

The Mediating Role of Peer Pressure on the Relationship between Teachers Students Interaction and Students Academic Achievement of Wolaita Sodo University Students

Bereket Merkine Gebresilase, Wei Zhao

School of Education, Shaanxi Normal University, Xi'an, China

Email: bereketmerkine@gmail.com/bereketmerkine@outlook.com, zhaowei@snnu.edu.cn

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Abstract

The impact of peer pressure on the relationship between teacher-student contact and academic achievement in University of Ethiopia graduating class students was investigated in this study. Using a well-established questionnaire, 313 students were randomly recruited from four colleges and one school for a survey-based study. The CFA and SEM procedures were employed. Student-teacher interaction has a positive and significant relationship with both peer pressure and academic achievement, according to the findings. In the relationship between student-teacher interaction and academic achievement, peer pressure had a mediating function. All of the current study's hypotheses were found to be true. The Ethiopian Ministry of Education and university officials should evaluate the display guidelines for instructors and students so that students can resist negative pressure and professionals may use proper care and emotional attachment tactics while interacting with them. In addition, university leaders and practitioners can identify important areas to consider in selecting instructors, providing life skill training, interpersonal interaction training, and managing peer pressure workshops for all students and teachers by using the model developed in this study.

Keywords

Peer Pressure, Student Teacher Interaction, Academic Achievement

1. Introduction

Socialization with other individuals in the environment has an impact on human

growth. The support supplied by parents, teachers, and peer groups that affect their level of academic performance are inferred to be correlational to children's academic successes (Vangie et al., 2019). Learning in a classroom is heavily reliant on the structure and pattern of inter-personal relationships, particularly pupil-pupil relationships that exist at any one time within the learning group. For many youth, the transition from secondary school to a higher education institution is a significant life change and a time when they are confronted with a variety of psycho-social issues such as peer pressure, different inter-personal relationships, living away from parents, and adjusting to a new environment. Students can gain learning experiences and possibilities for psychological growth by attending a tertiary institution (Friedlander et al., 2007; Tao et al., 2000).

Entering a higher education institution, on the other hand, can be a source of tension and acute stress (Friedlander et al., 2007). Academic demands are increasing at colleges and universities, and new social relationships are forming. According to Jill Carlivati's (2001) research, college achievement is linked to the quality of one's interpersonal interactions and other developmental outcomes. Academic failure, as measured by peer conflict and trouble with schoolwork, has a significant impact on family connections, as adolescents who have had a hard day at school are more likely to show unpleasant behavior toward their parents that evening (Repetti et al., 2011).

In today's world, education competency is inextricably linked to a society's success. The ultimate goal of education, according to Deepa & Chamundeswari (2014), is the best adjustment of school atmosphere, parental participation, peer interaction, students' self-evaluation, and student teacher interaction.

The educational enterprise revolves around student success. University success assists students in achieving long-term personal and career goals while also providing a variety of monetary, emotional, and physical rewards (Baum & Ma, 2007). Various psycho-social factors, such as low socio-economic background, student psycho-social factors such as peer group influence, teachers interaction with students, cognitive abilities, school-related factors, home environment, or parental and other family members' support, have been found to be responsible for students' scholastic failure (Khan & Malik, 1999; Fan, 2001; Gonzalez-Pianda, Nunez, Gonzalez-Pumariega, Alvarez, Roces, & Garcia, 2002).

Parents, instructors, examination organizations, counselors, psychologists, and universities are all concerned about the growing rate of low academic self-efficacy and, as a result, low academic accomplishment. Peer groups have an important role in kids' social, emotional, and academic development. According to Gardner and Steinberg (2005), peer group impact begins at a young age and grows throughout adolescence. Understanding the opportunities and limitations of peer groups is critical for educational process productivity and school system organizational design in order to increase student academic achievement.

Friendships, according to Filade et al. (2019), are "essential interpersonal vehicles that drive pupils toward psychological growth and maturity, permitting

social compassion that promotes the development of self-evaluation". The preceding remark strongly shows that peer group has an unparalleled impact on practically every aspect of teenage development. Such an effect can be seen in young people's social and emotional life, which doesn't stop there; it can also be shown in their attitudes toward educational activities, and careful analysis of these factors has demonstrated that they have an impact on students' academic achievement.

Negative peer influence may be one of the motivating elements behind most students' low academic performance; the rationale for this is not far-fetched: they spend a significant amount of time in extracurricular activities. Academic priorities are frequently overlooked, and academic achievement suffers as a result.

Interaction between students and teachers is another factor that influences students' academic progress at the university level. One of the key goals of every university in the country is to improve academic performance as assessed by examination results. Wolaita Sodo University, which aspires to be a center of excellence in Africa's heartland, places a premium on quality assurance and upholding standards. However, students' academic achievement in university is not very interesting in terms of achieving the university's objective. According to research conducted by (Bushura, 2010), universities are seen as locations that provide an acceptable learning environment for students, but the importance of student-community engagement cannot be overlooked. Although there has been a lot of research on the influence of peer groups on students' academic achievement, the majority of it has focused on the impact of peer pressure on academic accomplishment (e.g. Wentzel & Watkins, 2003; Cillessen & Mayeux, 2004; Antonishak, 2008) or teacher-student relationship on students' academic achievement (e.g. Fowler et al., 2008; He & Qi, 2018; Zeng et al., 2012). Few studies have looked at the role of peer pressure in learning as a mediating factor in the relationships between teacher-student relationships and students' academic achievement at the university level. At Wolaita Sodo University in Ethiopia, this study examines the relationship between students' peer group influence and academic achievement, the relationship between student teacher interaction and academic achievement, and the mediating effect of students' peer group influence on the relationship between teacher student interaction and academic achievement. As a result, the variables listed below were the focus of this study.

1.1. Peer Pressure and Academic Achievement

Peer pressure is defined as when individuals your age encourage or pressure you to do something or refrain from doing something, regardless of whether you want to do it or not (Ryan & Deci, 2000). Peer influence is a more subtle form of peer pressure that involves modifying one's conduct to fit others' perceived expectations (Burns & Darling, 2002). In general, most teenagers give in to peer pressure over relatively minor issues such as music, dress, and haircuts. When it

comes to more crucial topics like as moral ideals, parents continue to have a greater influence than peers (Black, 2002). Peer pressure refers to being persuaded or pushed to do something you don't want to do by your friends or peers your age. It's the pressure an individual feels to fit into the norms of a social group into which he or she wishes to fit. Humans are sociable creatures who spend the most of their life socializing and building close bonds with one another. People such as parents, siblings, instructors, and friends surround them (Yunus et al., 2012). Peer pressure has recently become a source of concern for many Ethiopian school and university students, as well as parents. It is quickly becoming the most important factor in determining whether university students use cigarettes, alcohol, Khat, and other substances, as well as if they are involved in education and engage in sexual activities. Peer pressure has been defined as having both a positive and negative impact on individuals, as well as having no effect on a person because peer pressure is a lifelong learning process (Gulati, 2017).

According to Clark (2009), peer group pressure begins when children crave separation from their parents and elders in order to associate with their peers. The majority of an adolescent's actions are impacted by the group to which he or she belongs. As a result, adolescents imitate their peers' actions rather than those desired by their parents. Tarshis (2010) explained that parents are mostly to blame for failures in adolescent conduct since they are supposed to act as role models and pay attention to their children's growth in order to instill a proper sense of discipline. According to Peterson (2011)'s research, there is a considerable link between peer pressure and academic accomplishment. Smoking, drinking, teenage pregnancy, drug addiction, and academic failure are all linked to negative peer pressure among adolescents (Tarshis, 2010).

According to a study done by Kadir et al. (2018), peer networks might increase student anxiety, particularly when it comes to their schooling. When a student is affected and motivated by his or her peers, he or she will perform well in school and get strong academic results (Boehnke, 2008). According to Olalekan (2016), when kids receive essential peer support, they are more likely to achieve and exceed their capabilities, focus more on their studies, and perform well in academic tasks at school. Understanding the nature of peer pressure, according to Zhang (2010), is challenging, and no one has yet fully grasped the consequences of peer pressure on academic life. Peer pressure is generated by parents' lack of supervision of their children during adolescence; during this time, children prefer to love their peers' company and spend more time with them (Vangie et al., 2019).

Students' relationships with their peers can help them improve their capability and academic performance in school since they can request assistance from their peers, which can serve as motivation rather than working alone (Sotinis et al., 2013). Students' interactions with their peers are likely to influence them and can be vital in helping them make decisions. It can also have an impact on their performance (Vangie et al., 2019).

In order to design and comprehend how to enhance socioeconomic policies, it is necessary to understand peer effect on university students (Carman & Zhang, 2012). During a teenager's adolescence, peer relationships are extremely important. When teens start university, they form intimate friendships with their peers that last throughout their adolescence (Guzman, 2017). Peer pressure on people's conduct is defined as a social phenomenon in which members of a society may influence one other positively or adversely, but the majorities are affected by the unpleasant behavior of those who resist what others do (Gulati, 2017). When it comes to the various aspects that influence kids' ability to achieve academic achievement, developmental problems are a major hindrance (Chen, 2008). A person seeks emotional support in order to communicate openly and reveal his personal ambitions or goals. Individuals can gain emotional benefits from exposing their feelings to others since it can help them overcome temptation and provide emotional rewards (Bonein & Boemont, 2013). Peer groups, on the other hand, respond to questions from teenagers about many issues that arise during the adolescent era, such as physical appearance or body changes (Adeniyi & Kolawole, 2015).

According to the evidence presented above, many researchers have studied the effects of peer pressure on students' academic achievement and have concluded that the level of peer pressure has a positive and negative impact on students' academic performance at various levels, particularly in high school. These findings motivate us to do more research, and the goal of this study is to look into the function of peer pressure in mediating the relationship between student-teacher interaction and academic accomplishment among university students.

1.2. Teacher-Student Relationship and Academic Achievement

Relations with peers and teachers are two of the most significant types of social relationships that kids build and sustain in school, and the former appear to be more consistently associated to academic outcomes from childhood to adolescence (Košir & Tement, 2014). One of the attributes that will undoubtedly make most lists is a teacher's ability to connect with students. It may be referred to as an ability to cultivate relationships or be more formally labeled as "nurturing pedagogy". It may be defined as a mix of high expectations and caring support; or as Pianta (1999) defines the student-teacher relationship, "Emotions-based experiences that emerge out of teachers' on-going interactions with their students." Strahan and Layell (2006) noted the importance of "establishing a learner-centered environment that featured warm, supportive relationships with students," (p. 153). McEwan (2002) makes the case quite eloquently stating, "Effective teachers appear to be those who are 'human' in the fullest sense of the word. Their classroom seems to reflect miniature enterprise operations in the sense that they are more open, spontaneous, and adaptable to change" (p. 30) Hargreaves (1994) apparently agrees, stating. Good teaching is charged with positive emotion. It is not just a matter of knowing one's subject, being efficient, having

correct competencies, or learning all the right techniques. Good teachers are not just well oiled machines. They are emotional, passionate beings who connect with their students and fill their work and classes with pleasure, creativity, challenge and joy. (p. 835).

Relationships, whether positive or negative in nature, have proven to have profound effects on quality of life. [Lansford et al. \(2005\)](#) found that well-being is directly tied to personal relationships. In this mixed methods study, participants, ranging from teenagers to senior citizens from both the United States and Japan, were surveyed revealing that in both countries social relationship quality was equally related to well-being. This well-being was accomplished specifically “by providing love, intimacy, reassurance of worth, tangible assistance, and guidance” (p. 1). [Vanzetti and Duck \(1996\)](#) shared similar as well as other benefits to relationships, which include physical support, a sense of belonging, having a “sounding board” for emotional reactions and opinions, being able to say what you really think, providing a reassurance of worth, opportunities to help others, and validation and support for the way we do things and interpret experience (p. 15-18).

Conversely, [Lansford et al. \(2005\)](#) reported that the lack of high quality relationships resulted in negative effects including depression, anxiety, and poor health in general. And [Ehrensaft's \(2005\)](#) meta-analysis review of research of juveniles with conduct problems also suggested that problems of self-conduct, especially with regard to females, were linked to impaired interpersonal relationships.

When discussing the impact of a multi-year experience at China's secondary schools, [Liu \(2013\)](#) also emphasizes the significance of the student-teacher relationship, adding, “The tight emotional bond between teachers and students encouraged pupils to regard the school as a home away from home.” The teachers' commitment to their pupils' development inspired them to meet the school's academic and behavioral criteria.” Students who reported better teacher-student interactions also reported better sentiments of belonging, and so felt more academically efficacious and less self-conscious, according to [Roeser et al. \(1996\)](#). In a similar line, [Koplow \(2002\)](#) claimed that excellent student-teacher connections foster more confidence and classroom involvement, similar to how responsive parenting fosters a sense of stability and confidence. The relationship between teachers and students has a substantial impact on students' learning outcomes ([Zhang, 2019](#)). With the exception of a few studies ([Pianta, 1994](#); [Lee, 2007](#)), research that has examined the relationship between student-teacher interaction and academic achievement of students at various levels of education has consistently documented that students with higher levels of interaction with their teachers have significantly higher academic performance than their counterparts who have low levels of interaction with their teachers.

1.3. Objectives

Analyzing the relationship between peer pressure and academic achievement,

student teacher interaction and academic achievement and the mediating role of peer pressure on the relationship between student teacher-interaction and academic achievement

1.4. Conceptual Frame Work

By proposing and testing an integrated student teacher interaction and peer pressure model of academic achievement (see **Figure 1** below) with data from university students from Ethiopia, the current study sought to examine the effects of student teacher interaction and peer pressure on academic achievement as well as the interrelationships among these variables.

2. Methods

The current study was conducted in Wolaita Sodo University graduating class students which is one of public university in Ethiopia.

2.1. Participants

The current study's target population was 1730 students from the graduating class. We used stratified and random sampling techniques to pick participants from a second generation institution in Ethiopia's southern nation nationality area. A total of 313 university students made up the study's sample (177 male and 136 female).

2.2. Measures

The researchers employed the comparative fit index (CFI), incremental fit index (IFI), Tucker-Lewis coefficient (TLI), and root mean square error of approximation to assess the model's overall goodness of fit (RMSEA). If CFI > .93 (Byrne 1994), IFI > .9, TLI > .9, and RMSEA .08, a model is regarded satisfactory (Byrne 1994). When CFI > .95, IFI > .95, TLI > .95, and RMSEA .05, an ideal model is indicated; alternatively, the upper bound of RMSEA should not exceed .08. (Browne & Cudeck, 1992). To uncover sources of bad fit and link error words with reasonable high correlation, modification indices (MIs) were explored.

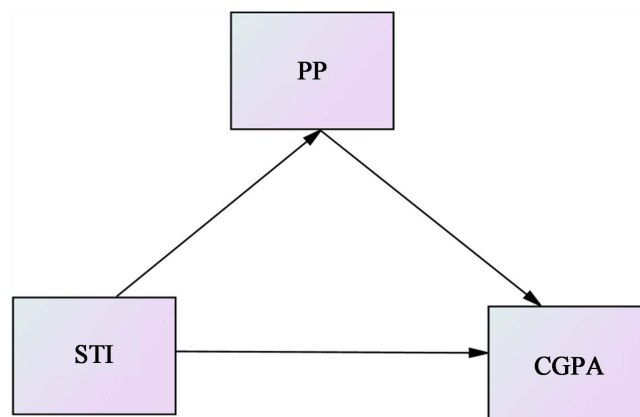


Figure 1. Conceptual frame work of the study.

This study followed Baron and Kenny's advice when it came to doing mediation analysis.

2.3. Peer Pressure

The Likert scale ("extremely low", "low", "moderately high", "high" and "very high") devised by B. Bradford Brown University of Wisconsin was used to quantify student peer pressure (2013). Cronbach's alpha calculated the internal consistency of responses to this scale to be 0.79. On a five-point Likert-Scale ranging from 1 to 5, participants were asked to rate how much peer pressure they felt. There were 18 items designed to assess the student's peer pressure. However, confirmatory factor analysis revealed that 8 items were eliminated due to validity and reliability concerns. For this study, we used ten items, including pressure to be accepted by teachers and parents (6 items), pressure to study hard (2 items), and pressure to be creative (2 items) and peer pressure to perform differently than their peers (2 items). Their model fit indices were [tucker-lewis index (TLI) = .91, comparative fit index (CFI) = .93, incremental fit index (IFI) = .93 root mean-square error of approximation (RMSEA) = .064 root mean-square error of approximation (RMSEA) = .064 root mean-square error of approximation (RMSEA) = .064 root mean-square error of approximation (RMSEA)].

2.4. Teacher's Student Interaction

Robert C. Piata (1999) established the Teacher-Student Relationship Scale (TSRS), which was amended by Cronbach's alpha calculated the internal consistency of responses to this scale to be .845. Participants were asked to rate the level of interaction on a five-point Likert-Scale ranging from 1 to 5, with 1 indicating strong disagreement and 5 indicating strong agreement. Among university students, this scale has demonstrated to be reliable and valid (Qing et al., 2017). Only the 14-item subscale of teacher-student interaction was used in this study, which included teachers' compassionate sharing with pupils (four items), [X²/df = 4.14, Tucker-Lewis index (TLI) = .95, comparative fit index (CFI) = .97, root mean-square error of approximation (RMSEA) = .036], and communication and sharing idea (seven items) [X²/df = 4.14, Tucker-Lewis index (TLI) = .95, comparative fit index (CFI) = .97, root mean-square error of approximation (RMSEA) = .036]. All items were assessed on a 5-point Likert scale, with 1 indicating strong disagreement and 5 indicating strong agreement. The higher the score, the greater the perceived parental marital strife. Cronbach's alpha for the scale in this study was .84.

2.5. Academic Achievement

According to university guidelines, academic achievement was judged by students' cumulative grade point average (CGPA) from first year through graduating semester.

2.6. Mediation Effect

The mediation effect was investigated using the Baron and Kenny (1986) technique. Some requirements must be met, according to Baron and Kenny (1986), in order to verify the mediation effect. The independent variable (student teacher interaction) should have a significant effect on the dependent variable in the first condition (academic achievement). The independent variable (student teacher interaction) should have a significant effect on the mediator variable in the second condition (peer pressure). The mediating variable (peer pressure) should have a significant effect on the dependent variable in the third condition (academic achievement). The effects of both independent (student teacher interaction) and mediator (peer pressure) factors on a dependent variable (academic achievement) are calculated in the fourth condition. Only when the independent variable's effect on the dependent variable becomes meaningless (Full medium) or declines can the mediation effect be evaluated (partial medium).

2.7. Procedures

The Academic Ethics Committee of Shaanxi Normal University's School of Education gave their approval to the current study. Prior to data collection, the University provided informed consent. The aggregate quantitative data was collected over the course of five days, following the Covid-19 norm. The questionnaire was delivered to the selected students (sample) in the classroom by the researcher, a data collector, and classroom representatives after taking all essential precautions, such as obtaining permission to join the class and the subjects (sample). The researcher provided some clarifications to the respondents, stating that participation was voluntary and that they had the option of not filling out the questionnaire before agreeing to participate in the study. Finally, in order to protect the confidentiality of the data acquired by the subject from unauthorized individuals, the disseminated questionnaires were collected during the day to avoid time limitations in filling out the question within the allotted time. While trying to organize the data for analysis, the researchers were lucky in that all 313 participants completed the questionnaire and returned it to the researchers. As a result, the researchers considered 313 samples for study.

2.8. Statistical Analysis

The following were the study's hypotheses: 1) teacher-student interaction positively and significantly affects students' academic achievement, 2) students' peer pressure significantly affects their interaction with their teachers, 3) student peer group influence affects students' academic achievement, and 4) Peer pressure mediates the effects of teacher-student interaction on students' academic achievement.

The following analyses were carried out using SPSS version 25.0 and AMOS 21.0 (IBM, Armonk, NY, USA) after the researchers had collected the data for analysis. To depict the relationships between all of the study variables, Pearson's

correlation analysis was used first. Then, based on hypothesized correlations between variables and preliminary model tests, structural equation models (SEM) were built. SEM is used to explain the link between various variables and concepts, and it can combine mediation analysis with latent variable analysis to provide model fit information regarding how well the hypothesized mediation model fits the data. RMSEA, TLI, and CFI were used to evaluate model fit. Values of less than or equal to .08 for the RMSEA and greater than or equal to .90 for the TLI and CFI were suggested as satisfactory fits (Hu & Bentler, 1999). Finally, the indirect effects were tested using the bootstrap method. Based on 2000 bootstrapped samples, we calculated bias-corrected and accelerated 95 percent bootstrap CIs. The indirect effect was significant if the 95 percent confidence interval did not contain zero.

3. Results

3.1. Common Method Bias

All of the data in this study was gathered by self-report assessments, which could lead to typical technique bias (Podsakoff et al., 2003). To rule out the prevalent method bias, a single factor Harman test was used. When just one factor emerged or when one factor explained more than 40% of the variance associated with all variables loaded concurrently in factor analysis. The current study's factor analysis revealed that a single factor explained 26.80% of the total variation, indicating that there was no significant common technique bias.

3.2. Descriptive and Correlational Analysis

Table 1 shows the means, SDs, and bivariate correlations of all research variables. Student teacher interaction is strongly connected with academic achievement, as expected, and student teacher interaction is also positively correlated with peer pressure. Peer pressure was also found to have a beneficial association with academic achievement.

Correlational analysis supported the three research hypotheses, as shown in the table. Students' university academic achievement is highly connected with peer pressure ($r = 0.51$, $p .05$). Students' academic achievement is significantly connected with student-teacher interaction ($r = 0.78$, $P .05$). Peer pressure was also found to be substantially connected with the teacher-student connection ($r = .000$, $p .001$).

Table 1. Results of Correlation and descriptive.

| | | M | SD | CGPA | PP | STI |
|---|------------------------------|------|-----|------|--------|--------|
| 1 | CGPA | 2.86 | .49 | 1 | .51* | .78* |
| 2 | Peer Pressure | 3.34 | .46 | .51* | 1 | .000** |
| 3 | Student teachers interaction | 3.41 | .47 | .78* | .000** | 1 |

3.3. Estimates of Reliability

The reliability estimates of Peer Pressure and student-teacher interaction were computed using Cronbach's alpha reliability estimation technique. The results are depicted in **Table 2**.

3.4. Mediation Test with Structural Equation Modeling

Two separate route analyses have determined the mediating role of peer pressure in the influence of student-teacher contact on students' academic progress. The above-mentioned **Baron and Kenny (1986)** method was utilized to demonstrate the effect of mediation. According to this, the first model was used to see if student-teacher contact has a substantial impact on student academic progress. When the first model is investigated, it is discovered that student-teacher contact has a substantial impact on students' academic performance (standardized = .20, $p < .05$). As a result, the first hypothesis has been confirmed see **Figure 2** and **Figure 3**.

Table 2. Estimates of reliability.

| Variables | Alpha score |
|-----------------------------|-------------|
| Peer Pressure | .79 |
| Student-teacher interaction | .84 |

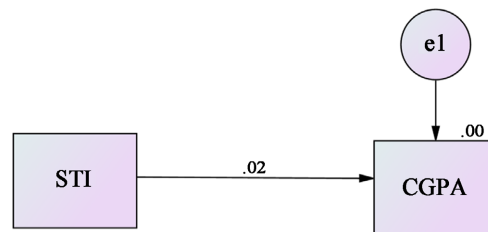


Figure 2. Direct effects of student teacher interaction on academic achievement.

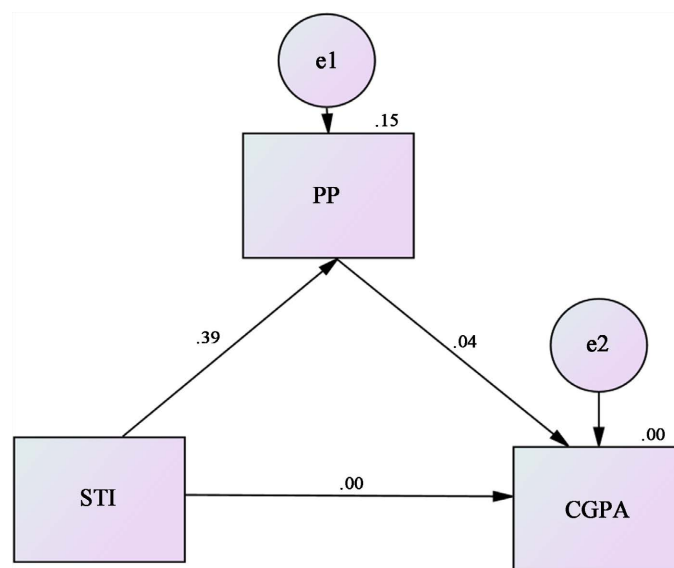


Figure 3. Mediation test with structural equation modeling.

Table 3. Mediation path model.

| Path | β | S.E | C.R | P |
|------------------------|---------|------|------|------|
| STI \rightarrow CGPA | .00 | .064 | .019 | .016 |
| STI \rightarrow PP | .39 | .052 | 7.5 | .000 |
| PP \rightarrow CGPA | .04 | .064 | .606 | .038 |

The goodness-of-fit indexes of the model show that the model is in between acceptable limits [$X^2/df = 4.14$, tucker-lewis index (TLI) = .95, comparative fit index (CFI) = .97, root mean-square error of approximation (RMSEA) = .036].

According to [Baron and Kenny \(1986\)](#), a mediation model should not be evaluated unless X1 and Y have a significant relationship. Even though X1 and Y are not highly associated, there can be large mediated effects in circumstances where one of the route coefficients is negative, according to more current mediation techniques ([Hayes, 2009](#)) see [Table 3](#).

In the second model, the [Baron and Kenny \(1986\)](#) approach was used to test the links between student teacher interaction and academic accomplishment, peer pressure and student teacher interaction, and peer pressure and academic achievement. In this approach, student-teacher contact is treated as an independent variable, academic accomplishment as a dependent variable, and peer pressure as a mediator variable.

In the second model, student teacher contact has a favorable influence on students' academic achievement (standardized = .000; p .01); and peer group pressure has a significant effect on academic achievement (standardized = .04; p .05). As a result, the second and third hypotheses were accepted.

The second and third conditions of [Baron and Kenny \(1986\)](#) have also been met, according to this. In addition, the effect of student teacher contact (standardized = .000; p .01) on students' academic progress has become important due to the inclusion of peer pressure in the model. As a result, the fourth requirement of [Baron and Kenny \(1986\)](#) has also been met. According to this, university student peer pressure plays a full mediator role in the relationship between student teacher interaction and academic accomplishment. As a result, the fourth hypothesis has also been accepted.

Mediation output

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 3.5 *****

Written by Andrew F. Hayes, Ph.D.

www.afhayes.com

Documentation available in Hayes (2018).

www.guilford.com/p/hayes3

Model: 4

Y: CGPA

X: STI

M: PP

Sample
Size: 313

OUTCOME VARIABLE:

PP

Model Summary

| R | R-sq | MSE | F | df1 | df2 | p |
|-------|-------|-------|---------|--------|----------|-------|
| .3897 | .1519 | .1859 | 55.6928 | 1.0000 | 311.0000 | .0000 |

Model

| | coeff | se | t | p | LLCI | ULCI |
|----------|--------|-------|---------|-------|--------|--------|
| Constant | 2.0243 | .1781 | 11.3647 | .0000 | 1.6739 | 2.3748 |
| STI | .3862 | .0518 | 7.4628 | .0000 | .2844 | .4881 |

OUTCOME VARIABLE:

CGPA

Model Summary

| R | R-sq | MSE | F | df1 | df2 | p |
|-------|-------|-------|-------|--------|----------|-------|
| .0377 | .0014 | .2417 | .2204 | 2.0000 | 310.0000 | .8023 |

Model

| | coeff | se | t | p | LLCI | ULCI |
|----------|--------|-------|---------|-------|--------|--------|
| Constant | 2.7239 | .2417 | 11.2721 | .0000 | 2.2484 | 3.1994 |
| STI | .0012 | .0641 | .0194 | .9846 | -.1249 | .1273 |
| PP | .0390 | .0647 | .6036 | .5465 | -.0882 | .1663 |

*****DIRECT AND INDIRECT EFFECTS OF X ON Y *****

Direct effect of X on Y

| Effect | se | t | p | LLCI | ULCI |
|--------|-------|-------|-------|--------|-------|
| .0012 | .0641 | .0194 | .9846 | -.1249 | .1273 |

Indirect effect(s) of X on Y:

| | Effect | BootSE | BootLLCI | BootULCI |
|----|--------|--------|----------|----------|
| PP | .0151 | .0282 | -.0422 | .0769 |

*****ANALYSIS NOTES AND ERRORS*****

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

2000

Indirect effects were employed to quantify the indirect effect of peer pressure on students' academic progress, and bootstrapping was used in the analysis for testing. The direct effect of peer pressure and student-teacher interaction was shown to be favorable and statistically significant. ($=.000$, $se = .064$, $p .016$) and

(=.04, se = .064, p .038). This demonstrates that students who have a higher amount of connection with their teachers have a higher overall grade. Peer pressure had a positive and substantial direct effect on student-teacher interaction (=.39, se = .052, p .000), implying that peer pressure has a considerable impact on students' interactions with their teachers. While the direct effect of peer pressure on students' academic achievement is positive and significant (=.04, se = .064, p .038), Meaning, peer pressure has an impact on students' academic performance.

4. Discussion

The purpose of this study was to look at the impact of student-teacher interaction on academic accomplishment, as well as the function of peer pressure as a mediating factor in the relationship between student-teacher interaction and academic achievement. Using the self-determination and ecological model as a theoretical foundation, the study attempted to broaden and connect existing research topics relating to student-teacher relationships, peer pressure, and academic accomplishment. According to the findings, there are favorable links between teachers' student contact, peer pressure, and academic accomplishment. According to the findings, there is a favorable association between teacher-student interaction and students' academic accomplishment, and students' peer group has a good impact on their academic achievement. Student teacher contact had a favorable and significant association with academic accomplishment, according to findings from a study of a poll of University graduating class students. This implies that the more teachers engage in appropriate student contact, the better pupils perform academically. That is, creating suitable relationships with students during the teaching and learning process will improve university students' academic progress.

Student-teacher interaction has both beneficial and negative effects on students' academic progress, according to the findings of prior studies. There were research findings that backed up the findings of this investigation.

Cui et al. (2020) discovered a good and substantial association between student-teacher interaction and Chinese students' academic achievements, which is supported by the findings of this study. This study backs up the findings of Xu and Qi (2019), who found a favorable and substantial association between student-teacher interaction and eighth-grade students' mathematics achievement in different areas of mainland China. This conclusion contradicts Sylvester et al. (2014) findings, which found that existing lecturer-student relationships had a negative correlation with students' self-esteem, implying that the greater the lecturer-student relationship scale scores, the lower the self-esteem.

This suggests that people with strong self-esteem did poorly in the student-lecturer relationship. This finding backed up the idea that good relationships between students and instructors provide a great learning environment for them, fostering social acceptance and belonging, and inspiring them to have

high self-esteem (DeSantis King et al., 2006; DuBois et al., 2002). This clearly demonstrated that the environment has a significant impact on the development of high self-esteem.

This study's findings are comparable to those of Whitaker (2004), who found a link between student-teacher interactions and college students' academic achievement. This research backs up Hamre and Pianta's (2001) findings, which show that student-teacher interaction is favorably associated to academic attainment. This study's findings are comparable to those of Zou, Qu and Ye (2007), who discovered a link between student-teacher engagement and academic accomplishment. This research backs up Lee's (2007) findings, which show that student-teacher interaction has a major impact on students' academic progress.

According to the findings, there is a positive and significant association between peer pressure and academic achievement among students. This means that when students are under positive peer pressure, their academic performance improves. When peer pressure is bad, academic success suffers as a result. This finding echoed a number of prior research' findings. The findings back up Peterson's (2011) findings, which indicated a significant link between peer group pressure and academic attainment. Their academic achievement is favorable when the pressure is positive, such as participating in academic activities, doing homework, reading, and group work. When peer pressure is negative, drinking, smoking and having more free time leads to academic failure. The findings of this study are comparable to those of Tarshis (2010), who found a link between peer pressure and academic achievement. According to the findings, school failure is linked to negative peer pressure such as drinking, partying, dismissing reading as a bad thing, and dismissing strong academic accomplishment as luck or chance.

The findings are comparable to those of Boehnke (2018), who found that when a student is positively affected and driven by peers, he or she does well at school and achieves strong academic results, however when a student is adversely motivated, academic failure ensues.

The findings of this study corroborate those of Olalekan (2016), who found that when kids receive essential peer support, they are more likely to achieve and exceed their capabilities, focus more on their studies, and perform well in academic tasks at school.

This research backs up Vangie and colleagues' (2019) findings, which show that peer interaction is likely to influence students and can be vital for them to make decisions. It also has the potential to alter student performance.

5. Conclusion

The researchers discovered a good association between student teacher interaction and academic accomplishment, as well as a positive relationship between student teacher interaction and peer pressure, as well as peer pressure and aca-

ademic achievement, in this study. As a result, both student-teacher interaction and peer pressure were found to be important determinants of academic success. Peer pressure also appears to modulate the association between student-teacher interaction and academic achievement, according to the findings. The study's findings aided our understanding of the causal linkages between peer pressure, student-teacher interaction, and academic accomplishment.

All of the assumptions in this study were effectively examined empirically and found to be validated, because they were formed based on previous literatures. The study used structural equation modeling to obtain relevant results (SEM). Overall, the study adds to our knowledge of the topic and gives an empirical evaluation of the study model.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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