



Article

The Roles of Rejection Sensitivity and Dysfunctional Perfectionism in the Relationship Between Perceived Parental Psychological Control and Social Anxiety

Shinyoung Park ¹ and Soyoung Park ^{2,*}

¹ Department of Psychology, College of Social Sciences, Seoul National University, Seoul 08826, Republic of Korea

² Education Research Institute, Seoul National University, Seoul 08826, Republic of Korea

* Correspondence: soyoung@esbfedu.com; Tel.: +82-10-5221-2915

Abstract

Social anxiety is a common and persistent mental health problem associated with substantial functional impairment. It comprises distinct subtypes, including social interaction anxiety and performance anxiety, which differ in their cognitive characteristics and may arise through different developmental pathways. Previous research has identified parental psychological control as an important risk factor for social anxiety and has linked rejection sensitivity and dysfunctional perfectionism to social anxiety symptoms. However, little is known about whether different forms of parental psychological control contribute to distinct social anxiety subtypes through different cognitive mechanisms. Addressing this gap, the present study examined whether rejection sensitivity and dysfunctional perfectionism differentially mediate the relationships between dependency-oriented and achievement-oriented psychological control and social interaction anxiety and performance anxiety. Using a cross-sectional design, 189 Korean college students completed validated self-report measures of parental psychological control, rejection sensitivity, dysfunctional perfectionism, and social anxiety. Mediation effects were examined using regression analyses, Sobel tests, and multiple mediation analyses. The results indicated that rejection sensitivity partially mediated the relationship between dependency-oriented psychological control and social interaction anxiety. In contrast, achievement-oriented psychological control influenced performance anxiety through both dysfunctional perfectionism and rejection sensitivity, with dysfunctional perfectionism showing the stronger indirect effect. Furthermore, dependency-oriented psychological control was more strongly associated with rejection sensitivity, whereas achievement-oriented psychological control was more strongly associated with dysfunctional perfectionism, supporting distinct developmental pathways for the two social anxiety subtypes. These findings extend previous research by demonstrating that different forms of parental psychological control contribute to different cognitive vulnerabilities underlying social anxiety. The findings suggest that interventions may be more effective when tailored to social anxiety subtype by targeting rejection sensitivity in individuals with social interaction anxiety and dysfunctional perfectionism in those with performance anxiety. However, because the study employed a cross-sectional design and relied exclusively on self-report measures, causal inferences cannot be drawn, and the generalizability of the findings may be limited.



Academic Editor: Antonio Bova

Received: 26 June 2026

Revised: 11 August 2026

Accepted: 20 August 2026

Published: 26 August 2026

Copyright: © 2026 by the authors.

Licensee MDPI, Basel, Switzerland.

This article is an open access article distributed under the terms and

conditions of the [Creative Commons](#)

[Attribution \(CC BY\)](#) license.

Keywords: parental psychological control; social anxiety; rejection sensitivity; dysfunctional perfectionism

1. Introduction

Human beings are known to rely on social relationships to meet fundamental interpersonal, educational, and occupational needs throughout life. As such, effective social functioning seems to be essential for psychological well-being and successful adaptation. Individuals with social anxiety might experience persistent fear of negative evaluation in social situations, which often leads to avoidance of interpersonal interactions and performance situations. Consequently, social anxiety tends to be associated with substantial distress and impairment across multiple domains of daily functioning.

Social anxiety disorder is one of the most common anxiety disorders and typically follows a chronic course without appropriate treatment (Bruce et al. 2005; Fresco and Heimberg 2001; Andreoli et al. 2026). It is associated with a range of adverse outcomes, including impaired social functioning, reduced educational and occupational performance, depression, substance misuse, and increased suicide risk (Andreoli et al. 2026; Olgiati et al. 2026; Sun et al. 2025). Despite its clinical importance, the developmental mechanisms underlying social anxiety remain incompletely understood. One reason may be that previous research has often treated social anxiety as a unitary construct despite growing evidence that social interaction anxiety and performance anxiety differ in their cognitive and developmental characteristics.

Historically, one factor limiting understanding of the developmental mechanisms underlying social anxiety has been the DSM-IV classification system, which primarily distinguished subtypes according to the breadth of feared situations rather than the nature of anxiety-provoking situations. The ambiguity of the generalized subtype may have led to inconsistent findings and limited understanding of developmental pathways (American Psychiatric Association 2022; Bögels et al. 2010; Leichsenring and Leweke 2017). With the DSM-5, social anxiety has been more clearly differentiated, including the recognition of performance anxiety as a distinct subtype, increasing the importance of situation-specific distinctions. Prior research indicates that different anxiety-provoking contexts are associated with differences in genetic, psychophysiological, developmental, and cognitive characteristics (American Psychiatric Association 2022; Leichsenring and Leweke 2017). Thus, it is reasonable to assume that social interaction anxiety and performance anxiety may follow different developmental pathways, although most previous studies have not distinguished between them (Dalrymple and D'Avanzato 2013; D'Avanzato and Dalrymple 2016).

Therefore, this study aimed to examine the developmental pathways of social interaction anxiety and performance anxiety by focusing on parental psychological control, rejection sensitivity, and dysfunctional perfectionism. Investigating these variables may enhance understanding of the distinct mechanisms underlying social anxiety subtypes and provide a basis for developing subtype-specific interventions.

1.1. The Concept of Social Anxiety Disorder and Its Subtypes According to Anxiety-Provoking Situations

Social anxiety refers to marked fear or anxiety about one or more social situations in which an individual may be observed and evaluated by others. Individuals with social anxiety fear acting in ways or showing symptoms that may lead to negative evaluation (American Psychiatric Association 2022). Schlenker and Leary (1982) conceptualized social anxiety as comprising two subdimensions—social interaction anxiety and performance anxiety—based on anxiety-provoking situations, a distinction supported by extensive research (Cook et al. 2022; Kessler et al. 1998; Leary 1983; Leichsenring and Leweke 2017; Liebowitz 1987; Turner et al. 1992).

Social interaction anxiety refers to fear in interpersonal situations such as face-to-face interaction, conversation, and relationship formation, whereas performance anxiety refers

to fear in task-performance situations such as public speaking or being observed during specific actions (Leary 1983; Heimberg et al. 1993; American Psychiatric Association 2022).

Research on cognitive differences across these subtypes suggests distinct patterns of dysfunctional beliefs. Social interaction anxiety is more strongly associated with a heightened need for approval and acceptance from others compared to performance anxiety (Goldfried and Sobocinski 1975; Shumaker and Rodebaugh 2009; Brozovich and Heimberg 2011; Andreoli et al. 2026). Individuals with social interaction anxiety tend to focus on others' reactions, leading to interpersonal-related irrational beliefs.

In contrast, performance anxiety is more strongly associated with perfectionistic beliefs that one's worth depends on flawless performance (Frost et al. 1990; Hewitt and Flett 1991; Shumaker and Rodebaugh 2009; Cox and Chen 2014; Sun et al. 2025). Such individuals, operating in less socially contingent performance contexts, are more likely to develop beliefs related to personal competence and achievement rather than interpersonal approval.

1.2. The Concept and Subtypes of Parental Psychological Control and Their Relationship with Social Anxiety

Parenting attitudes have been identified as a key vulnerability factor for the development of social anxiety, with numerous studies showing that behaviors such as overprotection, excessive control, inconsistency, and social isolation contribute to its emergence (Bruch and Heimberg 1994; Rapee 2012). Soenens et al. (2006) distinguished parental psychological control into two subtypes: dependency-oriented and achievement-oriented psychological control. Dependency-oriented psychological control refers to controlling behaviors that arise when parents feel threatened by their children's autonomy and independence. In contrast, achievement-oriented psychological control involves high parental expectations and guilt-inducing or intrusive responses when children fail to meet achievement standards. Prior research has consistently linked psychologically controlling parenting—including overcontrol, overprotection, inconsistency, shame induction, and emotional manipulation—to higher levels of social anxiety in children and adolescents (McLeod et al. 2007; Waite et al. 2014; Yap et al. 2014; Lei et al. 2023; Ryan et al. 2026). These practices are particularly associated with core cognitive features of social anxiety, such as fear of negative evaluation and social avoidance.

Children exposed to dependency-oriented psychological control tend to rely on others for decision-making, which hinders autonomy development (Wood 2006; Soenens and Vansteenkiste 2010). The frustration of autonomy needs increases insecurity and feelings of inadequacy, making confident and proactive social engagement difficult and contributing to interpersonal anxiety (Ryan and Deci 2021). Thus, dependency-oriented psychological control is particularly relevant to social interaction anxiety. In contrast, achievement-oriented psychological control is more closely related to performance anxiety. When parents impose high achievement standards and respond with guilt or intrusion when expectations are not met, children may experience guilt, shame, and fear of losing parental affection. This increases vulnerability to anxiety in evaluative and performance-based situations (Johnson et al. 2005; Soenens and Vansteenkiste 2010; Ryan et al. 2026).

Parental psychological control may influence child adjustment indirectly through mediating psychological processes rather than solely through direct effects (Barber and Harmon 2002; Young et al. 2003). Therefore, this study focused on rejection sensitivity and dysfunctional perfectionism as potential mediators linking parental psychological control and social anxiety.

1.3. The Concept of Rejection Sensitivity and Its Relationship with Parental Psychological Control and Social Anxiety

Rejection sensitivity refers to a cognitive-affective disposition characterized by anxiously expecting, readily perceiving, and overreacting to rejection in interpersonal situations (Feldman and Downey 1994). Previous research indicates that children are more likely to develop higher rejection sensitivity when parents disregard their emotions or provide conditional love (Downey et al. 1997). Accordingly, parental psychological control, which involves conditional acceptance and emotional rejection based on children's behavior, may cause the development of rejection sensitivity. Individuals high in rejection sensitivity tend to interpret ambiguous social cues as signs of rejection, perceive interpersonal situations as threatening, and experience elevated anxiety in social interactions involving potential rejection (Dodge and Somberg 1987; Downey and Feldman 1996; Levy et al. 2001). Consistent with these findings, rejection sensitivity has been associated with social interaction anxiety and identified as an important cognitive vulnerability contributing to the development and maintenance of social anxiety (Kim and Cho 2009; Feldman and Downey 1994). Likewise, rejection sensitivity may represent a key psychological mechanism linking parental psychological control to social interaction anxiety.

1.4. The Concept of Dysfunctional Perfectionism and Its Relationship with Parental Psychological Control and Social Anxiety

Perfectionism refers to a tendency to set excessively high standards for oneself or others and to strive relentlessly to achieve them (Hollender 1965). In particular, perfectionistic tendencies characterized by high standards and excessive concern over mistakes are common cognitive features of social anxiety disorder (Frost et al. 1990; Hewitt and Flett 1991). Individuals high in perfectionism tend to worry excessively about failing to meet expectations, which increases anticipatory anxiety and negative self-evaluation prior to performance situations (Flett et al. 1994; Mor et al. 1995; Shafran and Mansell 2001). Perfectionism is also closely associated with social anxiety, particularly performance anxiety, which involves fear of being evaluated while performing (Egan et al. 2011; Limburg et al. 2017; Shumaker and Rodebaugh 2009).

Frost et al. (1990) conceptualized perfectionism as a multidimensional construct comprising both adaptive and maladaptive components. Adaptive aspects include striving for high standards, whereas maladaptive aspects include excessive concern over mistakes and doubts about actions. Research consistently shows that these maladaptive dimensions are strongly associated with social anxiety, particularly performance anxiety, by increasing fear of negative evaluation and maladaptive self-evaluation (Egan et al. 2011; Limburg et al. 2017; Sun et al. 2025). Parenting environments characterized by high expectations, conditional approval, and psychological control foster dysfunctional perfectionism by encouraging children to internalize rigid achievement standards and become highly self-critical (Soenens and Vansteenkiste 2010). Accordingly, achievement-oriented psychological control may contribute to dysfunctional perfectionism, thereby increasing vulnerability to performance anxiety.

2. Research Questions and Purpose of the Study

The preceding sections reviewed subtypes of social anxiety based on anxiety-provoking situations, as well as the concepts of parental psychological control, rejection sensitivity, and dysfunctional perfectionism, along with prior findings on their interrelations. Individuals with social interaction anxiety and performance anxiety differ in their cognitive characteristics, suggesting that these subtypes may arise through distinct de-

developmental pathways. Although different forms of parental psychological control may differentially influence social anxiety subtypes, empirical evidence remains limited.

Thus, this study aimed to identify distinct developmental pathways of social anxiety by focusing on parental psychological control as a key antecedent. Consistent with previous research emphasizing the role of mediating variables in the relationship between parenting and maladjustment (Barber and Harmon 2002; Young et al. 2003), this study included rejection sensitivity and dysfunctional perfectionism as mediators, both of which have been identified as important factors related to social anxiety (Baumeister and Leary 1995; Levy et al. 2001; Shafran and Mansell 2001). Despite expected interconnections among these variables, relatively few studies have examined their structural relationships comprehensively. Therefore, this study tested whether rejection sensitivity and dysfunctional perfectionism differentially mediate the relationships between parental psychological control and social anxiety subtypes. Unlike previous studies, the present study simultaneously examined two forms of parental psychological control, two cognitive mediators, and two social anxiety subtypes within a single conceptual model. By doing so, it provides a more differentiated understanding of the developmental pathways underlying social anxiety.

Prior research shows that dependency-oriented psychological control, which undermines autonomy and provides conditional emotional acceptance, fosters rejection sensitivity (Soenens and Vansteenkiste 2007). Individuals high in rejection sensitivity tend to experience anxiety in interpersonal contexts involving potential rejection (Levy et al. 2001). In contrast, achievement-oriented psychological control, characterized by high parental standards and disappointment when expectations are unmet, is associated with dysfunctional perfectionism, including fear of failure and devaluation of one's performance. This, in turn, increases anxiety in evaluative performance situations (Burns 1980; Elliot and Thrash 2004).

Based on these theoretical and empirical considerations, the following hypotheses were proposed:

Hypothesis 1. *Dependency-oriented psychological control will influence social interaction anxiety through the mediating effect of rejection sensitivity.*

Hypothesis 2. *Achievement-oriented psychological control will influence performance anxiety through the mediating effect of dysfunctional perfectionism.*

3. Method

3.1. Participants

The participants were 189 undergraduate students enrolled in psychology-related courses at Seoul National University. During regular class sessions, students were invited to participate voluntarily by completing a set of anonymous self-report questionnaires. Participation was voluntary, and no identifying information was collected. Of the participants, 75 were male and 114 were female. Participants ranged in age from 18 to 28 years, with a mean age of 21.47 years ($SD = 2.04$).

3.2. Measures

(1) The Dependency-oriented and Achievement-oriented Psychological Control Scale (DAPCS): To assess perceived parental psychological control, the DAPCS developed by Soenens et al. (2010) was used. The Korean version translated and adapted by Park and Lee (2009) was administered. The DAPCS consists of two subscales: dependency-oriented psychological control (DPC), comprising 8 items, and achievement-oriented psychological control (APC), comprising 9 items. The DPC subscale measures parentally psychologically

controlling behaviors enacted when children fail to display the level of dependence expected by their parents. The APC subscale assesses parental psychologically controlling behaviors exhibited when children fail to achieve the level of accomplishment expected by their parents. All items are rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (always true). In this study, the internal consistency coefficients (Cronbach's α) were 0.90 for overall parental psychological control, 0.79 for dependency-oriented psychological control, and 0.93 for achievement-oriented psychological control.

(2) Liebowitz Social Anxiety Scale (LSAS): Social anxiety was measured using the Liebowitz Social Anxiety Scale (LSAS) developed by Liebowitz (1987). The Korean version translated by Park (2003) was used in this study. The LSAS assesses fear and avoidance in both social interaction situations and performance situations. Participants rated 13 items assessing social interaction situations and 9 items assessing performance situations on a 4-point scale ranging from 0 (not at all anxious) to 3 (extremely anxious). The internal consistency coefficients (Cronbach's α) were 0.95 for overall social anxiety, 0.93 for social interaction anxiety, and 0.91 for performance anxiety.

(3) Rejection Sensitivity Questionnaire (RSQ): Rejection sensitivity was measured using the Rejection Sensitivity Questionnaire (RSQ) developed by Downey and Feldman (1996). The Korean version translated and validated by Lee (2000) was employed in this study. The RSQ presents 18 interpersonal situations commonly encountered in early adulthood in which individuals make requests of others. For each situation, participants rate two dimensions: anxiety about rejection and expectation of rejection, using a 6-point scale ranging from 1 (not at all true) to 6 (very true). A rejection sensitivity score is calculated by multiplying the anxiety-about-rejection score by the expectation-of-rejection score for each situation, summing the resulting products across all 18 situations, and dividing the total by 18. The internal consistency coefficient (Cronbach's α) for rejection sensitivity in this study was 0.78.

(4) Multidimensional Perfectionism Scale (FMPS): Dysfunctional perfectionism was measured using selected subscales of the Multidimensional Perfectionism Scale (FMPS) developed by Frost et al. (1990). Based on previous studies (Dunkley et al. 2000; Slaney et al. 1995), only the subscales considered most relevant to dysfunctional perfectionism were included: Concern Over Mistakes and Doubts About Actions. The scale consisted of 9 items assessing concern over mistakes and 4 items assessing doubts about actions. Items were rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The internal consistency coefficient (Cronbach's α) for dysfunctional perfectionism in this study was 0.88.

3.3. Data Analysis

Data analyses were conducted using IBM SPSS Statistics for Windows (Version 19.0). Descriptive statistics and correlation analyses were performed to examine the characteristics and relationships among the study variables. Differences between correlation coefficients were tested using Fisher's Z transformation (Meng et al. 1992). To test the mediating effects, regression analyses were conducted following the procedure proposed by Baron and Kenny (1986). The statistical significance of the mediating effects was subsequently examined using the Sobel test (Sobel 1982). In addition, Multiple Mediation Script developed by Preacher and Hayes (2008) was employed to compare the relative magnitudes of the mediating effects.

4. Result

4.1. Descriptive Statistics

The means and standard deviations of all study variables obtained from the data of the 189 participants included in the analyses are displayed in Table 1, and the correlation coefficients among the variables are shown in Table 2. As shown in Table 1, no significant gender differences were observed in the mean scores of any of the variables included in the study.

Table 1. Means and Standard Deviations of the Measured Variables.

	Means(Standard Deviations)			<i>t</i>
	Total	Male (<i>n</i> = 75)	Female (<i>n</i> = 114)	
Parental Psychological Control (PC)	34.01 (9.76)	34.31 (10.12)	33.82 (9.55)	0.34
Dependency-oriented Psychological Control (DPC)	17.37 (4.71)	16.80 (4.23)	17.75 (4.98)	−1.36
Achievement-oriented Psychological Control (APC)	16.64 (6.74)	17.51 (7.11)	16.07 (6.45)	1.44
Social Anxiety (SA)	18.37 (9.45)	18.32 (10.18)	18.40 (8.99)	−0.06
Social Interaction Anxiety (SIA)	9.47 (5.67)	9.51 (6.08)	9.43 (5.41)	0.09
Performance Anxiety (PA)	8.90 (4.26)	8.80 (4.47)	8.97 (4.14)	−0.25
Rejection Sensitivity (RS)	9.12 (2.30)	9.27 (2.12)	9.02 (2.42)	0.70
Dysfunctional Perfectionism (DP)	38.68 (9.33)	39.49 (9.65)	38.15 (9.12)	0.96

Table 2. Correlation Coefficients Among the Measured Variables (*N* = 189).

	PC	DPC	APC	SA	SIA	PA	RS	DP
PC	-							
DPC	0.79 ***	-						
APC	0.90 ***	0.44 ***	-					
SA	0.38 ***	0.36 ***	0.30 ***	-				
SIA	0.38 ***	0.31 ***	0.33 ***	0.95 ***	-			
PA	0.35 ***	0.37 ***	0.25 ***	0.96 ***	0.80 ***	-		
RS	0.28 ***	0.30 ***	0.19 *	0.50 ***	0.48 ***	0.47 ***	-	
DP	0.37 ***	0.27 ***	0.36 ***	0.62 ***	0.59 ***	0.59 ***	0.35 ***	-

* $p < 0.05$ *** $p < 0.001$.

As shown in Table 2, social interaction anxiety showed significant positive correlations with dependency-oriented psychological control ($r = 0.31$, $p < 0.001$), achievement-oriented psychological control ($r = 0.33$, $p < 0.001$), rejection sensitivity ($r = 0.48$, $p < 0.001$), and dysfunctional perfectionism ($r = 0.59$, $p < 0.001$). Similarly, performance anxiety also showed significant positive correlations with dependency-oriented psychological control ($r = 0.37$, $p < 0.001$), achievement-oriented psychological control ($r = 0.25$, $p < 0.001$), rejection sensitivity ($r = 0.47$, $p < 0.001$), and dysfunctional perfectionism ($r = 0.59$, $p < 0.001$).

Rejection sensitivity showed a higher correlation with dependency-oriented psychological control ($r = 0.30$, $p < 0.001$) than with achievement-oriented psychological control ($r = 0.19$, $p < 0.05$). However, the difference between these correlation coefficients was not statistically significant according to Steiger's *Z* test ($Z = -1.48$, ns.). Similarly, dysfunctional perfectionism showed a higher correlation with achievement-oriented psychological control ($r = 0.36$, $p < 0.001$) than with dependency-oriented psychological control ($r = 0.27$, $p < 0.001$), but this difference was also not statistically significant ($Z = -1.23$, ns.).

In addition, the difference between the correlations of dependency-oriented psychological control with the two types of anxiety was not statistically significant ($Z = -1.39$, ns.).

Likewise, the difference between the correlations of achievement-oriented psychological control and the two types of anxiety was also not significant ($Z = 1.81$, ns.).

4.2. Mediation Effects of Rejection Sensitivity and Dysfunctional Perfectionism in the Relationship Between Parental Psychological Control and Social Anxiety

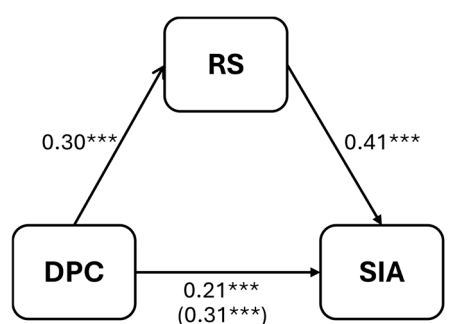
(1) Mediation Effects of Rejection Sensitivity and Dysfunctional Perfectionism in the Relationship Between Dependency-Oriented Psychological Control and Social Interaction Anxiety

To examine the mediating effects of rejection sensitivity and dysfunctional perfectionism in the relationship between dependency-oriented psychological control and social interaction anxiety, regression analyses were conducted following the procedure proposed by Baron and Kenny (1986). As shown in Table 3, in Step 1, dependency-oriented psychological control significantly predicted the mediator, rejection sensitivity ($\beta = 0.30$, $p < 0.001$). In Step 2, dependency-oriented psychological control significantly predicted social interaction anxiety ($\beta = 0.31$, $p < 0.001$). In Step 3, rejection sensitivity remained a significant predictor of social interaction anxiety even after controlling for dependency-oriented psychological control ($\beta = 0.41$, $p < 0.001$). The effect of dependency-oriented psychological control on social interaction anxiety decreased from Step 2 ($\beta = 0.31$, $p < 0.001$) to Step 3 ($\beta = 0.21$, $p < 0.01$) after controlling for rejection sensitivity. To test the statistical significance of this mediating effect, the Sobel test was conducted, and the result indicated that the mediation effect was statistically significant ($Z = 2.75$, $p < 0.001$). These findings demonstrate that rejection sensitivity partially mediates the relationship between dependency-oriented psychological control and social interaction anxiety (See Figure 1).

Table 3. Mediation Effect of RS in the Relationship Between DPC and SIA.

	B	β	R ²	F
Step 1: DPC $\rightarrow$ RS	0.15	0.30 ***	0.09	16.42 ***
Step 2: DPC $\rightarrow$ SIA	0.37	0.31 ***	0.10	19.72 ***
Step 3:				
DPC $\rightarrow$ SIA	0.25	0.21 **	0.27	30.25 ***
RS $\rightarrow$ SIA	1.00	0.41 ***		

** $p < 0.01$. *** $p < 0.001$.



*** $p < 0.001$

Figure 1. The mediating effect of RS in the relationship between DPC and SIA (Note. Values for paths are standardized β coefficients. Values in parentheses represent regression coefficients prior to the inclusion of the mediator (DP)).

Given that both dependency-oriented psychological control and social interaction anxiety showed similar correlations with dysfunctional perfectionism, an additional analysis was conducted to examine whether dysfunctional perfectionism also mediates this relationship. The results showed that in Step 1, dependency-oriented psychological con-

trol significantly predicted dysfunctional perfectionism ($\beta = 0.27, p < 0.001$). In Step 2, dependency-oriented psychological control significantly predicted social interaction anxiety ($\beta = 0.31, p < 0.001$). In Step 3, dysfunctional perfectionism significantly predicted social interaction anxiety even after controlling for dependency-oriented psychological control ($\beta = 0.55, p < 0.001$). The effect of dependency-oriented psychological control on social interaction anxiety decreased from Step 2 ($\beta = 0.31, p < 0.001$) to Step 3 ($\beta = 0.17, p < 0.001$) after controlling for dysfunctional perfectionism. However, the Sobel test indicated that this indirect effect was not statistically significant ($Z = 1.88, ns.$).

Only rejection sensitivity was found to significantly mediate the relationship between dependency-oriented psychological control and social interaction anxiety. These findings support Hypothesis 1.

(2) Mediation Effects of Dysfunctional Perfectionism and Rejection Sensitivity in the Relationship Between Achievement-Oriented Psychological Control and Performance Anxiety

The results of the mediation analysis examining the effect of dysfunctional perfectionism in the relationship between achievement-oriented psychological control and performance anxiety are displayed in Table 4. In Step 1, achievement-oriented psychological control significantly predicted the mediator, dysfunctional perfectionism ($\beta = 0.36, p < 0.001$). In Step 2, achievement-oriented psychological control significantly predicted performance anxiety ($\beta = 0.25, p < 0.01$). In Step 3, the mediator, dysfunctional perfectionism, remained a significant predictor of performance anxiety even after controlling for achievement-oriented psychological control ($\beta = 0.57, p < 0.001$). In this step, the effect of achievement-oriented psychological control on performance anxiety became non-significant ($\beta = 0.05, ns.$), indicating that dysfunctional perfectionism fully mediated the relationship between achievement-oriented psychological control and performance anxiety (See Figure 2). The Sobel test confirmed that this mediating effect was statistically significant ($Z = 3.70, p < 0.001$).

Table 4. Mediation Effect of DP in the Relationship Between APC and PA.

	B	β	R²	F
Step 1: APC $\rightarrow$ FMPS	0.50	0.36 ***	0.13	27.15 ***
Step 2: APC $\rightarrow$ PA	0.16	0.25 ***	0.06	12.18 ***
Step 3:				
APC $\rightarrow$ PA	0.03	0.05	0.35	48.65 ***
FMPS $\rightarrow$ PA	0.26	0.57 ***		

*** $p < 0.001$.

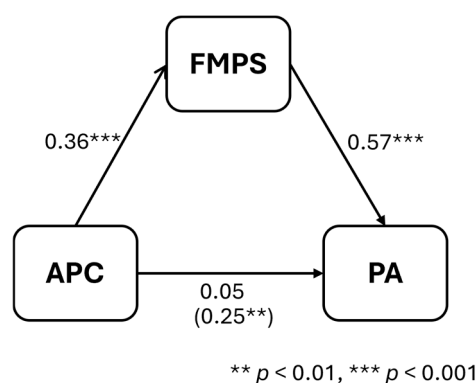


Figure 2. The mediating effect of DP in the relationship between APC and PA (Note. Values for paths are standardized β coefficients. Values in parentheses represent regression coefficients prior to the inclusion of the mediator (DP)).

Based on the correlation analysis, achievement-oriented psychological control and performance anxiety showed significant correlations with rejection sensitivity. Accordingly, an additional analysis was conducted to examine whether rejection sensitivity mediates the relationship between achievement-oriented psychological control and performance anxiety. As shown in Table 5, rejection sensitivity partially mediated the relationship between achievement-oriented psychological control and performance anxiety. The effect decreased from $\beta = 0.25$ to $\beta = 0.16$ after the inclusion of the mediator, and the mediating effect was statistically significant ($Z = 6.96, p < 0.001$).

Table 5. Mediation Effect of RS in the Relationship Between APC and PA.

	B	β	R ²	F
Step 1: APC → RS	0.07	0.19 *	0.04	6.30 ***
Step 2: APC → PA	0.16	0.25 **	0.06	12.18 **
Step 3:				
APC → PA	0.01	0.16 *	0.24	26.43 ***
RS → PA	0.09	0.44 ***		

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

In other words, it was found that in the relationship between achievement-oriented psychological control and performance anxiety, dysfunctional perfectionism functioned as a full mediator, whereas rejection sensitivity functioned as a partial mediator. Therefore, a Multiple Mediation Script (Preacher and Hayes 2008) was used to compare the relative magnitudes of these mediating effects. As shown in Table 6, the mediating effect of dysfunctional perfectionism in the relationship between achievement-oriented psychological control and performance anxiety was significantly greater than that of rejection sensitivity ($Z = 3.58, p < 0.001$). These findings provide partial support for Hypothesis 2.

Table 6. Comparison of the Mediating Effects of DP and RS in the Relationship Between APC and PA.

		Bootstrapping					
		Product of Coefficients		Percentile 95% CI		BC 95% CI	
	Point Estimate	SE	Z	Lower	Upper	Lower	Upper
Indirect Effects							
FMPS	0.09	0.03	3.58	0.05	0.15	0.05	0.15
RS	0.04	0.01	1.39	0.00	0.08	0.00	0.09
Total	0.13	0.03	4.98	0.07	0.20	0.07	0.20

BC = Bias Corrected. 1000 bootstrap samples.

Although not included in the hypotheses, additional analyses revealed that in the relationships between dependency-oriented psychological control and performance anxiety, as well as between achievement-oriented psychological control and social interaction anxiety, both rejection sensitivity and dysfunctional perfectionism partially mediated the associations. Moreover, the mediating effect of dysfunctional perfectionism was found to be stronger in both cases. In other words, the distinct effects of parental psychological control, rejection sensitivity, and dysfunctional perfectionism across the subtypes of social anxiety were not particularly pronounced. Therefore, additional analyses were conducted by combining the subtypes of social anxiety and examining the mediating effects of rejection sensitivity and dysfunctional perfectionism in the overall relationship between parental psychological control and social anxiety.

(3) Mediation Effects of Rejection Sensitivity and Dysfunctional Perfectionism in the Relationship Between Parental Psychological Control and Social Anxiety

In the relationship between parental psychological control and social anxiety, rejection sensitivity showed a partial mediating effect. The effect decreased from $\beta = 0.38$ to $\beta = 0.27$, and the mediation effect was statistically significant ($Z = 3.39$, $p < 0.001$; see Table 7). Similarly, dysfunctional perfectionism also partially mediated the relationship between parental psychological control and social anxiety. The effect decreased from $\beta = 0.38$ to $\beta = 0.18$, and the mediation effect was statistically significant ($Z = 4.92$, $p < 0.001$; see Table 8). A comparison of the relative magnitudes of the mediating effects showed that dysfunctional perfectionism had a significantly stronger mediating effect than rejection sensitivity in the relationship between parental psychological control and social anxiety ($Z = 1.01$, $p < 0.001$; see Table 9).

Table 7. Mediation Effect of RS in the Relationship Between PC and SA.

	B	β	R ²	F
Step 1: DAPCS $\rightarrow$ RS	1.14	0.28 ***	0.08	13.73 ***
Step 2: DAPCS $\rightarrow$ SAD	0.29	0.38 ***	0.15	31.73 ***
Step 3: DAPCS $\rightarrow$ SAD	0.20	0.27 ***	0.32	38.35 ***
RS $\rightarrow$ SAD	0.08	0.43 ***		

*** $p < 0.001$.

Table 8. Mediation Effect of Dysfunctional Perfectionism in the Relationship Between PC and SA.

	B	β	R ²	F
Step 1: DAPCS $\rightarrow$ FMPS	0.30	0.37 ***	0.14	30.23 ***
Step 2: DAPCS $\rightarrow$ SAD	0.29	0.38 ***	0.15	31.73 ***
Step 3: DAPCS $\rightarrow$ SAD	0.14	0.18 **	0.41	64.27 ***
FMPS $\rightarrow$ SAD	0.33	0.55 ***		

** $p < 0.01$. *** $p < 0.001$.

Table 9. Comparison of the Mediating Effects of RS and DP in the Relationship Between PC and SA.

Bootstrapping							
Product of Coefficients				Percentile 95% CI		BC 95% CI	
Point Estimate	SE	Z		Lower	Upper	Lower	Upper
Indirect Effects							
RS	0.06	0.02	0.56	0.02	0.11	0.02	0.12
FMPS	0.11	0.03	1.01	0.06	0.18	0.06	0.18
Total	0.18	0.04	1.58	0.11	0.26	0.10	0.26

BC = Bias Corrected. 1000 bootstrap samples.

5. Discussion and Conclusions

This study examined whether components of parental psychological control, rejection sensitivity, and dysfunctional perfectionism differentially influence social anxiety subtypes. Results supported Hypothesis 1, as only rejection sensitivity partially mediated the relationship between dependency-oriented psychological control and social interaction anxiety. Children exposed to dependency-oriented control tend to prioritize parental needs, suppress their own emotions, and avoid rejection (Ayduk et al. 2003), often adjusting themselves to others in relationships (Ayduk et al. 2009). When parents are non-accepting, children may develop heightened concerns about acceptance, increasing rejection sensitivity, negative interpretation of ambiguous cues, and anxiety in social interactions (Dodge

and Somberg 1987; Downey and Feldman 1996; Levy et al. 2001; Soenens and Vansteenkiste 2010; Zimmer-Gembeck et al. 2016).

Hypothesis 2 was also supported, as dysfunctional perfectionism mediated the relationship between achievement-oriented psychological control and performance anxiety. Parental disappointment and pressure to improve may foster dissatisfaction with performance and a need for approval through perfectionistic striving (Elliot and Thrash 2004; Curran and Hill 2019). Consistent with prior research, individuals high in perfectionism show excessive concern over mistakes, self-critical evaluation, and heightened anxiety in performance contexts (Egan et al. 2011; Limburg et al. 2017).

The two components of parental psychological control showed different developmental tendencies. Dependency-oriented control was more strongly associated with rejection sensitivity, whereas achievement-oriented control was more strongly associated with dysfunctional perfectionism. This aligns with evidence linking non-accepting and autonomy-undermining parenting to rejection sensitivity (Barber 1996; Downey and Feldman 1996; Soenens and Vansteenkiste 2010; Zimmer-Gembeck et al. 2016; Gao et al. 2024) and linking conditional approval to perfectionism development (Burns 1980; Damian et al. 2013; Egan et al. 2011; Curran and Hill 2019).

However, rejection sensitivity also partially mediated the relationship between achievement-oriented psychological control and performance anxiety. In addition, both mediators showed partial effects in pathways involving the opposite subtype combinations and when social anxiety was not differentiated, implying limited subtype specificity.

One explanation is the ecological overlap between social interaction anxiety and performance anxiety. Prior research indicates high comorbidity between the two (Cox et al. 2008; Holt et al. 1992; Knappe et al. 2011), and substantial empirical overlap has been reported despite conceptual distinctions (Habke et al. 1997; Crome et al. 2010; Andreoli et al. 2026). The high correlation observed in this study also indicates limited independence between subtypes.

Another possible explanation is that the variables examined in this study are not independent constructs but are highly interrelated. For example, individuals high in perfectionism tend to seek approval from others and avoid criticism and rejection, indicating close associations between rejection sensitivity and perfectionism (Rudich et al. 2007; Wade 2017; Wu and Wei 2008; Flett et al. 2016; Levine and Milyavskaya 2018). In addition, both dependency-oriented and achievement-oriented psychological control have been linked to perfectionistic family environments (Park and Lee 2009; Soenens and Vansteenkiste 2010), and parental psychological control has been reported to contribute to self-critical tendencies and perfectionism in children (Damian et al. 2013).

Furthermore, the self-critical evaluative tendencies of perfectionism may lead to maladaptive behaviors and social withdrawal not only in achievement contexts but also in interpersonal contexts, resulting in emotional isolation (Burns 1980; Limburg et al. 2017). The core components of dysfunctional perfectionism—concern over mistakes and doubts about actions—are also closely related to interpersonal and social anxiety (Egan et al. 2011; Smith et al. 2018; Rozental 2020). These findings indicate that dysfunctional perfectionism may be associated not only with performance anxiety but also with social interaction anxiety.

Third, because the participants were a non-clinical sample, subtype differences in social anxiety may not have been sufficiently pronounced. In clinical populations, more distinct patterns among parental psychological control, rejection sensitivity, and dysfunctional perfectionism may emerge depending on social anxiety subtypes; therefore, further research with clinical samples is needed. In addition, although the participants represented diverse personal and family backgrounds, they were recruited from psychology-related courses

at a single university. Students enrolled in psychology-related courses may differ from the general population in their awareness of psychological constructs and willingness to disclose psychological experiences. Therefore, caution is warranted when generalizing the findings to other age groups, educational backgrounds, or community populations. Future studies could also recruit participants from more diverse academic disciplines and community samples.

Fourth, although self-report measures are appropriate for assessing subjective constructs such as perceived parental psychological control and social anxiety, the exclusive use of self-report questionnaires may have introduced response biases, including exaggeration, minimization, recall bias, social desirability, and shared method variance, potentially attenuating the observed relationships among the variables. Future research lines could be incorporating multiple assessment methods, including behavioral observations, clinician ratings, and reports from parents or peers.

Finally, because the participants were emerging adults, perceptions of parenting and social anxiety may have been influenced by developmental transitions characteristic of emerging adulthood, which may further limit the generalizability of the findings.

Despite these limitations, the present study has several important contributions. First, it differentiated parental psychological control into dependency-oriented and achievement-oriented components and examined their distinct relationships with social anxiety subtypes. Second, the present study extends previous research by demonstrating that rejection sensitivity and dysfunctional perfectionism function as distinct mediating mechanisms linking different forms of parental psychological control to different social anxiety subtypes, thereby providing a more differentiated understanding of the developmental pathways underlying social anxiety.

Future research should use longitudinal designs to clarify the causal relationships among parental psychological control, rejection sensitivity, dysfunctional perfectionism, and social anxiety. In addition, studies should assess parental psychological control from both parents' and children's perspectives and include both non-clinical and clinical populations. Finally, future research should further examine whether the developmental pathways identified in the present study are replicated in populations exposed to more severe adverse family environments, including those involving severe forms of psychologically controlling parenting.

Author Contributions: Conceptualization, S.P. (Shinyoung Park); methodology, S.P. (Shinyoung Park); software, S.P. (Soyoung Park); validation, S.P. (Soyoung Park); formal analysis, S.P. (Shinyoung Park); investigation, S.P. (Shinyoung Park); resources, S.P. (Shinyoung Park); data curation, S.P. (Shinyoung Park); writing—original draft preparation, S.P. (Shinyoung Park); writing—review and editing, S.P. (Soyoung Park); visualization, S.P. (Soyoung Park); supervision, S.P. (Soyoung Park). All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: This study involved a self-report questionnaire design and was reviewed by the Institutional Review Board (IRB) of Seoul National University, Korea. The study received exemption from full ethical review (Approval No. E1310/001-010, Approval Date: 21 October 2013) prior to data collection, and all procedures were conducted in accordance with institutional ethical guidelines.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The datasets generated and analyzed during the current study are not publicly available due to participant confidentiality but are available from the corresponding author upon reasonable request.

Conflicts of Interest: The authors declare no conflicts of interest.

References

- American Psychiatric Association. 2022. *Diagnostic and Statistical Manual of Mental Disorders*, 5th text rev. ed. DSM-5-TR. Washington, DC: American Psychiatric Association Publishing.
- Andreoli, Giovanbattista, Chantal Kasch, Cameron E. Lindsay, and Stefan G. Hofmann. 2026. Pharmacological strategies for treating social anxiety disorder in adults: A systematic review of studies published since 2015. *Expert Review of Neurotherapeutics* 26: 185–96. [\[CrossRef\]](#)
- Ayduk, Ozlem, Danielle May, Geraldine Downey, and E. Tory Higgins. 2003. Tactical differences in coping with rejection sensitivity: The role of prevention pride. *Personality and Social Psychology Bulletin* 29: 435–48. [\[CrossRef\]](#)
- Ayduk, Özlem, Anett Gyurak, and Anna Luerssen. 2009. Rejection sensitivity moderates the impact of rejection on self-concept clarity. *Personality and Social Psychology Bulletin* 35: 1467–78. [\[CrossRef\]](#)
- Barber, Brian K. 1996. Parental psychological control: Revisiting a neglected construct. *Child Development* 67: 3296–319. [\[CrossRef\]](#)
- Barber, Brian K., and Elizabeth Lovelady Harmon. 2002. *Violating the Self: Parental Psychological Control of Children and Adolescents*. Washington, DC: American Psychological Association.
- Baron, Reuben M., and David A. Kenny. 1986. The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology* 51: 1173. [\[CrossRef\]](#) [\[PubMed\]](#)
- Baumeister, Roy F., and Mark R. Leary. 1995. The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin* 117: 497. [\[CrossRef\]](#)
- Bögels, Susan M., Lynn Alden, Deborah C. Beidel, Lee Anna Clark, Daniel S. Pine, Murray B. Stein, and Marisol Voncken. 2010. Social anxiety disorder: Questions and answers for the DSM-V. *Depression and Anxiety* 27: 168–89. [\[CrossRef\]](#)
- Brozovich, Faith, and Richard G. Heimberg. 2011. The relationship of post-event processing to self-evaluation of performance in social anxiety. *Behaviour Therapy* 42: 224–35. [\[CrossRef\]](#)
- Bruce, Steven E., Kimberly A. Yonkers, Michael W. Otto, Jane L. Eisen, Risa B. Weisberg, Maria Pagano, M. Tracie Shea, and Martin B. Keller. 2005. Influence of psychiatric comorbidity on recovery and recurrence in generalized anxiety disorder, social phobia, and panic disorder: A 12-year prospective study. *The American Journal of Psychiatry* 162: 1179. [\[CrossRef\]](#)
- Bruch, Monroe A., and Richard G. Heimberg. 1994. Differences in perceptions of parental and personal characteristics between generalized and nongeneralized social phobics. *Journal of Anxiety Disorders* 8: 155–68. [\[CrossRef\]](#)
- Burns, David D. 1980. The perfectionist's script for self-defeat. *Psychology Today* 14: 34–52.
- Cook, Sarina I., Susan Moore, Christina Bryant, and Lisa J. Phillips. 2022. The role of fear of positive evaluation in social anxiety: A systematic review and meta-analysis. *Clinical Psychology: Science and Practice* 29: 352–69. [\[CrossRef\]](#)
- Cox, Brian J., Ian P. Clara, Jitender Sareen, and Murray B. Stein. 2008. The structure of feared social situations among individuals with a lifetime diagnosis of social anxiety disorder in two independent nationally representative mental health surveys. *Behaviour Research and Therapy* 46: 477–86. [\[CrossRef\]](#)
- Cox, Sarah L., and Junwen Chen. 2014. Perfectionism: A contributor to social anxiety and its cognitive processes. *Australian Journal of Psychology* 66: 231–40. [\[CrossRef\]](#)
- Crome, Erica, Andrew Baillie, Tim Slade, and Ayelet Meron Ruscio. 2010. Social phobia: Further evidence of dimensional structure. *Australian and New Zealand Journal of Psychiatry* 44: 1012–20. [\[CrossRef\]](#)
- Curran, Thomas, and Andrew P. Hill. 2019. Perfectionism is increasing over time: A meta-analysis of birth cohort differences from 1989 to 2016. *Psychological Bulletin* 145: 410–29. [\[CrossRef\]](#)
- Dalrymple, Kristy, and Catherine D'Avanzato. 2013. Differentiating the subtypes of social anxiety disorder. *Expert Review of Neurotherapeutics* 13: 1271–83. [\[CrossRef\]](#)
- Damian, Lavinia E., Joachim Stoeber, Oana Negru-Subtirica, and Adriana Băban. 2013. On the development of perfectionism: The longitudinal role of academic achievement and parental expectations. *Journal of Personality* 81: 688–700. [\[CrossRef\]](#)
- D'Avanzato, Catherine, and Kristy L. Dalrymple. 2016. Recent insight into the subtypes of social anxiety disorder. *Current Psychiatry Reports* 18: 50. [\[CrossRef\]](#)
- Dodge, Kenneth A., and Daniel R. Somberg. 1987. Hostile attributional biases among aggressive boys are exacerbated under conditions of threats to the self. *Child Development* 58: 213–24. [\[CrossRef\]](#)
- Downey, Geraldine, and Scott I. Feldman. 1996. Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology* 70: 1327. [\[CrossRef\]](#)
- Downey, Geraldine, Hala Khouri, and Scott I. Feldman. 1997. *Early Interpersonal Trauma and Later Adjustment: The Mediation Role of Rejection Sensitivity*. Rochester: University of Rochester Press.
- Dunkley, David M., Kirk R. Blankstein, Jennifer Halsall, Meredith Williams, and Gary Winkworth. 2000. The relation between perfectionism and distress: Hassles, coping, and perceived social. *Journal of Counseling Psychology* 47: 437. [\[CrossRef\]](#)

- Egan, Sarah J., Tracey D. Wade, and Roz Shafran. 2011. Perfectionism as a transdiagnostic process: A clinical review. *Clinical Psychology Review* 31: 203–12. [\[CrossRef\]](#)
- Elliot, Andrew J., and Todd M. Thrash. 2004. The intergenerational transmission of fear of failure. *Personality and Social Psychology Bulletin* 30: 957–71. [\[CrossRef\]](#)
- Feldman, Scott, and Geraldine Downey. 1994. Rejection sensitivity as a mediator of the impact of childhood exposure to family violence on adult attachment behavior. *Development and Psychopathology* 6: 231–47. [\[CrossRef\]](#)
- Flett, Gordon L., Paul L. Hewitt, Avi Besser, Chang Su, Tracy Vaillancourt, Daniel Boucher, Yvette Munro, Lisa A. Davidson, and Olga Gale. 2016. The Child–Adolescent Perfectionism Scale: Development, psychometric properties, and associations with stress, distress, and psychiatric symptoms. *Journal of Psychoeducational Assessment* 34: 634–52. [\[CrossRef\]](#)
- Flett, Gordon L., Paul L. Hewitt, Norman S. Endler, and Chiara Tassone. 1994. Perfectionism and components of state and trait anxiety. *Current Psychology* 13: 326–50. [\[CrossRef\]](#)
- Fresco, David M., and Richard G Heimberg. 2001. Empirically supported psychological treatments for social phobia. *Psychiatric Annals* 31: 489–500. [\[CrossRef\]](#)
- Frost, Randy O., Patricia Marten, Cathleen Lahart, and Robin Rosenblate. 1990. The dimensions of perfectionism. *Cognitive Therapy and Research* 14: 449–68. [\[CrossRef\]](#)
- Gao, Shuling, Mark Assink, Chongzeng Bi, and Ko Ling Chan. 2024. Child maltreatment as a risk factor for rejection sensitivity: A three-level meta-analytic review. *Trauma, Violence, & Abuse* 25: 568–84. [\[CrossRef\]](#)
- Goldfried, Marvin R., and Donald Sobocinski. 1975. Effect of irrational beliefs on emotional arousal. *Journal of Consulting and Clinical Psychology* 43: 504. [\[CrossRef\]](#)
- Habke, A. Marie, Paul L. Hewitt, G. Ron Norton, and Gordon J. G. Asmundson. 1997. The Social Phobia and Social Interaction Anxiety Scales: An exploration of the dimensions of social anxiety and sex differences in structure and relations with pathology. *Journal of Psychopathology and Behavioral Assessment* 19: 21–39. [\[CrossRef\]](#)
- Heimberg, Richard G., Gregory P. Mueller, Craig S. Holt, Debra A. Hope, and Michael R. Liebowitz. 1993. Assessment of anxiety in social interaction and being observed by others: The Social Interaction Anxiety Scale and the Social Phobia Scale. *Behavior Therapy* 23: 53–73. [\[CrossRef\]](#)
- Hewitt, Paul L., and Gordon L. Flett. 1991. Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology* 60: 456–70. [\[CrossRef\]](#)
- Hollender, Marc H. 1965. Perfectionism. *Comprehensive Psychiatry* 6: 94–103. [\[CrossRef\]](#)
- Holt, Craig S., Richard G. Heimberg, Debra A. Hope, and Michael R. Liebowitz. 1992. Situational domains of social phobia. *Journal of Anxiety Disorders* 6: 63–77. [\[CrossRef\]](#)
- Johnson, Helena S., Heidi M. Inderbitzen-Nolan, and Ann M. Schapman. 2005. A comparison between socially anxious and depressive symptomatology in youth: A focus on perceived family environment. *Journal of Anxiety Disorders* 19: 423–42. [\[CrossRef\]](#)
- Kessler, Ronald C., Gavin Andrews, Daniel Mroczek, Bedirhan Ustun, and Hans-Ulrich Wittchen. 1998. The World Health Organization Composite International Diagnostic Interview Short-Form (CIDI-SF). *International Journal of Methods in Psychiatric Research* 7: 171–85. [\[CrossRef\]](#)
- Kim, Na Y., and Yu J. Cho. 2009. The mediation effect of self-concept on the relationship between rejection sensitivity and interpersonal anxiety in college students. *Korean Journal of Human Development* 16: 149–62.
- Knappe, Susanne, Katja Beesdo-Baum, Lydia Fehm, Murray B. Stein, Roselind Lieb, and Hans-Ulrich Wittchen. 2011. Social fear and social phobia types among community youth: Differential clinical features and vulnerability factors. *Journal of Psychiatric Research* 45: 111–20. [\[CrossRef\]](#)
- Leary, Mark R. 1983. Social anxiousness: The construct and its measurement. *Journal of Personality Assessment* 47: 66–75. [\[CrossRef\]](#)
- Lee, Bok D. 2000. Adult Attachment and Satisfaction in Romantic Relationships: The Mediating Roles of Rejection Sensitivity and Attributional Style. Unpublished Master's thesis, Korea University, Seoul, Republic of Korea.
- Lei, Yi, Yuan-Yuan Wang, Jia-Ming Wan, Chetna Patel, and Hong Li. 2023. Negative parent-related family interactions and child social anxiety: A meta-analysis. *Journal of Anxiety Disorders* 99: 102771. [\[CrossRef\]](#)
- Leichsenring, Falk, and Frank Leweke. 2017. Social anxiety disorder. *The Lancet Psychiatry* 4: 1005–17. [\[CrossRef\]](#)
- Levine, Shelby L., and Marina Milyavskaya. 2018. Domain-specific perfectionism: An examination of perfectionism beyond the trait level and its link to well-being. *Journal of Research in Personality* 74: 56–65. [\[CrossRef\]](#)
- Levy, Sheri R., Ozlem Ayduk, and Geraldine Downey. 2001. The Role of Rejection Sensitivity in People's Relationships with Significant others and valued social groups. In *Interpersonal Rejection*. Edited by Mark R. Leary. Oxford: Oxford University Press: pp. 251–89.
- Liebowitz, Michael R. 1987. Social phobia. *Modern Problems of Pharmacopsychiatry* 22: 141–73. [\[CrossRef\]](#)
- Limburg, Karina, Hunna J. Watson, Martin S. Hagger, and Sarah J. Egan. 2017. The relationship between perfectionism and psychopathology: A meta-analysis. *Journal of Clinical Psychology* 73: 1301–26. [\[CrossRef\]](#)
- McLeod, Bryce D., Jeffrey J. Wood, and John R. Weisz. 2007. Examining the association between parenting and childhood anxiety: A meta-analysis. *Clinical Psychology Review* 27: 155–72. [\[CrossRef\]](#)

- Meng, Xiao-Li, Robert Rosenthal, and Donald B. Rubin. 1992. Comparing correlated correlation coefficients. *Psychological Bulletin* 111: 172. [\[CrossRef\]](#)
- Mor, Shulamit, Hy I. Day, Gordon L. Flett, and Paul L. Hewitt. 1995. Perfectionism, control, and components of performance anxiety in professional artists. *Cognitive Therapy and Research* 19: 207–25. [\[CrossRef\]](#)
- Olgati, Paolo, Maria Luca, Antonina Luca, Antonino Messina, Daniel Souery, Siegfried Kasper, Joseph Zohar, Stuart Montgomery, Panagiotis Ferentinos, Dan Rujescu, and et al. 2026. Prognostic implications of social anxiety comorbidity in major depressive disorder: Evidence from three large samples with adult and older patients. *Journal of Affective Disorders* 402: 121308. [\[CrossRef\]](#)
- Park, Sun Y. 2003. Classification of social anxiety-provoking situations and differential characteristics of social anxiety subtypes. Master's thesis, Seoul National University, Seoul, Republic of Korea.
- Park, Sung Y., and Eun K. Lee. 2009. Validity of parental psychological control components in adolescents: Separation anxiety psychological control and achievement-oriented psychological control. *Korean Journal of Child Studies* 30: 211–29.
- Preacher, Kristopher J., and Andrew F. Hayes. 2008. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods* 40: 879–91. [\[CrossRef\]](#) [\[PubMed\]](#)
- Rapee, Ronald M. 2012. Family factors in the development and management of anxiety disorders. *Clinical child and family psychology review* 15: 69–80. [\[CrossRef\]](#)
- Rozental, Alexander. 2020. Beyond perfect? A case illustration of working with perfectionism using cognitive behavior therapy. *Journal of Clinical Psychology* 76: 2041–54. [\[CrossRef\]](#)
- Rudich, Eric A., Constantine Sedikides, and Aiden P. Gregg. 2007. Self-esteem moderates preferences for accepting versus rejecting interaction partners. *European Journal of Social Psychology* 37: 955–67. [\[CrossRef\]](#)
- Ryan, Katherine M., Melanie J. Zimmer-Gembeck, Tanya Hawes, Taylor Kovacs, and Nicola Leahy. 2026. Intrusive parenting and adolescent internalizing symptoms: Meta-analytic review. *Clinical Child and Family Psychology Review* 29: 105–27. [\[CrossRef\]](#)
- Ryan, Richard M., and Edward L. Deci. 2021. Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness. *Rajagiri Management Journal* 15: 88–90.
- Schlenker, Barry R., and Mark R. Leary. 1982. Social anxiety and self-presentation: A conceptualization model. *Psychological bulletin* 92: 641. [\[CrossRef\]](#)
- Shafran, Roz, and Warren Mansell. 2001. Perfectionism and psychopathology: A review of research and treatment. *Clinical psychology review* 21: 879–906. [\[CrossRef\]](#)
- Shumaker, Erik A., and Thomas L. Rodebaugh. 2009. Perfectionism and social anxiety: Rethinking the role of high standards. *Journal of Behavior Therapy and Experimental Psychiatry* 40: 423–33. [\[CrossRef\]](#)
- Slaney, Robert B., Jeffrey S. Ashby, and Joseph Trippi. 1995. Perfectionism: Its measurement and career relevance. *Journal of Career Assessment* 3: 279–97. [\[CrossRef\]](#)
- Smith, Martin M., Vanja Vidovic, Simon B. Sherry, Sherry H. Stewart, and Donald H. Saklofske. 2018. Are perfectionism dimensions risk factors for anxiety symptoms? A meta-analysis of 11 longitudinal studies. *Anxiety, Stress, & Coping* 31: 4–20. [\[CrossRef\]](#)
- Sobel, Michael E. 1982. Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology* 13: 290–312. [\[CrossRef\]](#)
- Soenens, Bart, and Maarten Vansteenkiste. 2007. Distinguishing among types of psychological control: Separation-anxious versus achievement-oriented psychological control. Paper presented at the Biennial Meeting of the Society for Research on Child Development (SRCD), Boston, MA, USA, 29 March–1 April.
- Soenens, Bart, and Maarten Vansteenkiste. 2010. A theoretical upgrade of the concept of parental psychological control. *Developmental Review* 30: 74–99. [\[CrossRef\]](#)
- Soenens, Bart, Maarten Vansteenkiste, Bart Duriez, and Luc Goossens. 2006. In search of the sources of psychologically controlling parenting: The role of parental separation anxiety and parental maladaptive perfectionism. *Journal of Research on Adolescence* 16: 539–59. [\[CrossRef\]](#)
- Soenens, Bart, Maarten Vansteenkiste, and Patrick Luyten. 2010. Toward a domain-specific approach to the study of parental psychological control: Distinguishing between dependency-oriented and achievement-oriented psychological control. *Journal of personality* 78: 217–56. [\[CrossRef\]](#)
- Sun, Linghan, Xu Dai, Shunshun Zhu, Zhengjie Liu, and Zhongming Zhang. 2025. Psychotherapies for social anxiety disorder in adults: A systematic review and Bayesian network meta-analysis. *Journal of Affective Disorders* 378: 301–19. [\[CrossRef\]](#)
- Turner, Samuel M., Deborah C. Beidel, and Ruth M. Townsley. 1992. Social phobia: A comparison of specific and generalized subtypes and avoidant personality disorder. *Journal of Abnormal Psychology* 101: 326. [\[CrossRef\]](#)
- Wade, Tracey D. 2017. Prevention of perfectionism in youth. In *The Psychology of Perfectionism: Theory, Research, Applications*. Edited by Joachim Stoeber. New York: Routledge, pp. 265–83.
- Waite, Polly, Lauren Whittington, and Cathy Creswell. 2014. Parent-child interactions and adolescent anxiety: A systematic review. *Psychological Reports* a1: 51–76. [\[CrossRef\]](#)

- Wood, Jeffrey J. 2006. Parental intrusiveness and children's separation anxiety in a clinical sample. *Child Psychiatry and Human Development* 37: 73–87. [[CrossRef](#)]
- Wu, Tsui F., and Meifen Wei. 2008. Perfectionism and negative mood: The mediating roles of validation from others versus self. *Journal of counseling Psychology* 55: 276. [[CrossRef](#)]
- Yap, Marie Bee Hui, Pamela Doreen Pilkington, Siobhan Mary Ryan, and Anthony Francis Jorm. 2014. Parental factors associated with depression and anxiety in young people: A systematic review. *Journal of Affective Disorders* 156: 8–23. [[CrossRef](#)]
- Young, Jeffrey E., Janet S. Klosko, and Marjorie E. Weishaar. 2003. *Schema Therapy: A Practitioner's Guide*. New York: Guilford Press.
- Zimmer-Gembeck, Melanie J., Drew Nesdale, Haley J. Webb, Mhasa Khatibi, and Geraldine Downey. 2016. A longitudinal rejection sensitivity model of depression and aggression: Unique roles of anxiety, anger, blame, withdrawal and retribution. *Journal of Abnormal Child Psychology* 44: 1291–307. [[CrossRef](#)]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.