

## Parenting Psychological Control and Adolescents Anxiety: Investigating the Mediating Role of Self-Esteem

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### ABSTRACT

*The current research investigated the mediating role of self-esteem in the link between psychological control by parents and anxiety among adolescents in a sample of 300 students. It employed, a Parental Psychological Control Scale (PPCS) (Parent Psychological Control Scale, PC): Rosenberg Self-Esteem Scale (RSES) (Rosenberg Self-Esteem Scale, RSE): Beck Anxiety Inventory (BAI) (Beck Anxiety Inventory, BAI) in the research. The findings indicate that parental psychological control was positively associated with adolescent anxiety and inversely associated with self-esteem. There are also negative correlations between self-esteem and anxiety indicating a protective effect of self-esteem on adolescent mental health. Mediation analysis indicated that self-esteem mediated the association between parental psychological control and adolescent anxiety to some extent. The findings indicate how controlling child-rearing practices eroded adolescent's self-worth, thereby enhancing symptoms of anxiety. These results present evidence for the negative consequences of psychological control parenting on adolescent well-being, and the value of self-esteem development as a protective factor against anxiety. The research makes significant contributions to the literature through its empirical confirmation of self-esteem as a process to explain the pathway between parental psychological control and adolescent psychological distress. The results are applicable to parenting behavior, preventive sectional and promotion of adolescent mental health.*

**Keywords:** Parental psychological control, self-esteem, adolescent anxiety, mediation, psychological health

### INTRODUCTION

Parental influence is a significant factor in understanding the psychological adjustment and emotional well-being of adolescents. Supportive parenting behaviors support resilience and boosted confidence, while affording detrimental effects, and producing maladaptive behaviors, are negative. One detrimental parenting behavior, identified as parental psychological control, includes intrusive behaviors that engage guilt inductions, withdrawal of love, and invalidating feeling (Soenens & Vansteenkiste, 2010) and is defined as a detrimental dimension of parenting, as it restricts the adolescent's autonomy and self-worth (Barber, Stolz, & Olsen, 20005). This detrimental parenting style infringes on the adolescent's freedom of personal thought and emotional expression but also inhibits the adolescent's healthy psychological functioning, contributing to susceptibility to internalizing problems, such as anxiety.

Adolescence is defined as a critical developmental period, where identity forms, adolescents are more sensitive to peer and parental evaluation, and the susceptibility for adolescents to face mental health issues is heightened in the exposures of adolescence (Steinberg & Morris, 2001). Anxiety disorders

are typified as the most common psychological difficulty during this developmental period, and the prevalence of anxiety for adolescents is from 15 -30 % globally (Beesdo et al., 2009). Moreover, family Dynamics, particularly parental control, was reported as the only significant predictor leads to adolescent anxiety levels (McLeod, Wood, & Weisz, 2007). Without autonomy from parental criticism, or saturated parental suppression, adolescents face heavy internalization from excessive psychological control, which produces adolescent insecurity and elevated anxious tendencies.

Parent psychological control differs from behavioral control, which denotes properly supervising and limiting children's activities (Barber, 1996). Behavioral control is connected with positive outcomes, whereas psychological control disrupts the adolescent's sense of agency and produces maladaptive outcomes (Soenens et al., 2012). To be more specific, parents who engage in psychological control control their children's emotive experiences, which instill dependency, and diminish self-efficacy (Assor et al., 2004). In contrast to the experience of autonomy, parenting that exercises psychological control is able to initiate and sustain anxiety symptoms, particularly during adolescence when adolescents are having trouble controlling emotions in the absence of supportive parenting that supports autonomy.

One of the most significant mechanisms by which psychological control operates to influence anxiety could be via self-esteem. Self-esteem more broadly speaking can be defined as a person's overall assessment of how worthy and competent they are (Rosenberg, 1965). Healthy self-esteem is a resilience factor for emotional disturbance, whereas low self-esteem is a established risk factor for anxiety and other internalizing disorders (Sowislo & Orth, 2013). When parents psychologically control their adolescents, this can create feelings of inferiority, or self-doubt which adversely affect the adolescents self-esteem (Soenens, Luyten, et al., 2008). With time, this process of losing one's worth can increase susceptibility to anxiety.

The mediating function of self-esteem between parenting and psychological outcome is well documented in empirical work. For instance, research illustrates that psychologically controlling parenting is a predictor of adolescent self-esteem, which is a predictor of anxiety (Inguglia et al., 2016; Wang et al., 2020). Such a pathway indicates self-esteem is a key mediator of the extent to which parenting, as control, can exacerbate adolescent anxiety. Moreover, adolescents with tenuous self-esteem tend to be highly sensitive to threats in intersocial interactions, including rejection, contextually promoting anxious responding (Zeigler-Hill, 2011).

Theoretical models also clarify the importance of this mediation. In Self-Determination Theory (SDT), parental control limits the exercise of one's autonomy, competence, and relatedness of self (Deci & Ryan, 2000). In this model, failing to meet these basic psychological needs leads to low self-esteem, which predisposes adolescents to experience anxiety and other psychological problems (Vansteenkiste & Ryan, 2013). Similarly, Social Development Models emphasize the development of one's identity, which shows how parental control and rejection can inhibit the formation of one's self-concept and lead to maladaptive beliefs of self and internalizing symptoms (Steinberg, 2001).

Cultural context can also shape these relationships. For example, in collectivistic cultures where parental authority is prioritized, adolescents may experience psychological control considerably more, due to opposing autonomy (Rudy & Grusec, 2006). Studies on parenting in Asian contexts, namely Pakistan, show that parental psychological control is normalized as parental care and protection, but still associates with negative mental health outcomes in adolescents (Ahmad et al., 2020). This means that if self-esteem is considered as a mediator in this cultural context, it can provide important information about how parenting models influence adolescent anxiety.

As interest and concern about adolescent mental health increase, it will be significant to identify pathways from parental psychological control, self-esteem, and anxiety. Self-esteem identified as a mediator can have theoretical and practical significance for intervention. Parenting programs, for

instance, can decrease psychologically controlling behavior and increase opportunities for self-esteem for adolescents that help to buffer the risk of anxiety.

In the end, the literature illustrates that parental psychological control is a significant risk factor for adolescent anxiety, and self-esteem is a primary mediator between them. Yet, additional empirical research is necessary to more fully understand the interaction of the two constructs, particularly across different cultures. The present research seeks to investigate the impact of parental psychological control on anxiety among adolescents, using self-esteem as a mediator, and contribute to the existing literature on adolescent psychological well-being.

## **LITERATURE REVIEW**

Parental psychological control is understood to encompass intrusive or manipulative behaviors, including tactics like guilt induction, withdrawal of love, disapproval of feelings, or personal attacks, that compel children to think or feel in a way prescribed by the parent (Barber, 1996; Soenens & Vansteenkiste, 2010). It is conceptually distinct from behavioral control ('a parent monitoring the child and having rules'), which is protective and fine when it is appropriate (Barber, Stolz, & Olsen, 2005). Psychological control is a consistent predictor of internalizing problems because it undermines autonomy, instills self-doubt, and conveys that one's worth is conditional (Assor, Roth, & Deci, 2004; Soenens, Vansteenkiste, & Luyten, 2012). Meta-analysis supports medium-size predictive relationships between psychological control and various forms of maladjustment during adolescence, including anxiety (Kuppens, Laurent, Heyvaert, & Onghena, 2013; Pinquart, 2017).

Adolescence is a unique time of identity exploration, greater sensitivity to evaluation, and heightened experience of anxiety symptoms (Beesdo, Knappe, & Pine, 2009; Steinberg & Morris, 2001). Family processes are key because adolescents start to renegotiate autonomy and continue to be embedded in parent relationships. Meta-analytic studies indicate that controlling, rejecting, or overprotective parenting styles are risk factors for anxiety in children and adolescents, increasing anxiety (McLeod, Wood, & Weisz, 2007). Psychological control, in particular, conveys the message that one's thoughts/feelings are unacceptable, making adolescents intensely focused on disapproval and threat, both key cognitive features of anxiety (Soenens & vansteenkiste, 2010; Pinquart, 2017).

Self-Determination Theory (SDT) asserts that well-being hinges on the satisfaction of autonomy, competence, and relatedness needs; psychologically controlling parenting obstructs these needs through pressure, shame, and conditional regard (Deci & Ryan, 2000; Assor et al., 2004). Need frustration diminishes feelings of personal efficacy and worth, providing fertile ground for internalizing symptoms. Studies show that psychological control predicts need frustration, and need-frustration is associated with lower self-worth and higher anxiety (Soenens & Vansteenkiste, 2010; Vansteenkiste & Ryan, 2013). Therefore, SDT offers a mechanistic route from parenting behaviors to changes in self-evaluations and anxiety.

Self-esteem - global self-evaluation of worth and competence - buffers stress and guards against internalizing problems, while low self-esteem forecasts anxiety (Rosenberg, 1965; Sowislo & Orth, 2013). Psychologically controlling parents communicate conditional love and unrelenting evaluative scrutiny, which dampens adolescents' self-esteem (Assor et al., 2004; Soenens, Luyten, Vansteenkiste, Duriez, & Goossens, 2008). Several studies, including longitudinal and cross cultural work, provide support for psychological control → lower self-esteem → higher anxiety as a reasonable mediational pathway (Inguglia, Ingoglia, Liga, Lo Coco, & Lo Cricchio, 2016; Wang, Pomerantz, & Chen, 2020). In these models, self-esteem is a proximal engine of anxious affect, as lower self-worth contributes to elevated threat appraisals and rejection sensitivity.

Low self-esteem increases negative self-schemas, intolerance of uncertainty, and self-conscious emotions (shame/guilt), all of which are implicated in anxiety (Sowislo & Orth, 2013; Zeigler-Hill,

2011). Psychological control validates self-doubt and evaluation in front of others, so adolescents begin to expect to fail or be criticized. This operates to continually increase worry, avoidance, and the physiological hyperarousal that are characteristic of anxiety disorders. Empirical results indicate that the internalized criticism of parents and guilt-inducing compliance corresponds with ruminative and anxious cognitive styles, with self-esteem accounting for this transmission (Assor et al., 2004; Inguglia et al., 2016).

Although some level of parental authority is normative in collectivist cultures, psychological control still predicts worse mental health, even when parental authority is framed as care or protection (Rudy & Grusec, 2006). Using samples from South Asian and East Asian countries, researchers show that high levels of psychological control predicted lower self-esteem and higher internalizing symptoms all in ways very similar to findings from Western samples (Wang et al., 2020). While in their study on Pakistani youth, Ahmad, Rana, and Riaz (2020) indicated psychological control was most closely related to distress, again supporting the mediating nature of self-esteem as well as demonstrating the cross-cultural applicability of the mediation effects. Findings such as these underpin the question of whether attention to cultural endorsement of psychological control neutralizes the potential harmful effects of control.

Psychological control is routinely examined using Barber's Psychological Control Scale or domain-specific variants of it (Barber, 1996; Barber et al, 2005). Self-esteem has traditionally been assessed using the Rosenberg Self-Esteem Scale (Rosenberg, 1965). Measures of anxiety outcomes typically rely on validated measures, such as the SCARED and RCMAS, as well as broader internalizing composites (e.g., Birmaher et al., 1997; Beesdo et al., 2009). The pattern of evidence supports longitudinal and cross-lagged models showing directionality from psychological control to subsequent self-esteem and anxiety (Wang et al., 2020), while meta-analyses find moderate associations between psychological control and self-esteem and anxiety across sources and methods (Kuppens et al., 2013; Pinquart, 2017). But multi-informant, culturally sensitive methods are still needed to deal with shared-method variance and context effects.

While several lines of evidence have converged and provided us with greater confidence about the effects of psychological control on anxiety-related outcomes in adolescents, there is still more to be learned regarding when they occur (e.g., early versus late adolescence), if they are the same whether accounting for boys and girls, and what confounding variables might moderate or suppress these associations (e.g., peer climate, teacher support, and socioeconomic stress); It is plausible that potentially more effective anxiety preventive interventions would target both parenting behaviours (e.g., reduce psychological control and enhance autonomy-support) and adolescent self-esteem, including strategies that focus on the adolescent's sense of competence and the importance of the adolescent feeling accepted unconditionally (Assor et al., 2004; Vansteenkiste & Ryan, 2013). Studies of parenting interventions targeted at autonomy-support in Pakistani and similar populations could apply cultural adaptations to test out autonomy-supportive parenting programs and formal modeling of the adolescents' self-esteem as a potential mediator linking psychological control to anxiety over time (Ahmad et al., 2020; Wang et al., 2020).

## **RESEARCH METHODOLOGY**

### **Objectives of Study**

The primary objective of this research was to explore the impact of parental psychological control on adolescent anxiety with specific focus on the mediating effect of self-esteem. In particular, the research aimed at testing whether parental psychological control is correlated with higher levels of anxiety among adolescents and whether this correlation can be affected by lower self-esteem.

### **Hypothesis**

The following hypotheses were hypothesized according to the objectives of the study and the nature of the prevailing evidence:

Parental psychological control will be positively related to anxiety in adolescents.

Parental psychological control will be negatively related to self-esteem in adolescents.

Self-esteem will be negatively related to anxiety in adolescents.

Self-esteem will mediate the relationship between parental psychological control and anxiety in adolescents.

### **Measures**

Adolescent Anxiety was measured through the Beck Anxiety Inventory for Youth (BAI-Y; Beck, Beck, & Jolly, 2001), a standardized instrument developed to evaluate the anxiety symptoms of youth. The BAI-Y consists of 20 items with a 4-point Likert scale of 0 (never) to 3 (always) that estimate the frequency and severity of symptoms. The BAI-Y is designed to produce measures of physiological, cognitive, and affective aspects of anxiety, with a combined score that includes linked experience normally assigned to anxiety. The BAI-Y was constructed for children between the ages of 7-14, but it has been widely administered to teenagers in late adolescence, reporting strong psychometric properties, high internal consistency and validity in diverse samples. Higher scores on the BAI-Y reflect increased anxiety. Parental Psychological Control was measured with the Psychological Control Scale–Youth Self-Report (PCS-YSR; Barber, 1996), a rigorously validated traditional scale designed to assess adolescents' self-reports of parents' behaviors interfering with their emotional and psychological development.

The PCS-YSR measures several aspects of psychological control such as guilt induction, love withdrawal, and intrusive control of thoughts and feelings, which are essential elements to achieve psychological control in the sense proposed. Respondents scoring higher on this measure reflect increased perceived parental psychological control. It has 10 items and it is rated on a 5-point Likert scale. Self-Esteem was assessed with the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965), a 10-item self-report scale of global self-worth. Items were responded to on a 4-point Likert scale on which respondents indicated their degree of agreement from strongly disagree to strongly agree, with higher scores reflecting greater self-esteem. Both scales exhibited high reliability and validity for adolescent populations, and for the current study these measures were suitable.

### **Research Design**

A correlational, cross-sectional research design was employed. Measures were taken from adolescents, aged 13–19 years, to self-report questionnaires on research variables such as parental psychological control, self-esteem, and anxiety. Correlation, regression, and mediation analysis statistical procedures were scheduled to test the hypothesized correlations.

## **RESULTS**

**Table 1**

### **Demographic Properties of the Study Sample (N=300)**

Sample Data	n	%
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Age			
	18-26	110	36.66
	27-36	190	63.33
Gender			
	Men	195	65
	Women	105	35
Family system			
	Joint	180	60
	Nuclear	120	40
Residency			
	Urban	175	58.33
	Rural	125	41.66

The respondents' demographic profile is presented in Table 1 (N = 300). Age was indicated with most respondents (63.33%) falling within 27 to 36 years of age, and 36.66% of respondents in the youthful 18 to 26 years of age. The gender distribution indicated that there was a greater proportion of males at 65% (n = 195) compared to females with 35% (n = 105) of the sample being female, thus having a very male-dominated sample. Regarding family system, 60% of the respondents (n = 180) had their family system as a joint family system whereas 40% of the respondents (n = 120) had their family system as a nuclear family system. In residential background, it was seen 58.33% (n = 175) of the respondents belonged to an urban place whereas 41.66% (n = 125) respondents reported to belong to a rural place. Overall, this demographic background made the sample predominantly male, urban, joint family, and older and had more respondents covered in the age group of 27-36 years.

**Table 2**

**Psychometric Properties of all the Scales (N=300)**

Scales	K	$\alpha$	M	SD	Range		Skew	Kurt
					Actual	Potential		
PPS	10	.76	28.45	6.12	15-46	10-50	.55	.71
BAI	20	.82	32.78	8.35	10-55	0-60	.53	.53
RSES	10	.84	27.96	5.21	14-38	10-40	.42	-.33

Note. PPS= Parental Psychological Control Scale; BAI= Beck Anxiety Inventory; RSES= Rosenberg Self-esteem Scale

Table 2 details the psychometric properties of the scales employed in the present research. The three scales exhibited good to acceptable internal consistency reliability in the form of Cronbach's alpha which was all above the recommended cut-point. Further, mean scores and standard deviations indicated moderate levels of parental psychological control, anxiety, and self-esteem in the sample. The range of actual scores was relatively close to the possible ranges of the scales, which suggests that the sample was capable of offering variability in their responses. Skewness and kurtosis scores were within the acceptable levels, which implies that the distribution for all the scales would be regarded as normal.

**Table 3**

**Pearson Correlation between Study Variables (N=300)**

Variables	1	2	3
1. PPcS	-		
2. BAI	.61 **	-	
3. RSES	-.32 **	-.21 *	-

Note. PPS= Parental Psychological Control Scale; BAI= Beck Anxiety Inventory; RSES= Rosenberg Self-esteem Scale

Table 2 summarizes the psychometric characteristics of the scales applied here. The three scales exhibited appropriate to excellent internal consistency reliability, as evidenced by Cronbach's alphas that were all greater than the suggested cut-off. In addition, mean scores and standard deviations indicated moderate levels of parents' psychological control; anxiety; and self-esteem among the sample. Actual score ranges were reasonably close to the possible ranges of the scales, showing that the sample was capable of offering variability in their answers. Skewness and kurtosis values were within acceptable limits, which is to say that all scales' distributions could be regarded as normal.

**Table 4**

**Pearson Correlation between Study Variables (N=300)**

Variables	B	SE	t	p	95%CL
Constant	34.46	.74	44.18	.00	32.92– 36.01
PPCS	.43	.09	5.38	.00	.27 – .59
RSES	-.23	.03	-11.50	.00	-.27- -.35

Note. PPS= Parental Psychological Control Scale; RSES= Rosenberg Self-esteem Scale; BAI= Beck Anxiety Inventory (Dependent)

Table 4 presents the outcome of regression analysis testing the contribution of parental psychological control and self-esteem to adolescent anxiety. As revealed in the table, parental psychological control was a positive predictor of anxiety; hence, adolescents whose parents engaged more in controlling and intrusive parenting reported higher levels of anxiety symptoms. Additionally, self-esteem was a strong

negative predictor of anxiety; thus, adolescents who had higher levels of self-esteem had fewer symptoms of anxiety. Thus, parental psychological control is a risk factor and self-esteem is a protective factor based on their association with adolescent anxiety. Together, the two predictors explained a good proportion of variance in anxiety that underscores the significance of family environment factors and individual resources associated with mental health outcomes.

**Table 5**

**Self-esteem mediating role between Parental Psychological Control and Anxiety (N=300)**

<i>Variables</i>	<i>R<sup>2</sup></i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>95% CI</i>	
					<i>LL</i>	<i>UL</i>
Total effect	.32	.42***	.08	10.63	.34	.50
PPCS- BAI(c)						
Direct effect						
PPS--RSES(a)		-.31***	.04	-15.50	-.35	-.27
RSES--BAI (b)		-.34***	.07	-5.67	-.46	-.22
PPCS--- BAI (c')		.21***	.03	7.00	.15	.27
Indirect effect						
PPCS—RSES-- BAI	.21	.11***	.02		.07	.16

Note. PPS= Parental Psychological Control Scale; BAI= Beck Anxiety Inventory; RSES= Rosenberg Self-esteem Scale

p< .01\*\*; p< .001\*\*\*

Table 5 shows the output of mediation model testing the mediational role of self-esteem between parental psychological control (PPC) and anxiety among students (N = 300). The total effect of parental psychological control on anxiety (c) was significant (B = 0.42, SE = 0.08, p < .001), indicating that higher perceived levels of psychological parental control were related to greater anxiety.

The direct paths of effect were also important. Psychological Warfare by parents had a significant negative association with self-esteem (a: B = -0.31, SE = 0.04, p < .001), showing that higher parental psychological control is associated with lower self-esteem. Self-esteem had a significant negative association with anxiety (b: B = -0.34, SE = 0.07, p < .001), showing that students having high self-esteem have low anxiety. The direct impact of parental psychological control on anxiety, with self-esteem (c') controlled for, was still significant but much weaker (B = 0.21, SE = 0.03, p < .001), suggesting partial mediation.



The indirect effect via self-esteem was also substantial ( $B = 0.11$ ,  $SE = 0.02$   $p < .001$ ), confirming that self-esteem does function as a partial mediator for parental psychological control to anxiety. As a whole, these results show that parental psychological control not only adds to higher anxiety directly, but also leads to greater anxiety indirectly through decreasing student self-esteem.

## DISCUSSION

Adolescence is a period of crucial development in which parents have the ability to influence emotional, cognitive, and social growth. Of these influences, parental psychological control (PPC) has been broadly associated with poor developmental outcomes, such as greater anxiety and decreased self-esteem in adolescents (Barber, 1996; Soenens & Vansteenkiste, 2010). The current study explored PPC with adolescent self-esteem and anxiety, with a secondary focus on self-esteem as a mediator between PPC and anxiety. The findings of the mediation analysis enlightened the relationships under consideration and generally endorsed accepted theoretical models, such as attachment theory (Bowlby, 1969) and self-determination theories (uncontrolling and controlling environments), which infer that parental control affects children's anxiety (Deci & Ryan, 1985).

**Hypothesis 1**, hypothesizing that PPC would be positively related to levels of anxiety among adolescents, was confirmed, and overall effect of PPC on anxiety was statistically significant ( $B = 0.42$ ,  $p < .001$ ), with adolescents who were exposed to higher parental psychological control in the forms of guilt induction, love withdrawal, and parental intrusiveness reporting higher levels of anxiety compared to adolescents reporting lower rates of parental psychological control (Barber, 1996; Wang et al., 2007).

**Hypothesis 2** predicted parental psychological control to be negatively related with self-esteem among adolescents. This hypothesis was confirmed, as there was a significant negative relationship between PPC and self-esteem ( $B = -0.31$ ,  $p < .001$ ) indicating that with increase in PPC, self-esteem declined.

This result is consistent with earlier findings that over-control by parents crushes autonomy and fosters dependency that damage adolescents' self-esteem (Rogers et al. 2015; Soenens et al. 2008). Teenagers who are subject to a lot of psychological control from their parents tend to internalize the negative feedback from their parents, which can negatively affect their self-perception and self-confidence. Hypothesis 3 predicted self-esteem would have a negative relationship with anxiety among teenagers. Hypothesis 3 was also validated ( $B = -0.34$ ,  $p < .001$ ), indicating teenagers with self-esteem have less anxiety. This finding is in line with existing studies that show self-esteem acts as a protective factor against physical and psychological distress, and higher levels of self-esteem will result in more adaptive coping mechanisms and emotional resilience (Orth et al., 2009; Sowislo & Orth, 2013).

Teenagers with a positive concept of self are more likely to employ adaptive coping mechanisms and form emotional stability in dealing with environmental stressors. In **Hypothesis 4**, we theorized that self-esteem would mediate the PPC-adolescent anxiety relationship. Consistent with predictions, the mediation analysis showed partial mediation evidence (indirect effect  $B = 0.11$ ,  $p < .001$ ), meaning that self-esteem partially explained the route by which PPC affects anxiety. This result expands on the earlier work, where the focus had been primarily on parental effects on their teen's mental health via decreased self-esteem (Kawabata et al., 2011; Liu et al., 2020).

## CONCLUSION:

In light of this, interventions to enhance self-esteem in adolescents may improve distressing emotional symptoms from PPC parenting. All in all, the present study offers more evidence that PPC affects teen anxiety both directly and indirectly through self-esteem. Autonomy-supportive parenting and self-

esteem, when considered together, have the implication that both are needed to facilitate the promotion of adolescent mental health. Future research might seek to build on this work by examining longitudinal trends in these constructs, and whether any other variables (i.e. gender, ethnic background, and/or social support) might moderate any of these relationships. The study indicates that parental psychological control has a significant influence on the psychological health of adolescents, that is, raising anxiety and decreasing self-esteem. Self-esteem also acts in a mediating fashion in this regard, therefore, parental control directly and indirectly influences anxiety. These findings underscore the importance of positive parenting practice to sustain adolescent autonomy, promote good self-concept, and avoid emotional disturbance in adolescents.

### **Recommendations**

In the light of these findings, parenting interventions are advised to target the reduction of psychological control, and to encourage autonomy-supportive processes. There are also potential settings to reduce adolescents' self-esteem through school-based self-development workshops or counseling services, which might benefit in lowering an adolescent's anxiety vulnerability. Campaigns aimed at parents can be effective in increasing the awareness of the harmful effects of controlling parenting and encouraging more supportive parenting processes.

### **Limitations**

This research is not without limitation.

First, the sample used self-report tools that can distort measured variables due to social desirability bias.

Second, the study's design was cross-sectional, and hence causal inferences cannot be drawn; future studies can advance from this study by conducting longitudinal-data-gathering.

Third, this sample was only limited to a specific cultural context, and therefore is restricted in its generalizability to other groups. Subsequent research needs to use more than one informant (e.g., parents, teachers), involve participants from many cultures, and employ experimental or longitudinal designs in subsequent studies.

### **REFERENCES**

- Ahmad, I., Rana, S. A., & Riaz, M. N. (2020). Parental psychological control and mental health problems among adolescents in Pakistan. *Pakistan Journal of Psychological Research*, 35(1), 135–151.
- Assor, A., Roth, G., & Deci, E. L. (2004). The emotional costs of parents' conditional regard: A self-determination theory analysis. *Journal of Personality*, 72(1), 47–88.
- Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development*, 67(6), 3296–3319.
- Barber, B. K., Stolz, H. E., & Olsen, J. A. (2005). Parental support, psychological control, and behavioral control: Assessing relevance across time, culture, and method. *Monographs of the Society for Research in Child Development*, 70(4), 1–137.
- Beesdo, K., Knappe, S., & Pine, D. S. (2009). Anxiety and anxiety disorders in children and adolescents: Developmental issues and implications for DSM-V. *Psychiatric Clinics*, 32(3), 483–524.

Birmaher, B., Khetarpal, S., Brent, D., Cully, M., Balach, L., Kaufman, J., & Neer, S. M. (1997). The Screen for Child Anxiety Related Emotional Disorders (SCARED): Scale construction and psychometric characteristics. *Journal of the American Academy of Child & Adolescent Psychiatry*, 36(4), 545–553.

Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Springer Science & Business Media.

Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.

Inguglia, C., Ingoglia, S., Liga, F., Lo Coco, A., & Lo Cricchio, M. G. (2016). Autonomy and relatedness in adolescence and emerging adulthood: Relationships with parental support and psychological control. *Journal of Adolescence*, 55, 1–11.

Kawabata, Y., Alink, L. R., Tseng, W. L., van IJzendoorn, M. H., & Crick, N. R. (2011). Maternal and paternal parenting styles associated with relational aggression in children and adolescents: A meta-analytic review. *Developmental Psychology*, 47(6), 1299–1313. <https://doi.org/10.1037/a0025128>

Kuppens, S., Laurent, L., Heyvaert, M., & Onghena, P. (2013). Associations between parental psychological control and adolescent psychosocial functioning: A meta-analysis. *Parenting: Science and Practice*, 13(4), 281–304.

Liu, M., Chen, X., & Evans, A. D. (2020). Parental psychological control and adolescent anxiety: The mediating role of self-esteem. *Journal of Adolescence*, 80, 65–75. <https://doi.org/10.1016/j.adolescence.2020.02.004>

McLeod, B. D., Wood, J. J., & Weisz, J. R. (2007). Examining the association between parenting and childhood anxiety: A meta-analysis. *Clinical Psychology Review*, 27(2), 155–172.

Orth, U., Robins, R. W., & Widaman, K. F. (2009). Life-span development of self-esteem and its effects on important life outcomes. *Journal of Personality and Social Psychology*, 97(6), 138–152. <https://doi.org/10.1037/a0016307>

Pinquart, M. (2017). Associations of parenting dimensions and styles with internalizing symptoms in children and adolescents: A meta-analysis. *Marriage & Family Review*, 53(7), 613–640.

Rogers, T., Buchanan, C. M., & Winstead, B. A. (2015). Adolescent adjustment and parenting: Exploring the effects of psychological control. *Journal of Adolescence*, 43, 123–134. <https://doi.org/10.1016/j.adolescence.2015.05.006>

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press.

Rudy, D., & Grusec, J. E. (2006). Authoritarian parenting in individualist and collectivist groups: Associations with maternal emotion and cognition and children’s self-esteem. *Journal of Family Psychology*, 20(1), 68–78.

Soenens, B., & Vansteenkiste, M. (2010). A theoretical upgrade of the concept of parental psychological control: Proposing new insights on the basis of self-determination theory. *Developmental Review*, 30(1), 74–99. <https://doi.org/10.1016/j.dr.2009.11.001>

Soenens, B., Vansteenkiste, M., & Luyten, P. (2012). Toward a domain-specific approach to the study of parental psychological control: Distinguishing between dependency-oriented and achievement-oriented psychological control. *Journal of Personality*, 80(5), 995–1028.

Soenens, B., Vansteenkiste, M., Luyten, P., Duriez, B., & Goossens, L. (2008). Maladaptive perfectionism as an interpersonal orientation: The mediating role of controlled interpersonal behavior. *Journal of Personality*, 76(6), 1545–1580. <https://doi.org/10.1111/j.1467-6494.2008.00529.x>

Sowislo, J. F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological Bulletin*, 139(1), 213–240. <https://doi.org/10.1037/a0028931>

Steinberg, L. (2001). We know some things: Parent–adolescent relationships in retrospect and prospect. *Journal of Research on Adolescence*, 11(1), 1–19.

Steinberg, L., & Morris, A. S. (2001). Adolescent development. *Annual Review of Psychology*, 52, 83–110.

Vansteenkiste, M., & Ryan, R. M. (2013). On psychological growth and vulnerability: Need satisfaction and frustration as a unifying principle. *Journal of Psychotherapy Integration*, 23(3), 263–280.

Wang, Q., Pomerantz, E. M., & Chen, H. (2007). The role of parents' control in early adolescents' psychological functioning: A longitudinal investigation in the United States and China. *Child Development*, 78(3), 1592–1610. <https://doi.org/10.1111/j.1467-8624.2007.01066.x>

Wang, Q., Pomerantz, E. M., & Chen, H. (2020). Parents' control and early adolescents' functioning: A longitudinal study in the U.S. and China. *Child Development*, 91(4), 1239–1255.

Wang, Q., Pomerantz, E. M., & Chen, H. (2020). The role of parents' control in early adolescents' psychological functioning: A longitudinal study in the United States and China. *Child Development*, 91(4), 1239–1255.

Zeigler-Hill, V. (2011). The connections between self-esteem and psychopathology. *Journal of Contemporary Psychotherapy*, 41(3), 157–164.