Government/ School/ College/ University Management

1. Peer tutoring successful launch would develop a new educational discourse and culture in Pakistan which may lead education sector to its high achievement goals nation wise.

2. It would lead nation towards positive socialization through modifying their thinking mode.

3. Achieving national goals would become a comparatively easy target through involving the young and youthful population in some healthy activity

meaningfully. Even though, it needs a rigorous follow up of the program policy for a decade or so.

4. It would be a low cost option to remodify educational problems as compared to other possible options and would reduce financial burden on the authorities.

5. It would also help in unifying nation as a whole on the grounds of understanding and respecting human values.

5.6.4 Researchers

- Researchers have high scope to perform studies on the related issue with diverse local scenarios.

- They would get great opportunity to play their part in developing an environment of action research and traditionalizing it in Pakistani research settings. It would help solve the educational living issues in Pakistan.

- They would revive the true spirit of research in Pakistan by internalizing it on real problems of the society especially education.

- Competing international research community would be carried on better grounds.

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APPENDIX A

Guidelines for the student tutors

Setting Up the Tutor-Tutee Relationship

Tutors be clear with your tutee about what s/he wants to get out of your tutoring sessions. Make sure you agree on a schedule, and can meet her/his needs. Come to an understanding about the practical dimensions of your tutoring relationship. At the first session, do the following:

- Define the number of hours. Generally, it should be 1-2 hours/week. More than 2 hours requires approval the coordinator of the tutoring program.

- Define the general meeting schedule.

- Clarify the best contact information for both of you.

Guidelines and Expectations

The Initial Communication: During the initial communication (initiated by the Tutee), ask the Tutee to identify the area(s) in which assistance is required. Use this opportunity to ask specific questions in order to clarify and establish the exact nature of the problem; this will help you prepare for your first and subsequent sessions. Be patient and listen carefully; some people find it difficult to ask for help. (This applies to your tutoring sessions as well.)

The First Session: Prepare by reading over your lecture notes and researching the subject when necessary. Consider contacting the instructor to get specific information regarding material covered and knowledge/skills expected.

During the first session, try to do the following:

1 - Get to know each other

2 - Define the problem areas

(a) Determine what the Tutee knows

(b) Determine what the Tutee needs to know

(c) Assess the nature of the difficulty presented

3 - Make a long-term plan: clarify and agree upon objectives and procedures; it may
    help to break the work into manageable tasks.

4 - Summarize and evaluate the tutorial

5 - End on time

If Tutees see immediate benefits, they will be more likely to continue, so accomplishing
something definite in the first session is important. Remember that sometimes one
session is all that is needed; however, sometimes benefits do not occur until several
regular sessions have taken place. Frequency of sessions should be a joint decision.

Subsequent Sessions: At the end of each session, set a goal for the next tutoring
session; it may be wise to give a specific assignment. Both Tutors and Tutees need to
have a clear idea of what will be worked on at each session and what is expected to be
completed by the next meeting.

Depending on the Tutee's needs, sessions can include work on any of the following
skills areas:

- Listening

- Organizing notes

- Managing time and assignments

- Reading what's been assigned for main ideas

- Outlining and summarizing material covered so far

- Working on assigned homework (that is not to be graded)

- Devising memory techniques for material covered so far

- Understanding key concepts from lectures or readings

- Preparing for and presenting seminars

- Studying for and taking exams

- Researching

Both you and your Tutee are encouraged to contact a Coordinator for extra support and/or study suggestions. Carry out periodic checks with your Tutees to see if you are meeting their needs. Don't be afraid to ask them just that.

If you don't know the answers to the problems your Tutee is having, admit it and then try the following:

a) Re-direct the Tutee to the instructor

b) Approach the instructor as a team

c) With the Tutee's permission, approach the instructor on your own

Keeping Records: Maintain a journal or log of your contacts with each tutee. After the first session, it may be helpful to write down your observations:

What kind of learner does your Tutee seem to be? - What went well during the session? - What did not? - What would you like to have done differently? - What hypotheses can you make about the Tutee, the sources of difficulty, and the prospects for change? - What course of action is in order?

Thereafter, entries on an ongoing basis can help you keep on track; simply note what was done, what should be done next time, and what needs to be done in between. These notes can help you see the need to revise the original plan.

If you are tutoring more than one Tutee, such a journal or log may also help you to keep your tutoring individualized or custom-made.

Pedagogy and Androgogy

The strength of individualized teaching (tutoring) is its flexibility. Take advantage of that and strive to make a perfect fit between teachings and learning styles; pace should be especially considered.

Learning Styles

There are several different learning styles, i.e., means by which people learn most effectively. Try to figure out what style is your Tutee's strongest and then teach to that strength. Remember that concepts can be explained, understood, retained, and retrieved in many different ways. The following chart lists (Page No 273) a few characteristics of the three main learning styles, along with teaching strategies, which teach to the strengths of the particular learning style.

Teaching Strategies

You may be more comfortable with teaching holistically, or you may prefer to proceed 'step by step'; you may work better with lots of structure, or you may prefer arrangements to be rather open. Whatever the case, you must be able to adapt your natural teaching style to the learning style of your Tutee, as well as to the content involved. Remember that the Tutees come first: be responsive to their needs, and remember that what works for one may not work for another. The following is a list of teaching strategies, choose from it judiciously:

questioning – see questioning techniques section below (Page No 272) - discovery – set up problems for tutee to solve - drill – memory work - alternation – tutor/tutee switch roles - application – apply learned X to new situation Y - testing – see questioning techniques below for possibilities - summarizing – on a regular basis - coding – illustrate/link material with the strange, unusual, funny, emotional (a memory tactic) - looking it up (together) - referral to other resource people – yes, this is a valid teaching

strategy! - board work – especially for kinaesthetic learners - demonstration – especially for kinaesthetic learners - rephrasing – your question/instruction - paraphrasing – the tutee's response especially for auditory learners - silence - silence is especially important when questioning (we need time to think!)

Whatever strategy you use, remember the importance of relevance and reinforcement. And always encourage the student to participate actively in the learning process. Also, remember that feeling can be as influential to learning as thinking, so pay attention to feelings – both the Tutee's and yours.

Questioning Techniques

Learn to ask the right kinds of questions; each of the following kinds of questions can be appropriate, depending on the situation:

Difference in form: - leading – has an answer already known by tutor - probing – helps tutee see possibilities - yes/no – requires only a 'yes' or a 'no' - true/false – also requires only a one word answer - multiple choice – can encourage conceptual discrimination - short answer – encourages expression

Difference in content: - knowledge - comprehension - interpretation - application - analysis - synthesis - evaluation - feeling

Above all, ask thoughtful questions. Ask for amplification, specification, qualification. Encourage your Tutee to do the thinking. Ask your Tutees often to repeat verbally what they have learned as a check for accuracy. Don't accept a nod or silence as signifying understanding. It could be politeness or fatigue! This also keeps the Tutee in an active role (and it's so easy to become passive when you have someone helping you…).

Learning Style Characteristics Strategies

Visual Learners

- Need to see it.

- Strong sense of color.

- Difficulty with spoken directions.

- Use of graphics, diagrams, etc.

- Encourage visualizing to memorize.

- Use color coding to organize notes, ideas, etc.

Give written directions Auditory Learners

- Need to hear it to know it.

- Difficulty with written directions.

- Use recordings for reading and lectures.

- Encourage participating in discussions

Use spoken directions Kinaesthetic Learners

- Need to do it to know it.

- Learn better when physical activity is involved.

- Use a computer to reinforce learning through sense of touch.

- Encourage memorizing while moving.

- Use a cut-and-paste method for organizing essays, etc.

Learning Disabilities

This term is not a label, but a key to understanding. If a student self-identifies as a student with a learning disability, ask how you might best meet his/her learning needs. Then try to adjust your tutoring style accordingly. The student can be your best resource. Determine whether the student has established a link with Student

Accessibility Services. If not, it may be advisable to do so with the Tutee's consent, it may be helpful to speak to the Manager of Student Accessibility Services.

Interpersonal Communication Skills

Get to know your Tutee – build a rapport with them. Empathetic comments and information about your own experience can be helpful. But remember that it is not necessary to develop a friendship. (This in fact can, but does not necessarily, interfere with the Tutor/Tutee relationship.)

- Give your Tutees your undivided and sincere attention at every session.

- Be patient.

- Think of alternative ways to explain ideas and concepts.

- Break the teaching into small units.

- Be tactful.

- Cue, rather than tell, your Tutee about what needs to be done.

- Be aware of your tone and your body language.

- Sometimes validation is the best thing you can do (e.g., "Yes, that IS tough…").

- It is important to be honest; explicit identification of a problem may lead to a solution.

- Keep a positive attitude and be a confidence builder. Be encouraging, but remember to offer practical strategies not just vague encouragement. If progress is not being made despite the best efforts of both you and your Tutee, consider seeking additional help and/or advice. (See section titled Resource People, page 2.) Making a referral is wise when you suspect a problem that is 'out of your league.'

Training and Resources

At the beginning of every semester, the Academic Skills Coordinators will offer Tutor training sessions. Please let and Academic Skills Coordinator know if you are not able to make any of these sessions (Peer Tutoring Manual, 2013).

A summary of all the above instructions is as follows:

- Practice good listening skills. It may be useful to rephrase the tutee's questions, to ensure that you understand the main point and to give the tutee the opportunity to elaborate on it.

- Be careful not to step outside your area of expertise. When in doubt, ask the professor. Don't make up an answer if you don't know it.

- Help your tutee understand the concepts behind a problem, or the process of solving it, rather than solving it directly for her/him.

- If your tutee seems to be experiencing a problem which you feel is not covered by the kind of course content instruction you can provide, please refer her/him to the appropriate class dean.

- If you or your tutee feel the arrangement is not working, either of you can contact the coordinator for reassignment (Guidelines for Guidelines for Tutors and Students Requesting a Tutor, 2016).

APPENDIX B

Gudelines for the student tutees

1. Prior to your initial communication with a member of the Peer Tutor roster, make a list of the areas in which you are having difficulty.

2. During the initial communication, be prepared to identify these areas, being as specific as possible.

3. Be prepared for your first and subsequent sessions. It may help if you do the following: a) while doing your homework, make a list of all your questions and the page numbers of sections for which you need help. b) During lectures, place a mark beside problem spots and bring this to your session with your Peer Tutor.

4. Remember that sometimes one session is all that is needed; however in other cases, benefits do not occur until several regular sessions have taken place. Frequency of sessions should be a joint decision.

5. Consider keeping a journal; after the first session, write down your observations:

- What went well during the session?

- What did not?

- What would you like to have done differently? What hypotheses can you make about your sources of difficulty and the prospects for change?

- What course of action is in order?

- (Guidelines for Tutors and Students Requesting a Tutor, 2016).

6. Do not expect your tutor to do your homework. Your tutor will help you understand the concepts behind a problem, or the process of solving it, but s/he will not solve it directly for you.

7. Having a tutor is a supplement to other class resources. It is not a substitute for attending class, TA sessions, and/or the professor's drop-in hours.

8. As a result of meeting with a tutor, you should expect to work hard, to improve your skills and understanding of class material, and to improve your comfort level with class material.

9. You should not expect:

    o A homework solving session – come prepared!

    o An answer to everything in the class.

    o A sudden improvement in your GPA.

Entries made on an ongoing basis, after each subsequent session, can help you keep on track or adapt as the need arises (Peer Tutoring Manual, 2013).

APPENDIX C

Tutor & Aide Commitment Form

• I will arrive prepared and on time, maintain regular attendance and follow program procedures for informing my supervising teacher of any absences.

• I will serve as a role model of good school conduct, appropriate social behaviour and positive communication skills.

• I will keep all information about my students confidential.

• I will provide my students with accurate and honest feedback, positive encouragement and my full, undivided attention.

• I will become familiar with the learning needs, interests and preferences of my students as well as the specific classroom routines and expectations of my supervising teacher.

• I will show students through my actions and words that learning is important to me.

• I will take an active role in helping my students to develop personal pride and a positive self-image.

• I will respect the opinions, values and cultural backgrounds of my students and treat all students with dignity and respect.

• I will seek assistance from my supervising teacher when I have a concern or if I am unsure of how to work with a student.

• I agree to follow the policies and procedures of the Tutoring/Classroom Aide Program.

_____ Tutor/Instructional Aide

Date

This form may be copied and shared freely for non-commercial, educational purposes.

APPENDIX D

Post- Test only (% ages)

Students	Class	Catego ry	Experimental Group				Comparative Group			
			First Term	Grade	Secon d Term	Grad e	First Term	Grad e	Secon d Term	Grad e
1		TR	69	C	98	A*	46	E	86	A
2		TR	55	D	93	A*	30	U	46	U
3		TR	59	D	85	A	58	C	98	A*
4		TR	60	C	86	A	56	C	86	A
5		TR	52	D	75	B	36	U	90	A*
6		TR	64	C	89	A	48	E	68	C
7		TR	64	C	79	B	42	E	76	B
8		TR	92	A*	94	A*	36	U	72	B
9		TR	57	D	75	B	38	U	56	D
10		TR	81	B	88	A	40	E	58	D
11		TE	41	E	60	C	20	U	25	U
12		TE	32	U	59	D	36	U	56	D
13		TE	56	C	87	A	38	U	60	C
14		TE	51	C	68	C	46	E	64	C
15	9th	TE	55	C	82	A	32	U	60	C
16		TE	41	E	79	B	70	B	98	A*
17		TE	67	D	87	A	16	U	20	U
18		TE	61	D	81	A	26	U	24	U
19		TE	48	E	81	A	68	C	65	C
20		TE	40	E	89	A	82	A	76	B
21		TE	48	E	74	B	46	E	50	D
22		TE	44	E	69	C	42	E	45	E
23		TE	32	U	61	C	50	C	44	E
24		TE	34	U	44	E	29	U	36	U
25		TE	26	U	41	E	80	A	60	C
26		TE	32	U	47	E	80	A	80	A
27		TE	53	C	59	D	76	B	78	B
28		TE	85	B	96	A*	74	B	38	U
29		TE	65	C	86	A	66	C	78	B
30		TE	22	U	21	U	90	A*	82	A

Key:

TR	Tutor
TE	Tutee

APPENDIX E

Questionnaire 1

Effect of Peer Tutoring Dynamics on Students' Socialization at Secondary Level

Dear students of class 9th

Kindly fill in the following question grid by keeping an eye on the given key. You are requested to read and comprehend each of the question/ item and recall your all experiences before and after peer tutoring experience. Please mention your name and role as a tutor/tutee in the available space below. Those who performed both roles are advised to fill the questionnaire twice according to the role played.

Name: _____   **Class:** _____

Role: Tutor/ Tutee (tick any one)

Key:

5	4	3	2	1
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

A: Socialization Attributes

1. Relationships

Sr#	Item	5	4	3	2	1
1	Your relationship with your tutor/tutee is helpful in solving your academic problems					
2	Your relationship with your tutor/tutee is helpful in your routine problem solving					
3	Your relationship helps you interact better and become more friendly now					
4	Your relationship gives you confidence in sharing your ideas					
5	Your relationship makes you more interactive in groups now					

2. Power (authority while working with your tutor/tutor)

Sr#	Item	1	2	3	4	5
1	You share power with your tutor/ tutee					
2	You enjoy sharing power with your tutor					
3	You feel more powerful in expressing your ideas/views now					
4	You feel your tutor/tutee is more dominating					
5	You feel, your power helps you perform better					

3. Resistance (retaining distance/gap while working with your tutor/tutee)

Sr#	Item	1	2	3	4	5
1	You are reluctant while working with your tutor/tutee					
2	Your tutor/tutee doesn't cooperate making you reluctant					
3	You feel shy while discussing/ explaining your concerns with your tutor/tutee					
4	You find it essential to avoid distance between you and your tutor/tutee towards improving your academics					
5	Resistance helps you avoid clash with your tutor/tutee					

4. Confusion

Sr#	Item	1	2	3	4	5
1	You are able to tackle confusions in academics better after peer tutoring					
2	You can control your confused thoughts better after peer tutoring					
3	You can work with better clarity of mind/ ideas now					
4	You are able to get out of confused state of mind with less effort now					
5	You are able to remove your confusions by peer discussion					

5. Cooperation

Sr#	Item	1	2	3	4	5
1	You usually cooperate while working with your tutor/tutee					
2	You feel your cooperation/ adjustment is essential for your own improvement in academics					
3	Your cooperation is helping you improve in your class relations					
4	You feel it has made you make more friends					
5	You feel cooperation with your tutor/tutee has helped you solve many of your other behavior problems					

6. Responsibility

Sr#	Item	1	2	3	4	5
1	You find yourself more responsible now					
2	You can fulfil your responsibilities better now					
3	Your sense of responsibility has helped you work harder in your academics now					
4	Your sense of responsibility has made you better even independently now					
5	Your responsible behavior has improved your social repo					

7. Expectation

Sr#	Item	1	2	3	4	5
1	You expect healthy interaction between you and your peers now					
2	You try for improving healthy interactions between you and your class					
3	You expect more help/cooperation from your tutor/tutee in any matter at school					
4	You try harder to come up to others' (teachers, parents, tutor/tutee) expectations					
5	You expect high from others now					

8. Interaction

Sr#	Item	1	2	3	4	5
1	Your interaction with your peers is more useful now					
2	Your interact with your classmates more frequently than before					
3	Your interaction with your peers is mostly helpful					
4	You feel less hesitant in interacting with your peers					
5	You feel improvement in your interaction with peers, has helped you feel more confident to work out your problems					

9. Interpretation

Sr#	Item	1	2	3	4	5
1	Your peer-tutor relationship has helped you develop better understanding of the academic content and other matters					
2	Your peer-tutor relationship has helped you understand others better in their communication					
3	Your better understanding has helped you build better relations with your peers/class					
4	Your better understanding has helped you work better with your peers					
5	Your better understanding has helped you overcome your academic issues					

10. Expression/Impression Management

Sr#	Item	1	2	3	4	5
1	You can communicate your concern better since you worked with your tutor/tutee					
2	You can manage your work well since you worked with your tutor/tutee					
3	Your impression in the class improved since you worked with your tutor/tutee					
4	You can handle different situations better since you worked with your tutor/tutee					
5	You are better in handling your relationship with your peers					

B: Open Ended Responses

Briefly explain your responses in the following list of questions.

1. **How was your experience as a tutor/tutee?**

   _____

   _____

2. **How it helped you in your academic skills?**

   _____

   _____

3. **How peer tutoring added up to your academic performance?**

   _____

   _____

4. **How it was helpful in improving your academic performance in class?**

   _____

   _____

5. **Explain your academic relationship with your tutor/tutee.**

   _____

   _____

6. **How you helped your partner academically through peer tutoring?**

   _____

   _____

7. **How you helped yourself academically through it?**

   _____

   _____

8. **What was the core factor in your tutor-tutee relationship which made you successful in your aim to progress11?**

   _____

   _____

9. **What was the best thing with your partner that helped you improve your/her academics?**

   _____

   _____

10. **Any suggestion for future?**

    _____

    _____

APPENDIX F

Open Ended Responses of Questionnaire 1

Participant 1

1. No doubt it was an interactive programme. The time we spent helped us in knowing and engaging others.

2. I shared my ideas and tried to cooperate with my peers but was not that much comforting activity for me.

3. The project was exciting to work on. But I personally did not find it comfortable to sit with the non-serious peers.

4. It did not help me anyway because my peers diverted my focus.

5. One of my tutees did not want to sit with me forcefully.

6. I tried to make my tutees focus on their weak areas.

7. I got myself more alert of my own studies and goals.

8. I could see their hard work but they needed more determination to set up their goals.

9. I did not find my partners playing any role in improving my academics.

10. For such programmes motivation sessions should be conducted for all the participants.

Participant 2

1. My experience as a tutor was good as whatever I knew I explained to my tutee.

2. The content became clear to me during my explanation to the tutee.

3. Some of my work portions got strong due to through peer tutoring.

4. I was much more confident on my class answers.

5. It became friendly.

6. I tried hard to solve her problems.

7. I was making my weak areas strong by tutoring.

8. The core factor in our relationship was that we could reach each other easily.

9. We were friendly so could ask each other a variety of questions.

10. Peer tutoring must be carried in future with much more formal planning.

Participant 3

1. It was a great experience because my tutees were cooperative.

2. I was able to get some of my problems solved.

3. It improved my academic problems as I got solutions to my problems related to test and exams.

4. I gained confidence and was able to share my ideas with class.

5. My relationship with tutees was fine and I enjoyed working with them.

6. I explained them their problems and helped them in there solutions. Sometimes my assignments guided them how to do and present their work.

7. I also got answers to many of my questions while helping tutees in problem solving.

8. My tutees and I cooperated each other.

9. My partners followed my instructions.

10. Peer tutoring should be continued in future because it is a great way of helping each other in studies.

Participant 4

1. My experience as a tutor was great. It was an interactive activity which I think is very effective for the students.

2. Though it was an interactive activity but it didn't help me in academics. We couldn't cooperate to sit together and I found it uncomfortable.

3. It was easy enough for us to provide authentic and appropriate answers to our teacher.

4. My Confidence level increased.

5. We were cooperative with each other but at certain times showed anger as well as had little fights as well.

6. I tried to clarify my tutee's queries and tried my best to help them release their confusions.

7. I managed to remove my difficulties and learned a lot from my tutees.

8. The core factor in our relationship was unity and cooperation which we tried to maintain in order to achieve our goals.

9. No doubt the activity was good but due to certain problems both of us were not able to achieve our goals completely.

10. It is an effective strategy but should be carried on students' willingness.

Participant 5

1. I find it helpful in solving academic problems and to become friendly towards others.

2. I felt free in asking my queries from them.

3. My confused thoughts became clear through peer tutoring sessions. It helped me improve my grades.

4. It wasn't helpful much as I had enough confidence from the beginning.

5. My tutees became my best friends.

6. I made sure they understood everything.

7. I changed myself to settle between them.

8. The core factors in our relationships were friendship and cooperation.

9. I improved in having better understandings of the subject content and learnt good teaching skills.

10. Peer tutoring is a good way to make a person comfortable in his surroundings. By following such programmes students ca be made responsible and confident.

Participant 6

1. It was extremely helpful in not only my academics but also in making me more confident.

2. By teaching tutees I got new ideas from them and became able to come up with better answers.

3. Peer tutoring allowed me to clarify my own confusions improving my knowledge. It introduced me with tutees ideas which helped me produce better result.

4. The activity further polished my skills allowing me to show better performance.

5. I developed friendly relations with my tutees who were not only cooperating me but also motivated me a lot.

6. I was able to make my tutee shine by providing them guidance. I provided her tips and had group conversations more often.

7. Peer tutoring programme made me aware of my weaknesses. I was able to accept the fact and worked harder.

8. Cooperation and realization of our weaknesses made us successful.

9. My tutees became a source of great motivation for me and their cooperation helped me improve my and her academic performance.

10. Peer tutoring should be made compulsory in schools as it makes the studious students realize their weaknesses, further polishing themselves.

Participant 7

1. It was a very good experience to help my fellows achieve better.

2. It helped me in my academics by discussing questions and having problem solving sessions with my fellows which improved my work quality.

3. It helped me perform well in class and in getting better grades in final exams.

4. It was really helpful in making me confident in answering any question easily.

5. We worked together as sisters avoiding any sense of superiority or inferiority. Instead we cared for each other.

6. My tutees were confused in answering any question or attempting it but peer tutoring helped me to make my tutees recover this deficiency.

7. I became more cooperative towards my peers. It also helped me to learn better myself.

8. Cooperation, care and helpful attitude for each other made me my tutees successful in showing progress.

9. We discussed everything freely and worked out our weak areas.

10. This is being carried perfectly and should be carried in future. It should be made compulsory in every class and tutors should be given some salary or stipend for their efforts.

Participant 8

1. My experience remained good.

2. It did not contribute significantly in my academics.

3. It did not help me that much.

4. Wasn't much helpful.

5. One of my tutee was very shy and I perhaps more demanding in order to bring the best out of her.

6. I had my peer partners helped the best to address her queries. Initially I provided her notes as well for better idea of work.

7. I couldn't help myself through it.

8. My tutees approached me whenever needed.

9. The best thing in my partners was to be the good listeners.

10. Peer tutoring can be useful in future too.

Participant 9

1. It was very exciting and helpful for me as my tutees were very cooperative.

2. While helping my tutees to solve any problem I also helped myself to become skilful in tackling many hard questions easily.

3. It helped me to come out of the confused state. I also learnt many things from my tutees.

4. Now I have become more confident about what I know and say. It also helped me improve my impression in class.

5. We worked more like sisters and could easily talk about our problems.

6. Their concepts were clarified than before and they were able to work independently.

7. My concepts were more cleared.

8.   My tutees were very cooperative and had positive attitude towards learning.

9.   We helped each other through good cooperation.

10. The tutor should provide enough time to their tutees with a more positive attitude.

Participant 10

1.   It was little disappointing as one of my tutee did not cooperate.

2.   It helped me in understanding geography's basic skills better.

3.   It helped me develop better answers in written while explaining ideas and concepts to my tutees.

4.   It did not help out much more in my academics but stabilized my performance as I became more attentive to the class lessons.

5.   I continued to work hard and not give up, made me control my emotions more and increase endurance.

6.   I worked hard but faced tutees non serious attitude.

7.   My tutee didn't know geography's basics previously so I helped her a lot by teaching basics. I went through this all to help my friend in her academics and also to get a certificate.

8.   I used to draw and write down points and prepared concepts pictures etc which helped me to improve tutees concepts.

9.   I used to give her questions and we studied together via facetime every day at home also.

10. Peer tutoring should be made permanent by the school authorities. It can be a source of income for high achievers.

Participant 11

1. The experience was pleasant.

2. I improved in some of my study areas.

3. It improved my performance but not significantly.

4. It made me see my performance in class as average.

5. We did not interact much as needed.

6. I couldn't help my partner.

7. I couldn't improve much.

8. The core point was the exceptional understanding of concepts.

9. Tutors cooperated me whenever I asked.

10. It is a new idea that should be used in schools for students uplift.

Participant 12

1. It was a wonderful experience and one of the best I had. We both explored a lot of new things.

2. I am now able to grasp concepts more easily than before. I can answer questions in the class without any hesitation.

3. At the start of the term I did not do well but after peer tutoring my results improved and I got good grades.

4. I was shy to answer questions in the class and wasn't able to complete my given task on time. My tutor helped me and proved really beneficial in improving our performance.

5. My relationship with my tutor was successful. We became close friends instead of just classmates.

6. We discussed questions before attempting them which helped in reducing mistakes.

7. I was able to understand the actual meaning of text in the book. I asked those questions from my tutor which were not clear to me improving my academics.

8. The core factor in our relationship was cooperation and willingness to work with each other.

9. My tutor made concepts easier for me making me perform better in the class.

10. It should be continued.

Participant 13

1. The experience was really good to share our thoughts with our tutor and understand the things.

2. Detailed discussions with my tutor helped me get better understanding and confusions were released.

3. It helped me understand my content problems and I can solve them better now.

4. It helped me in getting better marks by understanding the actual subject's needs.

5. We worked as friends and helped each other in many problems confidently.

6. It also helped my tutor clarify his concepts even further during his discussions with me. His marks were also improved.

7. My confusions were released and I showed progress in my studies.

8. I had good understanding with my tutor.

9. My tutor was very serious to help me out in my academics.

10. Peer tutoring is a good source in improving our academic results and understanding. It should be continued in future.

Participant 14

1. It was a good experience and helped me a lot.

2. It helped me in improving my academics.

3. My performance improved.

4. It was also helpful in improving our class relations.

5. We had good friendly relation.

6. My tutor also got more chance to improve his concepts.

7. It helped me to overcome my threats and get good grip on the concepts.

8. The core factor was our cooperation.

9. My tutor was helpful all the time that made me solve my academic issues.

10. Peer tutoring should be applied in some subjects.

Participant 15

1. This experience was helpful in improving my behaviour towards others.

2. By discussing issues my understanding of concepts improved.

3. My concepts are much more improved than before.

4. I became more confident in expressing my views.

5. We became good friends and worked in harmony.

6. It made my partners concepts more clear and he assigned me work with better understanding.

7. I studied even harder to come up to my tutors expectations.

8. We both were motivated to help each other.

9. My tutor used to share his own ideas and tips to understand the concepts helping me.

10. I want my tutor to remember to remember me and pray for me. Peer tutoring was good.

Participant 16

1. It was a good experience.

2. It helped me to be open to others ideas and views and to tackle different questions.

3. We didn't have much more academic discussion but I became more confident in my work.

4. I recognized my errors and identified my class standing.

5. We were good class fellows who could discuss their problems and jokes as well.

6. My tutors thinking perspective was improved further.

7. I learnt discussing my problems.

8. Our relationship was just ok.

9. My tutor explained me thoroughly.

10. Peer tutoring idea should be implemented in our schools formally.

Participant 17

1. It was a very good experience and I tried to work hard.

2. I learnt how to explain and write my ideas with better clarity.

3. I improved in knowing the basic concepts of the subjects.

4. I became more attentive in class.

5. I started working hard. Our relationship was just ok.

6. It helped my tutor revise more before he taught me.

7. I wanted to contribute to my society.

8. The core factor in our relationship was our sense of responsibility.

9. It was my perseverance.

10. It should be improved further. Special rewards and certifications should be given to the best tutors.

Participant 18

1. The experience was quite good and beneficial for my studies.

2. It also helped me improve my concepts.

3. I clarified my concepts further. We could share our problems easily.

4. Now I feel more confident while answering questions. It improved my impression on teachers.

5. We became good friends who could share any type of problem.

6. My tutor's concepts were also improved and she gained more confidence in reflecting his ideas.

7. I strengthen my concepts. I could interact with others more confidently.

8. She was more cooperative and friendly.

9. She was more interested and willing to make me learn better.

10. Tutor should provide enough time to her partner and follow a much more positive attitude.

Participant 19

1. It was not that much good as my tutor was also confused on my queries.

2. I couldn't solve my confusions very well.

3. It could help a little to tackle my problems.

4. It couldn't help as she used to come late and we couldn't sit along.

5. Our relationship was friendly.

6. We could solve some of each other's problems.

7. I couldn't help myself through it.

8. We could interact easily and were confident.

9. We were friendly so could help each other easily.

10. Peer tutoring must be carried out in future but tutor should be more serious.

Participant 20

1. It was a good experience. I learnt many of new things.

2. It helped me improve my academics and raised confidence.

3. My performance got better than before.

4. My tutor helped me a lot and always gave me homework which helped out my academics.

5. My tutor was very cooperative and was always helpful in problem solving.

6. I didn't help my tutor much.

7. I was very motivated and studied hard.

8. The core factor was that we studied with each other in a comfortable environment.

9. The best thing was that he was very helpful and was available whenever I needed him.

10. Peer tutoring should be continued for weak students.

Participant 21

1. As a tutee it was a great experience. Now I am able to solve my problems easily.

2. It helped me to overcome many of academic issues.

3. It helped me in improving my result.

4. I improved in class performance and in the subject.

5. My relation with my tutor is friendly. Now I feel comfortable to share every problem with my tutor.

6. I helped m partner by being a good friend and by working harder.

7. I helped myself by working hard and by becoming good listener.

8. The core factor was to share problems. We were always ready to help each other.

9. He could understand me very well and always motivated me.

10. Peer tutoring is suggested for future if to make weak students work hard and socially active.

Participant 21

1. As a tutee now I am able to get out of confused state of mind with less effort.

2. Now I can handle different situations better by working with my tutor.

3. It helped me improved my grades and over all academic performance.

4. Now I can perform better and communicate better with my class.

5. He is my closest friend now.

6. I helped her by my hard work and cooperation.

7. I worked harder and improved in problem solving.

8. Our relationship in work was of true friends and we cooperated each other.

9. He helped me to understand the topic and in solving question correctly.

10. Peer tutoring experience helped me in leading to better future so it should be the part of school environment.

Participant 22

1. It was a great experience and made me more responsible and hard worker.

2. My tutor could help me in academics even more if he would have become more regular to school.

3. My academics were improved to some extent.

4. I have started performing better. My assignments are also better now.

5. We dealt each other like sisters.

6. He made me learn how to attempt my work and to become a hard worker.

7. I became more confident and hard worker.

8. Our friendly relationship made us successful.

9. I felt easy to ask questions to my tutor.

10. Tutors have to be more responsible and peer tutoring is useful.

Participant 23

1. It was a great experience. My tutor helped me to get rid of my problems.

2. It gave me sense of responsibility.

3. Not really much addition due to me being irregular.

4. I remained irregular due to some health issues.

5. We were having some health issues.

6. My tutor was not very friendly but still we had discussions.

7. I discussed more but my tutor had less interest.

8. I could handle over more work.

9. Discussions clarified my concepts.

10. Peer tutoring is good.

Participant 24

1. I found it really helpful not only in studies but also in making friends.

2. It helped me in clarifying many of my concepts and understand things better.

3. It clarified my confused thoughts and I was able to solve problems in a better manner.

4. It helped me share my ideas and made me confident enough to speak and express.

5. We became best friends.

6. We shared our problems.

7. It made me responsible.

8. The core point was cooperation.

9. Solving each other problems was the best thing.

10. It's really helpful in developing friendly relations. It should be applied in every school.

Participant 25

1. I felt comfortable while working with my tutor.

2. My concepts were clarified and confidence increased.

3. My tutor introduced new ways to me to solve my problems easily.

4. My quality of work presentation improved.

5. It was good as my tutor was helpful so was i.

6. Sometimes I helped my tutor in confusions.

7. I developed more interest in studies.

8. Our cooperation was the core factor.

9. My tutor didn't try to dominate which developed more confidence in me.

10. Peer tutoring should be continued and implemented institutionally.

Participant 26

1. My experience as a tutee was very well. I could easily interact with my tutor.

2. It helped me in my regular sessions as well as examination as my tutor helped me in problem solving.

3. My overall performance improved as my tutor helped me learn decision making.

4. It helped me gain more confidence. Now I can ask questions confidently in front of class.

5. We are now friendlier towards each other.

6. I helped my tutor by overcoming his own confusions.

7. Sometimes both of us tried hard to work out a question.

8. We were cooperative enough with each other.

9. My partner often settled my confusions which were previously hindering my progress.

10. There should be more tutoring programmes in school for student's benefits.

Participant 27

1. At first I was annoyed being away from my class friend but with the passage of time it was good.

2. My tutor provided me guidance in my confusions.

3. My concepts became much clear improving my academics.

4. I started submitting my homework regularly so I learnt doing hard work.

5. Our relationship was good but my tutor was less talkative.

6. I resolved many issues during discussions myself that helped my tutor.

7. I developed willingness to cooperate for my betterment.

8. The core factor was cooperation.

9. The best thing was that my tutor clarified my confusions instantly.

10. Peer tutoring should be more accommodative.

Participant 28

1. It was a good experience as I was free to discuss my queries with my tutor.

2. It really helped me in improving academics.

3. I started performing well in class as well as in exams.

4. I became confident enough to answer question.

5. We were friends but now we are best friends who help each other and study together.

6. I helped her in her confusions in the content.

7. Peer tutoring helped me in solving my problems.

8. The core factor was that we could communicate well.

9. The best thing was that my tutor was good in the subject learning.

10. Peer tutoring programmes should be carried further in other classes as well.

Participant 29

1. It was really a nice experience that I had for the very first time.

2. It helped me bring myself forward and strengthen my basic information and techniques to analyse.

3. It did add much to my academics by making my basics strong.

4. It gave me a strong footing to voice out my thoughts and confusions.

5. It was friendly.

6. I helped my tutor in his confusions followed by the addition of his perspective on the topic.

7. I helped myself by putting my trust and belief in God, tutor and teacher.

8. Discussing questions from different perspectives was the core factor that strengthened my basics.

9. The best thing was our friendly and approachable relationship.

10. I would suggest the continuity of peer tutoring in schools as it promotes cooperation and hard work among the students.

Participant 30

1. It was good as it was helpful.

2. It helped me as my confusions were better understood and solved by my age mates.

3. It improved my grades effectively.

4. I became confident in sharing my views which improved my impression in class.

5. It was good as we both were open to each other.

6. I helped my tutor by cooperating him and followed his instructions properly.

7. I came prepared in tutoring sessions with my queries and gave more time to my studies.

8. The core factor was our honesty with the role given to us by the teacher.

9. My tutor made me realize my shortcomings without degrading me.

10. Peer tutoring should be continued as it can serve better in working out students' academic and other problems in schools being a more convenient method of collaborative learning.

NOTE

Tutors: 1-10

Tutees: 11-20

APPENDIX G

Tutors'and Tutees' Perception of Peer Tutoring

Questionnaire 2

Dear students of class 9th

Kindly fill in the following question grid by keeping an eye on the given key. You are requested to read and comprehend each of the question/ item and recall your all experiences before and after peer tutoring experience. Please mention your name and role as a tutor/tutee in the available space below. Those who performed both roles are advised to fill the questionnaire twice according to the role played.

Name: _____   **Class:** _____

Role: Tutor/ Tutee (tick any one)

Key:

5	4	3	2	1
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

Sr#	**A Peer Tutoring: A Convenient Means of Academic Progress**	5	4	3	2	1
1	I found PT useful in addressing my academic concerns					
2	It helped me in learning mentorship skills					
3	It gave me better realization of my talent					
4	It helped me develop/improve my leadership skills					
5	It helped me reflect better on my academic weaknesses					
6	It has made me more reflective on my academic weaknesses					
7	It supplemented me in better understanding of concepts					
8	It helped me know my academic needs					
9	It helped me work constructively on my grades					
10	It helped me achieve better grades					

Sr#	B Peer Tutoring : A Convenient Means of Student Socialization	1	2	3	4	5
1	I know myself better now					
2	I feel more responsible of myself					
3	I developed better relations with my peers					
4	I am able to overcome my non-socializing behaviour					
5	I find it easy now to accept others' view					
6	I am less/not reluctant in taking responsibilities in a group					
7	I have learnt making compromises in groups					
8	I like to discuss my academic concerns with my peers					
9	I feel comfortable in discussing my concerns with my teacher					
10	I find more charm in my school					

APPENDIX H

Role of Peer Tutoring in Socialization

Structured Interview

1. How it was helpful in improving your interaction in class?

2. How peer tutoring helped you in your social interactions?

3. Which of your personality weaknesses were removed or worked out through your role as tutor/ tutee?

4. Which positive or negative traits were developed in you through playing this role?

5. What was the core factor in your tutor-tutee relationship which made you successful in aim accomplishment?

6. What was the best thing with your partner that helped you improve yourself as a class mate?

7. Was there any sense of achievement with you out of this experience as a tutor/tutee? Explain.

8. How has this experience made you earn some good feeling?

9. How was peer tutoring a good mean of socialization for you?

10. How much successful you are in realizing your deficiencies and overcoming them?

APPENDIX I

Role of Peer Tutoring in Socialization

Structured Interview Responses

Tutors' Responses

1. **How it was helpful in improving your interaction in class?**

I.   It helped me develop stronger relations with other students of the class.

II.   It made me introduce with the fellows whom I didn't ever talk.

III. It was helpful in knowing the ways how to socialize in the class.

IV.   I developed close relationship with those whom I didn't ever talked.

V.   It made me feel ease in my class interaction.

VI.   I was now able to interact equally with all of my classmates.

VII. I improved my positive communication with my classmates.

VIII. It made me interact widely in the class.

IX.   It strengthened my relationship in class.

X.   I felt more confident not only in building relations with my class fellows but also felt comfortable in treating everyone equally without any bias.

XI.   It has made me know more of my classmates other than my friend.

2. **How peer tutoring helped you in your social interactions?**

I.   I was now less reluctant in interacting people around me.

II.   It made me better in my social dealings with the people around me.

III. It helped me a lot as I gained confidence and improved my behavior towards others.

IV.   It helped me accept the importance of many of others in my environment.

V.   I can interact with people easily now and can also work with comfortably.

VI.   It made me develop good relations to even those individuals whom I felt reluctant before.

VII.   I learnt the skill of being polite in my nature.

VIII.   It helped me make new friends. Now I don't feel shy talking to them.

IX.   I was previously shy and preferred not to talk to others most of the times. This activity allowed me to communicate conveniently and make friends much easily.

X.   It helped me interact better with others improving my relations with them.

3. Which of your personality weaknesses were removed or worked out through your role as tutor/ tutee?

I.   It gave me strength to voice my confusions.

II.   I was able to give detailed responses.

III.   My habit of not talking to anyone mostly was quite improved.

IV.   My hesitation of asking someone a questions and interacting others was eradicated.

V.   I was not confident enough before but tutoring my tutee made me release this.

VI.   Nil

VII.   I became more interactive in my social dealings.

VIII. My confusions related to different things was removed and I have become quite confident in answering questions.

IX.   I was able to improve my confidence and allowed me not only to socialize but also to be ranked amongst the leading students of the class.

X.   My confidence level was increased to some extent by performing the role of a tutor.

4. **Which positive or negative traits were developed in you through playing this role?**

I. I became dependent upon other's opinion in my matters.

II. Now I feel pleased helping others in their problems.

III. I developed more confidence on myself through peer tutoring practices.

IV. I developed a passion of helping others.

V. My way of expressing thoughts changed but I have also become impatient to an extent now.

VI. Nil

VII. Nil

VIII. It has made me more helpful and I have developed good interest in working with my classmates.

IX. I am now more responsible and can deal with problems without hesitation.

X. I have developed an attitude of helping others and my confidence has also increased.

5. **What was the core factor in your tutor-tutee relationship which made you successful in aim accomplishment?**

I. Our friendly relationship helped us in accomplishing our aim.

II. We had good mutual understanding.

III. Our friendship and understanding each other made us successful.

IV. Our less communication gap was helping in getting success.

V. The motivation level of both of us was quite high which pushed us for good cooperation throughout.

VI. Mutual cooperation made us achieve our aim.

VII. I was approachable to my tutee most of the time.

VIII. Cooperation, helpfulness and caring attitude made us successful.

IX. Realization of our weaknesses and to work cooperatively made us achieve our aim.

X. Cooperation and sense of knowing each other as class fellows helped us achieve our aim.

6. What was the best thing with your partner that helped you improve yourself as a class mate?

I. He was a good listener which made me work affectively.

II. His best willingness to work and follow me made myself improve in my leadership skills.

III. My tutee was a good mate and understood quickly whatever I wanted him to understand.

IV. My tutee didn't argue and was very compromising.

V. My partner was good in sharing his ideas and concepts that helped me.

VI. Helpfulness was the best thing with my partner.

VII. My tutee remained very cooperative and a good listener. He was also self-motivated.

VIII. We discussed everything freely and worked on our weak areas by sitting together and discussing.

IX. His motivation and cooperation helped me improve myself.

X. My partners were cooperative and followed my instructions religiously,

7. Was there any sense of achievement with you out of this experience as a tutor/tutee? Explain.

I. Yes, I achieved a lot as a tutor while my tutee clarify his concepts and became willing to work hard for his progress.

II. It is a pleasure to make people understand things and the best achievement that anyone can have by helping people around you.

III. Yes, it gave me great feeling of achievement through the improvement of my tutees performance.

IV. Yes it gave me a sense of achievement as my tutee was able to perform well in finals.

V. Great achievement it was when my tutee was confident enough to present in front of the whole class.

VI. Nil

VII. The great achievement with me was better socialization skills.

VIII. I served humanity and became a useful friend.

IX. Yes, there was a lot of great feeling through serving as a tutor. I played an active role in uplifting my tutees performance which gave me respect not only with him, class, but also with my teacher.

X. Yes I got a good sense of achievement that I helped my tutees.

8. **How has this experience made you earn some good feeling?**

I. Helping others by making them better performers was really was really a great feeling. It made me understand that cooperation is helpful in developing new ideas.

II. I developed a more serious attitude of helping others.

III. I developed a great feeling of satisfaction by others.

IV. It was just as to serve your society so I got delighted through this exercise.

V. I felt very good in helping a friend and got motivated to help others.

VI. Cooperation and supportiveness was a good feeling with us.

VII. Yes.

VIII. Yes, I earned feeling of being good friend and caring and helping others.

IX. It made me realize that everyone has some flaws and we should play our part positively to improve them in their life.

X. This experience has made me earn the feeling of helping others.

9. How was peer tutoring a good mean of socialization for you?

I. It helped me release my reluctance while building communications with others.

II. I became more confident in talking to people and expressing myself.

III. I came to know how to interact with others in different situations.

IV. It helped me behave better and more sensibly.

V. Yes my behavior to others also changed and I resolved my temper issues.

VI. Yes peer tutoring was a good means of socializing with those whom didn't ever want to interact.

VII. Off course it was a good mean of socialization.

VIII. It created an environment for me to develop better relationships with not only my class friends but foes as well.

IX. Yes, it allowed me to socialize with others as I became more confident and my behavior changed positively.

X. It was a good means of socialization because I was able to interact with people in a better manner.

10. How much successful you are in realizing your deficiencies and overcoming them?

I. To some extent it made me realize the weak areas of my personality like being less socialized and made me get rid of an impression of being proud.

II.   It made me realize a number of things hindering myself as a person like being introvert, more quite, mostly willing to work alone etc. I was quite successful in socializing me not only in my class but in other social settings as well.

III. My tutee remained my good teacher too large extent as well to realize the weal areas in my academics and personality like less interactive etc. now I feel responsible for others weaknesses as well.

IV.   Behaving like a teacher was a great experience helping me find better solutions to my own weaknesses after I came to realize my weak areas like lack of knowing the importance of my role as a member of society.

V.   It really helped me to work on the negative traits of my personality like anger management.

VI.   Yes I was successful in improving my willingness to help all without any feeling of difference.

VII. It helped me compose myself and organize my routine in a better manner.

VIII. It was helpful in making me admit my lack of interactive skills. Through this practice I became successful in overcoming my sense of pride for just being a good performer in my academics.

IX.   It made me realize having lack of social skills which compelled me modify my attitude with people in my surroundings.

X.   My lack of willingness to help others was identified as my major weakness. Now I am able to even volunteer for any such task which brings betterment in anyone around me.

Tutees' Responses

1. **How it was helpful in improving your interaction in class?**

I.   It helped me by improving my communication skills which increased my class interaction.

II.   I can interact with my class fellows now in a much better manner.

III.   It didn't help me much in my class interaction because my tutee remained not very cooperative.

IV.   I improved in my class relationships.

V.   I became friendlier with most of my class fellows and could ask questions much conveniently than before.

VI.   It improved my relations with my class.

VII.   I can interact better with most of my classmates.

VIII.   I can interact with anyone in my class now without having any bias in my mind.

IX.   It has strengthened my relations with my class.

X.   It helped me know more mates and to make more friends in class.

XI.   I gained more confidence in enjoying friendly environment of the class.

XII.   I became more interactive in class.

XIII.   Through this a friendly environment was created in the class.

XIV.   I was quite shy in the class which I have controlled a lot now.

XV.   I was able to make my relationship stronger with my tutor and other class fellows.

XVI.   It made me feel confident in my class.

XVII.   I can interact with my class mates and teacher much better.

XVIII. I felt much comfortable now while being with classmates.

XIX.   It made me develop stronger relation with other students in my class.

XX. It helped me to behave more confidently in the class.

2. How peer tutoring helped you in your social interactions?

I. It helped me to get an opportunity to discuss my queries with others.

II. I became socially more active.

III. It didn't help me much in my social interaction because my tutee was not cooperative.

IV. It strengthened my friendship with most of the people around me.

V. I feel confident in my social interactions.

VI. Yes I started conversing with other class fellows as well.

VII. It helped me interact better and make more friends as my tutor remained very friendly.

VIII. I became friend with my new class mates and got closer to each other in a short while that improved my social interaction.

IX. I can communicate better with the people around me.

X. I can better communicate with the people around me.

XI. My confidence was built up and I develop better friendly relations with others.

XII. I became socially more active.

XIII. It made me feel easy to interact with others.

XIV. I have become confident in having talk with others.

XV. I felt more confident to interact with others around me including my teachers.

XVI. It helped me workout my problems better and behave better in my social settings.

XVII. If I want I can interact well with the people around me.

XVIII. My social interactions with others got improved now.

XIX. I am less reluctant now in building links with the people.

XX. It helped me to interact with people more comfortably.

3. Which of your personality weaknesses were removed or worked out through your role as tutor/ tutee?

I. My confidence level was increased due to sharing of ideas with my tutor.

II. I felt scared to interact with anyone before but now I am quite comfortable in doing so.

III. I became a more resolved person and it helped me control my anger.

IV. I was able to understand the subject and its needs easily.

V. Some of my personality weaknesses were improved like lack of confidence.

VI. It has helped me to submit my routine assignments on time.

VII. Now with the help of my tutor I can ask questions more confidently.

VIII. Completing my task on time was a big problem for me but peer tutoring helped me to overcome this problem.

IX. I am able to understand the subject easily now.

X. I am now able to complete my task on time.

XI. Being a tutee the hesitation of presenting my work was removed

XII. I felt very scared before in my social interactions but I am able to release this fear and interact comfortably.

XIII. It helped to interact with others better and gain confidence.

XIV. It helped me with the understanding of question pattern.

XV. As a tutee I became more responsible and was able to complete my work on time.

XVI. I can solve questions quite easily now.

XVII. My question solving problem was solved.

XVIII. I have improved in controlling my shyness.

XIX. It gave me strength to voice my confusions.

XX. Now I feel more confident as well as comfortable while interacting with others.

4. Which positive or negative traits were developed in you through playing this role?

I. I feel myself more responsible now.

II. I tried to be more positive now.

III. I became more social and could understand a variety of different people instead of rejecting them.

IV. It made me more careful and helpful to others.

V. I feel confident in asking questions now but felt disappointed with my tutor.

VI. Putting your ego aside and working under someone makes you quite positive.

VII. I value all of my class fellows now.

VIII. I grasp thing much earlier now and also in an effective way now.

IX. It has made more careful and helpful.

X. My grasp of the concepts is better now. I can tackle them quite easily now.

XI. More friendship was developed among students.

XII. I didn't notice any positive or negative difference but at least I try to be much more positive now.

XIII. It has made me friendlier.

XIV. My discussions with my tutor were less useful as I remained quite irregular due to certain health issues.

XV. I felt confident while asking questions about the subject areas in which I was weak or unclear.

XVI. Friendly relations made us successful.

XVII. I am now more social and attentive in my class, and a good listener as well.

XVIII. I have improved my work habits and do my homework regularly.

XIX. I became dependent on others' opinion many a times on certain matter but on the other hand I am able to analyze the situation better now from different perspectives.

XX. Now I am confident that I can do anything I want.

5. What was the core factor in your tutor-tutee relationship which made you successful in aim accomplishment?

I. Our unity and cooperation was the core factor which helped us achieve our goals.

II. The core factor was exceptional understanding of concepts.

III. The core factor was that we used to write every concept, drew and discussed it and then solved questions.

IV. We became friends so it was easily to communicate better.

V. The core factor in bringing improvement was our good and easy interaction whatever was possible in some sessions.

VI. We cooperated with each other.

VII. We were cooperative with each other.

VIII. Many of my concepts have become clear now that's why I got successful in improving my class performance.

IX. We were friends so could communicate easily.

X. My tutor was able to help me in understanding the way how to overcome my problems.

XI. Our cooperation was the core factor which helped both of us to become successful.

XII. The core factor is the exceptional understanding of the concepts.

XIII.   Cooperation was the core factor.

XIV.   I was able to handle more work with my tutor's help.

XV.   Our friendly relationship was the major factor.

XVI.   Our positive relationship was the core factor. We worked as true friends and solved questions with full attention.

XVII.   We could share our problems and find better solutions.

XVIII.   We studied together that helped me understand many things in the topics better.

XIX.   We discussed the questions from different perspectives and tried to strengthen our basics.

XX.   He was friendlier as well as cooperative.

6. **What was the best thing with your partner that helped you improve yourself as a class mate?**

I.   No doubt the activity was quite good but I wasn't able to improve my academics due to certain problems.

II.   Her cooperation to help me was available whenever I asked her.

III.   There wasn't any such thing with my partner. It was my perseverance.

IV.   She was good in learning and explaining the subject content.

V.   We were friends and were helpful to each other.

VI.   We were able to clarify our confusions instantly.

VII.   My partner often addressed all of my confusions regarding topics which were not easy to solve for me before.

VIII.   My tutor made the concepts easier for me helping me to recover many of my weaknesses.

IX.   My tutor was good in learning concepts so explained me better.

X.   He was able to make concepts easier for me and I progressed in my academics.

XI.   My tutor was not dominant over me which helped me develop more confidence.

XII.   My tutor was always helpful whenever I asked for help.

XIII.   While my tutor helped me, I was also able to help him. We both tried to solve each others' problems as well as our own.

XIV.   I was able to discuss my academic problems with the tutor.

XV.   The best thing was that I was able to ask any question very easily from my tutor.

XVI.   He helped me understand the topics' concepts by explaining them in an easier manner and we worked attentively.

XVII.   My tutor always motivated me and helped me in better understanding of the concepts.

XVIII.   My tutor remained very helpful to me and was available whenever I needed him.

XIX.   It was our friendly and approachable relationship.

XX.   My tutor himself was more interested and keen to learn more through helping me.

7. **Was there any sense of achievement with you out of this experience as a tutor/tutee? Explain.**

I.   Yes initially it was useful but later we developed certain clashes which ended our association in not much benefit.

II.   I felt that I needed to develop positive thinking and that was my achievement.

III.   Yes, I developed the feeling that I could improve myself by putting some effort in routine.

IV.   Yes I have a good sense of achievement for showing some progress in my subject understanding and results.

V.   My achievement is that I am not shy now as before.

VI. Making good bonding with other classmates has made me strive hard for progress.

VII. Now i can easily answer the questions helping me gain more marks.

VIII. I achieved a lot. New relations were formed with the people around me. Many new learning techniques were sorted out between us improving our skills.

IX. Yes, progress in academics and relations is my achievement.

X. Yes I achieved a lot. New relations were formed. New learning techniques were sorted out between us which improved our skills.

XI. My sense of achievement is my confidence. My presentation skills were also improved.

XII. I felt I needed to develop or maintain positive thinking.

XIII. I was able to perform better in my academics. It also helped me make more friends.

XIV. The sense of achievement was that I developed the habit of doing much of work on time.

XV. The control over my shyness had been my big achievement. I have become more confident and social as well.

XVI. I have achieved good grades than before.

XVII. Yes, now I am quite confident and can easily interact with people.

XVIII. My achievement was my progress even being less.

XIX. Yes, I got better at analyzing the subject matter and its different dimensions.

XX. Improvement in my subject score was a real achievement for me.

8. How has this experience made you earn some good feeling?

I. I developed the feeling that working with others, helps us come out of our problems.

II. The good feeling is that it has made me better in my studies.

III. The good feeling through this experience was that my progress was in my hand and in my willingness to strive hard.

IV. Better achievement score gave me good feeling.

V. A feeling of helping myself for progress.

VI. I have developed good feelings about my tutor's personality.

VII. This experience has made me more social and interactive which will help me make more friends.

VIII. It made me earn some good feelings that I have become familiar with the group work and how to work with others.

IX. Yes, my progress has given me good feelings.

X. It gave me good feelings while working in group and also adjusting with others.

XI. This experience made me have more friends in my class.

XII. It made me feel good regarding my studies.

XIII. Yes it was the good feeling of cooperation with others.

XIV. It couldn't help me a lot because of being irregular but still discussions made me feel clarifying my concepts to some extent.

XV. It made me more friendly and social.

XVI. We worked in good relationship as friends.

XVII. Yes, it is the feeling of clarifying my concepts.

XVIII. It was the good feeling of comfort that I have while being with my friends.

XIX. It made me earn a good feeling of cooperation that it is a key to progress further.

XX. I have developed the feeling of being not alone instead helped by my companions for my progress.

9. How was peer tutoring a good mean of socialization for you?

I. Yes it was a good means of socialization for me as I developed better relations with my tutor and others.

II. Peer tutoring has made me feel easy to make new friends.

III. It was so but not to large extent because my tutor tried to maintain his distance from me as a tutor which did not let me feel much comfortable with him and resolve my problems much.

IV. Peer tutoring made me not only interact with my tutor but it also helped me in feeling less resistant in building good relations with other class mates.

V. Control on my shyness has made me build better relations with the people around me.

VI. Yes it is good means of socialization but sitting with your real friend is much more comfortable.

VII. My tutor helped me a lot in my academic and social problems helping me to become more social.

VIII. Yes peer tutoring is a great means of socialization building healthy relations of an individual with his environment.

IX. Yes, I interacted better with my tutor and others in class.

X. It made me more positively interactive.

XI. Yes it was a good mean of socialization which made our class environment more friendly and interactive.

XII. Yes, I was able to make new friend.

XIII. Yes, it made me quite socialized.

XIV. It helped me make a variety of friends.

XV. Yes, it was a good mean of making me adjusted in my environment.

XVI.   Now I have become more confident and social than before.

XVII.   Yes, I am socially more active and have more friends.

XVIII. Yes. It made me know others more than before.

XIX.   It made me better in my social relations.

XX.   Routine interactions with my tutor has made me use to interact with others too.

10. How much successful you are in realizing your deficiencies and overcoming them?

I.   I wasn't successful to large extent in overcoming my deficiencies but it make me realize my weaknesses to a large extent.

II.   I was successful in not only realizing my weakness in positive thinking and I am working on it now.

III.   It made me realize many of my week areas like lack of the ability to discuss my queries with others.

IV.   Yes it was useful to improve the weak areas of my personality like being less social.

V.   Now I am more conscious about my shortfalls in the subject and I keep working on the weak areas.

VI.   Yes it made me realize my weak social skills and helped me build good relations with most of my classmates.

VII.   It helped me improve in many areas like my threats for becoming social.

VIII.   Yes I came to know my weak areas of personality and also gave me enough opportunity to get rid of my threats in this regard.

IX.   It helped me feel that I should work hard.

X.   It became a source of peeping inside me and I was able to know many of my weaknesses like I needed a focused approach towards my work for progress.

XI. I was able to realize where I was having short fall like confidence level, my ability to collaborate etc. Now I feel better in these areas.

XII. Peer tutoring has helped me overcome my sense of superiority instead made me strive hard to show progress in my academics as well in my class attitude.

XIII. It helped me gain confidence and expanded my social circle.

XIV. I got control over my shyness and increased my friend circle to an extent.

XV. It made me confident, brave, and interactive. I am now quite able to perform better.

XVI. I am now more aware of myself. I have gained a lot of confidence and trust in me and believe in working hard.

XVII. Yes, it is the feeling of good academic and social progress.

XVIII. I am confident and social now to quite a good extent.

XIX. It has helped me in perfecting my academic matters as well as my skills to become a better social individual.

XX. My lack of confidence and courage was great hindrance in my progress which now I am able to overcome.