

Teacher-Student Relationship and Its Influence on College Student Engagement and Academic Achievement

Bilash Mallik

Master Trainer Associate in Education, Nottingham University, Malaysia, Assistant Professor, Department of Sociology, Govt. Brojomohun College, Bangladesh, bilashsoc@gmail.com

This exploratory mixed-methods study aimed to explore how students' perceptions of positive and negative teacher-student relationships influence their classroom engagement and academic progress. The data in the quantitative phase came from 157 undergraduate, graduate, and postgraduate students at Government Brojomohun College in Bangladesh who participated in a Google-based survey questionnaire posted on Facebook groups, and a semi-structured interview of eight students was conducted via the Zoom platform. The qualitative data were interpreted and analyzed based on the themes that emerged from literature, open-ended survey questions, and interviews. To acquire a deeper comprehension of qualitative data, quantitative data were presented and analyzed statistically. The findings revealed that college students' positive perceptions of TSR greatly improve their behavioral engagement, emotional engagement, and cognitive engagement in the classroom, as well as their academic achievement, whereas their negative perceptions of TSR significantly hinder all types of classroom engagement and academic achievement. However, this study also found that some students' positive and negative relationships with teachers have no impact on their classroom engagement and academic achievement. This study makes an important contribution to the existing literature by elucidating college students' perceptions of TSR in terms of its positive and negative perceptions, as well as its impact on classroom engagement and academic achievement in college education. The implications and limitations are discussed.

Keywords: teacher-student relationship, classroom engagement, academic achievement, perception, college students

INTRODUCTION

Teacher-student relationships were viewed as a crucial factor in the past for ensuring student engagement and academic success in the Bangladeshi education system, as both teachers and students believed that a positive rapport between the two parties would result in positive outcomes for both parties. However, Bangladesh's educational system has changed over time. Due to the rise of other factors that affect student performance, such as class size, teacher shortage, student volume, socioeconomic status, etc., teachers, students, and policymakers have neglected this issue, particularly in Bangladesh's higher education (Banik & Kumar, 2019). However, research indicates that when students view their relationships with their teachers as pleasant, amicable, and adaptable, they are more engaged in the classroom, hence improving their academic performance (e.g., Collie, 2018; Dennie et al., 2019; Inman, 2019; Zhou, 2012). In contrast, if students' relationships with their teachers are strained, they may engage in disruptive conduct and become unsatisfied and disengaged, so impeding their overall achievement (e.g., Furrer & Skinner, 2003; Spilt, J. L., Hughes, J. N., Wu, J. Y., & Kwok, 2012). Numerous pieces of research studied the relationship between the TSR and student engagement, as well as their effects on academic achievement. (e.g., Dennie et al., 2019; Geng

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et al., 2019; Juin-yu Wu, Jan N. Hughes, 2010; Ko & Tement, 2013; Roorda et al., 2011; Stroet et al., 2013; Thornberg et al., 2020; Zhou, 2012). Much is known regarding how TSR increases students' behavioural, emotional, and cognitive engagement in the school context (e.g., Dennie et al., 2019; Geng et al., 2019; Thornberg et al., 2020; Wilson et al., 2020), how TSR improves students' school outcomes (Roorda et al., 2011), and how TSR is affected by gender differences in school (Pöysä et al., 2019). Moreover, a few empirical studies have also been conducted in the school context of Bangladesh to examine how TSR impacts public schools, private schools, and madrasahs (Mustary, 2020), how to create TSR in secondary schools (Khaleduzzaman, 2017), and how teacher-student interaction affects secondary school student academic performance (Pervin et al., 2021).

However, this issue remained the subject of research in higher education, particularly in college education (Hagenauer & Volet, 2014). Although some pieces of research were conducted in the college context, none of these studies focused on this issue, following a mix-method approach and a theoretical lens. For example, in a quantitative study, Robinson et al. (2019) found that the quality of classroom relationships between college teachers and students positively correlated with desirable academic outcomes for students, and students perceive uniformly positive relationships with instructors, but instructors experience a less positive relationship with some groups of students. Bulson (2015), in his qualitative study, found that supportive relationships between teachers and their students help create an environment for student success. Moreover, in a quantitative study, Docan-Morgan & Manusov (2009) discovered that students who reported positive instrumental, personal, and locational turning point events with a college teacher reported increased cognitive learning, affective learning, and student motivation following the turning points. Further, Hurtado et al. (2011) found that students at more selective institutions typically have less frequent, less personal interactions with teachers, whereas black students report having more support and frequent interactions with teachers at higher levels of education. So, it appears that previous studies either focused on the impact of TSR on student outcomes or the level of relationship between teachers and students, but TSR and its influence on student engagement and academic outcomes are missing in a college setting. This mixed-methods study sought to address this gap in the literature by examining students' perceptions of TSR and its influence on student engagement and academic achievement in college education, using an attachment theoretical lens. It is argued that positive and negative relationship between teachers and students influences college students' engagement and academic attainment in Bangladesh. So, the findings of this study will help us comprehend how positive and negative TSR perceptions affect student engagement and achievement in a Bangladeshi college setting from both theoretical and practical aspects. This investigation was inspired by the following research questions:

1. How does college students' perception of positive and negative teacher-student relationships affect their engagement in the classroom?
2. How does college students' perception of positive and negative teacher-student relationships affect their academic achievement?

Theoretical Framework

This study attempts to investigate the impact of TSR on student engagement and academic achievement by employing attachment theory (Bowlby, 1982; Bretherton, 1985) to gain a better grasp of the research topics from a theoretical standpoint. Bowlby (1982) developed attachment theory, which states that attachment refers to psychological connectedness between human beings, creating and maintaining intimacy with adults in such a way that these people are sensitive to children's needs. According to this theory, when adults understand emotional needs and provide a safe atmosphere, children become more self-reliant and focused on learning because they know that if they face any obstacles, adults would guide and aid them (Bowlby, 1982; Krstic, 2015). Moreover, attachment theory about TSR suggests that students' perceptions of teachers' nurturing and care may build their

relationship, which in turn promotes academic success (Berman-Young, 2014; Roorda et al., 2011). The fundamental strength of this idea is that it has given the most momentum to the relationship between teachers and students (Wubbels et al., 2012). Furthermore, this theory is pertinent to this study since it may aid in understanding the TSR regarding students' perceptions of their instructors' emotional support, nurturing, and caring. According to Hughes et al. (2008), building relationships between students and teachers based on the teachers' enthusiasm and willingness to be flexible may boost student engagement and achievement.

Literature Review

Teacher-student relationship

TSR is difficult to comprehend in a college setting because relatively few studies have been conducted on this topic in higher education, and the term has multiple components. This topic has been the subject of several empirical investigations in educational environments, but few have focused on TSR. In addition, the majority of empirical investigations have sought to describe TSR in terms of various theoretical components, such as self-determination theory, attachment theory, and motivation theory, while neglecting TSR's multidimensionality. In addition, some researchers have sought to classify TSR according to its specific facets. In meta-analyses of empirical studies, Cornelius-white (2007) and Roorda et al. (2011), for instance, stated that researchers in educational settings attempted to conceptualize TSR as distinct aspects of the association, such as educator support, high expectations, etc., rather than as an overall association. Further, the literature on TSR is lacking in clarity and uniformity (Hagenauer & Volet, 2014). Consequently, this study conceptualized TSR as a multidimensional concept in college education.

TSR is a broad concept that stresses teachers' emotional support, instructional support, classroom safety, emotional closeness, and conflict resolution. For example, Wentzel et al. (2010) conceptualized TSR in four dimensions. Students are more engaged in the classroom and achieve higher academic achievement when they are (a) cared for, valued, supported, and respected; (b) they achieve their goals with the help of their teachers; (c) they are informed of teachers' expectations, and (d) they feel safe in the classroom environment. In contrast, Chong et al. (2010) defined TSR as having three dimensions. When (a) teachers care and provide extra help; when (b) students are preferred for their cooperation and sense of responsibility, they view their relationship as satisfactory; and when (c) students experience negative relationships and their relationship with teachers is negatively affected, they feel less connected to teachers. Chong et al. (2010) looked at both the positive and negative features of TSR. As a result, each relationship might contain both positive and negative relationships, and research indicates that inequalities between the two elements of a relationship are widespread (Baker, 2006).

Pianta, Hamre, and Stuhlman (2003) conceptualized that TSR is a crucial element in the emotional intimacy and conflict dimension. When there is affection, caring, and emotional stability between teachers and students, it appears that proximity is a positive characteristic of a relationship. In contrast, conflict is a negative aspect of the relationship between teachers and students characterized by a lack of compassion, hostility, unpredictable behaviours, and unpredictability (Zee & Koomen, 2020). A conflict-free relationship between teachers and students, according to Verschueren and Koomen (2017), would increase student engagement in class and reduce school-related stress. Roorda et al. (2011) seem to validate this notion, finding that when students have close ties with their teachers, class participation is high and there is a lack of negativity and conflict among them. In contrast, conflict may have a negative impact on TSR and inhibit student participation in the classroom (Zee & Koomen, 2020). Thus, TSR is shaped by teachers' and students' positive and negative perceptions of support, compassion, intimacy, conflict, etc. This could have both positive and bad effects on student engagement and academic achievement.

Student engagement

TSR, like student engagement, is multidimensional; but, the majority of empirical studies ignore its multidimensionality by treating it as a one- or two-dimensional entity (Li, 2018). Despite the recent emphasis on adopting it as a multidimensional construct (e.g., Christenson et al., 2012; Z. Wang et al., 2014; Wonglorsaichon et al., 2014), the majority of researchers are from English-speaking countries. Student engagement was seen as a multifaceted construct in this study, comprised of three interconnected concepts: behavioural engagement, emotional engagement, and cognitive engagement (e.g., Chang et al., 2016; Fredricks et al., 2004; Lei et al., 2018; M. Te Wang et al., 2011). Firstly, Behavioral engagement initially refers to students' participation in their learning activities, assignments, and extracurricular activities; positive behaviour, effort, attention, perseverance, questioning, and actions toward the learning process and academic duties (e.g., Fredricks et al., 2004; Lei et al., 2018; M. Te Wang et al., 2011; Z. Wang et al., 2014). Secondly, emotional engagement describes students' positive and negative feelings or reactions toward educational institutions, teachers, and peers, such as connectedness, identification, interest, boredom, anxiety, happiness, enjoyment, enthusiasm, and a sense of belonging to learning activities, peers, and teachers (Lawson & Lawson, 2013; Lei et al., 2018; Poysa et al., 2019; Quin, 2016). Finally, cognitive engagement refers to a student's psychological investment in the academic task and willingness to invest in skill mastery through self-regulating or meta-cognitive strategies, such as how students think, understand the value of education, use learning strategies to comprehend complex ideas, and are goal-directed (e.g., Appleton et al., 2008; Archambault et al., 2009; Geng et al., 2019; Lawson & Lawson, 2013; Lei et al., 2018; Quin, 2016). An essential concept is that the numerous components of student participation are interrelated rather than different. For instance, when students enjoy the class (emotional engagement), they are more likely to focus on the learning activities (behavioural engagement) that lead to the mastery of challenging concepts (cognitive engagement). Consequently, student engagement is comprised of students' behavioural, emotional, and cognitive engagement, all of which is interconnected and assists students to achieve academic achievement.

Student academic achievement

There is little debate about student academic achievement in the literature because there is no universal system for defining academic achievement; rather, it differs depending on the research setting (Northup, 2011). Some researchers have provided a broad definition, while others have envisioned a restrictive one (Lindholm-Leary & Borsato, 2006). In addition, some empirical studies base their discussion of student academic achievement on graduation rates or classroom grades, while others define it using measurement techniques such as end-of-year exams (Northup, 2011). Lindholm-Leary and Borsato (2006) generally defined student academic achievement as linguistic skills, scientific knowledge, mathematics and cognitive skills, and proficiency in educational and social contexts. Due to the difficulty of assessing numerous forms of performance, this concept is rarely utilized to evaluate student academic achievement. According to Steinmayr, Meibner, Weidinger, and Wirthwein (2014), academic achievement is the extent to which a student accomplishes his or her predetermined educational goals, which are the focus of educational institutions. This approach is applicable since academic achievement in Bangladesh is measured by grades or end-of-year performance (Islam, 2021). Consequently, academic achievement was viewed as a proxy for end-of-year performance which may be bolstered by student perception of positive TSR and classroom engagement.

Student perceptions of positive TSR, student engagement, and academic achievement

The previous study on the impact of positive TSR perceptions on student engagement and academic achievement has yielded a variety of results. Student perception of positive TSR plays a key role in student classroom engagement, because it motivates them to explore the classroom (Furrer & Skinner, 2003; Hamre & Pianta, 2001; Wentzel, 1998), and it also aggregates their academic achievement

(Hamre & Pianta, 2001; Hughes et al., 2008). Some empirical studies found that when students have a positive relationship with their teachers and when teachers meet their needs and provide extra support, students are more engaged in the classroom (e.g., Collie, 2018; Dennie et al., 2019; Klem et al., 2004; Martin & Rimm-Kaufman, 2015; Rivera Munoz et al., 2020; Witherspoon, 2011), whereas other empirical studies discovered a significant correlation between student perception of positive TSR and academic achievement (e.g., Ansari et al., 2020; Fan, 2012; Fraser et al., 2010; Inman, 2019; Lewis, 2016; Omodan & Tsotet al., 2016; Omodan & Tsotetsi, 2018; Witherspoon, 2011; Zhou, 2012). Moreover, several meta-analyses have revealed that students' perceptions of outstanding relationships with teachers increase school engagement, particularly when students believe their teachers have high expectations for them and when they perceive themselves to be strong students (Quin, 2016; Roorda et al., 2011; Stroet et al., 2013). Other research discovered a correlation between students' favourable relationship with their teachers and their academic performance (Cornelius-white & Cornelius-white, 2007; Davis, 2003; Roorda et al., 2011). Furthermore, several empirical studies have shown that when students believe their teachers like, care about and value them, they are more engaged in the classroom, resulting in higher academic achievement (e.g., Bakadorova & Raufelder, 2018; Hafen, C. A., Allen, J. P., Mikami, A. Y., Gregory, A., Hamre, B., & Pianta, 2012; Hughes, 2015; Hughes et al., 2010; Lee, 2010).

In contrast to the literature, Benson (2020) found an unexpectedly weak correlation between TSR and student engagement in the setting of middle schools in North Dakota. In addition, Hafen, Allen, Mikami, Gregory, Hamre, and Pianta (2012) found no association between student psychological engagement and TSR. Positive TSR, according to Decker et al. (2007), is associated with classroom participation rather than academic achievement. Robinson et al. (2019) found no correlation between high TSR and college-level student performance. Due to the unpredictability of the findings on this topic, it is questionable whether the correlation between positive TSR, student engagement, and academic achievement is strong or poor. So, this study attempted to explore this issue from an attachment theoretical lens.

Negative TSR perception, student participation, and academic achievement

Students' perceptions of an unfavourable relationship with their teachers hinder their engagement and academic performance. Students that have a poor relationship with their teachers struggle to concentrate in class because they experience sorrow, grief, and insecurity (Furrer & Skinner, 2003; Spilt, J. L., Hughes, J. N., Wu, J. Y., & Kwok, 2012). Roorda et al. (2017) discovered in their meta-analysis a strong correlation between negative TSR and student engagement and achievement in a school setting. In the research population as a whole, a small link was observed by them between the negative component of TSR and student engagement and academic achievement; however, a longitudinal analysis revealed a stronger relationship between negative TSR, student engagement, and achievement. In addition, Chen and Cui (2020) found in a recent study with a large sample size from 52 nations that students' academic performance declines when they confront unjust behaviour from teachers. Although there is a clear negative relationship between school students' perceptions of inadequate TSR, engagement, and achievement, the issue in a college setting is less well recognized. Hence, this study concentrated on examining this issue in college education, using attachment theory.

To sum up, despite having an extensive study on TSR in elementary, middle, and high school contexts, revealing many fresh views, there have been few studies on TSR's effect on student engagement and academic achievement in higher education (Dwyer, 2017; Hagenauer et al., 2015; Hagenauer & Volet, 2014). In addition, a great deal of research has been conducted using either quantitative or qualitative methods, but only a few researchers in higher education have employed a mix-method approach. Moreover, several studies viewed TSR and student engagement as unidimensional or bidimensional phenomena, ignoring their multidimensionality (Karpouza & Emvalotis, 2019). Further, even though a

great deal is known about TSR, student engagement, and academic performances in school settings, divergent and contradictory findings exist in the literature. Finally, little is understood about these issues in underdeveloped nations such as Bangladesh (Pervin et al., 2021). Therefore, the purpose of this study was to explore how positive and negative attitudes regarding TSR affect college student engagement and academic achievement in Bangladesh, using attachment theory.

METHOD

Settings and Participants

This research was carried out at Government Brojomohun College in Bangladesh because it is the largest college in the southwestern part of Bangladesh, and it was chosen as a research location to acquire a thorough grasp of the issue. There are 22 departments and four faculties, such as the arts, science, social science, and commerce. Around 20,000 students from diverse regions and cultures study at the graduate and post-graduate levels. Additionally, nearly 200 teachers are employed here. In light of this, it was anticipated that examining the research problem in this context would provide a complete view of it. The Google-based survey had 157 participants (65% men and 35% women) from 20 disciplines and different academic years. Sociology, Management, Finance and Banking, Botany, and Soil Science attracted the most students (45.2%, 13.4%, 13.4%, 7.6%, and 5.1%, respectively). Students from the first year, second year, third year, fourth year, and MSS/MSc/MA/MBA participated in the survey (10.2%, 12.1%, 22.3%, 26.8%, and 28.2%, respectively). The majority of respondents (45.2%) were between the ages of 23 and 25; the second-largest group (38.9%) was between the ages of 20 and 22, and only 1.3% of respondents were older than 29. In addition, eight respondents (4 boys and 4 girls) from four faculties were interviewed.

Data collection instrument

Two key data gathering methods were utilized in this study: the survey and the interview. A well-structured self-administered survey questionnaire includes six close-ended multiple-response questions, a self-rating statement, and seven open-ended questions (Ornstein, 2014; Taherdoost, 2016a). In order to collect data to answer the research questions, these were developed based on the themes and sub-themes extracted from the literature. The closed-ended questions were designed to facilitate immediate comprehension and analysis of the response (e.g., how does your positive connection with your instructors influence your classroom behavior?). Behavioral engagement), whereas attitude was measured with a Likert scale since it is dependable and participant-centered (e.g., my positive relationship with teachers helps me engage in the classroom). In addition, certain open-ended questions were aimed to elicit more detailed responses from respondents (Ikart, 2019). Questions were translated into Bengali so that respondents could understand them (Ornstein, 2014). They were also formatted for easy comprehension by responders (C.R., 1990; Ikart, 2019; Hamed Taherdoost, 2016).

A semi-structured interview guide (Wahyuni, 2012) included two pre-programmed primary questions and many sub-questions that were followed throughout the interview while enabling respondents to speak freely if concerns emerged in order to collect more in-depth information (DiCicco-Bloom & Crabtree, 2006; Wahyuni, 2012). The main and sub-questions were developed to answer the research questions based on themes and sub-themes gleaned from the literature (for instance, Do you believe that a positive relationship with your teachers boosts your academic achievement? The theme is academic performance. During the period of September 5 to October 5, 2021, data was collected through internet channels such as Facebook and the Zoom app.

Data Collection Procedure

First, a Google form-based survey questionnaire was distributed to the Facebook groups of several departments, along with a project summary and consent form (Kayam & Hirsch, 2012). The researcher

then requested that the link to the questionnaire be accepted by the administrators of these Facebook groups and uploaded to all Facebook groups in different academic years. Students' responses were automatically saved in a Google Docs spreadsheet after they submitted the survey (Kayam & Hirsch, 2012). Due to the covid outbreak-caused closure of the college, the researchers relied solely on the students' voluntary involvement. Second, teachers assisted in selecting eight respondents from four faculties depending on their availability and willingness to participate. They were then sent an email with a consent form and a general information page. Those who wanted to participate and signed the consent form were ultimately selected as respondents. Each interview was conducted over the Zoom platform and lasted an average of 45 minutes. Throughout the interview, as many notes as possible were taken (Wahyuni, 2012), and all interviews were audio recorded with their permission.

Data analysis methods

Due to the fact that this was an exploratory mixed-methods study based on the interpretivism paradigm, first qualitative data were presented and analyzed then quantitative data were analyzed to gain a thorough understanding of qualitative data. The researcher conducted a comprehensive and logical analysis of the quantitative data, including editing, coding, reverse coding, and categorizing (C.R., 1990). The information was then entered into the SPSS software (version 26). Closed-ended questions were provided in a table, and open-ended question results were mixed with qualitative data. Following the collection of qualitative data, the interview transcripts were reviewed numerous times to become acquainted with coding. While coding the data, the researcher concentrated on deleting extraneous data (C.R., 1990) and developing the first code stages (open code) (Wahyuni, 2012), determining which should be included or removed to answer the research questions. Following coding, the data were turned into meaningful word or phrase chunks or a single word (Wahyuni, 2012). After that, a sequentially themed mind map was created to represent the findings, with frequent checks to verify that no essential patterns were missed. In addition, the codes were derived from the initial letters of the participants' pseudonyms and the names of their degrees. For instance, Tamal (pseudonym) is known as T, and his degree is in Science.

FINDINGS

Classroom engagement

Behavioural engagement

The majority of interviewees stated that they participate in classroom activities willingly when they have good relationships with their teachers because they believe that having a good relationship with teachers fosters a congenial classroom environment where they can interact with their teachers, and engage in learning-related activities. For example: "I am willing to attend class regularly as a result of my positive relationships with my teachers." (M, Science). "I voluntarily participate in group projects, extracurricular activities, and so on... as most teachers know me" (T., Science). "If I do not comprehend a concept, I can ask questions spontaneously in class because of my close relationship with teachers." (K, Commerce).

Table 1

Positive TSR perception and behavioural engagement among college students

Positive TSR and behavioural engagement	Responses		
	N	Per cent	Per cent of Cases
Attend class consistently	138	24.0%	87.9%
Focus on classroom activities	104	18.1%	66.2%
Complete assignments	59	10.3%	37.6%
Ask questions	106	18.5%	67.5%
Take part in extracurricular activities	84	14.6%	53.5%
Enjoy the lecture	79	13.8%	50.3%
It does not promote class participation.	4	0.7%	2.5%
Total	574	100.0%	365.6%

Table 1 demonstrates that nearly a quarter of surveyed respondents regularly attend class, around one in the fifth (18.5%) feel comfortable asking questions in the classroom, 18.1% of the respondents pay attention in class, 14.6% of them participate in extracurricular activities, and 13.8% enjoy class while having a positive rapport with their teachers. In contrast, only 0.7% of respondents indicated that their involvement was unaffected.

Emotional engagement

Seven out of eight respondents narrated those effective relationships with teachers are the reason why they feel emotionally connected to some teachers which bolsters their relatedness to a college campus. Moreover, most interviewed students described that they feel happiness, contentment, fascination, and enjoyment in some teachers' classes with whom they have a quality relationship, and these teachers understand their emotions and needs. For example, "I usually feel comfortable participating in my favourite teachers' classes because they know me and it brings me great joy". (R, Arts) "I regularly attend my favourite teachers' classes because I feel a sense of belongings with them." (S, Social Science)

Table 2

College students' emotional engagement and perceptions of positive TSR

Positive TSR and emotional engagement	Responses		Per cent of Cases
	N	Per cent	
Feel satisfied	100	20.6%	64.1%
Experience joy	79	16.3%	50.6%
Feeling intrigued	58	12.0%	37.2%
Feel relatedness with college, teachers, and peers	80	16.5%	51.3%
Feel enjoyment	82	16.9%	52.6%
Feel eager to participate in classroom activities.	86	17.7%	55.1%
Total	485	100.0%	310.9%

Table 2 indicates that when college students have a positive relationship with teachers, one in the fifth of students feel satisfied in the classroom, 16.5% feel linked to college, teachers, and peers, 17.7% are willing to participate in classroom activities, 16.9% find classroom activities enjoyable, and 16.3% feel satisfaction.

Cognitive engagement

Most interviewees stated that they engage in cognitive learning, such as understanding the hard task, and engaging in higher-order thinking in the classroom when they have a positive relationship with their teachers. Five out of eight respondents said that they engage in problem-solving and goal-setting in the classroom with the help of their favourite teachers. For example, "I can easily comprehend any difficult concepts if my preferred teacher explains it" (S, Social Science) "When I have positive relationships with my teachers, I feel more confident and better able to solve mathematical difficulties in the classroom. (P, Commerce)

Table 3

Positive TSR perception and cognitive engagement of college students

Positive TSR and cognitive engagement	Responses		
	N	Per cent	Per cent of Cases
Easily comprehend complete thoughts	108	32.0%	68.8%
Understand and master academic tasks	103	30.5%	65.6%
Become objective-directed	73	21.6%	46.5%
Become self-regulated	49	14.5%	31.2%
Inapplicable	5	1.5%	3.2%
Total	338	100.0%	215.3%

As indicated in table 3, while students believe that they have a supportive relationship with teachers, approximately one-third of the respondents comprehend complicated ideas, understand and master academic activities, more than one-fifth of them become goal-directed, and 14.5% become self-regulated. However, a small percentage of those (1.4%) said it did not apply to them.

However, when there is a lack of supportive relationships between teachers and students, students become dissatisfied and bored. Moreover, some participants claimed that when their teachers behave harshly, they become disinterested in-class participation and afraid to ask questions. Further, several students said that their poor relationships with teachers hinder their ability to comprehend the lesson and engage in problem-solving activities. As an illustration, "I feel shyness and hesitation to ask questions in the class and reluctance to participate in class..." (M, Science). "I lose focus and indulge in a side conversation when any narrow-minded teachers take a class." (K, Arts). Another student stated, "if I have a conflicting relationship with a teacher, I ignore his lessons". (R, Arts) "I struggle to comprehend the lectures of some teachers with whom I have no close contact or an unfamiliar..." (M, Science)

Table 4

The perception of negative TSR and classroom engagement by college students

Negative TSR and classroom engagement	Responses		
	N	Per cent	Per cent of Cases
Concentration lapse	89	26.7%	56.7%
Disruptive behavior	33	9.9%	21.0%
Disengaged, disappointed, and bored	89	26.7%	56.7%
Increase the likelihood of dropout	30	9.0%	19.1%
Frequently absent.	79	23.7%	50.3%
It has no effect on engagement.	13	3.9%	8.3%
Total	333	100.0%	212.1%

Table 4 shows that more than one-quarter of respondents feel disengaged, frustrated, bored, and unable to concentrate in class, while 23.7% of respondents reported being absent. In comparison, only 3.9% of respondents stated that negative TSR has no effect on their engagement in the classroom.

Academic achievement

According to the interviewees, a positive relationship with teachers indirectly affects their academic achievement because they believe that if they have a supportive relationship with teachers, their classroom engagement, the tendency of reading books increase to a great extent that helps get a good grade in the examination. For instance, "Having a healthy relationship with my teachers does not guarantee excellent grades if I don't study." (T, Social Science) "I receive guidance, suggestions, and motivation regarding my studies, which aids me in earning high test scores." (K, Arts). "If I do not comprehend a complex idea, I discuss it with my teachers in order to receive clarification that improves my exam scores". (K, Commerce)

Table 5

Positive TSR perception among students and academic attainment

Positive TSR and academic achievement	Responses		
	N	Per cent	Per cent of Cases
Score well on the in-course exam.	73	18.6%	46.5%
Score well in the viva exam.	68	17.3%	43.3%
Score well on the practical exam.	56	14.3%	35.7%
Calculate your overall GPA on the course final test.	63	16.1%	40.1%
Learn new talents	125	31.9%	79.6%
This is not applicable.	7	1.8%	4.5%
Total	392	100.0%	249.7%

According to Table 5, when students have a healthy relationship with their teachers, around one-third of the students believe they acquire new skills, 18.6% believe they achieve high scores on in-course exams. However, only 1.4% believes it has no impact on their academic development.

However, interviewed students reported that when they experience a conflicting relationship with teachers, they develop a sense of shyness, fear, and hesitation that have a negative impact on their learning and examination grades overall. Moreover, some students claimed that those who have a strenuous relationship with teachers remain absent in the classroom and hesitate to ask any questions if they face any understanding problems, even if they participate in the class. Consequently, they get poor grades on the final examination. For example, "I lose focus and suffer from nervousness and unwillingness to ask questions, which negatively affect my exam marks." (T, Social Science) "I do not have a good relationship with all teachers that affect my exam grades, particularly in those subjects that are taught by my less connected teachers." (M, Science). "I think, a negative relationship with teachers has no impact on my grades." (R, Arts).

Table 6
Students' perceptions of negative TSR and academic performance

Negative TSR and academic achievement	Responses		
	N	Per cent	Per cent of Cases
Poor performance on the in-course exam	74	23.5%	47.1%
Poor performance in the viva exam	62	19.7%	39.5%
Poor performance in the practical exam	58	18.4%	36.9%
It affects badly overall my GPA	73	23.2%	46.5%
It has no effect on academic performance.	48	15.2%	30.6%
Total	315	100.0%	200.6%

As shown in Table 6, more than one in the fifth of respondents reported that experiencing a bad relationship with teachers has a negative impact on their in-course exams and their overall GPA. In addition, 19.7% percent of them reported receiving unsatisfactory grades on the viva exam and 18.4% percent get poor marks on the practical exam. In contrast, 15.2% of respondents reported that it has no detrimental effect on their academic performance.

In essence, although negligible college students reported that their relationship with teachers does not influence classroom engagement and academic achievement, the majority of interviewed and surveyed students demonstrated that their positive and negative relationship with teachers influences their behavioural engagement, emotional engagement, and cognitive engagement as well as academic achievement. According to the narratives of college students, their perceptions of positive and negative TSR have positive good and negative consequences on their classroom engagement and academic achievement.

DISCUSSION

The purpose of the present study was to explore how college students' positive and negative perceptions of TSR affect their behavioural engagement, emotional engagement, and cognitive engagement, as well as their academic performance. Both qualitative and quantitative findings revealed that when students perceive their relationships with teachers to be positive, supportive, close, warm, and comfortable, they attend class regularly, ask questions freely, enjoy learning activities, participate in group work and co-curricular activities (behavioural engagement), develop a sense of satisfaction, interest, relatedness with college and teachers, and a willingness to participate in classroom tasks (emotional engagement), comprehend the lesson, engage in problem-solving tasks, and attend to solve difficult tasks, become self-directed and self-regulated (cognitive engagement). These findings are partially consistent with Hughes et al. (2008) and M. Te Wang and Eccles (2013),

who discovered that when students regard their relationship with teachers as favourable and supportive, they exhibit positive behavioural and emotional engagement in class. In addition, these results fully corroborated the finding of Quin (2016), who found that school student perceptions of good TSR increase all forms of engagement. These findings, however, contradict Benson's (2020) findings that there was no correlation between TSR and middle school student engagement. In explanation, it was to be thought that TSR is less influential in higher education (Robinson et al, 2019); however, these findings confirmed that most college students reported that their supportive relationships with teachers help them engage in the classroom behaviorally, emotionally, and cognitively. Attachment theory postulates that when teachers show prosocial behaviour, understand students' psychological and emotional needs, and maintain a close relationship, students become motivated and confident to explore and engage in the classroom (Bowlby, 1982; Krstic, 2015). The reason is that teachers' attempts to maintain a warm relationship with students create a congenial, consistent, and safe classroom environment where students become more self-reliant and confident because they believe that if they face any problems, teachers will guide and support them. So, college students are more interested in engaging in class when they feel like they have a good relationship with their teachers.

In contrast, another important finding is that both qualitative and quantitative findings revealed that when students have a negative or antagonistic relationship with their teachers, they are more likely to show less interest in engaging in the class, lose concentration, show unexpected behaviour, tend to drop out, feel hesitation to ask questions, and face problems understanding the classroom tasks. This finding matched the findings of Roorda et al. (2017), who discovered a high association between students' negative impressions of TSR and their poor engagement levels. Moreover, this finding partially goes with the findings of Spilt, Hughes, Wu, and Kwok (2012), who found that students who experience negative relationships with teachers show disruptive behaviour. In explanation, college students' negative perceptions of TSR lead to emotions of disengagement, disillusionment, boredom, ennui, and apathy toward study and class, and they show reluctance to ask questions, remain absent in the class, and engage in gossiping with fellow students, though some students stated that their negative perceptions had no impact on their behavioural and cognitive engagement. Therefore, college students' negative perceptions of TSR have a negative effect on how they act, feel, understand, and engage in the classroom.

Another promising finding is that interviewed students reported that when students create strong relationships with their teachers, they receive guidance, ideas, suggestions, and clarifications that inspire them to study and learn, ultimately resulting in an improvement in their academic performance. In addition, quantitative findings revealed that establishing a rapport with teachers enhances students' different examination grades, such as in-course exams, practical exams, and viva exams, and they learn new skills. This is a crucial finding for understanding how TSR affects college students' academic achievement. This is consistent with findings from earlier studies (e.g., Ansari et al., 2020; F. A. Fan, 2012; Fraser et al., 2010; Inman, 2019; Lewis, 2016; Omodan & Tsotetsi, 2018; Witherspoon, 2011; Zhou, 2012; Cornelius-white & Cornelius-White, 2007; Davis, 2003; Roorda et al., 2011) that have found similar findings in school contexts. However, this finding contradicts the findings of Robinson et al. (2019), who found no correlation between TSR and college student outcomes. To explain, students' perceptions of a supportive relationship with teachers are shaped by the higher levels of academic outcomes because this relationship boosts students' confidence and eagerness to study and learn new skills, which bolsters their good overall test scores. However, some college students reported that supportive TSR has no impact on their academic achievement. This is because they may consider that if they do not study, having a good relationship alone cannot ensure a good exam grade.

In contrast, this study also discovered that unfavourable perceptions of TSR had a negative effect on students' academic performance. In other words, both qualitative and quantitative findings revealed

that college students' negative perceptions of TSR are characterized by their shyness, hesitation, and understanding of problems that negatively impact their exam scores. This finding confirms the findings of Chen & Cui (2020) that negative TSR lowers students' grade point averages. In explanation, it is vital to remember that students develop relationships with their teachers not just to attain high exam scores but also to gain inspiration, direction, advice, support, encouragement, and recommendations that enhance their confidence and motivation to learn. As a result, they achieve academic success. Attachment theory posits that a student's perception of a teacher's motivation and support establishes the foundation for increased academic achievement (Berman-Young, 2014; Roorda et al., 2011). Moreover, Hamre and Pianta (2001) stated that when students are actively involved in the classroom, they generate motivation that increases their academic performance. If they consider their relationship with teachers adversely, however, they become disengaged in class and apathetic towards their studies, which has a negative impact on their exam performance. However, some college students reported that conflicting relationships with teachers had no negative impact on their academic achievement. The reason is that these students may think good exam scores depend on their hard work, well-preparedness, and presentation in the examination. Therefore, college students' positive and negative attitudes toward TSR impact their academic achievement, even though there are some exceptions.

IMPLICATIONS AND RECOMMENDATIONS

This study has practical consequences for politicians, college teachers, students, and future academics despite its shortcomings. The qualitative and quantitative findings shed light on how the positive and negative perceptions of TSR among college students influence their classroom engagement and academic achievement.

Implications and recommendations for policymakers

This study adds to the existing body of knowledge by looking into the impact of college students' perceptions of positive and negative TSR on their class engagement and academic attainment. According to this study, when students develop positive relationships with their teachers, they are more likely to participate in class, which promotes academic achievement. In contrast, when they perceive a negative relationship with teachers, they experience alienation and loss of concentration, resulting in low levels of engagement and academic achievement. These findings are relevant for education policymakers seeking to enhance the quality of TSR in Bangladesh's college education by formulating educational strategies. Therefore, this study suggests that the Ministry of Education provide various training programs for college teachers (Yu et al., 2018) so that they can learn how to encourage students to maintain a good relationship with them in order to engage in class and achieve academic success (Omodan & Tsotetsi, 2018).

Implications and recommendations for college teachers' and students' practice

Even though the viewpoints of teachers are not included in this research, it has also had significant ramifications for them. Teachers' guidance, encouragement, support, and ideas encourage college students to participate in class and enhance their academic performance. Teachers can demonstrate prosocial behaviour (admiring, encouraging, and supporting) for the welfare of their students (Prewett et al., 2019). Therefore, this study suggests that teachers should focus on recognizing students' emotional needs, extending a helping hand, and providing students with instructions and ideas in order to boost their classroom engagement and academic attainment. Moreover, as supporting TSR is connected with college students' behavioural, emotional, and cognitive engagement, teachers should utilize an interactive pedagogy to establish an atmosphere where students feel comfortable communicating with them (Delgado & McGill, 2020; Yu et al., 2018). In addition to planning extracurricular events and involving students in research projects, teachers should maintain touch with students outside of the classroom to improve students' connectedness. Further, teachers should make

significant efforts to develop their relationships with students by paying more attention to their needs, demonstrating a supportive attitude and approach, and regulating negative attitudes and emotions (Delgado & McGill, 2020; Ko & Tement, 2013).

Finally, this study will have the greatest impact on students because their voices were investigated. According to the study, a strong relationship with instructors is essential for increasing student classroom participation and academic achievement. These results give new light on how college students value a positive relationship with their teachers. This study suggests that college students should cultivate strong relationships with their teachers both within and outside of the classroom. To achieve this, students must respect their teachers, pay attention in class, and participate in extracurricular activities (Delgado & McGill, 2020).

Implications and recommendations for future researchers

This research lays the path for future scholars to analyze TSR, student engagement, and academic achievement in higher education in greater detail and breadth. This is the first scholarly endeavour in Bangladesh to investigate these concerns. Therefore, the findings of this study will help future researchers understand the current condition of TSR and its impact on student engagement and academic success in Bangladeshi college education. This study suggests that future studies examine these issues from the perspectives of both teachers and students to generalize the findings across all of college education. In addition, they must consider additional elements, such as the obstacles teachers and students face while striving to develop a positive relationship and the means of increasing TSR. For a comprehensive understanding of this subject, they must do longitudinal studies in college settings.

LIMITATIONS

Although this mixed-methods study gives light on TSR and how it increases student engagement and academic achievement in a Bangladeshi college setting, it is not flawless. Firstly, this study utilized only student views to examine how college student perception of TSR influences academic engagement and achievement. Secondly, the researcher obtained data from a single context; hence, the findings of the study may not be generalized to the entire Bangladeshi college education students (Thornberg et al., 2020). To generalize the findings nationwide, an additional study including both government and Non-government colleges is necessary.

Thirdly, the sample strategy and procedures for data gathering are key constraints. The quantitative data are susceptible to representativeness bias and external validity because they were acquired by convenience sampling of students based on their internet connection and availability (Cohen et al., 2007; Martinez-Mesa et al., 2016; Personal & Archive, 2016; Taherdoost, 2016b). The researcher, for instance, relied on respondents' voluntary involvement in Facebook. Students who lack Facebook, a smartphone, a laptop, or a computer are no longer eligible to participate in the survey. Fourthly, the sample size appeared to be small in comparison to the population as a whole. For instance, 157 individuals responded to the survey whereas the actual number is 377. This small sample size diminished the statistical significance of the quantitative results (Thornberg et al., 2020). Therefore, the findings may not be applied to the intended group.

CONCLUSION

This mixed-methods study examined the influence of college students' perceptions of positive and negative relationships with teachers on their behavioural, emotional, and cognitive engagement as well as academic achievement. The qualitative and quantitative findings provide a complete picture of these issues. The findings showed that students who feel that their relationships with teachers are good, encouraging, close, warm, and comfortable are more likely to attend class regularly, ask questions

openly, enjoy learning activities, participate in group work and extracurricular activities (behavioural engagement), feel satisfied, interested, and related to college and teachers (emotional engagement), understand the lesson, participate in problem-solving activities, pay attention to complete challenging tasks, and develop self-direction and self-regulation (cognitive engagement) (Quin, 2016). However, students who feel antagonistic or adversarial toward their teachers are more likely to get disinterested in learning, drift away from their work, act out, drop out, hesitate to ask questions, and struggle to comprehend tasks (Roorda et al., 2017). Positive student-teacher dyads encourage learning and academic achievement. In addition, student performance on in-class, practical, and viva tests is improved by supportive TSR (Ansari et al., 2020; Inman, 2019; Roorda et al., 2011), whereas the negative perceptions of TSR among college students are characterized by shyness, reluctance, and anxiety over exam performance (Chen & Cui, 2020). However, some students' positive and negative perceptions of TSR had no impact on their engagement and academic achievement. These findings contribute to a growing body of research suggesting that college students' classroom engagement and academic achievement are affected by their perceptions of positive and negative TSR and that TSR has a significant impact on college education in Bangladesh. Therefore, this study concluded that students' views of good and bad TSR have a significant impact on their classroom engagement and academic success in Bangladeshi college education, both positively and negatively.

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