

Quality of Student-Teacher Relationship and Externalizing Problems in Adolescents: Mediating Role of Self-Esteem

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Teachers play a significant role in the psycho-social development of children. The current study explored the mediating role of self-confidence in the association of quality of student-teacher relationship and externalizing problems in adolescents. A sample of 300 school children (boys = 50%, girls = 50%) with the ages of 13 to 15 years ($M = 14.95$, $SD = 1.11$) selected from mainstream government schools were given the Student Teacher Relationship Scale (STRS), Child Behavior Checklist (CBCL), and Self-Esteem Scale for Children (SESC). Correlation analysis suggested that quality of student teacher relationship and self-confidence were negatively associated with externalizing problems. Furthermore, quality of student-teacher relationship was positively associated with self-confidence. Mediation analysis indicated that self-esteem significantly mediates the association between quality of student teacher relationship and externalizing problems in adolescents. Implications of this study indicated that counseling sessions for teachers and students to boost their healthy relationship can be productive in the development of self-confidence and to reduce their externalizing problems.

Keywords. Student-Teacher Relationship, Self-Confidence, Externalizing Problems, Adolescents.

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Adolescent years are said to be a time of continuous adjustment with ever changing biological, social, emotional and academic demands (Zahra & Saleem, 2021; Zahra et al., 2021). As Erikson has described, during adolescence period, individuals continuously struggle to define and describe their roles that eventually help them to establish their sense of identity and relative status in society (Erikson, 1968). They shape their sense of identity by comparing themselves and adopt new roles with increased interaction in the social world including teachers, peer and friends (Kiuru et al., 2020). Developmental theories suggest that family, school context, teachers and peer are some important factors that determine psychosocial and emotional growth of adolescents (Mashburn & Pianta, 2006; O’Conno, 2010). While parental influence remains critically important, the role teachers play grows increasingly significant as a child matures, leaving a lasting imprint on their academic achievement, personal development, and social functioning. (Silver et al., 2010; Sabol & Pianta, 2012). A positive student-teacher relationship comprises of healthy interaction, support, trust, warmth and less conflict (Roorda et al., 2011).

There are two conceptual models that describe the dynamics of teacher-student relationship; firstly, attachment theory that explains the nature of attachment with parents or significant others which plays a template for further relationships including with teachers (Bowlby, 1969). The other developmental system theory explains teacher-student relationship in terms of multilevel systems including individual, personal, familial, school and peer that influence each other to form a relationship (Bronfenbrenner & Morris, 1998). Keeping in view developmental process of growing individuals, World Health Organization stated that a positive environment at schools, healthy interaction and a sense of connectedness between teachers and students is associated with the positive outcomes of mental health.

Self-determination theory of motivation (Ryan & Deci, 2000) postulates that every individual has three basic psychological needs firstly, a sense of autonomy and actualization, secondly, a sense of belongingness, close bonding and respect and lastly competence with a sense of achievement and accomplishment. The application of this theory can be best seen in the study of intrinsic motivation, academic motivation and psychological well-being (Spilt et al., 2011). Teachers who not only provide academic knowledge but also provide motivation, acceptance, emotional warmth and respect can help a student to fulfill these basic needs (Goetz et al., 2021). Numerous empirical studies have also demonstrated that positive, emotionally warmth and supportive A strong teacher-student relationship has been linked to a range of positive outcomes, including improved academic performance, greater motivation, smoother adjustment to school, heightened engagement in learning activities, reduced mental health difficulties, and enhanced social competence (Baker et al., 2008; Goetz et al., 2021; Marengo et al., 2018; Mitchell & DellaMattera, 2011; Myers & Pianta, 2008; O'Connor et al., 2012). Several factors shape the quality of this relationship, among them gender, age, and cultural background (Liu et al., 2016).

One of the important consequences of teacher-student relationship is the impact on self-esteem (Lavy & Naama-Ghanayim, 2020). Self-esteem is an important developmental task of adolescent years which is characterized by a sense of approval, acceptance and respect (Rosenberg, 1989). Self-esteem is a very dynamic construct that starts developing from childhood and shaped by a sense of competence and worthiness in adulthood (Rubin et al., 2002). Self-esteem is associated with high life satisfaction, higher academic achievement, buffer against mental health problems and psychological well-being (Du et al., 2017; Duy & Yıldız, 2019; Wang & Fowler, 2019). Low self-esteem is associated with several mental health problems including anxiety and depression (Henriksen et al., 2017; Sowislo & Orth, 2013). Literature also highlights that self-esteem plays a role of a mediator between numerous variables and mental health outcomes (Xiang et al., 2019; Uba et al., 2020).

Research further indicates that when teacher-student relationships are characterized by low quality, conflict, dissatisfaction, or a lack of trust, a range of negative consequences can follow—including academic underachievement, higher dropout rates, diminished self-esteem, internalizing and externalizing behavioral problems, depression, anxiety, boredom, and weakened social skills (Baker et al., 2008; Krane et al., 2016). The conflict in teacher-student relationship is characterized by anger, hostility, rejection, punishment and criticism in front of others which restrict learning of academic and social skills (Mantzicopoulos, 2005). The lack of positive interaction and closeness between a student and a teacher may result in a poor self-image and self-esteem that may further lead to serious mental health concerns (O'Connor et al., 2011). Teachers are an important source of socialization in adolescents' lives, and the quality of teacher-student relationship is associated with numerous academic, personal and social outcomes. The current study is aimed to identify the mediating role of self-esteem between teacher-student relationship and internalizing and externalizing problems in adolescents.

Method

Participants

Participants for this study were 300 (boys = 50%, girls = 50%) school students selected from 8th (33%), 9th (33%), and 10th (34%) grade by using multistage sampling strategy. Most of the participants in this study belonged to joint family system (62%).

Measures

The quality of student-teacher relationships was measured using the Student Teacher Relationship Scale (Amer & Saleem, 2015), a 20-item measure rated on a 7-point Likert scale from 1 (very bad) to 7 (very good). This instrument contains two subscales—one assessing positive aspects and the other negative aspects of the relationship. For the purposes of this study, only the positive subscale was administered to gauge relationship quality. The scale's

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internal consistency in this sample was found to be good, with a Cronbach's alpha of .71.

To measure participants' self-esteem, the Self-Esteem Scale for School Children (Saleem & Mahmood, 2011) was administered. This 44-item scale uses a 5-point Likert format, with responses ranging from 0 (never) to 4 (always). It is organized into four subscales: academic self-esteem, self-confidence, social self-esteem, and low self-esteem. For the purposes of this research, the academic self-esteem, self-confidence, and social self-esteem subscales were combined to generate an overall self-esteem score. The scale demonstrated good reliability in the present study, with an alpha coefficient of .77.

Externalizing problems were assessed by using subscale of externalizing problems taken from Child Behavior Checklist (CBCL) (Achenbach & Rescorla, 2001). CBCL consists of 112 items with two subscales, *internalizing problems* and *externalizing problems* assessment. It consists of 3-point Likert scale ranging from 0 (absent) to 2 (often). Cronbach's alpha value of CBCL for present study was .95 depicting good internal consistency of the scale.

Procedure

After getting approval from Institutional Review Board (IRB) researcher contacted 4 schools and gave them brief description related to the research to the school authorities. Two of them gave their consent to be the part of this study. After that researcher visited these schools and approached the participants in their classrooms. Researcher gained consent from the teachers as well as students. Participants were also given assurance of confidentiality and privacy of the data taken from them. The data was collected in groups with average 20 participants in each group. At the end participants were given some time to ask questions regarding research project. Average time to complete the research protocol was 15 minutes.

Results

Correlation Analysis

Table 1

Inter-correlations among Student-Teacher Relationship, Self-Esteem and Externalizing Problems in Adolescents (N = 297)

Variables	M	SD	STR	SE	EP
STR	76.45	13.67	-	.18**	-.21***
SE	31.17	9.87		-	-.20***
EP	10.66	7.13			-

Note. STR = Student-teacher relationship; SE = Self-esteem; EP = Externalizing problems, ** $p < .01$, *** $p < .001$, $df = 296$.

A Pearson Product Moment Correlation analysis was performed to examine the relationships between student-teacher relationship quality, self-esteem, and externalizing problems. As shown in Table 1, the results revealed a significant positive correlation between relationship quality and self-esteem ($r = .18$, $p < .01$), along with significant negative correlations between relationship quality and externalizing problems ($r = -.21$, $p < .001$), and between self-esteem and externalizing problems ($r = -.20$, $p < .001$). These patterns suggest that stronger, more positive student-teacher relationships are associated with higher self-esteem and fewer externalizing problems. Similarly, higher levels of self-esteem appear to help adolescents manage or reduce externalizing difficulties.

Mediation Analysis

The findings of correlation analysis revealed significant relationships between quality of student-teacher relationship, self-esteem, and externalizing problems, fulfilling the assumptions of Baron and Kenny (1986). Therefore, the mediating role of self-esteem in the association of quality of student-teacher relationship and externalizing problems was explored

through Hayes (2018) bootstrapping approach. Hayes (2013) also examined conditional process analysis, proposing that a mediation model requires demonstrating that the presumed independent variable (X) influences the presumed outcome variable (Y), at least partially, via a mediating variable (M). Accordingly, this study applied Hayes' (2018) bootstrapping method to examine self-esteem as a mediator linking the quality of student-teacher relationship and externalizing problems (as independent variables) with depressive symptomatology (as the dependent variable).

Table 2

Mediation Analysis of Self-Esteem in Quality of Student Teacher Relationship and Externalizing Problems in Adolescents (N=297)

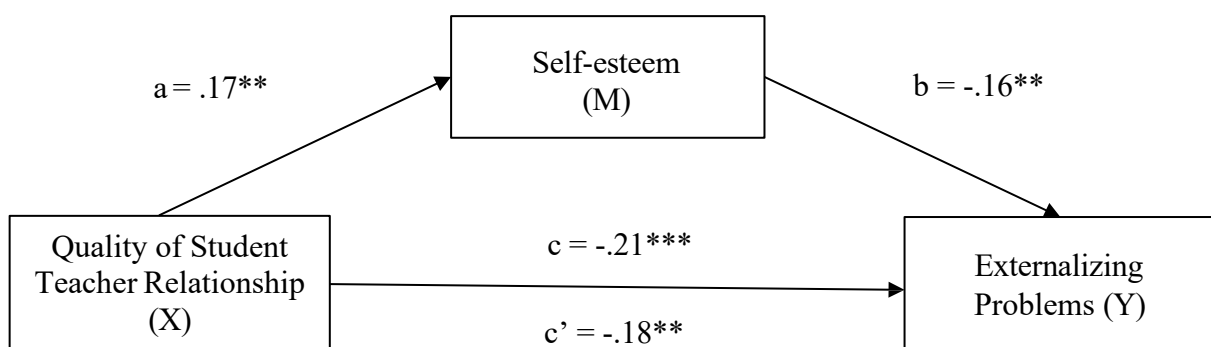
Antecedent		Consequent						
		M(SE)				Y(EP)		
		B	SE	p		B	SE	p
STR (X)	a	.17	.03	.003**	c'	-.18	.03	.001***
SE (M)		---	---	---	b	-.17	.05	.002**
Constant	i	23.83	2.48	.001***	i	22.98	2.64	.001***
		$R^2 = .03$				$R^2 = .07$		
		$F(1,295) = 8.89, p = .003**$				$F(2,294) = 11.46, p = .001***$		

Note. STR = Student-teacher relationship; SE = Self-esteem; EP = externalizing problems. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure 1 and table 2 show the results of mediation analysis. Path *a* depicts significant predictive association of quality of student teacher relationship with self-esteem, $\beta = .17$, $SE = .03$, $p < .01$. Path *b* reveals predictive association between self-esteem and externalizing problems, $\beta = -.17$, $SE = .05$, $p < .01$. Path *c* depicts the significant total effect of quality of student-teacher relationship on externalizing problems, $\beta = -.21$, $SE = .03$, $p < .001$. Findings indicate that self-esteem partially mediates the relationship of quality of student-teacher relationship and externalizing problems as after controlling self-esteem as mediator the direct effect of quality of student-teacher relationship on externalizing problems is reduced but model *c'* path is still significant, $\beta = -.18$, $SE = .03$, $p < .001$. Furthermore, findings also indicated the significant indirect effect of quality of student-teacher relationship on externalizing problems through self-esteem, $\beta = -.02$, $SE = .01$, $CI [-.03, -.00]$, confirming the mediating role of self-esteem in the association of quality of student-teacher relationship and externalizing problems.

Figure 1

Mediation Model of Self-esteem in Quality of Student Teacher Relationship and Externalizing Problems (N = 297).



Discussion

Adolescence is widely recognized as a life stage marked by ongoing developmental change, requiring individuals to continually adapt (Windle & Mason, 2004; Zahra et al., 2021). During this developmental period several changes take place in terms of genetic, organic, physical, psychological, cognitive, emotional, behavioral, temperamental, sociocultural, career choice, adjustability in the new environment and relationship expand to the small level to big levels independence and self-government in life (Al-Gelban, 2007; Nicolson & Ayers, 1997; Zahra & Saleem, 2021). Due to these developmental changes and demands several behavioral and emotional issues arise in adolescents leading them toward increased prevalence of externalizing problems like aggression and rule breaking behaviors associated with numerous negative outcomes. However, by exploring the factors associated with externalizing problems we can prevent adolescents from the adverse consequences of externalizing problems. The current research was therefore designed to explore the association of student-teacher relationship and self-esteem with externalizing problems.

Findings from the current study point to a significant inverse relationship between student-teacher relationship quality and externalizing problems. This is consistent with previous theoretical and empirical work suggesting that positive, supportive teacher-student relationships serve a protective function against the development of externalizing behaviors (Marengo et al., 2018; Miller-Lewis et al., 2014; O'Connor et al., 2012). Given that students spend considerable time in teachers' presence, it stands to reason that warm and supportive relationships with teachers can facilitate healthier adjustment to the school setting (Goetz et al., 2021). Additionally, in line with prior research, the current findings revealed a significant positive association between the quality of student-teacher relationships and self-confidence (Lavy & Naama-Ghanayim, 2020). Roeser et al. (1996) similarly found that students who described more positive relationships with their teachers also reported a stronger sense of belonging, higher academic self-esteem, greater self-efficacy, and fewer internalizing and externalizing problems, while poor student-teacher relationships were linked to externalizing problems and lower self-esteem among adolescents. The findings further indicated a significant negative relationship between self-esteem and externalizing problems, a result supported by earlier research showing that positive self-concept and self-evaluation help individuals manage negative emotions, thereby acting as a protective factor against externalizing problems (Zahra & Saleem, 2021).

Mediation analysis indicated the significant mediating role of self-esteem in the association of quality of student-teacher relationship and externalizing problems. These results are supported by previous empirical studies indicating that positive student-teacher relationship boosted the level of self-confidence and self-esteem which in turn help adolescents and children in overcoming their behavioral issue like aggressive behavior and rule breaking behaviors (Goetz et al. 2021; Marengo et al., 2018; Miller-Lewis et al., 2014). The cultural context of Pakistan also supports the current results in which teachers are considered like parents influencing the psycho-social development of children and adolescents. Teachers boost the level of self-worth and self-confidence by highlighting and encouraging the positive abilities of students (Lavy & Naama-Ghanayim, 2020). This escalated level of self-esteem and self-confidence ensure adjustment with challenges of adolescents and help them in overcoming mental health issues like externalizing behavioral issues. Therefore, ensuring the positive and healthy student-teacher relationship we can boost the level of self-esteem as well as prevent adolescents from externalizing problems.

Limitations and Recommendations

Despite its several implications, this study also has certain limitations that should be considered in future research. The sample was drawn from urban school children, so it would be valuable for future studies to conduct similar research with rural populations and compare the two groups. Additionally, this study relied solely on data collected from adolescents. Future

research is recommended to adopt a triangulated approach, gathering data from parents and teachers in addition to adolescents.

Conclusion

Teachers play a fundamental role in psycho-social and personal growth of children and adolescents. This study highlighted the healthy and productive role of student-teacher relationship in self-esteem and behavioral issues. Furthermore, this study confirmed that interplay of student teacher relationship and self-esteem helps adolescents in overcoming their externalizing behavioral problems.

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