

Interpersonal Skills and Depressive Symptomatology: Mediated Moderation of Dysfunctional Parenting and Self-Esteem of Adolescents

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The current study identified the role of dysfunctional parenting and self-esteem as mediating moderators in the association between interpersonal skills and depressive symptomatology in adolescents. The study participants were 674 government school students (male = 47%, female = 53%) from Lahore, Pakistan, aged 12–19 ($M = 14.88$, $SD = 1.33$). Interpersonal Skills Scale, Parenting Style Scale for Adolescents, Self-Esteem Scale for Children, and Depressive Symptomatology Scale for Adolescents were used for data collection. According to the findings of this study, dysfunctional parenting and low self-esteem have a significant mediating moderating role in the relationship between poor interpersonal skills and depressive symptoms. The study discusses the results in the context of relevant literature and offers recommendations for further research.

Keywords

interpersonal skills • dysfunctional parenting • self-esteem • depressive symptomatology • adolescents

Introduction

Adolescence is a crucial stage in human psychological development as it demands a constant adjustment to the changing growth process (Park et al., 2020; Zahra et al., 2021). Adolescents face various problems, difficulties, and pressures as they grow and develop, such as parental

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expectations, role identification, becoming a member of society, and hormonal changes (Danneel et al., 2020; Marcone et al., 2021). As a result of these constant challenges, adolescents are more likely to develop mental health problems, which can result in poor educational attainment and an increased risk of dropping out of school. Additionally, adolescents may experience poor self-esteem, interpersonal incompetence, low self-confidence, feelings of isolation, and diminished well-being later in life (Marcone et al., 2021).

Internalizing and externalizing problems are common mental health issues that adolescents face (Achenbach & Edelbrock, 2001; Saleem & Mahmood, 2011a). Internalized difficulties are internal behaviors such as anxiety, depression, tension, physical complaints, and social disengagement (Iram & Najam, 2015). Externalizing difficulties, on the other hand, are defined as disruptive, defiant, and hyperactive behavior, acting out tendencies, and violence (Merrell, 2001). Depression is stated to be on the rise and is one of the main focuses of this article (Zahra & Saleem, 2021). Depression is one of the most common and disabling mental health conditions in adolescents and children. Ample research has shown that the rate of depression among adolescents is rising at an alarming rate. According to the findings, around 20–60% of teenagers have symptoms of depression, and 15–20% meet the criteria for depressive illness (Kaur et al., 2014).

Depressive symptoms have a significant impact on adolescents' psychological, social, emotional, and academic functioning. These symptoms may lead to negative outcomes, including loneliness, poor academic performance, difficulty with adjustment, low self-esteem, lack of self-confidence, substance abuse, eating disorders, sleep disturbances, poor emotion regulation, suicidal ideation, and an overall lack of happiness (Saleem et al., 2014; Zahra & Saleem, 2021). Given the serious and potentially life-threatening effects of depressive symptoms in adolescents, it is critical to understand the risk and protective variables related to depressive symptomatology. Without proper diagnosis and early treatment, these symptoms can lead to significant physical, emotional, behavioral, psychological, and intellectual problems later in life, which can lead to psychopathology (Zahra & Saleem, 2021).

Researchers looked into a variety of mitigation factors of depression in adolescents. One of the most critical protective factors of depression in adolescents is interpersonal skills (Zahra et al., 2020). Adolescence is when people create social and interpersonal ties with peers, friends, and the opposite gender (Orkos, 2020; Van Der Graaff et al., 2018). The acquisition of new social skills and pro-social behaviors that enable social development and growth is critical to the success of dynamic and intense social involvement during adolescence (Raposa et al., 2016). The talents that facilitate or develop a relationship are known as interpersonal skills. These abilities may have constructive consequences like academic performance, identity, self-confidence, and self-esteem, as well as a reduction in isolation and psychological problems (Bester, 2019; Backman et al., 2018; Padilla-Walker et al., 2020; Zhang & Eggum-Wilkens, 2018).

Self-esteem is another crucial component in preventing depressive symptoms in adolescents (Wang et al., 2020). Self-esteem refers to how much one likes and appreciates oneself, regardless of the situation (Saleem & Mahmood, 2011a). This concept reflects an individual's subjective assessment of their self-worth. Self-esteem research indicates that adolescents' evaluation and perception of their abilities and attributes impact their academic, emotional, social, and psychological development (Masselink et al., 2018). In the long term, self-esteem is assumed to affect practically every aspect of an adolescent's life. Higher self-esteem has been connected to several positive outcomes, including self-belief, educational attainment, school success, and contentment (D'Mello et al., 2018; Huey et al., 2020; Wang et al., 2020). Conversely, low self-esteem has been linked to delinquency, substance use, behavioral problems, sadness, anxiety, tension, violent conduct, and feelings of loneliness (Gao et al., 2019; Masselink et al., 2018). According to the researchers, social and interpersonal skills are the foundations for developing self-concept

and self-esteem. Strong interpersonal skills and social competence contribute to more inspiration and better self-concept, while social difficulties can lead to feelings of inadequacy and a negative self-image (Vogel et al., 2014).

The interaction between social skills and self-esteem is influenced by parenting, a crucial means of self-development (Thompson, 2016). Loving, trustworthy, empathetic, supportive, and accepting parents provide a solid foundation for children to understand that they are worthy of love and care (Green et al., 2018). Children can take on new tasks, adventures, and activities with the conviction that their parents will encourage, guide, and attend to them when they have a strong parent-child relationship (Liu et al., 2018). Children with secure, protective, pleasant, compassionate, and supportive parent-child relationships are far more likely to have a positive self-concept than children with insecure, neglected, and negative associations (Thompson, 2016). Adolescents with positive relationships with their parents are more likely to have greater self-esteem (Keizer et al., 2019; Thompson, 2016). Therefore, if the degree of negative parenting is low and the level of positive parenting is high, the link between interpersonal skills and self-esteem will be higher. Conversely, a higher level of negative parenting and a lower level of positive parenting will lessen this link.

Pakistan is a traditional collectivistic culture in which societal and familial conventions and values, rather than personal ideals and interests, take precedence. In these cultures, social cohesion and family, particularly parents, play a critical role in the psychosocial development of children and adolescents. Therefore, considering the cultural norms and values, the current study aimed to find the association between interpersonal skills, negative parenting, self-esteem, and depression in adolescents. Furthermore, this study also aimed to find out the mediating moderating role of self-esteem and dysfunctional parenting in the association of interpersonal skills and depressive symptomatology (see Figure 1).

In line with the assumptions outlined by Baron and Kenny (1986), the following hypotheses were tested:

1. Interpersonal skills (X) would be positively associated with self-esteem (M).
2. Self-esteem (M) would be negatively associated with depressive symptomatology (Y).
3. Self-esteem (M) would mediate the association of interpersonal skills (X) and depressive symptomatology (Y).
4. Dysfunctional parenting (W) and self-esteem (M) would have moderated mediated roles in the association with interpersonal skills (X) and depressive symptomatology (Y).

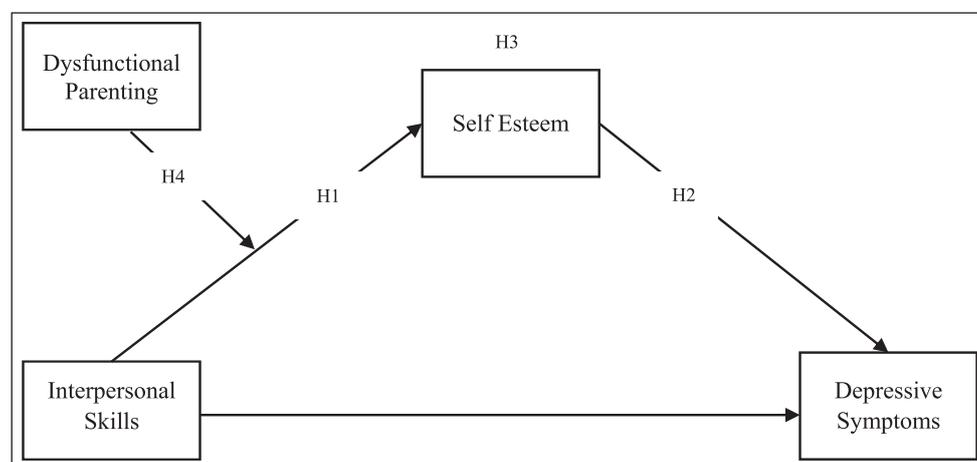


Figure 1. Hypothetical Model.

Materials and Method

Participants and Procedure

The study's participants were selected from the government schools of Lahore, Pakistan, using the multi-stage sampling technique. Seven schools, including three male-only and four female-only, were selected from the government school system, the predominant school system in Pakistan. This system primarily serves adolescents from lower, lower-middle, and some middle-class families residing in urban cities. The government-based schools have the most uniform education system in their curriculum and teaching methodology across Pakistan. Therefore, the sample consisted of 674 adolescents (47% male, 53% female) from seven government educational institutes studying in grades 8, 9, and 10, with a mean age of 14.88 ($SD = 1.33$).

The Institutional Review Board Committee of the department approved the current study. The researchers then sought approval from the government schools to research their institutions. Out of ten schools, seven were allowed to conduct the current research project after learning the aim and objectives of this research. The school authorized the researchers to approach the 8th, 9th, and 10th-grade students. A group of 30–35 school children was approached and given the instructions, along with the right to withdraw, after ensuring the confidentiality of each participant's responses on the provided protocol of the four scales. All the participants took almost 30 minutes to complete the protocol. Finally, the participants were allowed to ask questions and debriefed on the research.

Measures

The protocol of the four scales, along with the demographic form based on the participant's gender, age, class, family system, parental age, and education, was provided to each participant.

Interpersonal Skills Scale

The Interpersonal Skills Scale (IPSS) (Zahra et al., 2020) aimed to assess the adolescents' interpersonal skills in social situations they encounter in their environment. The IPSS was a 36-item scale comprising three subscales: social engagement, sociability, and social etiquette. The participants were asked to rate how much each item applied to them. The IPSS is a 5-point rating scale where the response options were 0 for *not at all*, 1 for *rarely*, 2 for *to some extent*, 3 for *very much*, and 4 for *always*. The scale had high psychometric properties within and between network properties. The internal consistency of IPSS was .89, the test re-test reliability was $r = .63^{***}$, and the split-half reliability was $r = .83^{***}$.

Parenting Styles Scale for Adolescents

The Parenting Styles Scale for Adolescents (PSSA) is an indigenously developed scale for adolescents to measure the parenting styles and the second sub-scale of the scale, *controlling parenting* and *punitive parenting* (Saleem et al., 2017). The scale is a self-report measure with a 4-point rating scale where each participant had to read each statement and respond with how well each statement applied to them. The response options in the scale are 0 for *never*, 1 for *sometimes*, 2 for *often*, and 3 for *very often*. Both sub-scales have sound psychometric properties with the internal consistency of .79 and $r = .89$ for test-retest reliability.

Self Esteem Scale for Children

The Self-Esteem Scale for Children (SESC) was used to assess the level of self-esteem of adolescents (Saleem & Mahmood, 2011b). This indigenously developed self-report measure assesses self-esteem on the following sub-factors: academic, self-confidence, social, and low self-esteem. The current study focused on the first three sub-factors because higher scores on the first three factors translate to higher self-esteem. SESC uses a 5-point rating scale with 0 meaning *not at all* and 4 meaning *very much*. The scale is well established and has sound psychometric properties. The internal consistency of the scale was .76.

Depressive Symptomatology Scale for Adolescents

The Depressive Symptomatology Scale for Adolescents (DSA) was used to assess the levels of depressive symptomatology present in the adolescents (Saleem et al., 2014). The DSS was a 27-item scale comprising four sub-scales: sadness, indecisiveness, irritability, and psychosomatic complaints. The scale is a self-report measure, where higher scores correlate with higher levels of depressive symptomatology experienced by adolescents. The participant must read each item of the scale and report the extent to which each item applies to them on a 4-point rating scale with 0 for *not at all*, 1 for *rarely*, 2 for *sometimes*, and 3 for *often*. The scale is indigenously developed with very strong and sound psychometric properties.

Statistical Analysis

The descriptive and bivariate analyses were performed using the IBM SPSS software. The PROCESS macro (Hayes, 2018) v3.5 was used to investigate both Simple Mediation (Model 04) and Mediated Moderation analysis (Model 7) with the bootstrapping of 5000 and 95% CI.

Results

Descriptive Statistics

The current sample consisted of a total of $N = 674$ adolescents from the government school system of an urban city. In the current sample, 53% ($n = 359$) were female and 47% ($n = 315$) were male. Seventy percent of the sample ($n = 472$) comprised those aged 12–15. The remaining 30% ($n = 202$) were aged 16–19. The grade level of the sample is split almost evenly, with 31% in 8th ($n = 223$), 36% in 9th ($n = 245$), and 31% in 10th grade ($n = 206$).

Bivariate Analysis

The bivariate analysis shows the relationship between the independent and dependent variables, as presented in Table 1. The results indicate that interpersonal skills are inversely correlated with dysfunctional parenting and positively correlated with self-esteem. Additionally, there is an inverse relationship between interpersonal skills and depressive symptomatology. Furthermore, dysfunctional parenting is inversely linked with self-esteem, while it has a positive correlation with depressive symptomatology. Finally, there was an inverse relationship between self-esteem and depressive symptomatology in adolescents.

Table 1. Correlation Analysis with the Mean and Standard Deviation of Each Factor.

Factors	<i>M</i>	<i>SD</i>	1	2	3	4
1. Interpersonal Skills	117.37	17.82	—	-.29**	.68***	-.20*
2. Dysfunctional Parenting	32.89	5.55	—	—	-.29**	.21*
3. Self-Esteem	94.13	13.78	—	—	—	-.22**
4. Depressive Symptomatology	35.43	12.16	—	—	—	—

Note. *M* = Mean; *SD* = Standard Deviation * $p < .05$, ** $p < .01$.

Mediated Moderation Analysis

Table 2. Regression Coefficients of Mediated Moderation Analysis.

Analysis		Self-Esteem (<i>M</i>)			Depressive Symptoms (<i>Y</i>)			
		Coeff.	95% <i>CI</i>		Coeff.	95% <i>CI</i>		
		<i>B</i>	<i>LL</i>	<i>UL</i>	β	<i>LL</i>	<i>UL</i>	
Simple Mediation Analysis-Model 4								
Interpersonal Skills (<i>X</i>)	<i>a</i>	.66***	.55	.66	<i>c'</i>	.16***	.05	.21
Self-Esteem (<i>M</i>)		—	—	—	<i>b</i>	-.33***	-.38	-.21
Mediated Moderation Analysis-Model 7								
Interpersonal Skills (<i>X</i>)	<i>a</i> ₁	.57***	.52	.63	<i>c'</i>	.13***	.05	.21
Self-Esteem (<i>M</i>)					<i>b</i> ₁	-.29***	-.38	-.21
Dysfunctional Parenting (<i>W</i>)	<i>a</i> ₂	-.30***	.15	.44				
<i>X</i> × <i>W</i>	<i>a</i> ₃	-.01**	-.02	-.01				
<i>R</i> ²		.45				.06		
<i>F</i>		185.74				23.11		

Note. *LL* = lower limit; *UL* = upper limit.

Simple Mediation Analysis

In PROCESS (v3.5), Model 4 was used to run a simple mediation analysis. The *Without Moderation* section in Table 2 indicated that significant indirect effects of self-esteem partially mediated the relationship between interpersonal skills and depressive symptomatology of adolescents. In path *a* of the mediation model, the self-esteem with interpersonal skills was significant. Path *b* showed that the self-esteem of adolescents with depressive symptomatology was also significant. In path *c'* of the mediation process, *interpersonal skills*, as well as *depressive symptomatology*, controlling the mediator (*self-esteem*), were also significant, indicating partial mediation. As per Baron and Kenny (1986), self-esteem partially mediates the relationship between interpersonal skills and depressive symptomatology.

Mediated Moderation Analysis

The results in Table 2 show that interpersonal skills and self-esteem have a significant positive association. Furthermore, findings also depicted that the interaction effect of interpersonal skills and dysfunctional parenting has a significant negative association with self-esteem. Moreover, the results showed that dysfunctional parenting and self-esteem have an inverse significant relationship.

Model 7 of PROCESS (v3.5) was used to run the moderated mediation to calculate the degree to which dysfunctional parenting moderated the mediational impact of interpersonal skills and depressive symptomatology through self-esteem. Figure 3 depicts the moderated mediation results: (1) when the association between interpersonal skills and self-esteem is altered by dysfunctional parenting, the mediation effect of self-esteem is also changed, and (2) the moderating effect of dysfunctional parenting on the mediator can be estimated using this integrative model. The coefficient values of each association are graphically shown in Figure 3 using Model 7 of PROCESS (v3.5). There is a significant positive relationship between interpersonal skills and self-esteem, dysfunctional parenting and self-esteem, and self-esteem and depressive symptomatology, reported as a_1 , a_2 , b_1 , and c' , respectively. The interaction term is used to examine moderation (interpersonal skills and dysfunctional parenting), which has negative moderation and is shown as a_3 (see Figure 2).

In Table 2, the confidence intervals surrounding the indirect effect of self-esteem did not reach zero, indicating a significant indirect effect has been found at low levels of dysfunctional parenting. Table 2 shows that the confidence intervals around the indirect effect of self-esteem did not reach zero, indicating a significant indirect effect has been found at low levels of dysfunctional

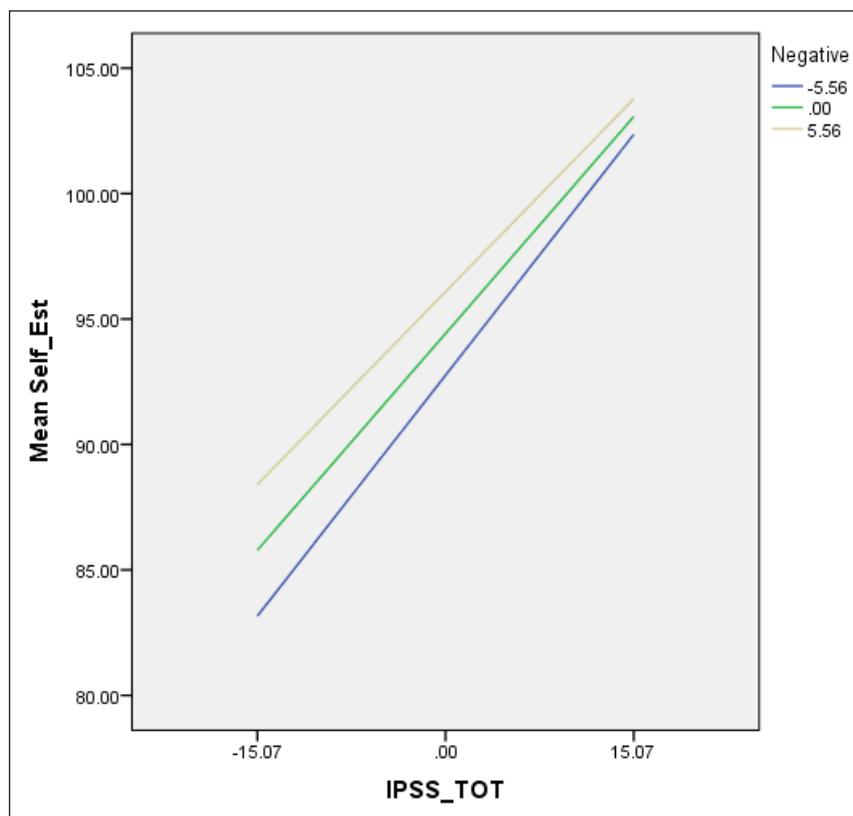


Figure 2. Moderating Role of Dysfunctional Parenting in Interpersonal Skills and Self-Esteem.

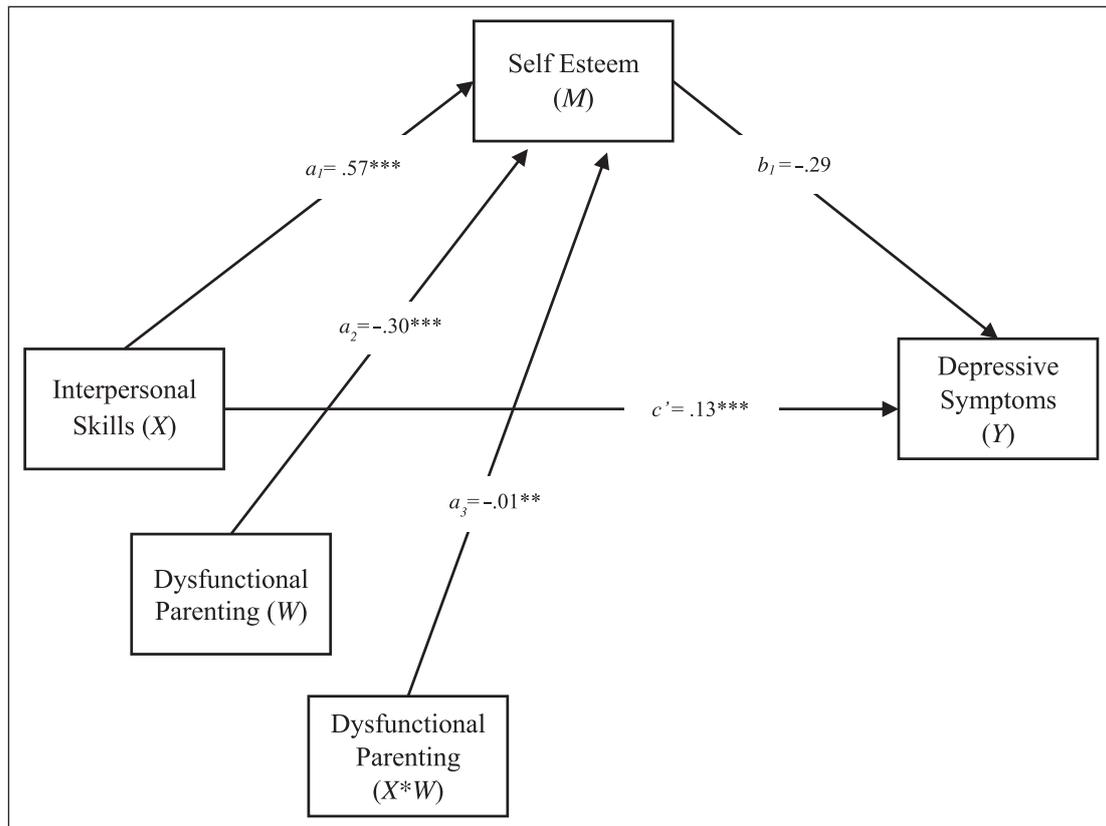


Figure 3. Mediated Moderation of Self-Esteem and Dysfunctional Parenting between Interpersonal Skills and Depressive Symptomatology.

parenting ($\beta = .63$, 95% CI: [.56 to .70], moderate levels of dysfunctional parenting ($\beta = .57$, 95% CI: [.51 to .63], and high levels of dysfunctional parenting ($\beta = .52$, 95% CI: [.44 to .59]). Therefore, the association between interpersonal skills and depressive symptomatology through self-esteem significantly decreases when adolescents experience dysfunctional parenting.

Discussion

Adolescence demands a constant adjustment during this ever-changing evolutionary phase (Lin & Yi, 2017). Adolescents encounter multiple challenges and barriers throughout this period, including identity development, biological changes, physical development, personal and social changes, variations in feelings, and parental expectations, which put them at greater risk of developing mental health issues (Dhuria et al., 2009). Depression is regarded as one of the most common mental health conditions that children and adolescents experience (Zahra & Saleem, 2021). Throughout the world, prevalence studies suggested an increasing and alarming rate of depressive symptomatology in adolescents. Depressive symptoms in teenagers are linked to a slew of negative outcomes, including poor academic performance, poor adjustment, high dropouts, low self-esteem, loneliness, substance use, social withdrawal, and greater interpersonal problems. Given the rising prevalence of depressive symptoms in adolescence, it is vital to identify risks and preventive variables of depression in children and adolescents (Saleem et al., 2014; Zahra & Saleem, 2021).

The findings of this study indicated that low interpersonal skills and low self-esteem are significant predictors of depression in adolescents. Furthermore, the study discovered that

self-esteem significantly mediates the association between interpersonal skills and depression. Adolescence is a time when a range of social transitions occur that significantly impact an adolescent's growth and adjustment (Sadovnikova, 2016). The social environment becomes more intense as they form interpersonal and social ties with friends and peers, compare themselves to others, and develop new social skills to help maintain or build relationships (Rodriguez et al., 2015). Good social comparisons and effective interpersonal skills training during this period are linked to a good self-concept and self-identity, becoming a source of accelerated self-esteem (Bergagna & Tartaglia, 2018; Endedijk et al., 2019). This boosted self-esteem assists adolescents and children in overcoming mental health issues, such as depression, anxiety, stress, and aggression. Previous empirical literature also backs up these findings, indicating that healthy social and interpersonal interactions are a source of boosted self-confidence and worth, resulting in fewer depressive symptoms.

The results of this study indicated that negative parenting significantly moderates the association between interpersonal skills and self-esteem. The link between interpersonal skills and self-esteem is stronger when negative parenting is minimal. However, as negative parenting becomes more prevalent, this link weakens. As a child's first social setting is their family, parents play a key role in their child's interpersonal, educational, and emotional growth (Emagnaw & Hong, 2018; Filus et al., 2019). In addition to their physical traits, parents influence their children's inherent values and beliefs, personality, identity, self-esteem, and social competence (Rohner, 2004; Shim & Lim, 2019). Children can create an internal working model by having a loving, caring, pleasant, and encouraging parent-child interaction (Bowlby, 1982), resulting in higher self-esteem. Conversely, negative and neglectful parenting approaches lead to less self-confidence and self-esteem. Through social learning and imitation, children can learn self-confidence and self-esteem from their parents and other influential family members. Bandura (1978) proposed that children's imitative responses can be seen in the model's conduct.

As a result, we can deduce that if negative parenting is more prevalent, despite having stronger interpersonal and social abilities, an adolescent's self-esteem will indeed be lower, leaving them at greater risk for depression.

Limitations and Suggestions

Despite its many ramifications, the current study is not without flaws. To begin, the data was obtained only from urban areas. Therefore, the authors recommend that future studies compare urban and rural samples. Second, the data was gathered only from public school. Future studies should aim to include data from private schools. Third, this study only included self-report measures. Future studies should utilize specific informant-rated measures as well. Finally, this study used a cross-sectional research design. The researchers suggest that future studies use a longitudinal research design to explore how depression and its associated characteristics change over time.

Conclusion

The findings of this study indicate the mediating role of self-esteem in the association between interpersonal skills and depression. The findings also highlight the moderating role of negative parenting in the relationship between interpersonal skills and self-esteem. Therefore, by boosting the level of interpersonal skills and self-esteem, and reducing negative parenting, depression and its associated adverse outcomes can be avoided in children and adolescents.

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