



Mediating role of social skills in the longitudinal relationship between intrapersonal perfectionism and psychological well-being of preadolescents

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ABSTRACT

Intrapersonal perfectionism is the dispositional tendency to impose perfectionistic expectations on oneself and is considered a bidimensional construct that consists of standards perfectionism and discrepancy perfectionism. Although scholars established the links between standards perfectionism and psychological adjustment and between discrepancy perfectionism and psychopathology, the mechanisms that explain these associations remain relatively unknown. Thus, a better understanding of these mechanisms, especially in children, is warranted given their high prevalence in this developmental population and potential destructiveness on psychological well-being. The present study examined whether social skills with peers mediated the link between the dimensions of interpersonal perfectionism and psychological outcomes due to the salience of social skills acquisition in middle childhood. The study included 225 students ($n_{\text{female}} = 114$; $n_{\text{male}} = 111$) with ages ranging from 7 to 10 years at Time 1 ($T1$; $M_{\text{age}} = 8.55$, $SD = 1.15$) and from 8 to 11 years at Time 2 ($T2$; $M_{\text{age}} = 9.52$, $SD = 1.10$). Participants provided responses on measures concerning standards perfectionism, discrepancy perfectionism, social skills, and psychological well-being at both time points. Longitudinal structural equation modeling indicated that standards perfectionism was positively associated with increases in social skills over time and psychological well-being, whereas discrepancy perfectionism was linked with decreases in social skills over time followed by psychological maladjustment. The study discusses implications for interventions and treatments.

1. Introduction

Intrapersonal perfectionism is a personality trait that results in individuals setting and striving for high performance standards (i.e., standards perfectionism) and focusing on the discrepancy between one's standards and actual performance (i.e., discrepancy perfectionism). According to the dual process model of perfectionism (Slade & Owens, 1998), standards perfectionism is underpinned by the need for success, whereas discrepancy perfectionism involves cognitions and behaviors oriented toward achieving high goals to

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avoid failure and negative consequences. These two dimensions pose different implications for psychological outcomes of youth and adults where standards perfectionism is associated with psychological success such as life satisfaction (Gilman & Ashby, 2003a) and discrepancy perfectionism is considered a core vulnerability to a range of psychopathology including depression, anxiety, and eating disorders (e.g., Gnilka et al., 2012; Mackinnon et al., 2011; Noble et al., 2014).

Scholars have reported that standards perfectionism and discrepancy perfectionism are highly prevalent among youth as estimates suggest that approximately 30% of children are classified as either discrepancy perfectionists or standards perfectionists (e.g., Chan, 2009; Rice et al., 2011). Given accumulating data that points to high levels of discrepancy/dysfunctional perfectionism among youth, scholars have identified perfectionism as an important health issue that requires an urgent response from academic and public communities (see Flett & Hewitt, 2014, for a discussion). However, there has been little investigation into the mechanisms that link the dimensions of intrapersonal perfectionism and psychological outcomes, especially among children. A better understanding of how intrapersonal perfectionism exerts its effects on psychological outcomes is needed to effectively respond to these issues.

Recently, scholars have suggested that certain characteristics inherent to dispositional intrapersonal perfectionism (e.g., negative self-schemas, relentless pursuit of perfection) may confer psychopathology risk through personality-dependent social outcomes such as impoverished social networks and marital divorce (Hewitt et al., 2017; Sherry et al., 2016). Specifically, these scholars emphasized the possibility that intrapersonal perfectionism may influence social cognition (i.e., the perception and interpretation of one's social world) and ultimately, social outcomes. Thus, the mechanism that links standards and discrepancy perfectionism to psychological outcomes may be a social process.

To examine this possibility, the present study examined the social skills of children with their peers as an interpersonal outcome that may explain the association between the dimensions of intrapersonal perfectionism and mental health outcomes (e.g., depressive symptoms, subjective well-being). Investigating these mechanisms during middle childhood is particularly important because this developmental period immediately precedes the significant physical, emotional, and social changes associated with puberty prior to the onset of many common psychological disorders (Magson et al., 2019; Rapee et al., 2019). Moreover, the acquisition of social skills acquisition from the preadolescent to adolescent periods is more salient compared with other stages in the lifespan (Hartup & Stevens, 1999; Sørli et al., 2021). Therefore, preadolescence is a crucial stage for investigating intrapersonal perfectionism, psychological outcomes, and the potential influence of social skills on these associations. A deeper understanding of such mechanisms may better equip practitioners in providing interventions before the link between intrapersonal perfectionism and psychological difficulties becomes more established in adolescence and adulthood.

2. Dimensions of intrapersonal perfectionism

Intrapersonal perfectionism is frequently theorized as a bidimensional construct that consists of standards perfectionism and discrepancy perfectionism, with both presenting different implications for the psychological well-being of children. Specifically, Slaney et al. (2001) developed the Almost Perfect Scale-Revised (APS-R) that is the only instrument designed to assess the positive and negative dimensions of intrapersonal perfectionism and that consistently yields adequate psychometric properties (Gilman & Ashby, 2003a). The positive aspect captured by standards perfectionism reflects the dispositional tendency to strive toward ideal expectations and improvements without debilitating self-criticism. The negative aspect is captured by discrepancy perfectionism, which reflects the dispositional tendency to perceive that one's efforts are inadequate and to experience strong negative reactions when failing to meet or maintain one's elevated, frequently unrealistic, goals (Slaney et al., 2001).

According to the dual model of perfectionism (Slade & Owens, 1998), the foci of both dimensions are different. Standards perfectionists strive to meet high standards, whereas discrepancy perfectionists tend to emphasize concerns over not meeting their established standards and are driven by the fear of personal failure. Indeed, several lines of evidence support the conceptual, psychometric, and practical importance of the dual process model of perfectionism with the adaptive/standards and maladaptive/discrepancy dimensions (e.g., Suddarth & Slaney, 2001; Wang & Zhang, 2017). Standards perfectionism is frequently associated with positive (e.g., adaptive coping, positive affect) or inversely with negative (e.g., maladaptive coping, negative affect) processes and outcomes. These associations particularly occur when the overlap with discrepancy perfectionism is statistically controlled. Conversely, discrepancy perfectionism is consistently associated with negative processes and outcomes (Lo & Abbott, 2013; Stoeber & Stoeber, 2009).

Examining both standards and discrepancy perfectionism in preadolescents is particularly important because scholars posit that perfectionism becomes established during early childhood. For instance, Hamachek (1978) postulated that perfectionism develops from the need of a child for acceptance from parents who set inordinately high standards of perfectionism. When children receive positive, consistent feedback, they are more likely to become standards perfectionists. When parents are never satisfied with the performance of the child or are chronically inconsistent with their approval, discrepancy perfectionism develops. Empirical studies that suggest that intrapersonal perfectionism develops early in childhood (Cook & Kearney, 2014; Flett & Hewitt, 2002; Harvey et al., 2017) support this postulation. In summary, investigating the separate associations of both dimensions of intrapersonal perfectionism with social skills in preadolescents is crucial due to the distinct bidimensional nature of intrapersonal perfectionism and its origins in early childhood.

3. Intrapersonal perfectionism and social skills with peers

Middle childhood is a time of profound transition in the social relationships and interpersonal skills of children. One salient feature of middle childhood includes the expansion of the social world as children spend increasing amounts of time with peers outside their

homes (Collins, 1984). Learning to interact effectively in this new environment and acquiring essential social skills lie at the core of social development during middle childhood. Moreover, landmark longitudinal studies demonstrate that the inability to acquire essential interpersonal skills during this developmental period presents important consequences for the concurrent and future psychological successes of children as they transition into adolescence and adulthood (Cowen et al., 1973; Kohlberg et al., 1972). Thus, social skills are an important social outcome in preadolescence and may explain the associations between the dimensions of intrapersonal perfectionism and psychological well-being.

Standards perfectionism may encourage the development of social skills because it fosters the motivation to set and strive for high performance in all areas of life (Flett & Hewitt, 2002). Previous studies have demonstrated that individuals with high levels of standards perfectionism tend to excel in academics and sports given that it precludes perceptions of discrepancy (e.g., Nounopoulos et al., 2006; Stoeber, 2014). This degree of effort may extend to the social domain such that children with high levels of standards perfectionism may strive toward ideal interpersonal goals such as intimacy and respect. Indeed, Shim and Fletcher (2012) found that standards perfectionism was associated with positive motivational goals of social development, intimacy, and nurturance. Similarly, LoCicero and Ashby (2000) examined social attitudes in children and found that those with high levels of standards perfectionism tended to report higher levels of social interest and eagerness compared with those of non-perfectionists and discrepancy perfectionists. Thus, a possibility exists that standards perfectionism may motivate children to act in a highly affiliative manner that provides them with numerous opportunities to socialize with peers and continually develop and refine their social skills.

Alternatively, discrepancy perfectionism may generate a maladaptive interpersonal context that hinders the development of social skills. For instance, high levels of negative self-evaluation, which accompanies discrepancy perfectionism, may lead children to overlook positive interpersonal cues and withdraw from peers to conceal deficits they deem unacceptable in themselves (Shahar, 2001). Furthermore, Farmer et al. (2017) indicated that undergraduate students with high levels of discrepancy perfectionism expressed that they highly value and desire close relationships yet devote more time to agentic goals (e.g., personal power, accomplishment) than they do for communion goals (e.g., friendship, support, togetherness). Moreover, the participating students described loneliness as a central theme in their lives. Thus, a possibility exists that, given high levels of achievement standards, preadolescents with high levels of discrepancy perfectionism are motivated to excel in the social domain (Flett & Hewitt, 2002; Hewitt et al., 1995; Stoeber & Stoeber, 2009). However, they may be hindered from achieving excellence in the social domain because “the discrepancy established between standards and the perceived inability to consistently meet these standards may hinder their comfort and flexibility in interacting with others” (Gilman & Ashby, 2003b, p. 685). Similarly, other scholars have hypothesized that discrepancy perfectionists tend to become socially avoidant and isolated to avoid revealing characteristics that they deem unacceptable in themselves (Alden et al., 1994; Flett & Hewitt, 2013). A certain degree of support exists for these contentions. For example, various studies have demonstrated that discrepancy perfectionists report high levels of fear of intimacy and social stress and tend to perceive others as unwilling or unavailable to help them in times of stress (Dunkley et al., 2003; Gilman & Ashby, 2003b; Martin & Ashby, 2004). However, they also reported that they desire to be flawless across many life domains including academics, romantic/social relationships, and work (Stoeber & Stoeber, 2009). If such findings can be applied to the present study, it may be that preadolescents with high levels of discrepancy disengage from striving toward social goals due to their high perceptions of discrepancy and self-criticism, which precludes them from opportunities to develop adequate social skills.

4. Culture and perfectionism

The existing research on perfectionism has not been equally distributed across cultures and ethnic groups. Most studies have focused on European and American students; thus, findings and implications may not be equally applicable to students of non-European or non-American descent (Wang et al., 2012). For instance, aspects that are deemed maladaptive in the western context (e.g., avoidance of failure, critical self-evaluation) may have culturally sanctioned adaptive values to Koreans. Indeed, Zane and Song (2007) highlighted the ways in which self-criticism, which is dysfunctional and harmful in terms of the value for healthy adjustment in the cultural context, may be especially adaptive in another: “Research in Japan and other East Asian societies indicates that... the basic underlying motivation is to be self-critical and to make continual efforts to improve oneself and to reduce one’s shortcomings” (p. 295). Similarly, Rice et al. (2019) noted that the Korean culture views self-criticism as a virtue for personal growth and reflection. However, despite the possibility that discrepancy perfectionism might have culturally sanctioned adaptive values to Korean children and adolescents, there is also evidence that it is a strong risk factor for academic burnout (Choi et al., 2022; Seong et al., 2021; Seong & Chang, 2021), negative achievement motivation (Seong & Chang, 2021), hopelessness, and suicide ideation (Yoon & Shim, 2014). As a result, the pursuit for perfection and high levels of self-criticism (i.e., discrepancy perfectionism) may be both culturally valued and personally problematic for Korean youths, emphasizing the need for further study of intrapersonal perfectionism within this context.

In addition to South Korea’s cultural values, historical information may help place the relevance of intrapersonal perfectionism in Korea in a broader context. South Korea quickly transformed from post-World War II poverty to one of the world’s largest economies in the span of half a decade (Seth, 2002). This change produced a high achievement-oriented society in which hard work and conscientiousness are highly valued. However, this shift led Korea to be dubbed a “pressure-pot” society that includes the highest rates of depression and suicide among all developed countries (Organization for Economic Cooperation and Development, 2022; Rice et al., 2019). Indeed, the phrase “the filthy world that remembers only first place” became a popular slogan through a Korean comedy, because it expressed the frustrated sentiment of many Koreans when they cannot rank first (Rice et al., 2019).

This pressure for high achievement is also evident in Korea’s educational system. The South Korean educational system has institutionalized standardized examinations and it is a common practice for student rankings and scores to be publicized (Rice et al., 2019). Elementary school students spend much of their time in school and cram-academies where they hone their test-taking skills and

prepare for these exams. Parents also place high levels of pressure on their children for academic excellence that some cultures probably would find excessive. Indeed, the high pressure for excellence has driven Korean students to be among the world's top academic performers (Organization for Economic Cooperation and Development, 2015). However, it has also contributed to suicide being the leading cause of death among Korean adolescents (Lee et al., 2010). Given the high levels of perfectionistic emphases that permeate South Korean society and the high rate of suicide and depression among youth, it seems particularly relevant to understand the mechanisms that link intrapersonal perfectionism to psychological well-being among South Korean preadolescents.

5. The present study

The present study investigated the separate roles that standards perfectionism and discrepancy perfectionism play in children's social skills over time and, subsequently, their psychological outcomes in a longitudinal sample of elementary school students from South Korea. Based on previous literature, the present study hypothesized that standards perfectionism would positively influence social skills and thus exert a positive impact on psychological adjustment (i.e., high-level subjective well-being and low-level depressive symptoms) over time. Conversely, the study expected discrepancy perfectionism to produce negative associations with social skills, which decrease psychological well-being over time (e.g., high levels of depressive symptoms and low-level subjective well-being).

To test the core hypotheses, this study aimed to expand the literature in several aspects. First, empirical studies on perfectionism centered on late adolescents, young adults, and adult clinical populations, resulting in comparatively less understanding of the nature, correlates, and consequences of intrapersonal perfectionism in children (Flett et al., 2011; Rice et al., 2007). Given that perfectionism often emerges before the age of 8 years (Harvey et al., 2017), investigating the preadolescent population may provide valuable insights into the early mechanisms through which intrapersonal perfectionism influences psychological adjustment. To the best of our knowledge, this study is among the first to investigate the longitudinal effects of standards perfectionism and discrepancy perfectionism on the mental health outcomes of preadolescents.

Second, existing studies on perfectionism have relied on the use of cross-sectional data that make it difficult to rule out alternative models and to test the plausibility of various direction of influence among variables. By employing a stringent two-wave autoregressive cross-lagged model, the present study tested an alternative model in which psychological outcomes mediate the association between intrapersonal perfectionism and social skills. We examined the model given that previous studies implicated deficits in social skills as causes and consequences of maladaptive psychological outcomes such as depression. For instance, consistent with the hypothesized model, the social skills deficit vulnerability hypothesis states that social skills deficits minimize opportunities for acquiring social support, which, in turn, leads to the proliferation of depressive symptoms (Segrin, 1996). Alternatively, the depression-isolation hypothesis suggests that depressive symptoms lead to poor social skills because individuals with depressive symptoms may experience fewer social interactions because they elicit rejection from others as they induce negative mood interaction with their partners. Moreover, they are likely to receive less positive reinforcement from the social environment, which leads to feelings of discomfort during social interactions and decreased social participation (Elmer & Stadtfeld, 2020). Aligned with this theory, longitudinal social network studies have demonstrated that depressive symptoms influence the creation, maintenance, and termination of social ties (Elmer et al., 2017; Schaefer et al., 2011). Thus, the present study tested an alternative model based on the premise that intrapersonal perfectionism leads to changes in depressive symptoms and subjective well-being, which, in turn, would lead to changes in social skills. By comparing this alternative model against the hypothesized model, we aimed to test the validity of the temporal sequence of the proposed model.

Lastly, based on the recommendation of scholars of the dual-factor model of mental health, the present study considered a comprehensive perspective of mental health. The dual-factor model views mental health as a complete state of being that consists of the absence of mental illness and the presence of positive factors (Suldo & Shaffer, 2008). Positive mental health reflects an optimal means for psychological functioning and a general feeling of well-being and happiness. In contrast, negative mental health includes deleterious facets such as health problems, psychopathology, or psychiatric disorders. These two constructs are interrelated but are considered distinct factors that act relatively independently (Antaramian et al., 2010; Kim et al., 2014). Therefore, disregarding the presence of positive characteristics would reduce the predictive value of the intrapersonal dimensions of perfectionism (Suldo & Shaffer, 2008). Hence, we examined the role of social skills in explaining the effects of intrapersonal perfectionism on the presence of positive (i.e., subjective well-being) and the absence of negative (i.e., depressive symptoms) aspects of mental health.

6. Method

6.1. Participants and procedure

The study recruited a sample of elementary school children from Seoul, South Korea, for a two-wave panel study as part of a larger project on family dynamics. Data collection was conducted from June 2018 to June 2019 (Kim, 2018). After the children and their parents provided informed consent, participating students completed several self-report measures during class time. The study included 225 students ($n_{\text{female}} = 114$; $n_{\text{male}} = 111$) with ages ranging from 7 to 10 years at Time 1 (T1; $M_{\text{age}} = 8.55$, $SD = 1.15$) and from 8 to 11 years at Time 2 (T2; $M_{\text{age}} = 9.52$, $SD = 1.10$). The attrition rate between the two waves was 34.9%. An independent sample *t*-test suggested that the participants included in the final sample at T2 did not significantly differ from the attrition group on any variables of interest (i.e., social skills, depressive symptoms, and subjective well-being). Moreover, the study observed no group differences in any demographic indicators such as sex and socioeconomic status. The institutional review board of the university

approved the study.

6.2. Measures

6.2.1. Standards and discrepancy perfectionism

The study assessed standards and discrepancy perfectionism using the Short Almost Perfect Scale (SAPS; Rice et al., 2014). Factor analyses supported the two-factor structure of the SAPS and scores displayed good internal consistency among children < 15 years (Leone & Wade, 2018). Four items from the standards perfectionism subscale (e.g., “I expect the best from myself” and four items from the discrepancy perfectionism subscale (e.g., “Doing my best never seems to be enough”) are rated on a scale from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Following Stoeber and Otto’s (2006) protocol, we inspected partial correlations to control for the overlap and identify the differential relationships between the two forms of intrapersonal perfectionism (i.e., standards perfectionism and discrepancy perfectionism) and various outcomes. Evidence supports the structure, discriminant validity, reliability, and concurrent validity of the SAPS scale (Elion et al., 2012; Slaney et al., 2001; Wang et al., 2009). In the present study, reliability obtained for the present sample was adequate for both the standards perfectionism scale (Cronbach’s alpha = 0.83) and the discrepancy perfectionism scale (Cronbach’s alpha = 0.82).

6.2.2. Social skills

Social skills were measured using the Children’s Self-Report Social Skills Scale (CS4; Danielson & Phelps, 2003). The CS4 is a 21-item questionnaire that measures social skills using three subscales, including (a) social rules (e.g., “I take turns with others”), (b) likability (e.g., “Others ask me to play”), and (c) social ingeniousness (e.g., “When I come over, others ask me to move or give them more space”). Items were rated on a scale ranging from 1 (*Never*) to 5 (*Always*). The term “others” was replaced with “friends” to assess the children’s social skills. The present study included only the first two components (i.e., social rules and likability subscales) because prior research identified concerns regarding the structure of the third factor when translated to different languages, including Korean (Brouzos et al., 2015; Kim & Hong, 2007). Like previous studies, the remaining items were combined to produce composite scores for social skills (e.g., Lator et al., 2016). Danielson and Phelps (2003) demonstrated the CS4’s strong re-test reliability ($r = 0.74$) and internal consistency (Cronbach’s alpha = 0.96). Furthermore, previous research identified correlations with other measures of social skills and theoretically related variables, such as school bonding and problem behaviors, which further supports the convergent validity of this measure (Kim & Hong, 2007). The present study had strong internal consistency for the CS4 (Cronbach’s alpha = 0.83 at T1; Cronbach’s alpha = 0.88 at T2).

6.2.3. Depressive symptoms

To measure depressive symptoms, we administered the Short Form of the Children’s Depression Inventory (CDI-S; Kovacs, 2011). The CDI-S consists of 10 items that assess the degree of sadness, self-esteem, and dysphoric mood among children. An example item includes “I feel like crying every day”. Items are rated on a scale from 0 (*Not at all*) to 4 (*All the time*). The CDI-S is one of the most widely used questionnaires for assessing depressive symptom in children and is found to be highly reliable and have good convergent and discriminant validity (Ahlen & Ghaderi, 2017; Cho et al., 2022; Houghton et al., 2022). For instance, Ahlen and Ghaderi (2017) demonstrated that the scores for CDI-S displayed a high correlation ($r = 0.72$) with the measure for depression (from the depression subscale of the Revised Child Anxiety and Depression Scale; Chorpita et al., 2000) and a moderately high correlation ($r = 0.52$) with the measure of anxiety (from the Spence Children’s Anxiety Scale; Spence, 1998). The present study had strong internal consistency for the CDI-S (Cronbach’s alpha = 0.93 at T1; Cronbach’s alpha = 0.95 at T2).

6.2.4. Subjective well-being

Subjective well-being was measured using the Faces Scale (Hall et al., 2016), which features a rating system that uses emoji faces and is commonly used to measure subjective well-being in children. For this instrument, the participants answered “Overall, how do you usually feel?” by marking one out of seven faces. The response options range from *very unhappy* (depicted by a very down-turned mouth) to *very happy* (depicted by a very up-turned mouth). Previous studies have employed single-item scores to measure subjective well-being in children (Abdel-Khalek, 2006; Holder & Klassen, 2010). Furthermore, several studies have confirmed the validity and reliability of the Faces Scale (Abdel-Khalek, 2006; Holder & Coleman, 2009; Holder & Klassen, 2010; Ivens, 2007).

6.3. Analyses

6.3.1. Half-longitudinal model

According to Cole and Maxwell (2003), mediation models measured at two-time points can provide similar estimates to those measured at three-time waves under the assumption of stationarity. This assumption suggests that the association between the mediator and dependent variables over a 1-year period would be similar (i.e., stationary) to the association obtained if three-wave data were employed 1 year later during the same developmental period. Several longitudinal studies have established the stability of the link between the mediator (i.e., social skills) and outcome (i.e., mental well-being; Perren & Alsaker, 2009; Saeri et al., 2017; Yao & Enright, 2021). Thus, the assumption of stationarity for the path between social skills, depression, and subjective well-being was reasonable.

Following the recommendation of Cole and Maxwell (2003) regarding half-longitudinal designs, the study estimated the regression paths for Model 1 (the hypothesized model) between the independent variables (i.e., standards perfectionism and discrepancy

perfectionism) at T1 and the mediator (i.e., social skills) at T2 and between the mediator at T1 and the dependent variables (subjective well-being and depressive symptoms) at T2. At the same time, it controlled for within-time associations and stability in the outcome variables of interest. The study used the product between the regression coefficients to estimate the mediational effects of the dimensions of perfectionism on subjective well-being and depressive symptoms. We also regressed the dependent variables at T2 onto the independent variables at T1 within this model. The statistical significance of this direct path indicated that social skills mediate the longitudinal association between the dimensions of perfectionism and psychological outcomes (i.e., subjective well-being and depressive symptoms). For Model 2 (the second or auxiliary model), we tested whether psychological outcomes exerted a mediational effect on the association between the dimensions of perfectionism and social skills using the same standard procedures, as previously outlined.

6.3.2. Performed analyses

We performed correlation analysis in SPSS 25 and structural equation analyses of the half-longitudinal models in Mplus 6 (Muthén & Muthén, 1998–2010). The Monte Carlo method for assessing mediation created a confidence interval of mediation paths to determine whether the mediation effect differed from zero after 5000 repetitions using the parameters of the model (Selig & Preacher, 2008). Moreover, we employed Cohen (1988) convention for effect sizes to determine the magnitude of the direct effects. The sizes of the indirect effect sizes were based on the standards of Kenny (2021), that is, small, medium, and large effects would reach 0.01, 0.09, and 0.25, respectively. We considered missing data using full-information-maximum-likelihood estimation of the parameters, which leverages all available information from the observed data to fit the statistics model (Lang & Little, 2018). This method is considered effective in reducing bias due to non-random missing data, which offers reliable results even with a 60% missing rate (Gjesdal et al., 2019).

To evaluate the sequential ignorability assumption on which mediation analysis is based (that is, unobserved and uncontrolled covariates are not responsible for the mediation effect observed in this study), the study employed Kenny's (2013) *failsafe ef* procedure: $(r_{my.x}) \times (sd_{m.x}) \times (sd_{y.x}) / (sd_m) \times (sd_y)$. The coefficient produced by this procedure denoted the degree of strength that an unobserved covariate confounder will need to correlate with the mediator and dependent variables while controlling for the independent and mediator variables in the case of the latter, to nullify the *b* path of the significant effect of M on the $X \rightarrow Y$ relationship. Notably, path *a* of the indirect effect runs from the independent variable to the mediator and path *b* runs from the mediator to the dependent variable.

6.3.3. Model fit indices

Following the multifaceted approach for assessing model fit as outlined by Hu and Bentler (1999), we used the following indices: Pearson χ^2 likelihood ratio statistic, comparative fit index (CFI), Tucker-Lewis index (TLI), root mean square error of approximation (RMSEA) with associated 90% confidence intervals, and standardized root mean square residual (SRMR). The cutoff criteria for a good fit to the data included CFI > 0.95, TLI > 0.95, SRMR < 0.06, and RMSEA < 0.06. The cutoff criteria for an adequate model included CFI > 0.90, TLI > 0.90, SRMR < 0.08, and RMSEA < 0.08 (Browne & Cudeck, 1993).

7. Results

7.1. Descriptive statistics

Table 1 presents the means, standard deviations, and correlations among the variables. The results of the discrepancy and standards subscales were significantly correlated with the following variables in opposing directions: T1/T2 social skills, T1/T2 depressive symptoms, and T1/T2 subjective well-being. The study observed no significant associations between standards perfectionism and discrepancy perfectionism, indicating that the two scales captured independent constructs (Slade & Owens, 1998; Slaney et al., 2001). Additionally, correlations between time-adjacent variables were significantly positively correlated. Sex (female) exhibited a positive correlation with social skills at T2 ($r = 0.20$) and age was negatively correlated with standards perfectionism ($r = -0.23$; Table 1). Thus, the study controlled for age and sex in the subsequent analyses.

Table 1

Means, standard deviations, and correlations of variables used in the hypothesized model.

	<i>M</i>	<i>SD</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) SP	5.25	1.40	–	0.003	0.32**	–0.23**	0.35**	–0.38**	–0.23*	–0.41**	–0.021
(2) DP	3.17	1.67	0.003	–	–0.23**	0.46**	–0.31**	–0.27**	0.25**	–0.24**	–0.032
(3) T1 SS	4.34	0.57	0.32**	–0.23**	–	–0.54**	0.54**	0.58**	–0.23**	0.44**	0.16
(4) T1 DEP	0.44	0.73	–0.23**	0.46**	–0.54**	–	–0.53**	–0.41**	0.44**	–0.38**	–12
(5) T1 SWB	5.88	1.24	0.35**	–0.31**	0.54**	–0.53**	–	0.39**	–0.45**	–0.58**	0.061
(6) T2 SS	4.30	0.60	0.38**	–0.27**	0.58**	–0.40**	0.39**	–	–0.44**	0.50**	0.20*
(7) T2 DEP	0.41	0.75	–0.23**	0.25**	–0.34**	0.44**	–0.45**	–0.44**	–	–0.70**	0.034
(8) T2 SWB	5.58	1.34	0.41**	–0.24**	0.44**	–0.38**	0.58**	0.50**	–0.70*	–	0.005
(9) Gender	–	–	–0.021	–0.032	0.16	–0.12	0.061	0.20*	0.034	0.005	–
(10) Age T1	8.55	1.15	–0.23**	–0.16	–0.003	–0.065	–0.049	–0.085	0.043	–0.047	0.043

Note. SP = standards perfectionism; DP = discrepancy perfectionism; DEP = depressive symptoms; SWB = subjective well-being; SS = social skills with peers; T1 = variable assessed at Time 1; T2 = variable assessed at Time 2. Gender: 1 = male, 2 = female. * $p < .05$. ** $p < .01$.

7.2. Mediation effects of social skills

The hypothesized model (Fig. 1) depicts a good fit to the data, $\chi^2(7) = 10.88, p = .14$, CFI = 0.99, TLI = 0.94, RMSEA = 0.06, 90% CI [0.000, 0.128], SRMR = 0.029. All autoregressive paths were significant, which indicated a high degree of stability over time. Social skills at T2 mediated the longitudinal relationship between standards perfectionism and psychological well-being in children as indicated by the significant and small indirect effects for depressive symptoms, $B = -0.019$, 95% CI $[-0.054, -0.002]$, and subjective well-being, $B = 0.054$, 95% CI $[0.016, 0.121]$. For the indirect paths, standards perfectionism predicted relative increases in social skills in children and high levels of social skills predicted increases in subjective well-being and decreases in depressive symptoms (see Fig. 1 and Table 2). The direct effect on subjective well-being was significant with a medium effect ($B = 0.24$, 95% CI $[0.100, 0.384]$) but not on depressive symptoms, which displayed a small effect ($B = -0.061$, 95% CI $[-0.166, 0.022]$). Thus, social skills mediated the relationship between standards perfectionism and subjective well-being and mediated the association between standards perfectionism and depressive symptoms.

Similarly, social skills mediated the association between discrepancy perfectionism and depressive symptoms ($B = 0.013$, 95% CI $[0.000, 0.043]$) and subjective well-being ($B = -0.037$, 95% CI $[-0.095, -0.010]$), both of which exhibited small effect sizes. Discrepancy perfectionism predicted relative decreases in social skills and low levels of social skills predicted decreases in subjective well-being and increases in depressive symptoms (Fig. 1). Furthermore, the direct effects of discrepancy perfectionism on depressive symptoms ($B = 0.045$, 95% CI $[-0.043, 0.149]$) and subjective well-being ($B = -0.079$, 95% CI $[-0.212, 0.049]$) produced small effect sizes, which were nonsignificant and indicates full mediation for both paths.

7.3. Alternative model

In addition, we tested the cross-directional paths in the model by computing an alternative model on the premise that adverse psychological outcomes as a result of perfectionism may contribute to low levels of SS. We tested whether depressive symptoms and subjective well-being mediated the relationship between perfectionism and social skills over time following standard procedures, including all autoregressive and direct paths (Fig. 2). This model exhibited a poor fit ($\chi^2(10) = 26.111, p = .0036$, CFI = 0.96, TLI = 0.83, RMSEA = 0.10, 90% CI $[0.056, 0.154]$, SRMR = 0.04) as indicated by a significant χ^2 value, a value of TLI below the acceptable fit, and a value of RMSEA above the acceptable fit.

To decide between the hypothesized and secondary models, we used Akaike information criterion (AIC) and CFI based on how well they fit the data (Byrne, 2012). Large AIC values are indicative of poor fit, whereas the opposite is indicated by large CFI values. The AIC and CFI values were 3590.135 and 0.96 for the alternative model and 3588.80 and 0.99 for the hypothesized model, respectively. The comparison between AIC and CFI values favors the hypothesized model. In terms of paths, the alternative model presented all nonsignificant autoregressive paths for all four paths (Table 3), which implied that the psychological outcomes (i.e., subjective well-being and depressive symptoms) did not mediate the association between the type of perfectionism and social skills.

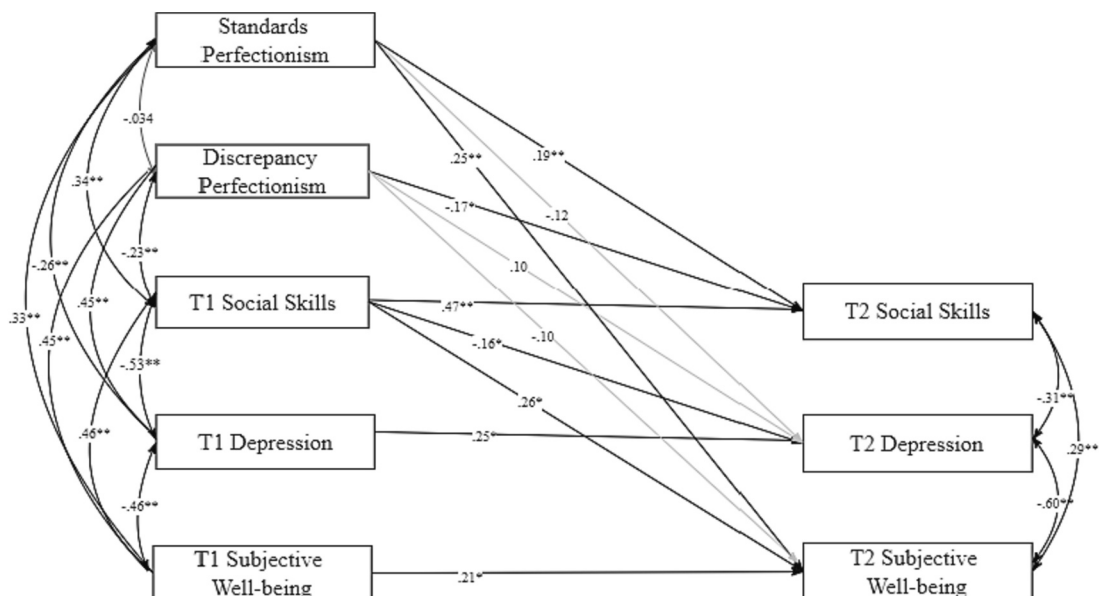


Fig. 1. Two-wave longitudinal mediation model.

Note. Standardized estimates. Children's gender and grade were included as covariates in analyses but omitted in the figure for clarity. Black arrows indicate significant paths. Gray arrows indicate nonsignificant paths.

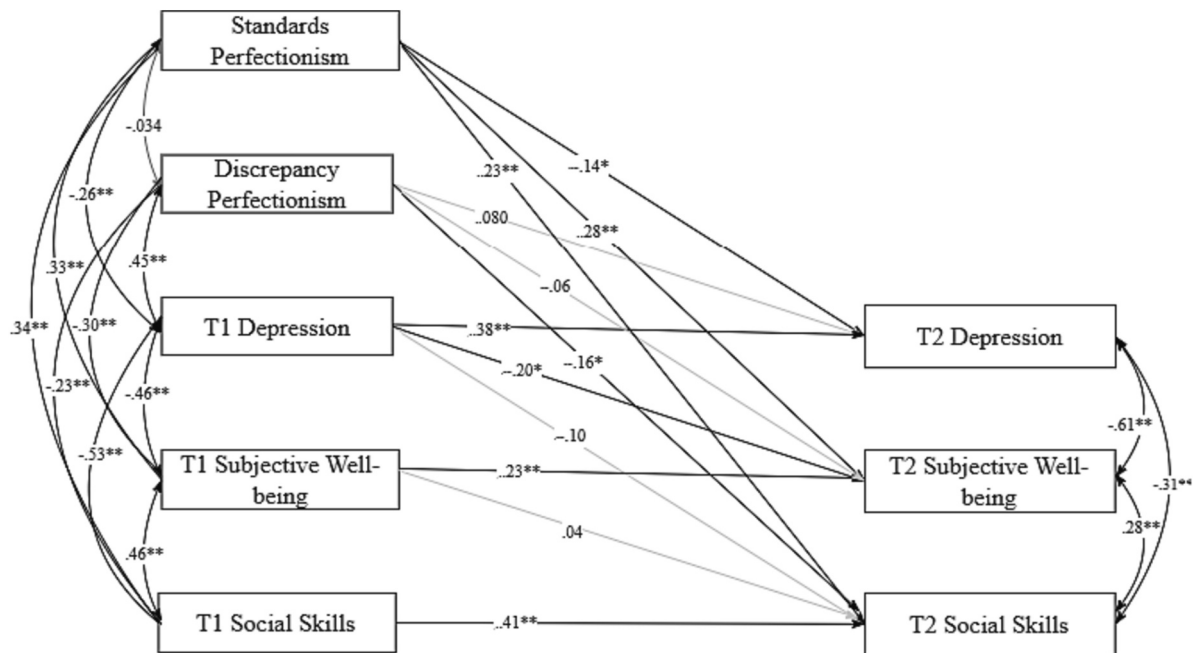
* $p < .05$. ** $p < .01$.

Table 2

Unstandardized coefficients and confidence intervals of indirect pathways in the proposed model.

	BPaths	SE	LLCI	ULCI
Standards Perfectionism → Depressive Symptoms				
Specific IE via T2 Social Skills	−0.019	0.012	−0.054	−0.002
Direct Effect	−0.061	0.048	−0.166	0.022
Standards Perfectionism → SWB				
Specific IE via T2 Social Skills	0.054	0.025	0.016	0.121
Direct Effect	0.236	0.072	0.100	0.384
Discrepancy Perfectionism → Depressive Symptoms				
Specific IE via T2 Social Skills	0.013	0.010	0.000	0.043
Direct Effect	0.045	0.048	−0.043	0.149
Discrepancy Perfectionism → SWB				
Specific IE via T2 Social Skills	−0.037	0.022	−0.095	−0.010
Direct Effect	−0.079	0.066	−0.212	0.049

Note. IE = indirect effect; SWB = subjective well-being. Unstandardized estimates.

**Fig. 2.** Two-wave longitudinal mediation model for the alternative model.

Note. Standardized estimates. Children's gender and grade were included as covariates but omitted from the figure for clarity. Black arrows indicate significant paths. Gray arrows indicate nonsignificant paths.

* $p < .05$. ** $p < .01$.

7.4. Sensitivity analysis

Sensitivity analysis was designed to test for missing variable bias using the “failsafe ef” procedure. The analytical results indicated that an unobserved covariate confounder would require a correlation of -0.36 with the mediator (social skills) and -0.36 with the

Table 3

Unstandardized coefficients and confidence intervals of indirect pathways in the alternative model.

	BPaths	SE	LLCI	ULCI
Standards Perfectionism → T2 Social Skills				
Specific IE via T2 Depressive Symptoms	0.005	0.007	−0.003	0.028
Specific IE via T2 SWB	−0.006	0.011	−0.031	0.014
Discrepancy → T2 Social Skills				
Specific IE via T2 Depressive Symptoms	0.054	0.025	0.016	0.121
Specific IE via T2 SWB	−0.003	0.005	−0.021	0.003

Note. IE = Indirect effect; SWB = Subjective Well-being. Unstandardized estimates.

dependent variable (depressive symptoms) when controlling for standards perfectionism and discrepancy perfectionism and social skills. In this manner, the significant indirect effect that links the dimensions of interpersonal perfectionism, social skills, and depressive symptoms can be eliminated. Additionally, an unobserved covariate confounder would require correlations of 0.40 with the mediator (i.e., social skills) and 0.40 with the dependent variable (i.e., subjective well-being), when controlling for standards perfectionism and discrepancy perfectionism and social skills if it intends to omit the indirect effect of social skills on the association between interpersonal perfectionism and subjective well-being. These results demonstrated that the main results were sufficiently robust to the effects of unobserved covariate confounders.

8. Discussion

Standards perfectionism and discrepancy perfectionism exhibited opposing implications on the psychological adjustment of children (Leone & Wade, 2018); however, empirical studies that examine the mechanisms that link them to their respective psychological outcomes remain lacking. Gaining insight into these mechanisms may be important in guiding interventions, particularly because evidenced-based treatments that specifically target perfectionism do not exist (Dry et al., 2015). In detail, the present study found that children with high levels of standards perfectionism displayed increased social skills over time, and consequently, decreased depression and increased subjective well-being. Conversely, children with high levels of discrepancy perfectionism exhibited decreases in social skills over time, and subsequently, increased depression and decreased subjective well-being. These findings suggest that even in a culture that views self-criticism as a virtue for personal growth and reflection, discrepancy perfectionism may negatively impact children's psychosocial functioning. It is possible that for European and American preadolescents, the consequences of discrepancy perfectionism may be more pronounced given that self-criticism often is deemed maladaptive in the Western context.

In terms of theoretical implications, the present study expands previous findings on the perfectionism social disconnection model (PSDM; Hewitt et al., 2006). The PSDM suggests that socially prescribed perfectionism (one that emerges from the perception that significant others demand perfection of oneself) leads to difficulties with people participating in and benefiting from close relations. Thus, social disconnection mediates the link between socially prescribed perfectionism and adverse mental health outcomes. Expanding on PSDM, the present study suggests that intraindividual perfectionism, or specifically, discrepancy perfectionism, may also lead to social isolation and negative psychological outcomes. Although the study did not directly measure social disconnection, the findings hint at such a possibility because social skills are typically a precursor to the development of behaviors that facilitate social acceptance (Aksoy & Baran, 2010).

At the practical level, the significant associations found among discrepancy perfectionism, social skills, and depressive symptoms in preadolescents prior to the onset of major depressive disorder suggests that discrepancy perfectionism may play an early role in the course of depression. Rogers et al. (2009) supported this suggestion, finding that among 422 adolescents, perfectionistic attitudes and major depression were evident in 86% of their sample of adolescents experiencing their first major depressive episode. Additionally, the literature supports that perfectionistic tendencies increase with age (Hong et al., 2017), which indicates that the link between discrepancy perfectionism and psychopathology may become increasingly established across adolescence. This scenario highlights the need to address discrepancy perfectionism prior to adolescence to help young perfectionists avoid the development of depression during adolescence.

Furthermore, the present study supports the value of incorporating a relational approach to address perfectionism. Currently, cognitive behavioral therapy (CBT) is the standard method for the treatment of perfectionism in clinical practice (Egan & Shafran, 2017). Although certain attitudinal features of perfectionism may be amenable to CBTs, failing to address disrupted social relationships (e.g., peer relations) when treating perfectionistic adolescents seemingly compromises treatment (Hewitt et al., 2017). For instance, Riley et al. (2007) reported that a short-term CBT program for perfectionism yielded no significant improvement in intrapersonal perfectionism among perfectionistic adults. In contrast, Hewitt et al. (2015) used the psychodynamic-interpersonal approach to treat intrapersonal perfectionism among undergraduate students, which resulted in clinically significant reductions in intrapersonal perfectionism at post-treatment and follow-up. In summary, the results of the present study advocate that intrapersonal perfectionism interventions focus not only on the symptoms (e.g., maladaptive cognitions), but also the relational dynamics of perfectionism. Furthermore, by providing early intervention, children with discrepancy perfectionism may be able to circumvent negative social consequences, such as the inability to acquire essential social skills and reduce the risk of psychopathology.

8.1. Recommendations for school psychologists

Given that approximately 30% children and adolescents are estimated to be intrapersonal perfectionists (e.g., Chan, 2009; Rice et al., 2011), professional preparation is crucial to enable school psychologists to effectively intervene and support perfectionistic students. The findings provide insights that school psychologists could address when working with perfectionistic students and designing interventions that effectively help them.

School psychologists who view students as setting perfectionistic standards for themselves should not assume that perfectionism is problematic. Instead, school psychologists may endeavor to distinguish between discrepancy/maladaptive and standards/adaptive perfectionism. The SAPS (Rice et al., 2014) is a brief instrument that mental health professionals may utilize to assist in the classification of students via simple cutoff scores for various populations, including the preadolescent population (Leone & Wade, 2018; Rice & Ashby, 2007). School psychologists may also provide training for parents and teachers on distinguishing between standards perfectionism and discrepancy perfectionism because adults frequently tend to assume that children possess the adaptive form of perfectionism and because perfectionistic children tend to be "model students" with excellent grades (Schuler, 2000). Therefore,

distinguishing between the two forms is crucial as a first step in providing appropriate support for students with intrapersonal perfectionism.

Furthermore, we recommend targeting intrapersonal perfectionism at the school level and including intrapersonal perfectionism items on universal social-emotional screeners. This recommendation is based on the findings that intrapersonal perfectionism is reaching crisis proportions in youth (Curran & Hill, 2019; Soenens & Vansteenkiste, 2019) and that youth with high levels of discrepancy perfectionism are highly unlikely to seek help when required because the act of seeking help could be regarded as an open admission of failure (Flett & Hewitt, 2019). Therefore, school and school staff who can provide help may not realize that help is needed, which results in more students who do not receive the appropriate treatment. When intrapersonal perfectionism is elevated at the school level, especially in primary schools, practitioners may reach a wide number of students and provide early prevention or treatment interventions before the consequences become amplified. These interventions should assist in creating a supportive school learning environment that emphasizes mistakes as acceptable and an expected part of the learning processes. In addition, they should focus on personal growth as opposed to perfect performances and guide students in creating realistic yet challenging goals (Nugent, 2000). School climate norms of high academic achievement expectations do need not be eliminated through such initiatives. Instead, schools can extend performance expectations to consider students as a whole and frame these initiatives as strength-building (e.g., self- and other-compassion after mistakes) that serve to excite and engage learners instead of focusing on inadequacies that frustrate and discourage them. The present study found that discrepancy perfectionism tends to negatively influence the development of social skills and that school connectedness is a core feature of healthy school climates. Thus, interventions should also support the social network and social skills development of children and include interpersonal elements. In fact, the results identify the potential adaptiveness of holding high standards for oneself in terms of social skills development, which suggests that children should be taught and encouraged to set reachable yet high-level social goals for themselves. In summary, targeting intrapersonal perfectionism at the universal level could aid in the development of an overall school climate that is supportive and celebrates learning and growth instead of achievement and grades.

8.2. Limitations and future research directions

Although the present study provides important insights into perfectionism in children, it has its limitations that must be addressed when interpreting the findings. The first refers to the sole reliance on self-reported data. Self-reports may be susceptible to social desirability, response, mono-method, and systematic bias, which could result in measurement error (Donaldson & Grant-Vallone, 2002; Lewis et al., 2015). However, young children can provide reliable information about their health and present a unique perspective on the functional aspects of their capabilities (e.g., social skills; Riley, 2004). For instance, Devine et al. (2018) found a significant correlation between the self-reported and peer-rated social skills of youth, which provided evidence for self-reported life skills. Nonetheless, obtaining measures of these variables from multiple informants using various methods (e.g., teacher report, peer report, interviews) would be desirable to gain a better understanding of the social skills, perfectionistic tendencies, and psychological outcomes of children.

Additionally, although intrapersonal perfectionism is generally considered a stable trait that influences all domains of life (Flett & Hewitt, 2002), we acknowledge that intrapersonal perfectionism may differentially affect life domains. In other words, an individual striving for high perfectionism in one domain may not demonstrate the same commitment in another domain. Although a few studies have demonstrated that individuals report varying levels of perfectionism across domains (e.g., Levine & Milyavskaya, 2018; McArdle, 2010; Stoeber & Stoeber, 2009), research on the domain specificity of perfectionism (especially intrapersonal perfectionism) is generally scarce. To the best of our knowledge, Stoeber and Stoeber (2009) was the only study that empirically examined intrapersonal perfectionism across life domains as they examined self-motivated intrapersonal perfectionism (i.e., self-oriented perfectionism) and externally motivated, socially prescribed perfectionism. They found that intrapersonal perfectionism was associated with being perfect across domains (i.e., social and romantic relationships, oral presentations, correspondence/mail, and orderliness) and socially prescribed perfectionism exhibited variability in perfectionism. These findings support the view that intrapersonal perfectionism is a disposition that encompasses striving across many domains of life (Flett & Hewitt, 2002). However, future studies should examine differences in intrapersonal perfectionism across domains and their differential implications on psychosocial outcomes for a nuanced understanding of intrapersonal perfectionism. Moreover, intrapersonal perfectionism is considered a stable trait that is temporally stable over time, which has been substantiated by past studies on child and adolescent samples demonstrating that discrepancy and standards perfectionism was invariant across time over a 6-month period (O'Connor et al., 2009). However, given that the present study was conducted over a 1-year period, the existence of variability in the levels of intrapersonal perfectionism over this time is possible. Scholars have encouraged longitudinal studies conducted over an extended period (> 6 months) to measure intrapersonal perfectionism at each time point to detect potential changes in intrapersonal perfectionism (O'Connor et al., 2009).

Moreover, although the present study examined an interpersonal outcome that mediates the association between intrapersonal perfectionism and psychological outcomes, future studies should investigate the specific attitudes and behaviors that lead to deficits in social skills. For instance, a possibility exists that discrepancy perfectionism may lead to deficits in social skills due to dysfunctional beliefs about interpersonal relationships, engagement in ego-defense behaviors (e.g., domineering or withdrawn interpersonal styles), and being interpersonally hypersensitive (Hewitt et al., 2017; Sherry et al., 2016). Thus, thoroughly understanding specific attitudinal and behavioral characteristics that lead to changes in social skills through intrapersonal perfectionism will better guide interventions.

Finally, the present study was based on a sample of elementary school students in South Korea, which limits the generalizability of the findings because existing research has identified national and ethnic differences in perfectionism relationships (e.g., Sherry et al., 2016; Stoeber et al., 2013). Consequently, future studies should reinvestigate the present relations across nationalities and ethnicities

to examine the degree to which the current findings can be generalized to other groups.

9. Conclusions

Although the intrapersonal forms of perfectionism stem from within (i.e., the self-driven motivation to be perfect), our study suggests that their effects may influence functioning outside the self. In detail, standards perfectionism positively influences social skills with peers whereas discrepancy perfectionism negatively influences social skills with peers. Social skills with peers mediate the association between intrapersonal perfectionism and psychological outcomes, albeit in opposite directions for standards and discrepancy perfectionists. In the present study, we identified the need to carefully consider interpersonal functioning when investigating the effects of intrapersonal perfectionism.

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Ethics approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Informed consent

Informed consents were obtained from youth participants and one of their parents/guardians.

Data sharing and declaration

The datasets generated and/or analyzed during the current study are not publicly available but are available from the corresponding author on reasonable request.

Declaration of Competing Interest

The authors have no conflicts of interest to declare.

References

- Abdel-Khalek, A. M. (2006). Measuring happiness with a single-item scale. *Social Behavior and Personality: An International Journal*, 34(2), 139–150. <https://doi.org/10.2224/sbp.2006.34.2.139>.
- Ahlen, J., & Ghaderi, A. (2017). Evaluation of the children's depression inventory—Short version (CDI-S). *Psychological Assessment*, 29(9), 1157–1166. <https://doi.org/10.1037/pas0000419>.
- Aksoy, P., & Baran, G. (2010). Review of studies aimed at bringing social skills for children in preschool period. *Procedia - Social and Behavioral Sciences*, 9, 663–669. <https://doi.org/10.1016/j.sbspro.2010.12.214>.
- Alden, L. E., Bieling, P. J., & Wallace, S. T. (1994). Perfectionism in an interpersonal context: A self-regulation analysis of dysphoria and social anxiety. *Cognitive Therapy and Research*, 18(4), 297–316. <https://doi.org/10.1007/bf02357507>.
- Antaramian, S. P., Huebner, S. E., Hills, K. J., & Valois, R. F. (2010). A dual-factor model of mental health: Toward a more comprehensive understanding of youth functioning. *The American Journal of Orthopsychiatry*, 80(4), 462–472. <https://doi.org/10.1111/j.1939-0025.2010.01049.x>.
- Brouzos, A., Vassilopoulos, S. P., & Baourda, V. C. (2015). Members' perceptions of person-centered facilitative conditions and their role in outcome in a psychoeducational group for childhood social anxiety. *Person-Centered and Experiential Psychotherapies*, 14(1), 32–46. <https://doi.org/10.1080/14779757.2014.965843>.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. *Sociological Methods & Research*, 21(2), 230–258. <https://doi.org/10.1177/0049124192021002005>.
- Byrne, B. M. (2012). *Structural equation modeling with Mplus: Basic concepts, applications, and programming*. Routledge Academic.
- Chan, D. W. (2009). Dimensionality and typology of perfectionism: The use of the frost multidimensional perfectionism scale with Chinese gifted students in Hong Kong. *The Gifted Child Quarterly*, 53(3), 174–187. <https://doi.org/10.1177/0016986209334963>.
- Cho, Y., Lee, E. H., Hong, S. H., Joung, Y. S., & Kim, J. H. (2022). Reliability and validity of the Korean version of Children's depression inventory 2 short version as a screening tool: A comparison with the standard 28-item version. *Psychiatry Investigation*, 19(1), 54–60. <https://doi.org/10.30773/pi.2021.0296>.
- Choi, H., Cho, S., Kim, J., Kim, E., Chung, J., & Lee, S. M. (2022). The mediating effect of introjected motivation on the relation between perfectionism and academic burnout. *Journal of Psychologists and Counsellors in Schools*, 32(2), 207–219. <https://doi.org/10.1017/jgc.2020.8>.
- Chorpita, B. F., Yim, L., Moffitt, C., Umemoto, L. A., & Francis, S. E. (2000). Revised child anxiety and depression scale. *PsycTESTS Dataset*, 43, 309–322. <https://doi.org/10.1037/t03547-000>.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Lawrence Erlbaum.
- Cole, D. A., & Maxwell, S. E. (2003). Testing mediational models with longitudinal data: Questions and tips in the use of structural equation modeling. *Journal of Abnormal Psychology*, 112(4), 558–577. <https://doi.org/10.1037/0021-843x.112.4.558>.
- Collins, W. A. (1984). *Development during middle childhood: The years from six to twelve*. National Academies Press.
- Cook, L. C., & Kearney, C. A. (2014). Parent perfectionism and psychopathology symptoms and child perfectionism. *Personality and Individual Differences*, 70, 1–6. <https://doi.org/10.1016/j.paid.2014.06.020>.

- Cowen, E. L., Pederson, A., Babigian, H., Izzo, L. D., & Trost, M. A. (1973). Long-term follow-up of early detected vulnerable children. *Journal of Consulting and Clinical Psychology*, 41(3), 438–446. <https://doi.org/10.1037/h0035373>.
- Curran, T., & Hill, A. P. (2019). Perfectionism is increasing over time: A meta-analysis of birth cohort differences from 1989 to 2016. *Psychological Bulletin*, 145(4), 410–429. <https://doi.org/10.1037/bul0000138>.
- Danielson, C. K., & Phelps, C. R. (2003). The assessment of children's social skills through self-report: A potential screening instrument for classroom use. *Measurement and Evaluation in Counseling and Development*, 35(4), 218–229. <https://doi.org/10.1080/07481756.2003.12069068>.
- Devine, K. A., Willard, V. W., Hocking, M. C., Stapleton, J. L., Rotter, D., Bukowski, W. M., & Noll, R. B. (2018). PROMIS peer relationships short form: How well does self-report correlate with data from peers? *Journal of Pediatric Psychology*, 43(9), 1059–1067. <https://doi.org/10.1093/jpepsy/jsy038>.
- Donaldson, S. I., & Grant-Vallone, E. J. (2002). Understanding self-report bias in organizational behavior research. *Journal of Business and Psychology*, 17(2), 245–260. <https://doi.org/10.1023/A:1019637632584>.
- Dry, S. M., Kane, R. T., & Rooney, R. M. (2015). An investigation into the role of coping in preventing depression associated with perfectionism in preadolescent children. *Frontiers in Public Health*, 3. <https://doi.org/10.3389/fpubh.2015.00190>.
- Dunkley, D. M., Zuroff, D. C., & Blankstein, K. R. (2003). Self-critical perfectionism and daily affect: Dispositional and situational influences on stress and coping. *Journal of Personality and Social Psychology*, 84(1), 234–252. <https://doi.org/10.1037/0022-3514.84.1.234>.
- Egan, S. J., & Shafran, R. (2017). Cognitive-behavioral treatment for perfectionism. In J. Stoeber (Ed.), *The psychology of perfectionism: Theory, research, applications* (pp. 284–305). Routledge.
- Elion, A. A., Wang, K. T., Slaney, R. B., & French, B. H. (2012). Perfectionism in African American students: Relationship to racial identity, GPA, self-esteem, and depression. *Cultural Diversity and Ethnic Minority Psychology*, 18(2), 118–127. <https://doi.org/10.1037/a0026491>.
- Elmer, T., Boda, Z., & Stadfeld, C. (2017). The co-evolution of emotional well-being with weak and strong friendship ties. *Network Science*, 5(3), 278–307. <https://doi.org/10.1017/nws.2017.20>.
- Elmer, T., & Stadfeld, C. (2020). Depressive symptoms are associated with social isolation in face-to-face interaction networks. *Scientific Reports*, 10(1), 1444. <https://doi.org/10.1038/s41598-020-58297-9>.
- Farmer, J. R., Mackinnon, S. P., & Cowie, M. (2017). Perfectionism and life narratives: A qualitative study. *SAGE Open*, 7(3), 215824401772173. <https://doi.org/10.1177/2158244017721733>.
- Flett, G. L., & Hewitt, P. L. (2002). Perfectionism and maladjustment: An overview of theoretical, definitional, and treatment issues. In G. L. Flett, & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 5–31). American Psychological Association. <https://doi.org/10.1037/10458-001>.
- Flett, G. L., & Hewitt, P. L. (2013). Disguised distress in children and adolescents “flying under the radar”: Why psychological problems are underestimated and how schools must respond. *Canadian Journal of School Psychology*, 28(1), 12–27. <https://doi.org/10.1177/0829573512468845>.
- Flett, G. L., & Hewitt, P. L. (2014). A proposed framework for preventing perfectionism and promoting resilience and mental health among vulnerable children and adolescents. *Psychology in the Schools*, 51(9), 899–912. <https://doi.org/10.1002/pits.21792>.
- Flett, G. L., & Hewitt, P. L. (2019). Reflections on three decades of research on multidimensional perfectionism: An introduction to the special issue on further advances in the assessment of perfectionism. *Journal of Psychoeducational Assessment*, 38(1), 3–14. <https://doi.org/10.1177/0734282919881928>.
- Flett, G. L., Coulter, L. M., Hewitt, P. L., & Nepon, T. (2011). Perfectionism, rumination, worry, and depressive symptoms in early adolescents. *Canadian Journal of School Psychology*, 26(3), 159–176. <https://doi.org/10.1177/0829573511422039>.
- Gilman, R., & Ashby, J. S. (2003a). A first study of perfectionism and multidimensional life satisfaction among adolescents. *Journal of Early Adolescence*, 23(2), 218–235. <https://doi.org/10.1177/0272431603023002005>.
- Gilman, R., & Ashby, J. S. (2003b). Multidimensional perfectionism in a sample of middle school students: An exploratory investigation. *Psychology in the Schools*, 40(6), 677–689. <https://doi.org/10.1002/pits.10125>.
- Gjesdal, S., Wold, B., & Ommundsen, Y. (2019). Promoting additional activity in youth soccer: A half-longitudinal study on the influence of autonomy-supportive coaching and basic psychological need satisfaction. *Journal of Sports Sciences*, 37(3), 268–276. <https://doi.org/10.1080/02640414.2018.1495394>.
- Gnilka, P. B., Ashby, J. S., & Noble, C. M. (2012). Multidimensional perfectionism and anxiety: Differences among individuals with perfectionism and tests of a coping-meditation model. *Journal of Counseling and Development*, 90(4), 427–436. <https://doi.org/10.1002/j.1556-6676.2012.00054.x>.
- Hall, L., Hume, C., & Tazzyman, S. (2016). Five degrees of happiness. In *Proceedings of the 15th international conference on interaction design and children* (pp. 311–321). <https://doi.org/10.1145/2930674.2930719>.
- Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology: A Journal of Human Behavior*, 15(1), 27–33.
- Hartup, W. W., & Stevens, N. (1999). Friendships and adaptation across the life span. *Current Directions in Psychological Science*, 8(3), 76–79. <https://doi.org/10.1111/1467-8721.00018>.
- Harvey, B. C., Moore, A. M., & Koestner, R. (2017). Distinguishing self-oriented perfectionism-striving and self-oriented perfectionism-critical in school-aged children: Divergent patterns of perceived parenting, personal affect and school performance. *Personality and Individual Differences*, 113, 136–141. <https://doi.org/10.1016/j.paid.2017.02.069>.
- Hewitt, P. L., Flett, G. L., & Ediger, E. (1995). Perfectionism traits and perfectionistic self-presentation in eating disorder attitudes, characteristics, and symptoms. *International Journal of Eating Disorders*, 18(4), 317–326.
- Hewitt, P. L., Flett, G. L., & Mikail, S. F. (2017). *Perfectionism: A relational approach to assessment, treatment, and conceptualization*. Guilford.
- Hewitt, P. L., Flett, G. L., Sherry, S. B., & Caelian, C. (2006). Trait perfectionism dimensions and suicidal behavior. In T. E. Ellis (Ed.), *Cognition and suicide: Theory, research, and therapy* (pp. 215–235). American Psychological Association. <https://doi.org/10.1037/11377-010>.
- Hewitt, P. L., Mikail, S. F., Flett, G. L., Tasca, G. A., Flynn, C. A., Deng, X., Kaldas, J., & Chen, C. (2015). Psychodynamic/interpersonal group psychotherapy for perfectionism: Evaluating the effectiveness of a short-term treatment. *Psychotherapy*, 52(2), 205–217. <https://doi.org/10.1037/pst0000016>.
- Holder, M. D., & Coleman, B. (2009). The contribution of social relationships to children's happiness. *Journal of Happiness Studies*, 10(3), 329–349. <https://doi.org/10.1007/s10902-007-9083-0>.
- Holder, M. D., & Klassen, A. (2010). Temperament and happiness in children. *Journal of Happiness Studies*, 11(4), 419–439. <https://doi.org/10.1007/s10902-009-9149-2>.
- Hong, R. Y., Lee, S. S. M., Chng, R. Y., Zhou, Y., Tsai, F. F., & Tan, S. H. (2017). Developmental trajectories of maladaptive perfectionism in middle childhood. *Journal of Personality*, 85(3), 409–422. <https://doi.org/10.1111/jopy.12249>.
- Houghton, S., Marais, I., Kyron, M., Lawrence, D., Page, A. C., Gunasekera, S., Glasgow, K., & Macqueen, L. (2022). Screening for depressive symptoms in adolescence: A Rasch analysis of the short-form childhood depression inventory-2 (CDI 2:SR[S]). *Journal of Affective Disorders*, 311, 189–197. <https://doi.org/10.1016/j.jad.2022.05.088>.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>.
- Ivens, J. (2007). The development of a happiness measure for schoolchildren. *Educational Psychology in Practice*, 23(3), 221–239. <https://doi.org/10.1080/02667360701507301>.
- Kenny, D. A. (2013). Mediation: Sensitivity analysis [webinar]. Retrieved from <http://davidakenny.net/webinars/Mediation/Sensitivity/Sensitivity.html>.
- Kenny, D. A. (2021, May 4). *Mediation*. Kenny: David A. Retrieved January 4, 2023, from <https://davidakenny.net/cm/mediate.htm>.
- Kim, E. K., Furlong, M. J., Dowdy, E., & Felix, E. D. (2014). Exploring the relative contributions of the strength and distress components of dual-factor complete mental health screening. *Canadian Journal of School Psychology*, 29(2), 127–140. <https://doi.org/10.1177/082957351452956>.
- Kim, Y., & Hong, J. (2007). Development of the Korean version of the children's self-report social skills scale. *Korean Society of Child Welfare*, 24, 177–206.
- Kim, Y. H. (2018). *Data for marital relations and family function in child development* [Unpublished raw data]. Yonsei University.
- Kohlberg, L., LaCrosse, J., & Ricks, D. (1972). The predictability of adult mental health from childhood behavior. *Manual of Child Psychopathology*, 7.
- Kovacs, M. (2011). *Children's depression inventory* (2nd editionTM). PscTESTS Dataset.

- Lalor, A., Brown, T., & Murdolo, Y. (2016). Relationship between children's performance-based motor skills and child, parent, and teacher perceptions of children's motor abilities using self/informant-report questionnaires. *Australian Occupational Therapy Journal*, 63(2), 105–116. <https://doi.org/10.1111/1440-1630.12253>.
- Lang, K. M., & Little, T. D. (2018). Principled missing data treatments. *Prevention Science*, 19(3), 284–294. <https://doi.org/10.1007/s1121-016-0644-5>.
- Lee, S. Y., Hong, J. S., & Espelage, D. L. (2010). An ecological understanding of youth suicide in South Korea. *School Psychology International*, 31(5), 531–546. <https://doi.org/10.1177/0143034310382724>.
- Leone, E. M., & Wade, T. D. (2018). Measuring perfectionism in children: A systematic review of the mental health literature. *European Child and Adolescent Psychiatry*, 27(5), 553–567. <https://doi.org/10.1007/s00787-017-1078-8>.
- Levine, S. L., & Milyavskaya, M. (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. <https://doi.org/10.1016/j.jrp.2018.02.002>.
- Lewis, T. T., Cogburn, C. D., & Williams, D. R. (2015). Self-reported experiences of discrimination and health: Scientific advances, ongoing controversies, and emerging issues. *Annual Review of Clinical Psychology*, 11(1), 407–440. <https://doi.org/10.1146/annurev-clinpsy-032814-112728>.
- Lo, A., & Abbott, M. J. (2013). Review of the theoretical, empirical, and clinical status of adaptive and maladaptive perfectionism. *Behaviour Change*, 30(2), 96–116. <https://doi.org/10.1017/bec.2013.9>.
- LoCicero, K. A., & Ashby, J. S. (2000). Multidimensional perfectionism in middle school age gifted students: A comparison to peers from the general cohort. *Roeper Review*, 22(3), 182–185. <https://doi.org/10.1080/02783190009554030>.
- Mackinnon, S. P., Sherry, S. B., Graham, A. R., Stewart, S. H., Sherry, D. L., Allen, S. L., Fitzpatrick, S., & McGrath, D. S. (2011). Reformulating and testing the perfectionism model of binge eating among undergraduate women: A short-term, three-wave longitudinal study. *Journal of Counseling Psychology*, 58(4), 630–646. <https://doi.org/10.1037/a0025068>.
- Magson, N. R., Oar, E. L., Fardouly, J., Johnco, C. J., & Rapee, R. M. (2019). The preteen perfectionist: An evaluation of the perfectionism social disconnection model. *Child Psychiatry and Human Development*, 50(6), 960–974. <https://doi.org/10.1007/s10578-019-00897-2>.
- Martin, J. L., & Ashby, J. S. (2004). Perfectionism and fear of intimacy: Implications for relationships. *The Family Journal*, 12(4), 368–374. <https://doi.org/10.1177/1066480704267279>.
- McArdle, S. (2010). Exploring domain-specific perfectionism. *Journal of Personality*, 78(2), 493–508. <https://doi.org/10.1111/j.1467-6494.2010.00624.x>.
- Muthén, L., & Muthén, B. O. (1998–2010). *Mplus users guide* (6th ed.). Muthén & Muthén.
- Noble, C. L., Ashby, J. S., & Gnillka, P. B. (2014). Multidimensional perfectionism, coping, and depression: Differential prediction of depression symptoms by perfectionism type. *Journal of College Counseling*, 17(1), 80–94. <https://doi.org/10.1002/j.2161-1882.2014.00049.x>.
- Nounopoulos, A., Ashby, J. S., & Gilman, R. (2006). Coping resources, perfectionism, and academic performance among adolescents. *Psychology in the Schools*, 43(5), 613–622. <https://doi.org/10.1002/pits.20167>.
- Nugent, S. A. (2000). Perfectionism: Its manifestations and classroom-based interventions. *Journal of Secondary Gifted Education*, 11(4), 215–221. <https://doi.org/10.4219/jsge-2000-630>.
- O'Connor, R. C., Dixon, D., & Rasmussen, S. (2009). The structure and temporal stability of the child and adolescent perfectionism scale. *Psychological Assessment*, 21(3), 437–443. <https://doi.org/10.1037/a0016264>.
- Organization for Economic Cooperation and Development. (2015). Programme for international student assessment. Retrieved from <https://www.oecd.org/pisa/pisa-2015-results-in-focus.pdf>.
- Organization for Economic Cooperation and Development. (2022). Suicide rates. Retrieved from www.data.oecd.org/healthstat/suicide-rates.htm.
- Perren, S., & Alsaker, F. D. (2009). Depressive symptoms from kindergarten to early school age: Longitudinal associations with social skills deficits and peer victimization. *Child and Adolescent Psychiatry and Mental Health*, 3(1). <https://doi.org/10.1186/1753-2000-3-28>.
- Rapee, R. M., Oar, E. L., Johnco, C. J., Forbes, M. K., Fardouly, J., Magson, N. R., & Richardson, C. E. (2019). Adolescent development and risk for the onset of social-emotional disorders: A review and conceptual model. *Behaviour Research and Therapy*, 123, Article 103501. <https://doi.org/10.1016/j.brat.2019.103501>.
- Rice, K. G., & Ashby, J. S. (2007). An efficient method for classifying perfectionists. *Journal of Counseling Psychology*, 54(1), 72–85. <https://doi.org/10.1037/0022-0167.54.1.72>.
- Rice, K. G., Ashby, J. S., & Gilman, R. (2011). Classifying adolescent perfectionists. *Psychological Assessment*, 23(3), 563–577. <https://doi.org/10.1037/a0022482>.
- Rice, K. G., Leever, B. A., Noggle, C. A., & Lapsley, D. K. (2007). Perfectionism and depressive symptoms in early adolescence. *Psychology in the Schools*, 44(2), 139–156. <https://doi.org/10.1002/pits.20212>.
- Rice, K. G., Park, H.-J., Hong, J., & Lee, D. G. (2019). Measurement and implications of perfectionism in South Korea and the United States. *The Counseling Psychologist*, 47(3), 384–416. <https://doi.org/10.1177/0011000019870308>.
- Rice, K. G., Richardson, C. M., & Tueller, S. (2014). The short form of the revised almost perfect scale. *Journal of Personality Assessment*, 96(3), 368–379. <https://doi.org/10.1080/00223891.2013.838172>.
- Riley, A. W. (2004). Evidence that school-age children can self-report on their health. *Ambulatory Pediatrics*, 4(4), 371–376. <https://doi.org/10.1367/A03-178R.1>.
- Riley, C., Lee, M., Cooper, Z., Fairburn, C. G., & Shafran, R. (2007). A randomised controlled trial of cognitive-behaviour therapy for clinical perfectionism: A preliminary study. *Behaviour Research and Therapy*, 45(9), 2221–2231. <https://doi.org/10.1016/j.brat.2006.12.003>.
- Rogers, G. M., Park, J. H., Essex, M. J., Klein, M. H., Silva, S. G., Hoyle, R. H., Curry, J. F., Feeny, N. C., Kennard, B., Kratochvil, C. J., Pathak, S., Reinecke, M. A., Rosenberg, D. R., Weller, E. B., & March, J. S. (2009). The dysfunctional attitudes scale: Psychometric properties in depressed adolescents. *Journal of Clinical Child and Adolescent Psychology*, 38(6), 781–789. <https://doi.org/10.1080/15374410903259007>.
- Saeri, A. K., Cruwys, T., Barlow, F. K., Stronge, S., & Sibley, C. G. (2017). Social connectedness improves public mental health: Investigating bidirectional relationships in the New Zealand attitudes and values survey. *Australian and New Zealand Journal of Psychiatry*, 52(4), 365–374. <https://doi.org/10.1177/0004867417723990>.
- Schaefer, D. R., Kornienko, O., & Fox, A. M. (2011). Misery does not love company. *American Sociological Review*, 76(5), 764–785. <https://doi.org/10.1177/0003122411420813>.
- Schuler, P. A. (2000). Perfectionism and gifted adolescents. *Journal of Secondary Gifted Education*, 11(4), 183–196. <https://doi.org/10.4219/jsge-2000-629>.
- Segrin, C. (1996). The relationship between social skills deficits and psychosocial problems. *Communication Research*, 23(4), 425–450. <https://doi.org/10.1177/009365096023004005>.
- Selig, J. P., & Preacher, K. J. (2008, June). Monte Carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects [Computer software]. Available from <http://quantpsy.org/>.
- Seong, H., & Chang, E. (2021). Profiles of perfectionism, achievement emotions, and academic burnout in south Korean adolescents: Testing the 2 × 2 model of perfectionism. *Learning and Individual Differences*, 90, Article 102045. <https://doi.org/10.1016/j.lindif.2021.102045>.
- Seong, H., Lee, S., & Chang, E. (2021). Perfectionism and academic burnout: Longitudinal extension of the bifactor model of perfectionism. *Personality and Individual Differences*, 172, Article 110589. <https://doi.org/10.1016/j.paid.2020.110589fpps>.
- Seth, M. J. (2002). *Hawaii studies on Korea: Education fever: Society, politics, and the pursuit of schooling in South Korea*. University of Hawaii Press.
- Shahar, G. (2001). Personality, shame, and the breakdown of social bonds: The voice of quantitative depression research. *Psychiatry*, 64(3), 228–239. <https://doi.org/10.1521/psyc.64.3.228.18463>.
- Sherry, S. B., Mackinnon, S. P., & Gautreau, C. M. (2016). Perfectionists do not play nicely with others: Expanding the social disconnection model. In F. M. Sirois, & D. S. Molner (Eds.), *Perfectionism, health, and well-being* (pp. 225–243). Springer International. https://doi.org/10.1007/978-3-319-18582-8_10.
- Shim, S. S., & Fletcher, K. L. (2012). Perfectionism and social goals: What do perfectionists want to achieve in social situations? *Personality and Individual Differences*, 52(8), 919–924. <https://doi.org/10.1016/j.paid.2012.02.002>.
- Slade, P. D., & Owens, R. G. (1998). A dual process model of perfectionism based on reinforcement theory. *Behavior Modification*, 22(3), 372–390. <https://doi.org/10.1177/01454455980220310>.
- Slaney, R. B., Rice, K. G., Mobley, M., Trippi, J., & Ashby, J. S. (2001). The revised almost perfect scale. *Measurement and Evaluation in Counseling and Development*, 34(3), 130–145. <https://doi.org/10.1080/07481756.2002.12069030>.

- Soenens, B., & Vansteenkiste, M. (2019). Are parents responsible for the rise of perfectionism? Comment on Curran and Hill (2019). *Psychological Bulletin*, 145(4), 430–432. <https://doi.org/10.1037/bul0000167>.
- Sørbye, M.-A., Hagen, K. A., & Nordahl, K. B. (2021). Development of social skills during middle childhood: Growth trajectories and school-related predictors. *International Journal of School and Educational Psychology*, 9(Supplement 1), S69–S87. <https://doi.org/10.1080/21683603.2020.1744492>.
- Spence, S. H. (1998). A measure of anxiety symptoms among children. *Behavior Research and Therapy*, 36, 545–566.
- Stoeber, J. (2014). Perfectionism in sport and dance: A double-edged sword. *International Journal of Sport Psychology*, 45(4), 385–394. <https://doi.org/10.7352/IJSP2014.45.385>.
- Stoeber, J., Kobori, O., & Tanno, Y. (2013). Perfectionism and self-conscious emotions in British and Japanese students: Predicting pride and embarrassment after success and failure. *European Journal of Personality*, 27(1), 59–70. <https://doi.org/10.1002/per.1858>.
- Stoeber, J., & Otto, K. (2006). Positive conceptions of perfectionism: Approaches, evidence, challenges. *Personality and Social Psychology Review*, 10(4), 295–319. https://doi.org/10.1207/s15327957pspr1004_2.
- Stoeber, J., & Stoeber, F. S. (2009). Domains of perfectionism: Prevalence and relationships with perfectionism, gender, age, and satisfaction with life. *Personality and Individual Differences*, 46(4), 530–535. <https://doi.org/10.1016/j.paid.2008.12.006>.
- Suddarth, B. H., & Slaney, R. B. (2001). An investigation of the dimensions of perfectionism in college students. *Measurement and Evaluation in Counseling and Development*, 34(3), 157–165. <https://doi.org/10.1080/07481756.2002.1206903>.
- Suldo, S. M., & Shaffer, E. J. (2008). Looking beyond psychopathology: The dual-factor model of mental health in youth. *School Psychology Review*, 37(1), 52–68. <https://doi.org/10.1080/02796015.2008.12087909>.
- Wang, K. T., Puri, R., Slaney, R. B., Methikalam, B., & Chadha, N. (2012). Cultural validity of perfectionism among Indian students: Examining personal and family aspects through a collectivistic perspective. *Measurement and Evaluation in Counseling and Development*, 45(1), 32–48. <https://doi.org/10.1177/0748175611423109>.
- Wang, K. T., Yuen, M., & Slaney, R. B. (2009). Perfectionism, depression, loneliness, and life satisfaction: A study of high school students in Hong Kong. *The Counseling Psychologist*, 37(2), 249–274. <https://doi.org/10.1177/0011000008315975>.
- Wang, Y., & Zhang, B. (2017). The dual model of perfectionism and depression among Chinese university students. *The South African Journal*, 23, 1025. <https://doi.org/10.4102/sajpsychiatry.v23i0.1025>.
- Yao, Z., & Enright, R. (2021). A developmental Cascade model of prosocial behavior, academic competence, and peer exclusion across preadolescence. *Merrill-Palmer Quarterly*, 67(3), 269. <https://doi.org/10.13110/merrpalmquar1982.67.3.0269>.
- Yoon, M., & Shim, E. J. (2014). The relationship among dichotomous thinking, dysfunctional perfectionism and suicide ideation in adolescents: The mediating role of hopelessness depression symptom. *The Korean Journal of School Psychology*, 11(3), 621–638. <https://doi.org/10.16983/kjsp.2014.11.3.621>.
- Zane, N., & Song, A. (2007). Interpersonal effectiveness among Asian Americans: Issues of leadership, career advancement, and social competence. In F. L. Leong, A. Ebreo, L. Kinoshita, A. G. Inman, & M. F. Yang (Eds.), *Handbook of Asian American psychology* (2nd ed., pp. 283–301). Sage Publications, Inc.