Relationships between dysfunctional perfectionism and school stress in primary school students in Posadas (Argentina)

Relaciones entre perfeccionismo disfuncional y estrés escolar en estudiantes de nivel primario de Posadas (Argentina)

Relações entre perfeccionismo disfuncional e estresse escolar em estudantes do nível primário de Posadas (Argentina)

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The dataset supporting the results of this study is not available



Abstract: Although it is known that maladaptive perfectionism leads to negative consequences in academic life, so far, no scientific work has been found that studies school stress in relation to the three dimensions of multidimensional perfectionism (i. e., self-directed, socially prescribed, and other-oriented). The aim of this paper was to analyze the predictive role of dysfunctional perfectionism in school stress in primary school students and to assess the differential contribution of each of its dimensions. A quantitative, cross-sectional, and correlational study was conducted with n = 226 students from primary schools in the city of Posadas, Argentina. The results suggest that perfectionism predicts school stress by 31.9 %, especially in the self-directed and socially prescribed dimensions. In multivariate regression analysis, self-oriented perfectionism contributed to emotional stress and interpersonal tension, socially prescribed perfectionism predicted all three dimensions of school stress, while other-oriented perfectionism only predicted interpersonal tension. These results are in line with the underlying theoretical model and provide relevant information to deepen the understanding of the dynamics of children's perfectionism at the primary school level.

Keywords: perfectionism; school stress; primary education; middle childhood

Resumen: Aunque es conocido que el perfeccionismo desadaptativo tiene consecuencias negativas en la vida académica, hasta el momento no se hallaron trabajos científicos que estudien el estrés escolar en relación con las tres dimensiones del perfeccionismo multidimensional (i. e., autorientado, socialmente prescrito y orientado a otros). El objetivo de este trabajo fue analizar el rol predictor del perfeccionismo disfuncional en el estrés escolar de estudiantes de nivel primario y valorar la contribución diferencial de cada una de sus dimensiones. Se realizó un estudio cuantitativo, transversal y correlacional con n = 226 estudiantes de escuelas primarias de la ciudad de Posadas, Argentina. Los resultados sugieren que el perfeccionismo predice el estrés escolar en un 31.9 %, sobre todo en las dimensiones autorientada y socialmente prescrita. En el análisis de regresión multivariada, el perfeccionismo autorientado contribuyó al estrés emocional y a la tensión interpersonal, el perfeccionismo socialmente prescrito predijo las tres dimensiones del estrés escolar, mientras que el perfeccionismo orientado a otros solo predijo la tensión interpersonal. Estos resultados son acordes al modelo teórico de base y aportan información relevante para profundizar el conocimiento de la dinámica del perfeccionismo infantil en el nivel primario de la escuela.

Palabras claves: perfeccionismo; estrés académico; educación primaria; tercera infancia

Resumo: Embora se saiba que o perfeccionismo desadaptativo conduz a consequências negativas na vida acadêmica, até o momento, não foram encontrados trabalhos científicos que estudem o estresse escolar em relação às três dimensões do perfeccionismo multidimensional (i. e., auto-orientado, socialmente prescrito e orientado para os outros). O objetivo deste trabalho foi analisar o papel preditivo do perfeccionismo disfuncional no estresse escolar de estudante do nível primário e avaliar a contribuição diferencial de cada uma de suas dimensões. Foi realizado um estudo quantitativo, transversal e correlacional com n = 226 estudantes de escolas primárias da cidade de Posadas, Argentina. Os resultados sugerem que o perfeccionismo prediz o estresse escolar em 31,9 %, especialmente nas dimensões auto- orientada e socialmente prescrita. Na análise de regressão multivariada, o perfeccionismo socialmente prescrito prediz as três dimensões do estresse escolar, enquanto o perfeccionismo orientado para os outros apenas prediz a tensão interpessoal. Estes resultados estão de acordo com o modelo teórico de base e fornecem informações relevantes para aprofundar o conhecimento da dinâmica do perfeccionismo infantil no nível primário escolar.

Palavras-chave: perfeccionismo; estresse acadêmico; educação primária; terceira infância

The term "perfectionism" was defined by Hewitt and Flett (1991) as the tendency to set and pursue high, though often unrealistic, standards. According to these authors, the rigid need for perfection and the concern with being perfect—or appearing perfect—can arise from a number of underlying issues and serve different functions, resulting in three distinct dimensions: (a) self-oriented perfectionism, driven by personal expectations of oneself; (b) socially prescribed perfectionism, which involves the belief that others expect perfection from us; and (c) other-oriented perfectionism, where individuals hold high expectations of others (Smith et al., 2022).

Numerous scientific studies have explored the consequences of maladaptive perfectionism during childhood, with evidence showing that it can lead to different issues across different areas of child development. For instance, certain aspects of interpersonal perfectionism (i. e., perfectionistic selfpresentation) in childhood have been associated with physical discomfort (Sánchez & Rodríguez et al., 2021). Moreover, within child and adolescent populations, perfectionism has been linked to depression (Asseraf & Vaillancourt, 2015), anxiety (Ferrer et al., 2018), eating disorders (Bills et al., 2023), selfharm (Gyori & Balazs, 2021), and other mental health issues. Evidence also suggests that perfectionism increases children's vulnerability, acting as a risk factor that may predispose them to more serious issues. In this context, research indicates that certain aspects of maladaptive childhood perfectionism specifically a combined profile of self-oriented and socially prescribed perfectionism—are associated with heightened levels of hostility, verbal and physical aggression, and anger (Vicent, Inglés, Sanmartín, Gonzálvez, & García-Fernández, 2017). Furthermore, high levels of socially prescribed perfectionism have been linked to negative emotional states and pathological thoughts (Gonzálvez et al., 2015). Particularly in the interpersonal domain, findings reveal that all three dimensions of perfectionism increase feelings of loneliness and reduce perceptions of social support in children (Chemisquy & Oros, 2020).

In this regard, one model that seeks to explain the maladaptive effects of perfectionism is the stress-vulnerability model (Hewitt & Flett, 1993; 2002), which suggests that perfectionism can influence or interact with stress, leading to or maintaining psychopathological states. This may occur because perfectionists either experience higher levels of stress or respond to stress in maladaptive ways. Evidence supports this model, for instance, the self-oriented and socially prescribed dimensions of perfectionism have been linked to poorer physical health due to perceived stress (Molnar et al., 2012). Additionally, research suggests that the connection between socially prescribed perfectionism and depression may arise from an intensified stress reactivity (Flett, Nepon et al., 2016).

Interestingly, within the school context, self-oriented perfectionism has been found to positively impact academic performance (Harvey et al., 2017) and math self-efficacy (Ford et al., 2023). Conversely, evidence indicates that perfectionistic children tend to experience higher levels of school-related anxiety compared to their non-perfectionistic peers (Inglés et al., 2016). Additionally, those with elevated levels of socially prescribed perfectionism may face greater peer rejection at school (Gonzálvez et al., 2015). Research also suggests that certain facets of perfectionism can contribute to higher stress within the school and learning environment (Yang & Chen, 2015).

School-related stress has been defined by Martínez Díaz and Díaz Gómez (2007) as "the discomfort that students experience due to physical and emotional factors —whether interpersonal or

intrapersonal— or environmental factors that place significant pressure on individual competence to cope within the school context, particularly regarding academic performance" (p. 14). Similarly, Bringhenti (1996) states that school stress includes demotivation, emotional exhaustion, interpersonal difficulties, and low satisfaction within the school environment.

Previous research has shown that maladaptive perfectionism can lead to higher levels of distress in senior students (Wuthrich et al., 2020) and may even contribute to certain aspects of academic burnout (i. e., cynicism and emotional exhaustion) in adolescents at this level (Seong et al., 2021). In terms of perfectionism facets, both self-oriented and socially prescribed perfectionism have been associated with school stress and some of its dimensions, including pressure to study, concern about grades, high expectations, and feelings of uneasiness or discouragement toward studying (Flett, Hewitt et al., 2016). Specifically, among primary school students, Latin American studies have shown that selforiented perfectionism increases the likelihood of both family- and school-related stress (Aguilar Durán, 2019; Barba, 2019).

A recent Spanish study with secondary school students has found that self-oriented perfectionism and high parental expectations can be linked to higher levels of school stress in dimensions such as academic performance, fear of uncertainty, and school-leisure conflict. The study has also provided evidence of the moderating role of self-oriented perfectionism in connection to school stress (i. e., school-leisure conflict) and somatic symptoms (Díez et al., 2023).

As observed in this brief review of background literature, most studies focus on self-oriented and/or socially prescribed perfectionism. However, to date, no scientific studies have examined school stress in relation to all three dimensions proposed by the Hewitt and Flett model (1991), revealing a significant gap in research on this topic.

In light of the above, this study aimed to analyze the predictive role of maladaptive childhood perfectionism in school stress. Exploring the dynamics of this relationship and examining the distinct contribution of each dimension of perfectionism to school stress in primary school students could be highly relevant, both scientifically and practically, given recent findings suggesting that academic stress partially mediates the relationship between perfectionism, anxiety, and depression (Gil et al., 2023).

Method

Type of Study

A quantitative, cross-sectional, correlational study was conducted.

Participants

A non-probability sampling was used based on the researchers' access to different schools. The resulting sample consisted of n = 226 primary school students from the city of Posadas, Argentina. Of the total sample, 60.2 % were girls; 54 % were in the sixth grade, while the remainder were in seventh grade. The mean age was 11.58 (*SD* = .67).

Instruments

To assess self-oriented perfectionism, the Child Perfectionism Scale (Oros, 2003) was used. This self-administered instrument includes 16 items on a Likert-type scale with three response options (1: *I don't think about it/no*; 2: *I think about it sometimes/sometimes*; 3: *I think about it/yes*), allowing for the assessment of self-oriented perfectionism across two subdimensions, each with eight items: Self-Demands, which evaluates self-imposed demands (e.g., "I need to be the best"; "I must always win"), and Maladaptive Reactions to Failure, which assesses responses to perceived failures (e.g., "I think a lot about the mistakes I made"; "I criticize myself a lot"). In this study, only the total scale score was used to represent the facet of self-oriented perfectionism facet without differentiating its factors.

The interpersonal dimensions of perfectionism were assessed using the Child Social Perfectionism Scale (Oros et al., 2019), which provides information on the two interpersonal dimensions of perfectionism: Socially prescribed, comprising nine items that assess the belief that others expect perfect performance (e.g., "My family wants me to be perfect"; "My teachers do not accept that I make mistakes"), and Other-oriented, comprising seven items that assess the demands for perfection imposed on others (e.g., "I get angry with my friends when they don't want to get high grades"; "I hang out with the smartest people"). This questionnaire is also self-administered, using a Likert-type format with

three response options (1: *no*, 2: *sometimes*, and 3: *yes*). The scale provides two scores representing each of the interpersonal facets of perfectionism; these scores are considered independently without calculating a total score.

These two scales assess perfectionism based on the multidimensional model proposed by Hewitt and Flett (1991). Recently, the simultaneous functioning of both instruments was studied, demonstrating adequate psychometric properties: the confirmatory factor analysis (CFA) showed a good fit to the underlying theoretical model, comprising three factors (AGFI = .94; CFI = .93; RMSEA = .048; SRMR = .039). The internal consistency was found to be optimal, according to McDonald's omega values (self-oriented perfectionism = .78; socially prescribed perfectionism = .82; other-oriented perfectionism = .71) (Oros et al., 2023). The Cronbach's alpha values in this study indicate adequate internal consistency, as shown in Table 1.

To assess school stress, the School Stress Questionnaire (SSQ) by Bringhenti (1996) was used. Like the previous instruments, this is a self-administered questionnaire consisting of 35 items with a Likert scale format offering four response options (1: *never*, 2: *sometimes*, 3: *almost always*, and 4: *always*). This instrument measures school stress across three subscales: (a) Emotional Scale, consisting of twenty items that assess attitudes related to emotional exhaustion, demotivation, and dissatisfaction with school, studying, and teachers (e.g., "I am afraid that school will interest me less and less"; "I am very tired due to schoolwork"); (b) Interpersonal Tension Scale, comprising eight items that measure interpersonal difficulties, feelings of annoyance, and hostility towards certain members of the class group (e.g., "Being among my classmates makes me tense and nervous"; "I am afraid that my relationship with my classmates will become increasingly difficult"); and (c) Self-Concept Scale, with seven items that gather information on social aspects of self-esteem and school adaptation (e.g., "I feel comfortable in my class and at school"; "I feel useful when solving problems given by teachers"). The scale provides three partial scores, representing each dimension, and a total score representing school stress. The internal consistency of the total scale and each subscale was very good, as shown in Table 1.

Data Collection and Analysis Procedure

Following the favorable evaluation by the Ethics Committee of the Province of Misiones, the head teachers of both public and private primary schools in the city of Posadas were contacted to invite sixth and seventh-grade students to participate in this research. Once approval was obtained from each school, informed consent forms were provided to the head teachers and/or teachers for distribution among students to secure the approval of their legal guardians. The questionnaires were administered to the students who had had the consent forms signed, following an explanation of the study's objectives and obtaining their verbal assent. The data collection was conducted in person, in groups, and on paper, with researchers present to minimize comprehension errors.

After data collection, the data were entered into Jamovi v.2.4.8. For the analysis, the total scores for the scales and subscales were calculated to construct indicators for each variable, and the reliability of the scales was assessed based on internal consistency (Cronbach's alpha). Next, the descriptive statistical analyses of the scales and subscales were conducted, including means, standard deviation, minimums, maximums, and indices of skewness and kurtosis. This was followed by the bivariate correlation analysis using Pearson correlation coefficient, r, with effect sizes evaluated based on the guidelines of Funder and Ozer (2019). Their guidelines suggest that r values of .05 represent a very small effect size for explaining events, while an r of .10 indicates an effect that —although potentially small at the individual event level— may hold greater relevance. Similarly, an r value of .20 suggests a medium effect size that may be both explanatory and practical, even in the short term; r values of .30 indicate a large and potentially strong effect, both in the short and long term; and finally, r values of .40 or higher represent very large effect sizes.

In the next step, a multiple-linear regression (MLR) was conducted, where the three dimensions of perfectionism served as independent variables, while school stress, based on the total score from the SSQ, was the dependent variable. Finally, a multivariate regression was carried out using a path analysis through the PATH module, which is based on the Lavaan R package (Gallucci, 2021; Rosseel, 2011). Since no significant deviations from univariate or multivariate normality were found in the data, the maximum likelihood estimation method (MLE) was used, and a model was tested in which the three dimensions of perfectionism were introduced as exogenous variables and the three subscales of school stress as endogenous variables. The following criteria was used to evaluate the model: values of $x^2/df \le 5.00$ (West et al., 2012), CFI and AGFI \ge .95 (Brown, 2006; Hu & Bentler, 1999), SRMR \le .08

R

(Hooper et al., 2008). In this study, the RMSEA value was not considered, as the tested model had few degrees of freedom (Kenny et al., 2014). The determination coefficients (r^2) were transformed into f^2 to compare effect sizes using Cohen's criteria (1992).

Results

Before proceeding with the analysis, we checked for missing data. It was found that the only missing entries were responses participants had not completed. To address this, the decision was made to replace these missing values with the participant's mode in that subscale (Cichosz, 2015). Univariate outlier analysis identified participants with Z-scores exceeding ± 3.29 in the other-oriented dimension of perfectionism (three cases) and in the emotional and interpersonal tension dimensions of school stress (one and two cases, respectively). Additionally, no multivariate outliers were found based on Mahalanobis distance analysis (p < .001) (Tabachnick & Fidell, 2013). Most skewness and kurtosis indices did not exceed ± 1 , indicating appropriate univariate normality (George & Mallery, 2011); the other-oriented dimension was the only exception, with acceptable skewness but very high kurtosis, typical for this variable (Chemisquy et al., 2019; Oros et al., 2023). The multivariate normality analysis yielded a Mardia coefficient of 12.31, considered acceptable, which justified the use of the maximum likelihood method for parameter estimation (Rodríguez Ayán & Ruiz Díaz, 2008).

The results of the descriptive statistical analysis and the internal consistency of the subscales are presented in Table 1.

Table 1

Minimum and Maximum Scores, Mean, Standard Deviation, Skewness, Kurtosis, and Cronbach's Alpha for Each Dimension Evaluated

	min.	max.	М	DS	Sk	Ku	α
SOP	16	47	30.3	6.48	.142	656	.83
SPP	9	27	15.4	4.26	.427	517	.79
OOP	7	21	8.9	2.11	2.03	5.98	.66
ES	20	74	39.6	9.06	.653	.442	.83
IT	8	32	15.4	4.78	.723	.295	.74
SC	7	27	16.4	3.93	.017	539	.65
SS	41	112	71.5	13.8	.485	.322	.81

Note. SOP: self-oriented perfectionism; SPP: socially prescribed perfectionism; OOP: other-oriented perfectionism; ES: emotional stress; IT: interpersonal tension; SC: self-concept; SS: school stress.

Table 2 shows the correlation coefficient analysis, revealing that all three dimensions of perfectionism had statistically significant and positive associations with to school stress. The self-oriented dimension showed a significant connection (r = .491; p < .001), as did the socially prescribed dimension (r = .490; p < .001). However, the other-oriented perfectionism dimension displayed a medium-sized association (r = .281; p < .001). This shows that school stress increases as self-oriented, socially prescribed, and/or other-oriented perfectionism increases, and vice versa.

On the other hand, the self-oriented and socially prescribed perfectionism showed statistically significant, positive, and strong associations with emotional stress. Other-oriented perfectionism also had a statistically significant and positive association with this subdimension of school stress, though with a medium effect size. All three dimensions of perfectionism also correlated positively -with statistically significant and large to very large effect sizes- with the dimension of interpersonal tension leading to school stress.

Only the socially prescribed perfectionism showed a statistically significant association with self-concept-based stress. In this case, the association was positive and of small effect size, though potentially relevant.

It is worth noting that the values found to show that the variables do not exhibit collinearity, since in all cases r < .85 (Cupani, 2012).

	SOP	SPP	00P	ES	IT	SC
SOP	1					
SPP	.497*	1				
OOP	.326*	.309	1			
ES	.452*	.445*	.260*	1		
IT	.514*	.434*	.333*	.576*	1	
SC	.064	.168**	014	.265*	.056	1

Table 2

Bivariate Correlations (Pearson's r) between the Dimensions of Perfectionism and the Subscales of School Stress

Note. SOP: self-oriented perfectionism; SPP: socially prescribed perfectionism; OOP: other-oriented perfectionism; ES: emotional stress; IT: interpersonal tension; SC: self-concept.

* p < .001; ** p = .011.

In the multiple linear regression analysis, perfectionism was found to account for 31.9 % of school stress variance ($F(_{3,222}) = 36.160$; p < .001). As shown in Table 3, the self-oriented and socially prescribed dimensions made statistically significant contributions, whereas other-oriented perfectionism did not reach statistical significance in this analysis.

Table 3

Linear Regression Between School Stress and the Dimensions of Perfectionism

Variables	В	Beta	t	р
SOP	.664	.311	4.797	<.001
SPP	1.003	.309	4.794	<.001
OOP	.554	.085	1.430	.154

Note. SOP: self-oriented perfectionism; SPP: socially prescribed perfectionism; OOP: other-oriented perfectionism.

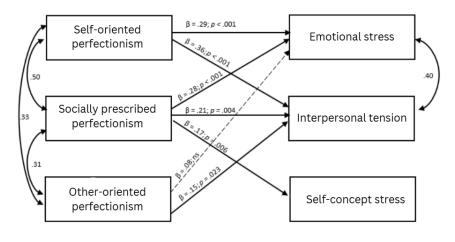
Finally, the multivariate regression model was tested using path analysis. In designing the model, the associations observed from the correlation and multiple linear regression analysis were considered, establishing connections between the three dimensions of perfectionism and both emotional stress and interpersonal tension. Additionally, only one association was identified between socially prescribed perfectionism and self-concept-related stress. The model showed fit values and acceptable error values ($\chi^2 = 17.3$; df = 4; p = .002; $\chi^2/df = 4.32$; CFI = .938; AGFI = .990; SRMR = .0039). The proposed model accounted for 27.5 % ($r^2 = .275$) of emotional stress and 32.7 % ($r^2 = .327$) of interpersonal tension, indicating large effect sizes ($f^2 = .38$ and .49, respectively). In contrast, it accounted for only 2.8 % ($r^2 = .028$) of self-esteem-related stress, which reflects a small effect size ($f^2 = .03$).

Figure 1 shows the contributions of each facet of perfectionism to the different dimensions of school stress: self-oriented perfectionism contributed significantly to emotional stress and interpersonal tension; socially prescribed perfectionism contributed significantly to all three dimensions of school stress; and other-oriented perfectionism predicted only interpersonal tension.

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Figure 1

Multivariate regression model depicting the relationships between the dimensions of perfectionism and school stress



Note. The dashed line represents a non-significant relationship (p > .05).

Discussion

This research aimed to analyze the predictive role of dysfunctional childhood perfectionism in school-related stress and to assess the impact that each dimension of perfectionism may have, using a sample of sixth and seventh-grade students from the city of Posadas, Argentina.

The descriptive analysis showed values that align with the characteristics of the variables. For intrapersonal perfectionism, the scale for the Argentine population (Oros & Vargas Rubilar, 2016) indicates that scores around 30-31 points reflect a moderate level of perfectionism. Currently, there is no specific scale to interpret scores in the interpersonal dimensions of perfectionism; however, a comparison with the minimum and maximum values suggests that the averages reflect low levels of these traits within the study sample. Likewise, the average scores for school stress and each of its dimensions are considered moderate to low, based on the possible minimum and maximum values.

In the correlation analysis, although all three facets of perfectionism showed a significant positive association with school stress, the strongest correlations were found in the self-oriented and socially prescribed dimensions. Supporting these findings, Aguilar Durán (2019) reported that self-oriented perfectionism is linked to higher stress levels among primary school students in Caracas. Similarly, Molnar et al. (2012) demonstrated that self-oriented and socially prescribed perfectionism were more strongly associated with declines in physical health due to perceived stress based on a sample of university students. As for other-oriented perfectionism, there is limited research on its association with stress, making the findings of this study unique and highlighting the need for further investigation in future studies.

In summary, it can be argued that it is unsurprising for the self-oriented and socially prescribed dimensions to be strongly associated with school stress, given that both generate considerable self-demand in perfectionistic students, regardless of whether this demand comes from within or others. In this regard, perfectionistic children may feel overwhelmed and lack the necessary skill set to cope with school demands (Richard, 2022).

In relation to the subdimensions of school stress, all three types of perfectionism have been associated with emotional stress, indicating that perfectionistic students tend to experience feelings of disinterest, exhaustion, and demotivation regarding school, teachers, and their own performance. Similarly, a study conducted with middle and high school students in China found that students in the maladaptive perfectionist group (i. e., high standards and high discrepancy) perceived their academic level to be lower, felt less satisfied, and experienced greater stress related to learning (Yang et al., 2016). Additionally, the three facets of perfectionism were related to the interpersonal tension factor, suggesting that childhood maladaptive perfectionism is associated with more negative peer relationships, generating tension, anxiety, and/or victimization. These results are consistent with the

social disconnection model and provide new evidence of its validity in understanding the social lives of perfectionistic children (Chemisquy, 2021; Goya Arce & Polo, 2017).

Finally, only the socially prescribed perfectionism showed a statistically significant association with self-concept-related stress. In this context, children with high levels of this facet may have low self-esteem and find it difficult to adapt to school. These results partially align with the research by Teixeira et al. (2016) conducted with adolescent girls in Portugal, which found that self-oriented perfectionism showed a non-significant relationship with self-esteem, while socially prescribed perfectionism was negatively correlated with this variable.

The multiple linear regression analysis found that maladaptive perfectionism is a predictor of school stress in primary school students. This result aligns with the stress generation model, which suggests that the relationship between perfectionism and stress contributes to the development and/or maintenance of different psychopathological processes (Hewitt & Flett, 2002).

Regarding the role of self-oriented perfectionism in predicting school stress, the specific stress vulnerability hypothesis suggests that this intrapersonal dimension is the most reactive to achievement-related stressors (Hewitt & Flett, 1993). In this context, some authors argue that this type of perfectionism can be adaptive as long as the stress levels experienced remain manageable (Gaudreau et al., 2018). It is therefore understandable that this facet of perfectionism would contribute to school stress, as school is an environment where achievement, performance, and sometimes competition play a central role. This setting may encourage students to adopt maladaptive beliefs—the "must" as described by Ellis (2002)—as well as checking behaviors, procrastination, and negative reactions to failure, illustrating the vicious cycle described by Oros (2005).

On the other hand, the role of socially prescribed perfectionism in predicting stress aligns with existing scientific evidence: numerous studies, as summarized in the review by Flett et al. (2022), indicate that this facet is the least healthy aspect of the construct. For instance, Chang and Rand (2000) found that university students with high levels of socially prescribed perfectionism may be more prone to developing different psychological issues and feelings of hopelessness when exposed to high levels of stress. Similarly, Díez et al. (2023) found that parental expectations can lead to stress related to academic performance, the feeling of uncertainty, and conflicts between school and leisure.

Finally, this study found that the other-oriented dimension did not contribute to school stress in children. As previously mentioned, this facet of perfectionism has been studied the least in child populations, although evidence suggests that it is more related to narcissistic personality traits than to negative outcomes (i. e., social disconnection) (Hewitt et al., 2022) and may even act as a buffer against such outcomes by boosting self-esteem and enabling for blame to be placed on others (Chen et al., 2017). Based on these premises, it is possible that children with high other-oriented perfectionism may attribute some of the difficulties they experience at school to others, thereby experiencing less distress in this context.

In the multivariate regression, self-oriented perfectionism was found to increase emotional stress and interpersonal tension. Consistent with this, the scientific literature suggests that perfectionistic students often perceive a significant gap between the goals they set for themselves and their achievements, leading them to lack self-confidence, fear failure, and experience less satisfaction from their accomplishments (Accordino et al., 2000; Bong et al., 2014; Lozano et al., 2014; Nounopoulos et al., 2006; Stoeber & Rambow, 2007). These factors may contribute to feelings of exhaustion and demotivation related to school. Emotional stress may also stem from anxiety about new tasks and negative self-assessment of their performance, characteristic of these students and potentially leading to dissatisfaction with their academic life (DiBartolo & Varner, 2012; Schruder et al., 2014). Additionally, high standards are associated with increased student distress (Wuthrich et al., 2020) and negative emotions such as anger, anxiety, and guilt (Curelaru et al., 2017), which may contribute to emotional stress at school.

The self-oriented facet also contributed to interpersonal tension at school, aligning with the Perfectionism Social Disconnection Model (Hewitt et al., 2006). Previous studies suggest that intrapersonal perfectionism can impact negatively on children's social lives (Chemisquy & Oros, 2020), partly due to their tendency toward being highly competitive and a desire to stand out. For instance, self-oriented perfectionists are often found to be more antisocial and less prosocial with their peers and opponents in sports activities (Mallinson-Howard et al., 2019). Additionally, perfectionistic students

tend to avoid activities in which they feel at a disadvantage (Flett & Hewitt, 2013), resulting in isolation and exclusion from certain social interactions in which their peers readily participate.

In relation to socially prescribed perfectionism, the path analysis confirmed that it contributes to all three dimensions of school stress evaluated. As previously noted, this interpersonal facet is often considered the most maladaptive, as it is associated with a number of psychopathological consequences. This makes it unsurprising that it has the strongest impact on students' school-related stress.

In the scientific literature, there is still no clear description of the emotional experience of socially prescribed perfectionists in school. For instance, while one study found that socially prescribed perfectionism predicted hopelessness only (and not anxiety, anger, or guilt) (Curelaru et al., 2017), another study found that students with high levels of socially prescribed perfectionism tend to experience both greater positive and negative affect than students with lower levels of this trait (Vicent, Inglés, Sanmartín, Gonzálvez, Granados, & García-Fernández, 2017). Findings from the present study suggest that students with high socially prescribed perfectionism, like self-oriented perfectionists, experience school as an environment of dissatisfaction and demotivation. Further evidence suggests that socially prescribed perfectionists perceive inefficacy (Çelik et al., 2014) and inferiority within the school context (Lee et al., 2020), which could help explain these students' dissatisfaction with the school.

Moreover, socially prescribed perfectionism was also associated with school stress due to interpersonal tension. According to the previously mentioned social disconnection model, perfectionism impacts social interactions negatively, which, in turn, can lead to other psycho-emotional health issues. In this context, socially prescribed perfectionists may experience social hopelessness (Roxborough et al., 2012), rejection sensitivity, and social isolation (Magson et al., 2019); these social challenges may be seen as contributors to academic stress. Research by Gonzálvez et al. (2015) suggests that this type of perfectionist may resist attending school to avoid social rejection and other stress-inducing situations, such as fear of evaluation or a need for approval from loved ones.

As previously noted, the socially prescribed dimension was the only one to show a statistically significant association with, and to predict, self-concept-related school stress. This finding is consistent with scientific evidence suggesting that this facet is often linked to low self-esteem (Cha, 2016) and perceptions of inefficacy and academic inferiority (Çelik et al., 2014; Lee et al., 2020). Overall, these findings underscore the characteristic negative self-assessment these students may have, which, in turn, may increase their distress within the school environment.

Finally, other-oriented perfectionism was found to predict school stress specifically related to interpersonal tension. As noted earlier, this type of perfectionist may be able to avoid certain aspects of school stress due to a tendency to place blame on others (Chen et al., 2017). However, in social interactions, other-oriented perfectionists have been shown to be less agreeable and, conversely, more hostile and dominant (Smith et al., 2022), potentially leading to interpersonal conflicts that increase the discomfort at school. Although relatively little is known about this facet of perfectionism in child populations, the findings of this study align with those of Sherry et al. (2016), who advocate for studying its interpersonal consequences within the framework of the social disconnection model for perfectionists.

Limitations and Future Directions

Some limitations of this study are related to the sampling method, which restricts the generalization of the results. Specifically, some limitations were identified in the sample characteristics, such as the unequal distribution of sociodemographic factors related to gender and school type, which may introduce bias into the findings. Additionally, the cross-sectional design may pose a limitation, as it does not account for data collected over time.

Moreover, although childhood perfectionism has been extensively studied, its dynamics within the school setting remain largely unknown. Longitudinal studies could be highly useful for identifying the impact of perfectionism over time, while qualitative research may offer valuable insights by enabling a deeper exploration of children's subjective experiences.

References

- Accordino, D. B., Accordino, M. P., & Slaney, R. B. (2000). An investigation of perfectionism, mental health, achievement, and achievement motivation in adolescents. *Psychology in the Schools*, *37*(6). 535-545. https://doi.org/10.1002/1520-6807(200011)37:6%3C535::AID-PITS6%3E3.0.C0;2-0
- Aguilar Durán, L. A. (2019). Perfeccionismo en escolares de Caracas: diferencias en función del sexo, tipo de institución educativa y nivel de estrés. *Revista de Psicología Universidad de Antioquia, 11*(1), 7-33. https://doi.org/10.17533/udea.rp.v11n1a01
- Asseraf, M., & Vaillancourt, T. (2015). Longitudinal links between perfectionism and depression in children. *Journal of Abnormal Child Psychology*, 43(5), 895-908. https://doi.org/10.1007/s10802-014-9947-9
- Barba, M. J. (2019). Evidencias de validez y confiabilidad de la escala de perfeccionismo infantil en niños del distrito de Chepén. *Revista JANG*, *8*(2), 178-192. https://doi.org/10.18050/jang.v8i2.2252
- Bills, E., Greene, D., Stackpole, R., & Egan, S. J. (2023). Perfectionism and eating disorders in children and adolescents: A systematic review and meta-analysis. *Appetite*, 187, 106586. https://doi.org/10.1016/j.appet.2023.106586
- Bong, M., Hwang, A., Noh, A., & Kim, S. (2014). Perfectionism and motivation of adolescents in academic contexts. *Journal of Educational Psychology*, *106*(3), 711-729. https://doi.org/10.1037/a0035836
- Bringhenti, F. (1996). Lo stress scolástico e la sua valutazione. *Psicologia e Scuola, 81*, 3-13.
- Brown, T. A. (2006). Confirmatory factor analysis for applied research. Guildford Press.
- Çelik, E., Arıcı Özcan, N., & Turan, M. E. (2014). The perception of school inefficacy, social prescribed perfectionism and self-appraisal as predictors of adolescents' life satisfaction. *Eğitimde Kuram ve Uygulama / Journal of Theory and Practice in Education*, 10(4), 1143-1155.
- Cha, M. (2016). The mediation effect of mattering and self-esteem in the relationship between socially prescribed perfectionism and depression: Based on the social disconnection model. *Personality and Individual Differences, 88*, 148-159. http://doi.org/10.1016/j.paid.2015.09.008
- Chang, E. C., & Rand, K. L. (2000). Perfectionism as a predictor of subsequent adjustment: Evidence for a specific diathesis-stress mechanism among college students. *Journal of Counseling Psychology*, 47(1), 129-137. https://doi.org/10.1037/0022-0167.47.1.129
- Chemisquy, S. (2021). *Perfeccionismo, apoyo social percibido, soledad y depresión. Avances sobre el modelo de desconexión social en niños* [Doctoral dissertation]. Universidad Nacional de Córdoba.
- Chemisquy, S., & Oros, L. B. (2020). El perfeccionismo desadaptativo como predictor de la soledad y del escaso apoyo social percibido en niños y niñas argentinos. *Revista Colombiana de Psicología*, 29(2), 105-123. https://doi.org/10.15446/rcp.v29n2.78591
- Chemisquy, S., Oros, L. B., Serppe, M., & Ernst, C. (2019). Caracterización del perfeccionismo disfuncional en la niñez tardía. *Apuntes Universitarios*, 9(2), 1-26. https://doi.org/10.17162/au.v9i2.355
- Chen, C., Hewitt, P. L., & Flett, G. L. (2017). Ethnic variations in other-oriented perfectionism's associations with depression and suicide behaviour. *Personality and Individual Differences*, *104*, 504-509. https://doi.org/10.1016/j.paid.2016.09.021
- Cichosz, P. (2015). *Data Mining Algorithms: Explained Using R.* John Wiley & Sons.
- Cohen, J. (1992). Statistical power analysis. *Current Directions in Psychological Science*, 1(3). https://doi.org/10.1111/1467-8721.ep10768783
- Cupani, M. (2012). Análisis de Ecuaciones Estructurales: conceptos, etapas de desarrollo y un ejemplo de aplicación. *Revista Tesis, 2,* 186-199.
- Curelaru, V., Diac, G., & Hendreş, D. M. (2017). Perfectionism in high school students, academic emotions, real and perceived academic achievement. In E. Soare, & C. Langa (Eds.), *Education Facing Contemporary World Issues* (pp. 1170-1178). https://doi.org/10.15405/epsbs.2017.05.02.144
- DiBartolo, P. M., & Varner, S. P. (2012). How children's cognitive and affective responses to a novel task relate to the dimensions of perfectionism. *Journal of Rational-Emotive and Cognitive-Behavior Therapy*, *30*, 62-72. https://doi.org/10.1007/s10942-011-0130-8
- Díez, M., Jiménez-Iglesias, A., Paniagua, C., & García-Moya, I. (2023). The role of perfectionism and parental expectations in the school stress and health complaints of secondary school students. *Youth & Society*, *56*(6), 885-906. https://doi.org/10.1177/0044118X231205929

- Ellis, A. (2002). The role of irrational beliefs in perfectionism. In G. L. Flett, & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 217-229). American Psychological Association. https://doi.org/10.1037/10458-009
- Ferrer, L., Martín-Vivar, M., Pineda, D., Sandín, B., & Piqueras, J. A. (2018). Relación de la ansiedad y la depresión en adolescentes con dos mecanismos transdiagnósticos: el perfeccionismo y la rumiación. *Psicología Conductual*, 26(1), 55-74. https://www.behavioralpsycho.com/wpcontent/uploads/2018/09/03.-Ferrer-261-1.pdf
- 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., Besser, A., Su, C., Vaillancourt, T., Boucher, D., Munro, Y., Davidson, L. A., & Gale, O. (2016). The Child-Adolescent Perfectionism Scale: Development, psychometric properties, and associations with stress, distress, and psychiatric symptoms. *Journal of Psychoeducational Assessment*, 34(7), 634-652. https://doi.org/10.1177/0734282916651381
- Flett, G. L., Hewitt, P. L., Nepon, T., Sherry, S. B., & Smith, M. (2022). The destructiveness and public health significance of socially prescribed perfectionism: A review, analysis, and conceptual extension. *Clinical Psychology Review*, 93, 102130. https://doi.org/10.1016/j.cpr.2022.102130
- Flett, G. L., Nepon, T., Hewitt, P. L., & Fitzgerald, K. (2016). Perfectionism, components of stress reactivity, and depressive symptoms. *Journal of Psychopathology and Behavioral Assessment*, *38*(4), 645-654. https://doi.org/10.1007/s10862-016-9554-x
- Ford, C. J., Usher, E. L., Scott, V. L., & Chen, X. Y. (2023). The 'perfect' lens: Perfectionism and early adolescents' math self-efficacy development. *British Journal of Educational Psychology*, 93(1), 211-228. https://doi.org/10.1111/bjep.12550
- Funder, D. C., & Ozer, D. J. (2019). Evaluating effect size in psychological research: Sense and nonsense. Advances in Methods and Practices in Psychological Science, 2(2), 156-168. https://doi.org/10.1177/2515245919847202
- Gallucci, M. (2021). PATHj: jamovi Path Analysis (versión 2.3) [Software]. Windows. https://pathj.github.io/help.html
- Gaudreau, P., Franche, V., Kljajic, K., & Martinelli, G. (2018). The 2 x 2 model of perfectionism: Assumptions, trends, and potential developments. In J. Stoeber (Ed.), *The psychology of perfectionism. Theory, research, applications* (pp. 44-67). Routledge/Taylor & Francis Group.
- George, D., & Mallery, P. (2011). *IBM SPSS Statistics 19. Step by step: A simple guide and reference*. Pearson Higher Education.
- Gil, T. C., Obando, D., García-Martín, M. B., & Sandoval-Reyes, J. (2023). Perfectionism, academic stress, rumination and worry: A predictive model for anxiety and depressive symptoms in university students from Colombia. *Emerging Adulthood*, 11(5), 1091-1105. https://doi.org/10.1177/21676968231188759
- Gonzálvez, C., Vicent, M., Inglés, C. J., Lagos-San Martín, N., García-Fernández, J. M., & Martínez-Monteagudo, M. C. (2015). Diferencias en el perfeccionismo socialmente prescrito en función del rechazo escolar. *International Journal of Developmental and Educational Psychology*, 1(1), 455-462. https://doi.org/10.17060/ijodaep.2015.n1.v1.47
- Goya Arce, A. B., & Polo, A. J. (2017). A test of the perfectionism social disconnection model among ethnic minority youth. *Journal of Abnormal Child Psychology*, 45(6), 1181-1193. https://doi.org/10.1007/s10802-016-0240-y
- Gyori, D., & Balazs, J. (2021). Nonsuicidal self-injury and perfectionism: A systematic review. *Frontiers in Psychiatry*, (12), 691147. https://doi.org/10.3389/fpsyt.2021.691147
- 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. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology*, 60(3), 456-470. https://doi.org/10.1037/0022-3514.60.3.456

- Hewitt, P. L., & Flett, G. L. (1993). Dimensions of perfectionism, daily stress, and depression: A test of the specific vulnerability hypothesis. *Journal of Abnormal Psychology*, 102(1), 58-65. https://doi.org/10.1037/0021-843X.102.1.58
- Hewitt, P. L., & Flett, G. L. (2002). Perfectionism and stress processes in psychopathology. In P. L. Hewitt,
 & G. L. Flett (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 255-284). American Psychological Association. https://doi.org/10.1037/10458-011
- Hewitt, P. L., Flett, G. L., Sherry, S. B., & Caelian, C. M. (2006). Trait perfectionism dimensions and suicide behavior. In T. E. Ellis (Ed.), *Cognition and suicide. Theory, research and therapy* (pp. 215-235). American Psychological Association. https://psycnet.apa.org/record/2006-01745-010
- Hewitt, P. L., Smith, M. M., Flett, G. L., Ko, A., Kerns, C., Birch, S., & Peracha, H. (2022). Other-oriented perfectionism in children and adolescents: Development and validation of the Other-Oriented Perfectionism Subscale-junior form (OOPjr). *Journal of Psychoeducational Assessment*, 40(3), 327-345. https://doi.org/10.1177/07342829211062009
- Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modeling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1), 53-60.
- Hu, L. T., & 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
- Inglés, C. J., García-Fernández, J. M., Vicent, M., Gonzálvez, C., & Sanmartín, R. (2016). Profiles of perfectionism and school anxiety: A review of the 2 × 2 model of dispositional perfectionism in child population. *Frontiers in Psychology*, *7*, 1403. https://doi.org/10.3389/fpsyg.2016.01403
- Kenny, D. A., Kaniskan, B., & McCoach, D. B. (2014). The performance of RMSEA in models with small degrees of freedom. *Sociological Methods & Research*, 44(3), 486-507. https://doi.org/10.1177/0049124114543236
- Lee, Y., Ha, J. H., & Jue, J. (2020). Structural equation modeling and the effect of perceived academic inferiority, socially prescribed perfectionism, and parents' forced social comparison on adolescents' depression and aggression. *Children and Youth Services Review*, 108, 104649. https://doi.org/10.1016/j.childyouth.2019.104649
- Lozano, L., Valor-Segura, I., Llanos, A., & Lozano, L. (2014). Efectos del perfeccionismo infantil sobre la inteligencia y el rendimiento académico. In A. Romero, T. Ramiro-Sánchez, & M. Paz (Coords.), *Libro de actas del II Congreso Internacional de Ciencias de la Educación y del Desarrollo* (p. 178). Asociación Española de Psicología Conductual.
- 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 & Human Development*, *50*, 960-974. https://doi.org/10.1007/s10578-019-00897-2
- Mallinson-Howard, S. H., Hill, A. P., & Hall, H. K. (2019). The 2 × 2 model of perfectionism and negative experiences in youth sport. *Psychology of Sport and Exercise, 45,* 101581. https://doi.org/10.1016/j.psychsport.2019.101581
- Martínez Díaz, E. S., & Díaz Gómez, D. A. (2007). Una aproximación psicosocial al estrés escolar. *Educación y Educadores, 10*(2), 11-22. https://www.redalyc.org/pdf/834/83410203.pdf
- Molnar, D. S., Sadava, S. W., Flett, G. L., & Colautti, J. (2012). Perfectionism and health: A mediational analysis of the roles of stress, social support and health-related behaviors. *Psychology & Health*, 27(7), 846-864. https://doi.org/10.1080/08870446.2011.630466
- 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
- Oros, L. B. (2003). Medición del perfeccionismo infantil: desarrollo y validación de una escala para niños de 8 a 13 años de edad. *Revista Iberoamericana de Diagnóstico y Evaluación Psicológica*. *16*(2), 99-112. https://www.aidep.org/03_ridep/R16/R166.pdf
- Oros, L. B. (2005). Implicaciones del perfeccionismo infantil sobre el bienestar psicológico: orientaciones para el diagnóstico y la práctica clínica. *Anales de Psicología, 21*(2), 294-303. https://revistas.um.es/analesps/article/view/26951
- Oros, L. B., Chemisquy, S. N., Serppe, M. D., & Helguera, G. P. (2023). Validación del modelo multidimensional de perfeccionismo en población infantil. *Revista Latinoamericana de Ciencias Sociales, Niñez y Juventud, 21*(2), 1-25. https://doi.org/10.11600/rlcsnj.21.2.5532

- Oros, L., Serppe, M. D., Chemisquy, S. N., & Ventura-León, J. L. (2019). Construction of a scale to assess maladaptive perfectionism in children in its social dimension. *Revista Argentina de Clínica Psicológica*, *28*(4), 385-398. https://doi.org/10.24205/03276716.2019.1108
- Oros, L. B., & Vargas-Rubilar, J. (2016). Perfeccionismo infantil: normalización de una escala argentina para su evaluación. *Acción Psicológica*, *13*(2), 117-126. https://doi.org/10.5944/ap.13.2.17822
- Richard, M. A. (2022). *Perfeccionismo y estrés académico en estudiantes universitarios de la ciudad de Paraná* [Trabajo integrador final, Pontificia Universidad Católica Argentina]. Repositorio Institucional UCA. https://repositorio.uca.edu.ar/handle/123456789/17596
- Rodríguez Ayán, N. R., & Ruiz Díaz, M. Á. (2008). Atenuación de la asimetría y de la curtosis de las puntuaciones observadas mediante transformaciones de variables: Incidencia sobre la estructura factorial. *Psicológica*, *29*(2), 205-227.
- Rosseel, Y. (2011). lavaan: An R package for structural equation modeling. *Journal of Statistical Software*, 48(2), 1-36. https://doi.org/10.18637/jss.v048.i02
- Roxborough, H. M., Hewitt, P. L., Kaldas, J., Flett, G. L., Caelian, C. M., Sherry, S., & Sherry, D. L. (2012). Perfectionistic self-presentation, socially prescribed perfectionism, and suicide in youth: A test of the perfectionism social disconnection model. *Suicide and Life-Threatening Behavior*, *42*(2), 217-233. https://doi.org/10.1111/j.1943-278X.2012.00084.x
- Sánchez-Rodríguez, E., Ferreira-Valente, A., Pathak, A., Solé, E., Sharma, S., Jensen, M. P., & Miró, J. (2021). The role of perfectionistic self-presentation in pediatric pain. *International Journal of Environmental Research and Public Health, 18*(2), 591. https://doi.org/10.3390/ijerph18020591
- Schruder, C. R., Curwen, T., & Sharpe, G. W. B. (2014). Perfectionistic students: Contributing factors, impacts, and teacher strategies. *British Journal of Education, Society & Behavioural Science*, 4(2), 139-155. https://doi.org/10.9734/BJESBS/2014/5532
- Seong, H., Lee, S., & Chang, E. (2021). Perfectionism and academic burnout: Longitudinal extension of the bifactor model of perfectionism. *Personality and Individual Differences*, 172, 110589. https://doi.org/10.1016/j.paid.2020.110589
- 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. Molnar (Eds.), *Perfectionism, health, and well-being* (pp. 225-243). Springer. https://doi.org/10.1007/978-3-319-18582-8_10
- Smith, M. M., Sherry, S. B., Ge, S. Y., Hewitt, P. L., Flett, G. L., & Baggley, D. L. (2022). Multidimensional perfectionism turns 30: A review of known knowns and known unknowns. *Canadian Psychology/Psychologie canadienne, 63*(1), 16-31. https://doi.org/10.1037/cap0000288
- Stoeber, J., & Rambow, A. (2007). Perfectionism in adolescents school students. Relations with motivation, achievement, and well-being. *Personality and Individual Differences*, 42(7), 1379-1389. https://doi.org/10.1016/j.paid.2006.10.015
- Tabachnick, B. G. & Fidell, L. S. (2013). Using Multivariate Statistics (6ª ed.). Pearson.
- Teixeira, M. D., Pereira, A. T., Marques, M. V., Saraiva, J. M., & Macedo, A. F. D. (2016). Eating behaviors, body image, perfectionism, and self-esteem in a sample of Portuguese girls. *Brazilian Journal of Psychiatry*, *38*(2), 135-140. https://doi.org/10.1590/1516-4446-2015-1723
- Vicent, M., Inglés, C. J., Sanmartín, R., Gonzálvez, C., & García-Fernández, J. M. (2017). Perfectionism and aggression: identifying risk profiles in children. *Personality and Individual Differences*, *112*, 106-112. https://doi.org/10.1016/j.paid.2017.02.061
- Vicent, M., Inglés, C. J., Sanmartín, R., Gonzálvez, C., Granados Alos, L., & García-Fernández, J. M. (2017). Socially prescribed perfectionism and affectivity in Spanish child population. *European Journal of Investigation in Health, Psychology and Education, 7*(1), 17-29. https://doi.org/10.3390/ejihpe7010002
- West, S. G., Taylor, A. B., & Wu, W. (2012). Model fit and model selection in structural equation modeling. In R. H. Hoyle (Ed.), *Handbook of structural equation modeling* (pp. 209-231). The Guilford Press.
- Wuthrich, V. M., Jagiello, T., & Azzi, V. (2020). Academic stress in the final years of school: A systematic literature review. *Child Psychiatry & Human Development*, 51(6), 986-1015. https://doi.org/10.1007/s10578-020-00981-y

- Yang, H., & Chen, J. (2015). Learning perfectionism and learning burnout in a primary school student sample: A test of a learning-stress mediation model. *Journal of Child and Family Studies, 25*, 345-353. https://doi.org/10.1007/s10826-015-0213-8
- Yang, H., Guo, W., Yu, S., Chen, L., Zhang, H., Pan, L., Wang, C., & Chang, E. C. (2016). Personal and family perfectionism in Chinese school students: Relationships with learning stress, learning satisfaction and self-reported academic performance level. *Journal of Child and Family Studies*, 25(12), 3675-3683. https://doi.org/10.1007/s10826-016-0524-4

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