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# Impact of Teacher-Student Relationship on Learning Chinese as a Second Language among Pakistani Students

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## Abstract

The purpose of this study was to examine the effect of Teacher Student Relationship (TSR) on Pakistani students' motivation and academic performance in a Chinese as a Second Language class. The sample of the study consists of 80 Chinese-language elementary school students. A total of three research questions and hypotheses were used in the study. A pre-post-test design was used to achieve the objectives of the study in which special treatment was given to the experimental group, whereas no treatment was given to the control group. SPSS was used as a statistical tool to examine the results of the present research. The results of the study proved the effectiveness of TSR in improving students' motivation and academic achievement, as the experimental group showed a better performance in the post-test than the control group. Moreover, the correlation test results indicated a positive significant relation between the TSR, academic performance, and student motivation.

**Keywords:** TSR; Second Language Acquisition; Academic Achievement; Motivation

## 1. Introduction

With the advancement of civilization and globalization, people are required to stay abreast with the times and grasp bilingualism or multilingualism, which is why language acquisition is becoming necessary.

Teacher-Student Relationship (TSR) is a key aspect in sustaining students' attention and interest during second language acquisition. (Cazden, 2001; E. Leu, 2004). Students are more engaged and active in learning a new language when they feel comfortable in the classroom environment (Hamre & Pianta, 2006; Skinner & Greene, 2008; Roorda et al., 2011; Maulana, 2013). The TSR is the most important and elementary factor of a good learning environment. It has a deep impact on students' academic, emotional, and social development. A healthy TSR, or emotional engagement between teacher and students, will undoubtedly have a positive influence on second language learning (Birch & Ladd, 1998; Hamre & Pianta, 2001; Gregory & Weinstein, 2004; Cornelius-White, 2007; Sabol & Pianta, 2012). Research conducted by different researchers supports the notion that students who have strong and positive interactions with their class teachers and find them to be more supportive achieve greater academic success. (Hughes et al., 2012; Gehlbach et al., 2012; Boynton & Boynton, 2005; Skinner & Green, 2008; Spilt et al., 2011; Rimm-Kaufman & Sandilos, 2012).

TSR is the most fundamental and significant aspect of classroom management and learning (Marzano, 2003). It is considered the main way in which teachers and students exchange information, ideas, and emotions in the classroom. It is a medium through which education and teaching activities can proceed smoothly. Cultivating a positive teacher-student connection contributes to the improvement of the overall quality of second language acquisition. According to Wilson (2011) and Morris (2013), establishing a healthy and positive TSR can meet the psychological requirements of students and teachers in language teaching and positively affect the bilateral activities of learning a second language (Pianta et. al., 2008; Hamre & Allen, 2012). Numerous studies have identified teachers as critical social mediators influencing students' school commitment, academic motivation, and disengagement. Additionally, studies highlight the significance of interactions and connections amongst students and teachers in improving performance, which is critical to the motivational process (Juvonen, 2006; Nugent, 2009).

In short, both positive and negative relationships with the class teacher have a deep effect on a student’s capability to remain motivated in school and maintain good academic performance (Hughes, 2008). Students who have poor interactions with their class teachers have low grades, feel stressed, and do not have good relationships with classmates (Yoon, 2002; Friedman, 2013). Strayed teacher-student interactions contribute to low academic performance and demonstrate disobedience toward the school system (Boynton, 2005), while positive and strong relationship among students and teachers foster a positive and good attitude toward teachers and results in very positive academic performance. According to studies, students

who have positive interactions with their teachers do not often miss school and are likely to create a feeling of belonging with their teachers.

## 2. Literature rwview

A huge body of data in the literature supports the idea that good TSR is a key component of students' effective academic development (Pianta, 1999; Birch, 1998; Hamre, 2001; Wigfield, 2002; Goodwin, 1999; Dewaele & Alfawzan, 2018; Spilt, 2011; Tan et al., 2007; Reza, 2013; Ebrahim, 2012; Paul & Ray, 2014; Kuri, 2013; Lau et al., 2014; Thanh-Pham et al., 2012; Inuwa et al., 2015; Mashadi & Gazorkhani, 2015; Phiwpong & Dennis, 2016; Garcha & Kumar, 2015). Over the last 30 years, many studies have been done to analyze the relationships between teachers and how these interactions influence learning outcomes. According to different studies, a teacher has the most significant role in teaching-learning activities, and is the core of the teaching-learning process (Friere, 1990; Hussain, 2013; Liu, 2017). TSR is the key factor in increasing students' academic performance (Khan, 2011). Because teachers play an important part of learning a second language, they must foster a good and comfortable classroom environment to increase students' interest and enthusiasm in learning. (Spilt, 2011). The efficacy of second language learning in the language classroom is greatly influenced by the teacher's engagement and the quality of the TSR. (Lucha, 2015). To support this notion, Camp (2011) asserts that the efficacy of a teacher can influence students' learning success or failure. Evidence has demonstrated that students like and value teachers who are cheerful, amusing, joyful, well organized, supportive, and considerate of their students. The results of recent researches (Pavelescu & Petric, 2018; Dewaele & Alfawzan, 2018; Saito et al., 2018; Jiang & Dewaele, 2019) demonstrate that good teacher student's relationship and enjoyment of the classroom are thought to aid L2 learners in better responding to and processing the target language. According to the findings of the research by Roorda and Koomen (2011), an excellent TSR can serve as a preventative measure against dropout and have an impact on student motivation and attitude toward studying as well as improve academic accomplishment. According to Miness and Cooper (2014), teachers who constantly inquire about their students' lives and keep in regular touch with them, are more likely to be viewed as favorite teachers by their students. According to Varga (2017), teachers and students must have a positive relationship in order for the teaching-learning process to be successful. Further research (Birch & Ladd, 1997; Pianta et al., 1995) revealed that students who have good ties with their teachers are more extroverted and socially capable. Furthermore, it also highlighted that good teacher-student connections promote classroom learning and motivation by establishing a secure and supportive atmosphere

in which students can open up and listen to their teachers and do better in class.

Besides helping students improve their grades, the TSR is considered an important factor in enhancing students' learning interests and motivation. For example, Hughes (2007) asserts that students who have a positive relationship with their teachers are encouraged and motivated to learn a second language. When students have a healthy relationship with their teacher, they are more engaged in the classroom. They are more likely to put in extra effort in class, persist, take advice and criticism, handle stress better, and pay close attention to their teachers. According to Silver (2005), the emotional support and intellectual assistance provided by teachers are extremely crucial in helping students attain academic success. His research results show that a good TSR assists in protecting and helping children who are weak in studies. Hence, interventions aimed at boosting a student's academic performance should take into consideration the student's connection with their teacher (McCartney & O'Connor, 2007). A poor connection, on the other hand, will have a detrimental influence on the teaching-learning process. Because the students lack the desire and enthusiasm to study in the classroom and they tend to be inactive in class. This type of connection frequently results in poor classroom engagement, low level of student motivation, and a lack of enthusiasm for learning. As a result of bad TSR, students suffer a lot. This indicates that such a connection leads students to feel distressed and insecure, as well as reduces their capacity to focus on their studies (Spilt et al., 2012). Increased teacher support for students has a positive influence on lowering depressive symptoms and enhancing self-confidence. As a result of good TSR, students may also learn to behave in a more socially acceptable way (Reddy, 2003; Hughes, 2012).

In a nutshell, TSR has a significant effect on academic performance and motivation as indicated by numerous studies. However, only a few research studies have been conducted in order to evaluate the effectiveness of TSR on academic performance of students in Pakistan. Particularly, there has been no studies regarding the effect of TSR on learning Chinese as a second language in Pakistan. As a result, there is an intense need to investigate the effect of teacher-student relationship on Pakistani students, especially in Chinese second language acquisition. This study is aimed at filling the research gap by examining three research questions. Each is represented with its corresponding hypothesis.

RQ 1: To find out the effect of the TSR on Pakistani students' motivation level in Chinese as the second language class.

Hypothesis 1: Good TSR has a positive effect on improving Pakistani students' motivation levels in Chinese as a second language class.

RQ 2: To find out the effect of the TSR on Pakistani students' academic performance in Chinese as a Second Language class.

Hypothesis 2: Good TSR is helpful in improving the academic performance of the Pakistani students in Chinese as a second language class.

RQ 3: To find out the correlation between TSR, Pakistani students' motivation level, and academic performance in Chinese as a second language class.

Hypothesis 3: There is a positive correlation between TSR, Pakistani students' motivation level, and academic performance in Chinese as a second language class.

## 3. Methodology

### 3.1 Research Design

The first objective of the present research was to find out how TSR affects Pakistani students' motivation in Chinese as a Second Language class. The second objective of the present research was to find out how TSR affects students' academic performance in Chinese as a Second Language class, and the third goal was to find out the correlation between TSR, motivation level, and academic performance of Pakistani students in Chinese as a Second Language class. For the above research goals, the Present research used two combined research methods. At the first level, a quasi-experimental approach was used, with a cooperative and traditional learning environment. Because of its resilience to frequent risks to internal validity, this approach is regarded as a real experimental design (Campbell & Stanley, 1963). In the second level, the questionnaire method was used. To gather data, quantitative research techniques were employed since they allow for the measurement of variables and the building of numbers that represent the results (Omopariola, 2017; Campbell & Stanley, 1963).

### 3.2 Population Sampling Techniques

In this study, the population included all the students who enrolled in Chinese language course at LGS elementary school in Layyah, Pakistan. There were 400 students who were studying in 12 different classes. Systematic sampling method was preferred as it allows the researchers to choose sample from the population based on intervals in equal numbers as a type of probability sampling method (Elsayir, 2014). In this respect, students were chosen based on the interval of 5, so 80 students were chosen from the population which included 400 students in total. The students in this study were then divided in two separate groups with 40 students in each group, experimental (N = 40) and control (N = 40), so the research could be conducted successfully, and necessary arrangements were made easily to finalize the research. Below figure 1 shows the sampling process.

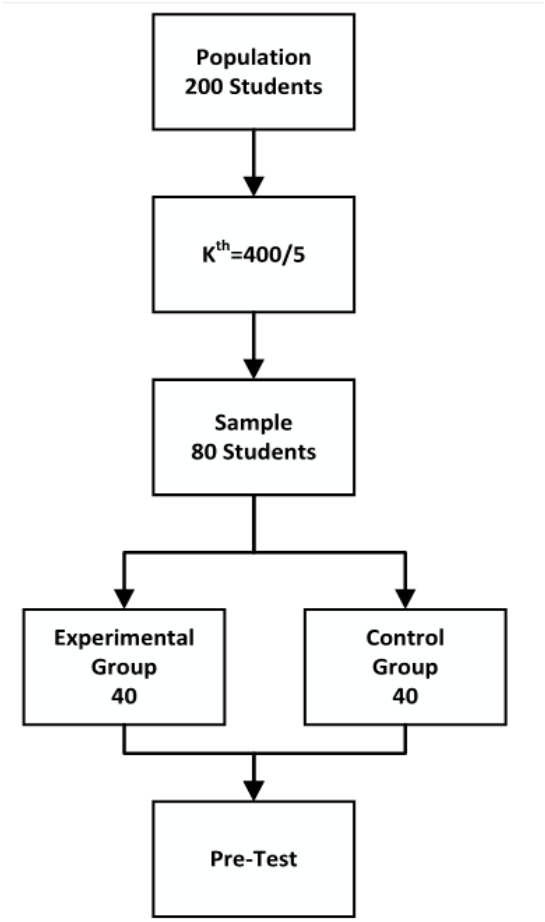


**Figure 1.** Sampling Technique

A systematic sampling approach was applied because in the present research, one cluster of students was divided into two different groups and it was the best accessible technique for selecting the study's sample (Gay, 2012).

### 3.3 Pre- Post Test Design

Two instruments were used for collection of data of pre-posttest analysis of the study: 1) Questionnaire 2) Written Test.

#### 3.3.1 Questionnaire

The first tool used was pre-post questionnaire for "Teacher-Student relationship and motivation level scale"; a certified questionnaire borrowed by Abdulrahman (2007), which was amended according to the aim of study. The questionnaire comprises three sections: A, B and C with a total of 22 questions. Part A elicited from the respondent's information about their

demographic such as Gender and age. The second section of the questionnaire consists on "Teacher-Student Relationship (TSR)" and the third section of the questionnaire consists on "Student Motivation Level (SML)" All the questions were close-ended on a five Point Scale.

### 3.3.2 Written Test

The second tool used was the pre-post written test. The written test was prepared with the cooperation of five Chinese language specialist teachers to assess students' academic achievement. Two Chinese language experts evaluated the test in order to verify the validity in terms of its content as well as its judgmental and facial validity. The test had a total score of 100. The test was in written form. Questions for the exam were chosen from the Chinese language textbook "Learn Chinese" (Swan, 2016).

## 3.4 Procedure

This section explains the whole research procedure of the present study. The procedure is summarized in Figure 2.

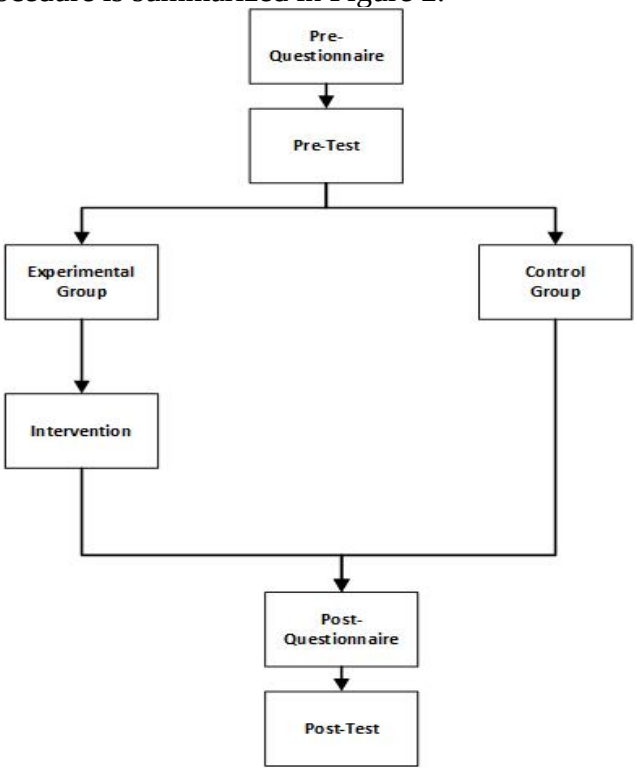


**Figure 2.** Research procedure

A pre-test was conducted at the first stage. The pre-test was a written form of the test, and it was to check the students' academic levels. A pre-questionnaire was also used to check the students' motivation in Chinese as a

second language classes before the experiment. In the second stage, both groups were taught in different ways. Students in the experimental group were taught through cooperative learning in which teacher treated students with a more friendly attitude and tried to keep a good and soft relationship with them. While the students in control group were not given any special treatment and the teacher used the general routine method to teach them and treated them in a very normal way, as he usually does in class. To reduce the impact of different factors, the same teacher taught two classes, and the same syllabus and teaching lesson plan were used for both groups. The teacher was specially trained through Pakistan's TBR teacher training course before the experiment. The time duration of this experiment was 3 months, which was one semester. At the third stage, a post-test including the written task and questionnaire was conducted to check students' academic performance, interest, and motivation in Chinese as a second language classes after the experiment. Both pre and post-test results were compared to see if there was any variation in both groups' results due to the nature of their relationship with their teacher. In the end correlation test was used to see if there is any correlation between TSR motivation and academic performance.

## 4. Results

### 4.1 Data Analysis

The tool used for analyzing the data was IBM SPSS 22. First, the demographic data was statistically analyzed. To examine the Hypotheses of the present study, Descriptive statistics (i.e., Min, Max, Mean, and standard deviations) were calculated, and independent samples t-tests and correlation analysis were conducted on the pre-post exam and questionnaire results of both groups.

#### 4.1.1 Socio-Demographic Characteristics of the Respondents

The demographic information included the analysis in terms of age, sex, mother tongue and second foreign language. The demographic information of respondents is summarized in Table 4.1.

**Table 4.1.** Socio-Demographic Information

| **Description** | | **Frequency** | **%** |
|---|---|---|---|
| **Gender** | Male | 40 | 50.0% |
| | Female | 40 | 50.0% |
| **Age in years** | 12-14 | 65 | 75.0% |
| | 15-17 | 15 | 25.0% |
| **Mother tongue** | Urdu | 80 | 100% |
| | Other | 0 | 0.0% |
| **Second language** | English | 80 | 100% |
| | Other | 0 | 0.0% |

It can be seen from Table 4.1 that from the sample of the total number (80) of respondents, males made up half of the participants (40), while females made up the other half (40). In terms of age, the subjects in this study were young people between 12 and 17 years old. In terms of mother tongue composition, the subjects comprising the two groups in this study were all native Urdu speakers. The second foreign language of all the students in the two groups was English.

### 4.1.2 Pre-Questionnaire Results

Before the experiment, researcher compared both groups' pre-questionnaire results to make sure that both groups' students were equal in TSR and motivation level. Table 4.2 presents the results of the pre-questionnaire.

**Table 4.2.** Pre-Questionnaire Results

| Variable | Level of Relationship | Frequency | Percentage |
|---|---|---|---|
| **TSR (Experimental group)** | Low | 35 | 87.5% |
| | Moderate | 5 | 12.5% |
| | High | 0 | 0.0% |
| | Total | 40 | 100.0% |
| **TSR (Control Group)** | Low | 34 | 85.0% |
| | Moderate | 6 | 15.0% |
| | High | 0 | 0.0% |
| | Total | 40 | 100.0% |
| **Motivation (Experimental Group)** | Low | 37 | 92.5% |
| | Moderate | 3 | 7.5% |
| | High | 0 | 0.0% |
| | Total | 40 | 100.0% |
| **Motivation (Control Group)** | Low | 36 | 90.0% |
| | Moderate | 4 | 10.0% |
| | High | 0 | 0.0% |
| | Total | 40 | 100.0% |

From the above table, we can see that in the experimental group, 35 respondents (87.5%) had a low level of TSR, while 5 respondents (12.5%) indicated a moderate level and no respondents had a high level of TSR. Likewise, in the control group, 37 respondents (85%) had a low level of TSR, 6 respondents (15.0%) indicated a moderate level, and no respondents had a high level of TSR. This implies that in both control and experimental groups, the majority of the students have the same (low) level of relationship with their teachers and there is no difference in the level of the TSR in both groups.

The above table also shows the pre-questionnaire motivation results of both classes. It can be seen from the above table that in the experimental group,

37 respondents (92.5%) had a low level of class motivation, 3 respondents (7.5%) indicated a moderate level, and no respondents had a high level of class motivation. Similarly, in the control group, 36 respondents (90%) had a low level of class motivation, 4 respondents (10%) indicated a moderate level, and no respondents had a high level of class motivation. This indicates that in both the control group and experimental group, the majority of the students have the same (low) level of class motivation before the experiment, and there is no difference in the level of class motivation in both groups.

Although the results of the above two groups of pre-questionnaires show that there is no significant difference between the two classes on the basis of TSR and Motivation level, i.e., both groups have the same TSR and motivation level, in order to verify the accuracy of the results, the researcher also used independent sample t-tests to ensure that the groups are not statistically different from each other. Below Table 4.3 show the results of this analysis.

**Table 4.3.** T test result for pre- questionnaire

| Variables | Group | N | Average | SD | SD. Error | T | Df | P |
|---|---|---|---|---|---|---|---|---|
| TSR | Experimental Group | 40 | 2.60 | 0.26 | 0.04 | 1.26 | 78 | .21 |
| | Control Group | 40 | 2.52 | 0.31 | 0.05 | | | |
| Motivation | Experimental Group | 40 | 2.51 | 0.30 | 0.05 | -0.24 | 78 | .81 |
| | Control Group | 40 | 2.53 | 0.31 | 0.05 | | | |

The independent sample t-test results from Table 4.3 shows that the control group (Mean = 2.52, St. Dev. = 0.05) and the experimental group (Mean= 2.60, St. Dev. = 0.04) have no statistically significant difference in TSR [t (78) =1.26, p =.21]. Similarly, the independent sample t-test results show that the control group (M = 2.53, SD = 0.31) and the experimental group (Mean = 2.51, St. Dev. = 0.30) have no statistically significant difference in motivation level [t (78) -0.24, p =.81]. Therefore, the two classes have the same level of TSR and motivation and it ensures the homogeneity of the sample.

### 4.1.3 Pretest Exam Results

The above results show that the two groups of students are not significantly different regarding the relationship with their teacher and level of motivation in learning Chinese as a second language. However, in order to ensure that both class students have an equal academic level in Chinese as a

second language class, the researchers also compared the pretest exam score of both groups. Below is the result of pretest exam scores for both groups.

**Table 4.4.** Pretest Exam Results

| | N | Range | Minimum | Maximum | Mean | Std. Error | Variance | St. Dev |
|---|---|---|---|---|---|---|---|---|
| Experimental Group | 40 | 24 | 43 | 69 | 55.60 | 1.10 | 48.66 | 6.98 |
| Control Group | 40 | 25 | 45 | 70 | 56.95 | 1.07 | 45.48 | 6.74 |

The maximum score of the experimental group in the pretest exam was 69, the minimum score was 45, and the average was 55.60, while the maximum score of the control group in the pretest exam was 70, the minimum score was 45, and the average was 56.95, as shown in Table 4.4. The average scores of the control and experimental groups in both variables showed that the academic level of both groups was almost the same.

In the pre-test exam, the average score (55.60) of the experimental group was not much different from the control group (56.95). The average scores of the two classes of subjects in the pre-test show that before the formal experiment, all subjects are homogeneous. However, in order to ensure that there is no significant difference, the researcher also performed an independent sample t-test on the two groups' pretest scores.

**Table 4.5.** T-test result for both groups pretest Exam

| Variables | Group | N | Average | SD | SD. Error | T | Df | P |
|---|---|---|---|---|---|---|---|---|
| Grade | Experimental Group | 40 | 55.60 | 6.98 | 1.10 | -.880 | 78 | .382 |
| | Control Group | 40 | 56.95 | 6.74 | 1.07 | | | |

The t-test result from the above table shows that there is not a significant difference between the average marks of both classes in the pretest and that both groups of students were homogeneous before the formal experiment. The independent sample t-test results show that the control group (Mean = 56.95, St. Dev. = 6.74) and the experimental group (Mean = 55.60, St. Dev. = 6.98) have no statistically significant difference in pretest exam scores [t (78) =.-.880, p =.382].

### 4.1.4 Correlation Analysis of TSR, Motivation, and Grade at Pre-Test level

Another objective of the study was to find the relation between TSR, grade achievement, and the motivation level of students. To find out this

relationship a correlation test was performed. The result is shown in Table 4.6.

**Table 4.6.** Pre–test Correlation coefficient matrix

| | TSR | Motivation | Grade |
|---|---|---|---|
| **Experimental Group** | | | |
| TSR | - | | |
| Motivation | 0.71** | - | |
| Grade | 0.66** | 0.68** | - |
| **Control Group** | | | |
| TSR | - | | |
| Motivation | 0.69** | - | |
| Grade | 0.60** | 0.72** | - |

**p<0.01

The above table shows that for experimental group the correlation between the TSR and motivation was ($r = 0.71$, $p < .01$); correlation between TSR and grade was ($r =. 0.66$, $p < .01$), and the correlation between the motivation and grade was ($r = 0.68$, $p < .01$). Similarly, for control group the correlation between the TSR and motivation was ($r = 0.69$, $p < .01$); correlation between TSR and grade was ($r =. 0.60$, $p < .01$), and the correlation between the motivation and grade was ($r = 0.72$, $p < .01$) which means there is a strong positive correlation among TSR, Motivation and academic performance. As both class students have weak TSR scores, so consequently most of the student have low motivation levels and low exam scores.

### 4.1.5 Post questionnaire Results

After the experiment, the researcher again compared both groups' post-questionnaire results to see if, on the basis of two different treatments, there is any statistical difference in both groups' TSR and motivation level in Chinese as a second language class. According to the post-questionnaire results, students in control group and experimental group have improved differently in terms of their relationship with their teacher and their level of motivation in second language class. Table 4.7 presents the results of post-questionnaire.

**Table 4.7.** Post-Questionnaire results

| Variable | Level of Relationship | Frequency | Percentage |
|---|---|---|---|
| **TSR (Experimental Group)** | Low | 0 | 0.0% |
| | Moderate | 15 | 37.5% |
| | High | 25 | 62.5% |
| | Total | 40 | 100.0% |
| **TSR (Control Group)** | Low | 32 | 80.0% |
| | Moderate | 7 | 17.5% |
| | High | 1 | 2.5% |
| | Total | 40 | 100.0% |
| **Motivation (Experimental Group)** | Low | 0 | 0% |
| | Moderate | 14 | 35.0% |
| | High | 26 | 65.0% |
| | Total | 40 | 100.0% |
| **Motivation (Control Group)** | Low | 31 | 77.5% |
| | Moderate | 8 | 20.0% |
| | High | 1 | 2.5% |
| | Total | 40 | 100.0% |

The descriptive results of the above two groups of post-tests show that there is a difference between the two groups of students regarding TSR and level of motivation. However, in order to ascertain the accuracy of the experimental results, the researcher again used independent sample t-tests to ensure that the difference in performance of the two groups is statistically significant. Table 4.8 show the results of this analysis.

**Table 4.8.** T test result for post-questionnaire

| Variables | Group | N | Average | SD | SD. Error | T | Df | P |
|---|---|---|---|---|---|---|---|---|
| TSR | Experimental Group | 40 | 4.20 | 0.27 | 0.04 | 18.42 | 78 | .000 |
| | Control Group | 40 | 2.93 | 0.34 | 0.05 | | | |
| Motivation | Experimental Group | 40 | 4.11 | 0.21 | 0.03 | 23.87 | 78 | .000 |
| | Control Group | 40 | 2.92 | 0.24 | 0.04 | | | |

The independent sample t-test results of the TSR scores show that the control group (Mean = 2.92, St. Dev. = 0.34) and the experimental group (Mean = 4.20, St. Dev. = 0.27) have a statistically significant difference in terms of TSR (T (78) =.18.42, p =.000). Similarly, the results of independent sample t-tests for motivation shows that, the control group (Mean = 2.92, St. Dev. = 0.24) and the experimental group (Mean = 4.11, St. Dev. = 0.21) have a statistically significant difference in terms of motivation (T (78) =23.87, p =.000). The two groups have developed different levels of relationships with

their teacher and have improved differently in terms of motivation in the second language. From the descriptive results, we can clearly see that the experimental group improved more than the control group in both TSR and motivation levels. Therefore, we can say that a good TSR has a positive impact on improving students' motivation levels in a second language class. The above results support the first hypothesis of this research: Good TSR has a positive effect on improving Pakistani students' motivation levels in Chinese as a second language classes.

### 4.1.6 Post Test exam Results

After the experiment, the researcher also compared the two classes' students' posttest exam results. Table 4.9 shows the posttest exam results.

**Table 4.9.** Posttest exam Results

| | N | Range | Minimum | Maximum | Mean | Std. Error | Variance | St. Dev |
|---|---|---|---|---|---|---|---|---|
| Experimental Group | 40 | 23 | 72 | 95 | 85.33 | 1.04 | 43.25 | 6.58 |
| Control Group | 40 | 22 | 57 | 79 | 69.5 | 1.00 | 40.15 | 6.34 |

As can be seen in Table 4.9, the highest score of experimental group in the post-test is 95, the lowest score is 72, the average score is 85.33. On the other hand, the highest score of the control group in the posttest is 79, the lowest score is 57, and the average is 69.5. Both groups' students performed differently in the post-test, and there is a significant difference in their final scores due to the different type of treatment (in terms of teaching) that was given to both groups.

In order to ensure that the difference between the posttest scores of both groups was significant, the researcher also conducted an independent samples t-test. The Results of t-test are shown in Table 4.10.

**Table 4.10.** T-test result for both groups' posttest exam results

| Variables | Group | N | Average | SD | SD. Error | T | Df | P |
|---|---|---|---|---|---|---|---|---|
| Grade | Experimental Group | 40 | 85.33 | 6.58 | 1.04 | 10.96 | 78 | .000 |
| | Control Group | 40 | 69.50 | 6.34 | 1.00 | | | |

The above table shows there was a statistically significant difference [T (38) =.87, p =.000] in posttest results of the control group (Mean = 51.31, St. Dev. = 5.20) and the experimental group (Mean = 52.04, St. Dev. = 3.93). From the descriptive results, we can clearly see that the experimental group improved more than the control group in post-test results. Again, we can say

that there is a significant difference in their final scores due to the different types of treatments that were given to both groups.

The above results support the second hypothesis of this research: Good TSR is helpful in improving the academic performance of Pakistani students in Chinese as a Second Language classes.

### 4.1.7 Correlation Analysis of TSR, Motivation, and Grade at Post-Test Level

To examine the third hypotheses of the present study, which was to find out the correlation between TSR, grade achievement, and motivation level of students, a correlation test was conducted at Post-test level. The result is shown in Table 4.11.

**Table 4.11.** Post–test Correlation coefficient matrix

| | TSR | Motivation | Grade |
|---|---|---|---|
| **Experimental Group** | | | |
| TSR | - | | |
| Motivation | 0.70** | - | |
| Grade | 0.63** | 0.60** | - |
| **Control Group** | | | |
| TSR | - | | |
| Motivation | 0.68** | - | |
| Grade | 0.66** | 0.62** | - |

**p<0.01

The above table shows that the correlation between TSR and motivation for the experimental group was ($r = 0.70$, $p < .01$), the correlation between TSR and grade was ($r = 0.63$, $p < .01$), and the correlation between motivation and grade was ($r = 0.60$, $p < .01$), which indicates a strong positive correlation between TSR, motivation, and academic performance.

Similarly, the correlation between TSR and motivation for the control group was ($r = 0.68$, $p < .01$), the correlation between TSR and grade was ($r = 0.66$, $p < .01$), and the correlation between motivation and grade was ($r = 0.62$, $p < .01$), that indicates a strong positive correlation between TSR, motivation, and academic performance.

As we can see, in the experimental group, students have high TSR, so consequently most of the students have high motivation levels and high exam scores. On the other hand, the control group students have weak TSR scores, so consequently most of the students have low motivation levels and low exam scores. We can conclude that all three variables have very strong positive relationships with each other i.e., increases in one variable lead to increases in the others and deterioration in one variable lead to deterioration in the others.

The above results support the third hypothesis of this research: There is a positive correlation between TSR, Pakistani students' motivation level, and academic performance in Chinese as a second language class.

From the above results, we can conclude that TSR is an important factor in encouraging students to learn a second language. A good TSR motivates students to put forth their best effort in learning Chinese. The students in the experimental group have better TSR, Motivation and Exam scores as compared to the control group. This gap between the two classes is because the experimental group has received special treatment, it has become the cause of building good TSR as well as increasing the class motivation, due to which students have improved their grade marks as well. On the other hand, control group did not receive any special treatment, So, the majority of the control group students still have a low level of relationship with their teacher. Consequently, they have a lack of motivation or have a low level of motivation in Chinese as a second language class, and it also affects their grade. We can also conclude that these three variables have a very strong positive relationship.

## 5. Discussion and conclusion

The first goal of the present study was to determine the impact of the TSR on a Pakistani student’s motivation level in a Chinese as a second language class. The second goal of the study was to determine the impact of the TSR on a Pakistani student’s academic performance in a Chinese as a second language class. The third goal of the study was to find out if there was a correlation between the TSR, Pakistani students' motivation level, and academic performance in a Chinese as a second language class. The quasi-experimental research design was used to investigate the above-mentioned objectives. As some studies have emphasized, that in TSR experimental studies, sometimes the positive results are not just because of a good TSR but could be because of a different class syllabus, teaching methodology, or teachers themselves. Therefore, the best technique to avoid the effect of external factors in research is to use the same teacher, class syllabus, and teaching methodology (Bryan & Atwater, 1994; Chin, 2006). Therefore, with the reference to the above studies, the control group and experimental group in this study were taught by the same teacher and were taught the same class syllabus.

Different research results show that relationship between students and teachers have a positive effect on students’ motivation levels and academic performance. The post-questionnaire results of present study also show that after the experiment period, the experimental group students, feel more motivated in their class in comparison to the control group students. These results are also supported by researches carried out by Reddy (2003), Hughes

(2012), and Lucha (2015). According to Williams (2010), the perception of students about their relationship with their teachers have a very important role in developing their interest and motivation in learning and pushing them to study more effectively. Similarly, another study revealed that cooperative learning is the most effective teaching style that encourages students to study in groups in order to enhance their interest, confidence, and desire for learning (Aziz & Hossain, 2010).

Similarly, the results also support the second hypothesis of the present study that good TSR is helpful in improving the academic performance of the Pakistani students in Chinese as a second language classes. The post-test findings of the present study demonstrate that a positive teacher-student has a beneficial influence on students' academic progress. As in the Post-test results, we can clearly see that the experimental group showed significantly higher scores than the control group. These findings indicate the efficacy of teacher-student interaction in academic advancement. These findings corroborate prior research (Friere, 1990; Hussain, et al., 2013; Khan, 2011). Similar results have been given by (Spilt et al., 2011; Lucha, 2015; Roorda & Koomen, 2011; Miness & Cooper, 2014), who found that the most significant factor in enhancing students' academic success is the establishment of healthy TSR. The formation of strong teacher-student interactions is the single most essential factor in raising students' academic success levels. The present study supports the research findings of Liu (2017). According to his research, as compared to traditional learning approaches, cooperative learning is more effective. Because the lecture method is focused on putting information into a theoretical narrative without regulating, integrating, and organizing perceptions and scientific principles. Therefore, it is an ineffective method and it significantly adds to students' poor accomplishment levels.

Similarly, results from the analysis of the present research also support the third hypothesis that there is a positive correlation between TSR, Pakistani students' motivation level, and academic performance. These results support previous findings (D. W., 1998; Ahmed & Mahmood, 2010; Reza, 2013; He & Qi, 2018; Ebrahim, 2012; Wang et al., 2015) that there is a strong positive correlation between TSR, academic performance and motivation level. The study's findings may be supported by the fact that students in the experimental group worked in a highly cooperative atmosphere, with teachers and students assisting one another to do better throughout the experimental group activities. Cooperative learning is a style of teaching and learning in which students collaborate to achieve a shared objective (Arends, 1998). Another significant element that may have contributed to the positive outcome was that these students were exposed to

such therapy for the first time, and the thrill and delight of doing something new in their normal lessons may have enhanced their motivation to perform.
In conclusion, we can say that the TSR is the most fundamental aspect of classroom instruction. The enhancement of students' motivation and academic progress is stimulated by the change in the TSR. The positive TSR has a significant influence on both student learning motivation and academic success. A positive teacher-student connection encourages students to participate actively in class, share their thoughts, and take an interest in their class, which automatically results in improving their grades. It can be demonstrated that the positive teacher-student interaction in the classroom influences not only students' learning motivation but also grade achievement. Most students who have a positive relationship with their teacher have high self-esteem and perform better on exams.

The TSR is one of the prime factors that directly affect the healthy development of students' personal traits, the quality of education, and their performance in classroom. It is recommended that the teachers create a positive TSR and learning environment. Generally speaking, the establishment of a TSR is not a difficult task. Teachers and students can only have a better communication and get to know each other when teachers love and respect their students, treat them fairly, praise them, and encourage them. Teachers must actively seek out and use effective methods and techniques, improve exchanges and communication with students in all aspects of thinking, life, and study, and express our emotions in appropriate and acceptable ways. In addition, teachers should be good at listening to students' emotions so that they can vent their emotions normally. In addition, they must learn to identify and master certain skills in identifying and judging emotions, gain insight into the emotional state of students, and make appropriate responses to students' emotional responses to build a harmonious TSR. This improves communication and exchanges between teachers and students, as well as among students. Students' language cognitive abilities are improved, and language-teaching activities are carried out with a new language teaching method to better realize the purpose of language teaching.

## Conclusion

1. In the present study, participants were chosen from a single school and one ethnic group, which posed a constraint because they constituted a homogeneous sample. It is advised that future studies on this topic recruit respondents from a more varied range of backgrounds.
2. The data from this study does not include observation, which is essential. It is anticipated that future researchers will take these restrictions into account if they want to do research on a similar topic.

3. The present research sample is just from a basic language class at elementary school level. Future research could include a study across multiple grade levels.
4. Besides the TSR, there are so many other variables (age, family, investment, personality, learning methodologies, etc.) that also have a high impact on student grade achievement and their motivation level in second language classes, so future researchers can also consider these variables while conducting research on a similar topic.
5. The teacher's response to the students' interests is very important. Teaching is not a one-way process; it's a bilateral activity between teachers and students. In teaching activities, students learn new things and exchange information with their teachers. So, teachers shouldn't think of their students as passive acceptors, but rather be turned into active, lively, and developing cognitive subjects.
6. Language classroom teaching should create a harmonious, coordinated, lively, relaxed, and happy classroom atmosphere between teachers and students. This atmosphere can improve students' curiosity and interest, mobilize students' active learning, and reduce the obstructive effect of emotional anxiety and mentality, thereby improving classroom teaching efficiency. At the same time, students participate in the teaching with good cooperation and heartfelt cooperation. They can happily accept the input of language knowledge, internalize it in their own knowledge system, and then perform language in real or simulated pragmatic contexts.

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