Cross-Cultural Adaptation and Psychometric Properties of the Scale of Perfectionism and Excellencism (SCOPE) for Brazilian Adults

Adaptación transcultural y propiedades psicométricas de la Escala de Perfeccionismo y Excelentismo (SCOPE) en adultos brasileño

Received: February 28, 2024; **Reviewed:** March 27, 2025; **Accepted:** October 29, 2025

Marcela Mansur-Alves*
ORCID: https://orcid.org/0000-0002-3961-3475
Psychology Graduate Program: Cognition and Behavior, Federal University of Minas Gerais Minas Gerais, Brazil

Patrick Gaudreau
ORCID: https://orcid.org/0000-0003-4094-5423
School of Psychology, University of Ottawa
Ottawa, Canada

Willian de Sousa Rodrigues
ORCID: https://orcid.org/0000-0002-5959-8073
Psychology Graduate Program: Cognition and Behavior, Federal University of Minas Gerais
Minas Gerais, Brazil

Evandro Morais Peixoto
ORCID: https://orcid.org/0000-0003-1007-3433
Graduate Program in Psychology, University of San Francisco
São Paulo, Brazil

Abstract

There is considerable discussion in the scientific literature about whether perfectionism is beneficial, harmful, or unnecessary. The Scale of Perfectionism and Excellencism (SCOPE) was developed to assess the pursuit of perfection as opposed to the pursuit of excellence. This study aimed to investigate the validity indicators of the internal, external, convergent, and discriminant structures, as well as the reliability of the SCOPE for Brazilian adults. Two cross-sectional studies with convenience samples were conducted. The results of the confirmatory and exploratory factor analyses in Study 1 (n = 1,814) indicated suitable fit indices for the scale (χ^2 = 600.585, df = 208, p < .001, χ^2/df = 2.887, *CFI* = .984, *TLI* = .982, *RMSEA* = .059 (90 % *CI* [.056, .062])), suggesting a two-factor structure (perfectionism and excellencism). Low positive correlations were observed between perfectionism/excellencism and general psychiatric symptoms, and a low negative correlation between perfectionism and life satisfaction. Perfectionism was a negative predictor of life satisfaction, whereas excellencism was a positive predictor of both psychiatric symptoms and life satisfaction. Study 2 (n = 432) supports the convergent validity of perfectionism and discriminant validity of excellencism with Hewitt and Flett's Multidimensional Perfectionism Scale. When controlling for perfectionism, excellencism remains positively associated with self-oriented perfectionism (SOP), but the correlation with socially prescribed perfectionism (SPP) disappears. Controlling for excellencism, the association

between perfectionism and SOP and SPP remains significant, though somewhat smaller in magnitude. This study provides favorable evidence for using SCOPE among Brazilian adults and valuable insights into the constructs of excellencism and perfectionism.

Keywords
Perfectionism; excellencism; psychometric properties; scale

Resumen

Existe un debate sobre si el perfeccionismo es beneficioso, perjudicial o innecesario. La Escala de Perfeccionismo y Excelentismo (SCOPE) evalúa la búsqueda de la perfección frente a la de la excelencia. Esta investigación se propuso analizar los indicadores de validez de las estructuras interna, externa, convergente y discriminante y la fiabilidad de la SCOPE en adultos brasileños. Se realizaron dos estudios transversales con muestras por conveniencia. Los resultados de los análisis factoriales en el Estudio 1 (n = 1814) mostraron índices de ajuste adecuados (χ^2 = 600,585, df = 208, p < 0,001, χ^2/df = 2,887, *CFI* = 0,984, *TLI* = 0,982, *RMSEA* = 0,059 (*IC* del 90 % [0,056, 0,062]), lo que sugiere una estructura de dos factores. Se observaron correlaciones positivas bajas entre el perfeccionismo/excelentismo y los síntomas psiquiátricos generales y una correlación negativa baja entre el perfeccionismo y la satisfacción con la vida. El perfeccionismo fue un predictor negativo de la satisfacción con la vida, y el excelentismo, un predictor positivo de los síntomas psiquiátricos y de la satisfacción con la vida. El Estudio 2 (n = 432) apoya la validez convergente del perfeccionismo y la validez discriminante del excelentismo mediante la escala de Hewitt y Flett. Al controlar el perfeccionismo, el excelentismo continúa positivamente asociado con el perfeccionismo autoorientado (PAO), pero desaparece la correlación con el perfeccionismo socialmente prescrito (PSP). Al controlar el excelentismo, la asociación entre PAO y SPP disminuye, pero sigue siendo significativa. Este estudio aporta evidencia sobre la SCOPE en adultos brasileños y conocimientos sobre excelencia y perfeccionismo.

Palabras clave
Perfeccionismo; excelentismo; propiedades psicométricas; escala

How to cite [APA]:
Mansur-Alves, M., Gaudreau, P., de Sousa Rodrigues, W., & Morais Peixoto, E. (2025). Cross-Cultural Adaptation and Psychometric Properties of the Scale of Perfectionism and Excellencism (SCOPE) for Brazilian Adults. *Acta Colombiana de Psicología*, *28*, 1-17. https://doi.org/10.14718/ACP.2025.28.18

* **Corresponding Author:** Federal University of Minas Gerais, Avenida Presidente Antônio Carlos, 6627, CEP 31270-901, Pampulha, Belo Horizonte, Minas Gerais, Brazil. Email: marmansura@gmail.com

Introduction

Perfectionism is a construct of great relevance for psychological science due to its complexity, uniqueness, transdiagnostic implications, and predictive capacity (Flett & Hewitt, 2020; Smith et al., 2022). Perfectionism is a multidimensional personality characteristic, which is mainly defined by the aiming and striving toward high, inflexible, and unrealistic standards, accompanied by severe self-criticism, concerns, doubts, and perceived pressure to be perfect (Frost et al., 1990; Hewitt & Flett, 1991; Slaney et al., 2001). Many conceptual frameworks have been developed to measure different components of perfectionism (Smith et al., 2022). Nevertheless, most researchers agree that two broader dimensions are central to understanding the construct: perfectionistic standards and perfectionistic concerns (Flett & Hewitt, 2020; Smith et al., 2022). Perfectionistic standards (also called perfectionistic strivings) capture a central aspect of perfectionism: the setting and relentless pursuit of high, self-imposed standards by which people measure themselves. Perfectionistic concerns (also called self-critical perfectionism) refer to doubts about actions, worries about mistakes and failures, fear of negative evaluation, and perceived performance expectations by others, and the severe self-criticisms that accompany the pursuit of perfection.

Research over the last thirty years has provided plenty of evidence for the relationship of perfectionism with a variety of outcomes across many contexts, such as education (Damian et al., 2014; Madigan, 2019; Shim et al., 2016), sports (Flett & Hewitt, 2014; Hill et al., 2018; Stoeber, 2011), career development (Gnilka & Novakovic, 2017), creativity (Goulet-Pelletier et al., 2022), and clinical results (Hewitt et al., 2017, 2018; Miller et al., 2017). Outcomes associated with perfectionism are diverse and span a large spectrum from performance (Madigan, 2019) to mental health outcomes like burnout, depression, anxiety, suicidal ideation, eating disorders, and obsessive-compulsive disorder (Dahlenburg et al., 2019; Eley et al., 2020; Molnar et al., 2020; Robinson & Wade, 2021; Smith, Sherry et al., 2018; Smith, Vidovic et al., 2018; Stoeber, 2014).

Research relying on the two-dimensional model of trait perfectionism remains abundant. Findings have systematically related perfectionistic concerns with undesirable outcomes (Flett et al., 2022; Lunn et al., 2023; Stackpole et al., 2023; Stricker et al., 2023). However, findings regarding perfectionistic standards have been mixed and often inconclusive (e.g., Cheng et al., 1999; DiBartolo et al., 2004; Smith et al., 2016; Smith, Vidovic et al., 2018). Some of the literature points to perfectionistic standards as the adaptive aspect of perfectionism because of their positive relationships with favorable outcomes, such as high performance, success, self-efficacy, and positive emotions (Damian et al., 2016; Hill et al., 2010; Smith et al., 2015). However, other studies have found positive associations of perfectionistic standards with maladaptive outcomes, such as burnout or suicidal ideation (Hill & Curran, 2016; Smith, Sherry et al., 2018; Stoeber & Damian, 2016). Perhaps even more perplexing is the moderately strong positive association between perfectionistic standards and the perfectionistic concerns that systematically relate to debilitative outcomes (e.g., Gaudreau, 2021). Overall, the weighting of the evidence calls into question the adaptive nature of perfectionism. If anything, perfectionistic standards are associated with paradoxical rather than strictly positive outcomes (e.g., Flett & Hewitt, 2014). This epitomizes the idea that perfectionism is a double-edged sword (Stoeber, 2014).

Gaudreau (2019) proposed a new approach to clarify the concept of perfectionistic standards. Based on previous observations (e.g., Blasberg et al., 2016), Gaudreau (2019) formalized the distinction between the pursuit of perfection and the pursuit of excellence. In this approach, perfectionistic standards are considered the core defining feature of perfectionism (Gaudreau, 2021). Consistent with past theories, perfectionism represents a relentless, rigid, and almost compulsive striving for perfection. In contrast, excellencism is defined as the "tendency to aim and strive toward high yet attainable standards in an effortful, engaged, and determined yet flexible manner" (Gaudreau, 2019, p. 200). The Model of Excellencism and Perfectionism (MEP; Gaudreau, 2019) assumes that perfectionism and excellencism should be treated as empirically related but conceptually distinct constructs. Both involve setting and pursuing high standards. After achieving excellence, excellence strivers recognize they have reached their goals (Gaudreau et al., 2022). In contrast, "perfectionism starts where excellencism ends" (Gaudreau et al., 2023, p. 381), and perfectionism is therefore seen as a pursuit that goes over and above the standards involved in excellencism.

Gaudreau et al. (2022) recently developed and validated the Scale of Perfectionism and Excellencism (SCOPE). The SCOPE conceives perfectionism as the pursuit of more stringent, rigid, and extreme standards. Therefore, each item measuring excellencism (e.g., *As a person, my general goal in life is to have very good performances*) is matched with a more extreme item measuring perfectionism (e.g., *As a person, my general goal in life is to have perfect performances*). This aligns measurement with the conceptual definitions proposed in the MEP. The SCOPE generates scores that reflect an individual's general levels of perfectionism and excellencism. These scores can be used to differentiate individuals who are excellence or perfection strivers from people who are oriented toward lower standards (non-excellence/non-perfection strivers). Gaudreau et al. (2022) conducted a series of five studies across eight samples and presented the first results on the validity and reliability of the SCOPE. The results across two samples of adults provided evidence for the tenability of a two-factor structure, as theoretically expected, in both exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). Scores on perfectionism and excellencism were internally consistent, with omega coefficients indicating high reliability ($\omega > .90$).

Furthermore, the authors (Gaudreau et al., 2022) provide evidence of convergent and discriminant validity, as well as of the SCOPE criterion, using three other measures of perfectionism. As hypothesized, the perfectionism dimension showed a stronger association with the measures used. Simultaneously, excellencism did not exhibit a positive and significant association with the other perfectionism measures, except for the positive association with self-oriented perfectionism (SOP). Additionally, the authors present evidence supporting the MEP's criteria for differentiating between excellencism and perfectionism, using indicators of satisfaction with life, depression, and academic performance. These results highlight the instrument's excellent quality and usefulness for research aimed at elucidating the distinctions between perfectionism and excellencism, as well as their relationships with adaptive and maladaptive outcomes.

Considering that the publication of SCOPE is recent, only a few studies have been carried out with the instrument, all involving English speakers from Canada, the USA, the United Kingdom, and Australia (Gaudreau & Schellenberg, 2022; Goulet-Pelletier et al., 2022; Grieve et al., 2022; Robinson et al., 2022). An important next step for the SCOPE will be to investigate the replicability of the factor structure and reliability of the scores in other cultural contexts and languages. As highlighted by Rice et al. (2019), the study of perfectionism has been strongly influenced by the English language and the presentation of perfectionism and its relationships in developed Western countries. Measures conceived in English, written in English, and which are associated with problems related to Anglo-Saxon cultures, as Ardila (1993) pointed out, may not be equally effective for non-English speakers and cultures outside the Anglo-Saxon and Western axis, such as Latin American and Eastern cultures. Furthermore, Curran and Hill (2019) suggested that many cultural aspects, such as neoliberal and meritocratic ideas, can influence the development and presentation of perfectionism. Although Curran and Hill (2019) based their analysis solely on rich, developed, and industrialized countries, they emphasized the importance of cultural values and practices (at both macro and micro levels) for a deeper understanding of perfectionism's manifestations in each society. Considering the technological advances of recent decades and globalization, measures initially developed in one country and language can be easily translated and adopted in other languages and cultures. Therefore, these measures must be cross-culturally adapted and validated so that scientifically based inferences can be made.

Our main objective in this study was to translate and adapt the SCOPE for the Brazilian context and to evaluate its psychometric properties. Brazil is a non-English-speaking Western country ranked among the most unequal in the world, according to the World Inequality Lab (2022) report. It ranks second-highest in inequality among G20 members. Additionally, Brazil is ranked at the 133rd position in the world economic freedom ranking (being considered mostly unfree) according to the Index of Economic Freedom (2022). These factors, combined with others specific to the Brazilian context, such as results in international and national educational assessments, may be relevant to the study of perfectionism in its specific cultural manifestations.

This research is a non-experimental, cross-sectional, quantitative study with a psychometric approach. We conducted two studies to examine the SCOPE in the Brazilian context. Study 1 aimed to present the adaptation process of SCOPE into Brazilian Portuguese, test its factor structure and reliability, and explore the association of perfectionism and excellencism with two external criteria: satisfaction with life and general

psychiatric symptoms. The adapted version will likely have a similar structure to the original version and satisfactory reliability indices. Furthermore, perfectionism and excellencism will be differentially associated with the chosen criteria, as postulated by the MEP (Gaudreau, 2019, 2021; Gaudreau et al., 2022). In Study 2, we recruited a different sample to test the convergent validity of perfectionism and the discriminant validity of excellencism for the SCOPE with SOP and socially prescribed perfectionism (SPP) measured with the Multidimensional Perfectionism Scale (MPS) of Hewitt and Flett (1991). SOP concerns the setting of unrealistic standards and perfectionist motivations directed towards oneself, while SPP is associated with the belief that significant others expect perfection from oneself.

Based on Gaudreau et al. (2022), we hypothesized that SCOPE perfectionism (controlling for excellencism) will exhibit stronger, positive, significant associations with both dimensions of the MPS (SPP and SOP). The effect of SCOPE perfectionism should be stronger when predicting SOP scores, once they are conceptually linked. On the other hand, we hypothesized that excellencism (controlling for perfectionism) should be unrelated to, or only weakly related to, SOP and SPP scores.

Study 1

Method

Participants

We recruited a sample of 1,814 Brazilian participants from the general population, aged 18 to 68 years (mean age = 28.87, *SD* = 8.38). Regarding gender identity, participants identified as cisgender women (78.9%), cisgender men (18.4%), non-binary (1.2%), and transgender (0.1%). Several participants preferred not to disclose their gender identity (1.5%). Many participants were university students (33.8%), 25% had completed a graduate degree, 20.1% had completed an undergraduate degree, 11% had completed high school or technical education, 8.4% had incomplete graduate education, 1.2% had incomplete high school or technical education, and 0.3% had incomplete elementary education. Concerning monthly family income, 32.5% reported earning between three and five Brazilian minimum wages (a minimum wage in Brazil is equivalent to 215 US dollars), 31% reported earning between one and two minimum wages, 23.7% reported earning more than five minimum wages, 8.5% reported earning less than one minimum wage, and 4.3% were unsure about the exact value of their family income.

Procedures

This research was approved by the Research Ethics Committee of the Federal University of Minas Gerais (registration number 5.273.686) and followed the recommendations from the Declaration of Helsinki (World Medical Association, 2013). Each participant provided informed consent before responding to the scales voluntarily and anonymously. Data collection occurred remotely between April 2022 and June 2022 using the Forms platform (Arslan et al., 2020). Participants were recruited through social media platforms (Facebook, Instagram, LinkedIn, Telegram, Twitter (X), and WhatsApp) and via email, through contact mediated by higher education institutions. Upon completion of the study, participants received feedback detailing their personality traits, prepared using an instrument unrelated to this research.

Our main goal was to conduct linguistic and cultural adaptation and validation of the SCOPE in Brazilian Portuguese. To translate and verify the instrument's suitability for the target context, we followed the guidelines of the International Test Commission (2017). The original English version of the SCOPE was translated by three independent translators, native speakers of the target language, and proficient in the instrument's original language. The research team synthesized the three resulting translations. Subsequently, the preliminary version of the instrument was evaluated by five expert raters who assessed conceptual, cultural, idiomatic, semantic, and dimension adequacy. Agreement among experts was measured using the coefficient of content validity (CCV; Hernández-Nieto, 2002), which yielded satisfactory results (CCV > .80). In addition, the expert raters proposed modifications to some items, which were considered and, when appropriate, accepted by the research team. Thereafter, a sample of 30 people (mean age = 24.27, *SD* = 3.62) assessed the readability and adequacy of the SCOPE items and instructions, resulting in an agreement index exceeding CCV = .90.

After implementing the proposed modifications, two bilingual translators, who did not participate in the initial research stage, performed back translation to English. The back-translated version was sent to the author of the original SCOPE, and some items were adjusted to improve coherence with the original theoretical meaning.

Measures

Excellencism and perfectionism. We used the Brazilian Portuguese version of the SCOPE, developed in the current study. The SCOPE contains 22 items (Gaudreau et al., 2022). Each of the 11 perfectionism items (e.g., *As a person, my general goal in life is to accomplish great things perfectly*) matches and increments one of the 11 excellencism items (e.g., *As a person, my general goal in life is to accomplish great things*). Participants were instructed to indicate the extent to which each item reflected the goals they generally pursue in their lives. Responses were provided on a 7-point Likert-type scale, ranging from 1 (*not at all*) to 7 (*totally*). In its original version, the instrument demonstrated good internal consistency across different subsamples, with McDonald's omega coefficients ranging from .947 to .956 for Excellencism and from .973 to .974 for Perfectionism, indicating strong and stable measurement properties.

Life satisfaction. Participants completed the Satisfaction With Life Scale (SWLS; Diener et al., 1985), designed to measure global cognitive judgments of satisfaction with one's life. The SWLS consists of five items (e.g., *In most ways my life is close to my ideal*), answered on a 7-point Likert-type scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher scores indicate greater satisfaction with life aspects and conditions. For this study, the version adapted by Gouveia et al. (2009) for the Brazilian context was used. Psychometric properties, estimated through confirmatory factor analysis (CFA) in the total sample (n = 1814), were deemed adequate ($\chi^2 = 31.066$, $df = 5$, $p < .001$, $CFI = .990$, $TLI = .979$, $RMSEA = .055$ (90 % *CI* [.037, .074]), with factor loadings ranging from .565 to .878). Additionally, a McDonald's omega coefficient of .852 indicated adequate and consistent internal reliability.

General psychiatric symptoms. Non-specific psychological distress was measured using the Self-Reported Questionnaire (SRQ-20; Harding et al., 1980). In this study, we utilized a version adapted by Mari and Williams (1986) for the Brazilian context. The SRQ-20 consists of 20 items answered in a yes/no format, designed to screen for non-psychotic mental disorders (e.g. *Do you often have headaches?*). Each affirmative response is scored 1 point, and the final score is the sum of these values. For this study, the instrument displayed appropriate CFA fit indices ($n = 1814$, $\chi^2 = 1198.451$, $df = 170$, $p < .001$, $CFI = .950$, $TLI = .944$, $RMSEA = .061$ (90 % *CI* [.058, .064]), with factor loadings ranging from .333 to .648). These results were complemented by evidence of good internal consistency, as indicated by a McDonald's omega coefficient of .922.

Socio-demographic characteristics. Participants responded to questions about their age, gender, income, education, region of the country, and residence.

Plan of Analyses

Given the objective of evaluating the internal structure of the Brazilian version of SCOPE, it was decided to randomly select 1,000 observations (Sample 1) for exploratory evaluation. To determine factor retention, the Kaiser-Guttman Method, Parallel Analysis (PA) based on the Minimum Rank Factor Analysis, and the Hull Method were employed (Timmerman & Lorenzo-Seva, 2011). All analyses were performed using version 12.02.01 of the Factor Statistical Software (Ferrando & Lorenzo-Seva, 2017). For the evaluation of the factorial model, an Exploratory Factor Analysis (EFA) was performed using Unweighted Least Squares (ULS) and the Promax oblique rotation. For this purpose, it was based on polychoric correlation matrices, given the greater adequacy of this procedure for analyzing ordinal variables and Likert-scale items.

As initial evidence of the validity of the internal structure, the data from Sample 2 (814 observations) were subjected to a CFA. For this purpose, the Diagonally Weighted Least Squares (DWLS) estimation method was used, which is also based on polychoric correlation matrices. The factorial models were evaluated using the indices recommended by Muthén and Muthén (2012): DWLS, χ^2, df, χ^2/df, RMSEA, CFI, and TLI. The reference values commonly used in the specialized literature were used as parameters of adequacy: $\chi^2/df < 5$, RMSEA < .08, and CFI and TLI > .90 as adequate, and $\chi^2/df < 3$, RMSEA < .06, and CFI and TLI > .95 as good. It is also important to note that the χ2/df index can be sensitive to sample size and the number of items, leading to under-specification of the model. Therefore, values above the suggested cut-off point may be accepted if other fit indices show adequacy (Zheng & Bentler, 2024). Such analyses were performed with the statistical package Lavaan v. 0.6-15 (Rosseel, 2012) in the R environment (RStudio Team, 2015).

In a second step, the samples were combined to assess the relationships between the SCOPE scores and the external variables (satisfaction with life and general psychiatric symptoms). For that, a Structural Equation Modeling (SEM) based on weighted-average least squares and variance-adjusted estimation method was applied to test a full factorial structural model. The same parameters used on the confirmatory factor analysis were used to assess the model. The significance level adopted for the estimates of the association between the latent variables was $p < .05$, corresponding to a 95% confidence interval (CI). The sample size was deemed adequate using the A-priori Sample Size Calculator for Structural Equation Models (Soper, 2024).

Results

The estimation of the factorial model was preceded by the evaluation of the adequacy indicators of the correlation matrix, Kaiser-Meyer Olkin (KMO) and Bartlett's Test of Sphericity, which indicated that the proportions of variance of the items could be explained by latent variables (KMO = .806), and rejected the hypothesis that the data matrix is similar to an identity matrix ((780) 2,761.8; $p < .001$), demonstrating the suitability of the data for performing the EFA (Tabachnick & Fidell, 2012).

The results of the retention methods used in this research converged to the indication of a factorial structure composed of two dimensions, and the detailed results are presented in Table 1. It is observed that, in relation to the Kaiser-Guttman Method, only the first two factors had an eigenvalue greater than 1. As for the parallel analysis, it is noted that only the first two from the real data showed explained variances greater than the average of the variances estimated through matrices obtained randomly, 500 matrices estimated through the permutation method (Buja & Eyuboglu, 1992), as well as greater than the explained variance value allocated in the 95th percentile among the random data. Finally, regarding the Hull method, the solution with two factors obtained the highest value of the Scree test, which indicates the best ratio between the adjustment indices and the degree of freedom presented among the possible factorial solutions and, therefore, the most suitable solution (Ceulemans et al., 2010; Lorenzo-Seva et al., 2011).

Table 1. Factor Retention Method

Number of factors	Parallel analysis				Hull		
	Eigenvalue	% of explained variance in real data	% of explained variance in random data		CFI	GL	Scree test
			Average	95th percentile			
1	12.38615	59.5298	9.4381	10.8083	.955	209	21.603
2	**2.86779**	**13.981**	**8.8274**	**9.9760**	**.997**	**188**	**29.674**
3	0.83496	3.8281	8.3471	9.3906	.999	168	0.000

Based on the factorial retention results and the theoretical hypothesis that underpinned the development of SCOPE, an EFA was performed, with a two-factor solution forced. The factorial model is presented in Table 2, which includes item loadings, commonalities, percentage and explained variances, factor correlations, and reliability indicators.

The results presented in Table 2 show that the items presented factorial loadings consistent with the theoretical perspective described by the Model of Excellencism and Perfectionism. Thus, the items that composed Factor 1 correspond to the perfectionism factor, while those with factorial loadings in Factor 2 correspond to the excellencism factor. As for the factorial loads, they ranged from .598 to .994 for the perfectionism factor and from .529 to .884 for the excellencism factor. Regarding the correlation between the factors, a moderate correlation was observed ($r = .609$). Finally, the two-factor model explained 64.54% of the variance in the data. These results support the

first validity evidence based on the internal structure of the Brazilian version of SCOPE. Still, in Table 2, the reliability indexes for each factor were adequate: .96 for perfectionism and .94 for excellencism, results that support the instrument's reliability in the Brazilian version.

Table 2. Exploratory Factor Analysis, Confirmatory Factor Analysis, and Reliability

	Sample 1: EFA			Sample 2: CFA	
Items	**Perfec**	**Exe**	**h2**	**Perfec**	**Exe**
2	**.714**	.135	.646	**.832**	
4	**.901**	-.124	.691	**.786**	
5	**.805**	.063	.714	**.859**	
7	**.598**	.186	.527	**.730**	
8	**.818**	-.072	.602	**.734**	
10	**.662**	.151	.584	**.779**	
13	**.914**	-.048	.785	**.852**	
14	**.737**	.131	.677	**.817**	
16	**.994**	-.147	.832	**.851**	
19	**.841**	.052	.763	**.865**	
22	**.840**	-.050	.656	**.784**	
1	.104	**.642**	.504		**.728**
3	-.076	**.787**	.553		**.646**
6	.083	**.602**	.430		**.713**
9	.236	**.529**	.488		**.730**
11	-.024	**.746**	.536		**.670**
12	-.012	**.814**	.652		**.769**
15	-.239	**.829**	.503		**.555**
17	-.030	**.770**	.566		**.731**
18	.215	**.631**	.609		**.847**
20	-.137	**.884**	.652		**.735**
21	.219	**.537**	.479		**.754**
r	.609			.669	
% VE	51.57	12.97			
Total	64.54				
α	.964	.940		.949	.935
Ω	.964	.939		.950	.937

Note. *r* = correlation between factors; %VE = percentage of variance explained; α= Cronbach's alpha; Ω= McDonald's omega.

Once the first evidence of the validity of the Brazilian version of SCOPE was estimated, the CFA was used to estimate the factorial model with Sample 2. The results provide additional support for the validity based on the internal structure, demonstrating a favorable fit of the model to the available data: DWLS $\chi 2 = 600.585$, $df = 208$, $p < .001$, $\chi^2/df = 2.887$, $CFI = .984$, $TLI = .982$, RMSEA = .059 (90 % *CI* [.056, .062]). The confirmatory factorial model is also presented in Table 2, where adequate item loadings on the respective factors, moderate factor correlations, and good precision indicators are verified.

Furthermore, the analysis assessed relationships between SCOPE scores and external variables (satisfaction with life and general psychiatric symptoms, as measured by SRQ-20). Correlations between the factors were estimated, and the results are shown in Table 3.

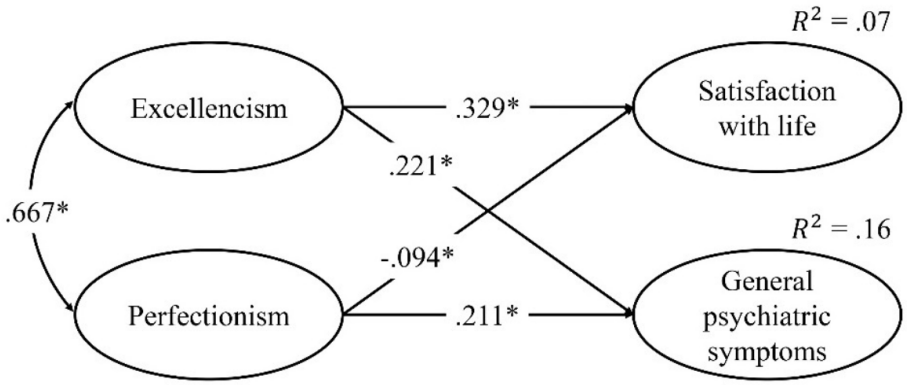
Table 3. Pearson Correlations between the SCOPE, SWLS, and SRQ-20

	M	SD	Ω	1.	2.	3.	4.
1. Excellencism	5.75	0.98	.940	1			
2. Perfectionism	4.28	1.40	.963	.623**	1		
3. Life satisfaction	3.94	1.28	.852	-.010	-.083**	1	
4. General psychiatric symptoms	1.48	0.24	.922	.081**	.185**	-.492**	1

Note. ** $p < .01$. Ω = McDonald's omega.

In the last step, a model in which excellencism and perfectionism predict life satisfaction and general psychiatric symptoms was tested. The model estimated via the full factorial SEM presented a good fit (DWLS $\chi^2 = 8{,}181.061$, $df = 1{,}028$, $\chi^2/df = 7.958$, $p < .001$, $CFI = .963$, TLI = .961, RMSEA = .064 (90 % *CI* [.062, .065]). Consistent with the scales' internal structure assessment, all items showed adequate factor loadings on their respective factors, with values of .741 or greater.

Figure 1. Results of Structural Equation Modeling



Note. * $p < .001$.
The intercept of the latent variables was set to 0. The variance of Exellencism was equal to .660, and Perfectionism was equal to .751.

Study 2

Method

Participants

The sample, for convenience, consisted of 432 Brazilian participants from the general population, ages 18 to 59 years (mean age = 32.87, *SD* = 10.07). Regarding gender identity, 81.6% of participants identified as cisgender women, 17.5% as cisgender men, and 0.9% preferred not to disclose. As for marital status, 51.2% declared themselves as single, 41% as married, 6% as divorced, 0.7% as widowed, and 1.2% as other. Regarding education level, 32% had completed high school, 28.6% had pursued post-graduate studies at the specialization level, 23.3% had completed a bachelor's degree, 10.1% held a master's degree, 5.1% held a doctoral degree, and 0.9% had completed primary education. As for monthly family income, 57.3% indicated receiving three to five Brazilian minimum wages, 26.7% indicated receiving one to two minimum wages, 14.2% indicated receiving more than five minimum wages, and 1.4% declared to have no family income.

Procedures

This research received approval from the Research Ethics Committee of the Federal University of Minas Gerais (registration number 5.273.686) and followed the guidelines from the Declaration of Helsinki (World Medical Association, 2013). Data collection was performed on an online platform (Google Forms®) from June to December 2022. Participants were recruited using social networks and email. All participants completed a socioeconomic questionnaire (see Study 1), the SCOPE, and another measure of perfectionism, chosen to evaluate the SCOPE's convergent and discriminant validity. To be eligible, volunteers needed to be at least 18 years old and able to access the platform via a link provided in the study description or email.

Measures

Excellencism and Perfectionism. Identical to Study 1.

Multidimensional Perfectionism. Participants completed the Brazilian version (Mansur-Alves et al., 2023) of the MPS (Hewitt & Flett, 1991). This questionnaire contains three 15-item subscales measuring SOP, SPP, and other-oriented perfectionism (OOP). For this study, only SOP and SPP items were used, and participants responded to each item on a 7-point Likert-type scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Results in our sample provided evidence for the two-factor model with appropriate CFA fit indices ($n = 434$, DWLS $\chi^2 = 3{,}035.243$, $df = 404$, $p < .001$, *CFI* = .950, *TLI* = .946, RMSEA = .076 (90% *CI* [.072, .081]). Mansur-Alves et al. (2023) reported a three-dimensional factor structure, similar to the original scale, good discriminative item parameters, and satisfactory reliability indices (above .70 for all three dimensions).

Data Analysis

For the evaluation of the internal structure of SCOPE with Sample 3, the CFA was employed, utilizing the same parameters presented in Study 1, namely DWLS $\chi^2/df < 5$, *RMSEA* < .08, CFI and *TLI* > .90, considered adequate, and $\chi^2/df < 3$, *RMSEA* < .06, *CFI* and *TLI* > .95 considered good. To estimate the evidence of convergent validity, Pearson's and partial correlation coefficients were estimated between SCOPE scores and the factors of the Hewitt and Flett's MPS. The significance level was set at <.05, and the magnitude of correlation was classified according to Cohen's (1998) criteria: null (-.09 to .09); small (.10 to .29); medium (.30 to .49); and large (.50 to 1.0).

Results

The CFA results in this study indicated good model fit indices to the available data: $\chi2 = 372{,}186$, df = 208, p < .001, $\chi2/df = 1.789$, CFI = .996, TLI = .995, RMSEA = .043 (90% CI [.036, .050]). The results of the factorial model are presented in Table 3, confirming adequate factor loadings of the items in their respective factors, positive correlation between the factors, and good reliability indicators. Finally, the factor correlations were estimated, and the results are shown in Table 4.

Table 4. Pearson and Partial Correlations between the SCOPE and MPS Dimensions

	M	SD	Ω	1.	2.	3.	4.
1. Excellencism	5.24	1.33	.969	1		.228**	-.006
2. Perfectionism	3.65	1.75	.978	.684**	1	.470**	.307**
3. Self-oriented perfectionism	4.89	1.24	.934	.587**	.679**	1	
4. Socially prescribed perfectionism	3.97	1.11	.888	.269**	.399**	.517**	1

Note. ** $p < .01$. Ω = McDonald's omega. The lower triangular matrix presents Pearson correlations, while the upper triangular matrix presents partial correlations controlling for the shared variance between excellencism and perfectionism.

Discussion

After three decades of intensive research on the structure and outcomes of perfectionism (Flett & Hewitt, 2020; Smith et al., 2022), an important conceptual issue remains: the boundary between high personal standards of performance and perfectionist standards. Gaudreau (2019) attempts to shed light on this issue by proposing the MEP, which formalizes a conceptual distinction between performance standards associated with the pursuit of excellence and those associated with the pursuit of perfection. The SCOPE emerges as an attempt to operationalize the distinction between perfectionism and excellencism and to test hypotheses derived from the MEP. However, there are still a few studies about the validity and reliability of the SCOPE. Furthermore, the studies published to date on the scale have focused solely on its psychometric properties among English-speaking individuals from wealthy, industrialized countries. Thus, this study aimed to assess the validity indicators of the internal, external, convergent, and discriminant structures, as well as the reliability of the SCOPE for Portuguese-speaking adults in the general population of Brazil, using two studies.

The first study provided evidence of validity based on the SCOPE's internal structure, reliability, and association with external measures. As expected, the exploratory and confirmatory analyses indicated a two-factor structure (perfectionism and excellencism), with items loading more strongly on each theoretically allocated factor. Furthermore, high internal consistency was found for both dimensions of the scale. The results corroborate the findings of Gaudreau et al. (2022) for Canadian university adult samples. Also, Study 1 indicates a moderate, positive association between perfectionism and excellencism ($r = .609$). This result aligns with one of MEP's hypotheses, suggesting that perfectionists and excellence strivers share high personal performance standards. However, while the latter stop in their quest for excellence, the former continues to pursue more stringent, extreme, and less realistic performance standards (Gaudreau, 2019).

Study 1 also aimed to verify the relationship between the two SCOPE dimensions and external measures: satisfaction with life and general psychiatric symptoms. Results from correlation analysis indicated that perfectionism, not excellencism, was significantly and negatively associated with satisfaction with life. Additionally, structural equation modeling indicated that perfectionism was a negative predictor, and excellencism a positive predictor of satisfaction with life. At the same time, both excellencism and perfectionism were positively associated with and predictive of the measure of general psychiatric symptoms used in this study, although with low magnitude for both. The results partially confirm the scenarios proposed by MEP (Gaudreau, 2019; Gaudreau et al., 2022). In terms of the association with positive outcomes, the MEP predicts that perfectionism could be beneficial (Scenario 1), unnecessary (Scenario 2), or harmful (Scenario 3) when compared to excellencism. Our results point to perfectionism as harmful since it contributes negatively

to people's life satisfaction, corroborating Gaudreau et al.'s (2022) study. It is noticeable that this result gives great value to the separation between perfectionist and excellencist patterns proposed by MEP, which seems to resolve a long-standing quarrel in the field about the association of perfectionist efforts, sometimes with positive outcomes and sometimes with adverse outcomes (Hill et al., 2010; Smith et al., 2015, 2016; Stoeber & Damian, 2016). Nevertheless, Gaudreau et al. (2023) also point out that the most popular scales for assessing perfectionist patterns contain items that measure excellencism patterns, which could further contribute to the confusion in interpreting the results of the association of perfectionism with positive outcomes.

The positive associations and similar magnitudes of perfectionism and excellencism with the measure of general psychiatric symptoms (negative outcome) found in this study might confirm MEP Scenario 2 (Gaudreau, 2019), suggesting that perfectionism and excellencism are equally harmful. This result is at odds with most studies conducted with the SCOPE (Gaudreau et al., 2022; Gaudreau et al., 2023). However, one point is worth noting. The MEP scenarios were designed from a person-centered rather than variable-centered approach, in which three groups of people are compared based on their cut-off points on the SCOPE dimensions: perfection strivers, excellence strivers, and non-excellence/non-perfection strivers. Corroborating the literature in the area and the findings of other SCOPE studies (Gaudreau et al., 2022; Gaudreau et al., 2023), perfection strivers should have higher distress than excellence strivers. Excellence strivers should also experience greater distress than non-excellence/non-perfection strivers. This scenario would indicate that perfectionism is more harmful than excellence, but that excellencism could also, to some extent, lead to more stress and anxiety than non-excellence. The results of this study were obtained from a correlation analysis and equation modeling of variables rather than from comparisons between groups derived from the combination of the SCOPE dimensions. Considering that, according to the MEP, perfectionism could also lead to some stress, our results are consistent with the MEP's predictions. Future studies comparing groups of perfection strivers, excellence strivers, and non-excellence/non-perfection strivers on adverse outcomes among Brazilian adults could confirm our interpretations and provide additional evidence for MEP.

The second study supports the convergent validity of perfectionism and discriminant validity of excellencism with Hewitt and Flett's multidimensional perfectionism scale, one of the most widely used scales for assessing multidimensional perfectionism (Smith et al., 2022). When considering the results found from the partial correlation analysis (controlling for perfectionism), excellencism maintains its positive association with SOP, but the association with SPP disappears. Whereas the partial correlation (controlling for excellencism) between perfectionism with MPS self-oriented and SPP falls somewhat in magnitude but remains significant. Similar results were reported by Gaudreau et al. (2022).

Taken together, the study's findings offer essential contributions to the field. First, the results attest to the psychometric quality of the SCOPE for the Brazilian context. This is the first study, to our knowledge, to raise evidence of validity and reliability for the SCOPE outside the axis of wealthy, industrialized, non-English-speaking countries (Gaudreau & Schellenberg, 2022; Goulet-Pelletier et al., 2022; Grieve et al., 2022; Robinson et al., 2022). Considering the specificities of the Brazilian context for understanding the manifestations of perfectionism and the differences between perfectionism and excellencism, despite vast social, educational, and opportunity inequalities, in addition to not being an intensely liberal country, this study may contribute to discussions on the impacts of culture on the development and manifestations of perfectionism (Curran & Hill, 2019; Rice et al., 2019). Moreover, it may allow testing the MEP hypotheses and scenarios in a country with entirely different characteristics from those in which they have been tested. A valid and reliable instrument is an important and necessary first step in this direction. Furthermore, the study's findings present further evidence that perfectionism and excellencism are distinct, though associated, constructs. This distinction is an important step for the field's literature, which can add new evidence on the actual impacts of perfectionism at the functional level and shed light on inconclusive results regarding the relationship between positive outcomes and the effectiveness of interventions (Gaudreau et al., 2023).

Even with its contributions, this study has some limitations. Non-probabilistic and convenience sampling were used, which may limit the generalizability of the findings. In addition, our sample was primarily female and had at least an average level of education, which also affects the inferences made. Future studies can test the invariance of the SCOPE across

age, gender, and education. Furthermore, further criterion validity studies are needed to extend the predictions made by the MEP. Studies with interpersonal aspects and perfectionist cognitions may provide further evidence on the distinctions between perfectionism and excellence. Association with other health outcomes is urgently needed. Also, this study did not work with a person-centered approach but with a variable-centered approach. Future studies with Brazilian samples should include comparisons among perfection strivers, excellence strivers, and non-excellence/non-perfection strivers to better understand the differences among these groups in various outcomes and life outcomes. Such studies may have broad and varied repercussions for the applicability of the knowledge produced in the field.

Data Availability

The database and analysis scripts are available upon reasonable request from the corresponding author.

Conflicts of Interest

We have no known conflict of interest to disclose.

Funding

The first and last authors are Research Productivity Fellows of the National Council for Scientific and Technological Development (CNPq). Also, the third author received funding from the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES).

References

Ardila, R. (1993). Latin American psychology and world psychology. In U. Kim & J. Berry (Eds.), *Indigenous psychologies* (pp. 170–176). Sage.

Arslan, R. C., Walther, M. P., & Tata, C. S. (2020). formr: A study framework allowing for automated feedback generation and complex longitudinal experience-sampling studies using R. *Behavior Research Methods, 52*(1), 376–387. https://doi.org/10.3758/s13428-019-01236-y

Blasberg, J. S., Hewitt, P. L., Flett, G. L., Sherry, S. B., & Chen, C. (2016). The importance of item wording: The distinction between measuring high standards versus measuring perfectionism and why it matters. *Journal of Psychoeducational Assessment, 34*(7), 702–717. https://doi.org/10.1177/0734282916653701

Buja, A., & Eyuboglu, N. (1992). Remarks on parallel analysis. *Multivariate Behavioral Research, 27*(4), 509–540. https://doi.org/10.1207/s15327906mbr2704_2

Ceulemans, E., Timmerman, M. E., & Kiers, H. A. L. (2010). The CHull procedure for selecting among multilevel component solutions. *Chemometric and Intelligent Laboratory Systems, 106*(1), 12–20. https://doi.org/10.1016/j.chemolab.2010.08.001

Cheng, S. K., Chong, G. H., & Wong, C. W. (1999). Chinese frost multidimensional perfectionism scale: a validation and prediction of self-esteem and psychological distress. *Journal of Clinical Psychology, 55*(9), 1051–1061. https://doi.org/10.1002/(SICI)1097-4679(199909)55:9%3C1051::AID-JCLP3%3E3.0.CO;2-1

Cohen, J. (1998). Statistical Power Analysis for the Behavioral Sciences (2nd ed.). Lawrence Erlbaum Associates.

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

Dahlenburg, S. C., Gleaves, D. H., & Hutchinson, A. D. (2019). Anorexia nervosa and perfectionism: a meta-analysis. *International Journal of Eating Disorders, 52*(3), 219–229. https://doi.org/10.1002/eat.23009

Damian, L. E., Stoeber, J., Negru-Subtirica, O., & Băban, A. (2014). Perfectionism and achievement goal orientations in adolescent school students. *Psychology in the Schools, 51*(9), 960–971. https://doi.org/10.1002/pits.21794

Damian, L. E., Stoeber, J., Negru-Subtirica, O., & Băban, A. (2016). On the development of perfectionism: the longitudinal role of academic achievement and academic efficacy. *Journal of Personality, 85*(4), 565–577. https://doi.org/10.1111/jopy.12261

DiBartolo, P. M., Frost, R. O., Chang, P., LaSota, M., & Grills, A. E. (2004). Shedding light on the relationship between personal standards and psychopathology. *Journal of Rational-Emotive and Cognitive-Behaviour Therapy, 22*, 241–254. https://doi.org/10.1023/B:JORE.0000047310.94044.ac

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment, 49*(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13

Eley, D. S., Bansal, V., & Leung, J. (2020). Perfectionism as a mediator of psychological distress: implications for addressing underlying vulnerabilities to the mental health of medical students. *Medical Teacher, 42*(11), 1301–1307. https://doi.org/10.1080/0142159X.2020.1805101

Ferrando, P. J., & Lorenzo-Seva, U. (2017). Program FACTOR at 10: Origins, development and future directions. *Psicothema, 29*(2), 236–241. https://doi.org/10.7334/psicothema2016.304

Flett, G. L., & Hewitt, P. L. (2014). "The perils of perfectionism in sports" revisited: Toward a broader understanding of the pressure to be perfect and its impact on athletes and dancers. *International Journal of Sport Psychology, 45*(4), 395–407.

Flett, G. L., & Hewitt, P. L. (2020). 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., 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

Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research, 14*, 449–468. https://doi.org/10.1007/BF01172967

Gaudreau, P. (2019). On the distinction between personal standards perfectionism and excellencism: a theory elaboration and research agenda. *Perspectives on Psychological Science, 14*(2), 197–215. https://doi.org/10.1177/1745691618797940

Gaudreau, P. (2021). Separating the core definitional feature and the signature expressions of dispositional perfectionism: Implications for theory, research, and practice. *Personality and Individual Differences, 181*, 110975. https://doi.org/10.1016/j.paid.2021.110975

Gaudreau, P., & Schellenberg, B. J. I. (2022). Attitudes of sport fans toward the electronic sign stealing scandal in Major League Baseball: differing associations with perfectionism and excellencism. *Journal of Sport & Exercise Psychology, 44*(3), 220–229. https://doi.org/10.1123/jsep.2021-0136

Gaudreau, P., Benoit, A., & Boileau, L. (2023). Questions, critical reflections, and advances with the Model of Excellencism and Perfectionism. A call to action. In A. P. Hill (Ed.), *Perfectionism in sport, dance, and exercise* (2nd ed., pp. 377–398). Routledge. https://doi.org/10.4324/9781003288015-19

Gaudreau, P., Schellenberg, B. J. I., Gareau, A., Kljajic, K., & Manoni-Millar, S. (2022). Because excellencism is more than good enough: on the need to distinguish the pursuit of excellence from the pursuit of perfection. *Journal of Personality and Social Psychology, 122*(6), 1117–1145. https://doi.org/10.1037/pspp0000411

Gnilka, P. B., & Novakovic, A. (2017). Gender differences in STEM students' perfectionism, career search self-efficacy, and perception of career barriers. *Journal of Counseling & Development, 95*(1), 56–66. https://doi.org/10.1002/jcad.12117

Goulet-Pelletier, J. C., Gaudreau, P., & Cousineau, D. (2022). Is perfectionism a killer of creative thinking? A test of the model of excellencism and perfectionism. *British Journal of Psychology, 113*(1), 176–207. https://doi.org/10.1111/bjop.12530

Gouveia, V. V., Milfont, T. L., da Fonseca, P. N., & Coelho, J. A. P. de M. (2009). Life satisfaction in Brazil: testing the psychometric properties of the Satisfaction With Life Scale (SWLS) in five Brazilian samples. *Social Indicators Research*, *90*(2), 267–277. https://doi.org/10.1007/s11205-008-9257-0

Grieve, P., Egan, S. J., Andersson, G., Carlbring, P., Shafran, R., & Wade, T. D. (2022). The impact of internet-based cognitive behaviour therapy for perfectionism on different measures of perfectionism: a randomised controlled trial. *Cognitive Behaviour Therapy*, *51*(2), 130–142. https://doi.org/10.1080/16506073.2021.1928276

Harding, T. W., de Arango, M. V., Baltazar, J., Climent, C. E., Ibrahim, H. H., Ladrido-Ignacio, L., Murthy, R. S., & Wig, N. (1980). Mental disorders in primary health care: A study of their frequency and diagnosis in four developing countries. P*sychological Medicine*, *10*(2), 231–241. https://doi.org/10.1017/s0033291700043993

Hernández-Nieto, R. A. (2002). *Contributions to statistical analysis.* Universidad de los Andes.

Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptual assessment, and association with psychopathology. J*ournal 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., & Mikail, S. F. (2017). *Perfectionism: A relational approach to conceptualization, assessment, and treatment* (1st ed.). Guilford Publications.

Hewitt, P. L., Flett, G. L., Mikail, S. F., Kealy, D., & Zhang, L. C. (2018). Perfectionism in the therapeutic context: The perfectionism social disconnection model. In J. Stoeber (Ed.), *The psychology of perfectionism* (1st ed., pp. 306–330). Routledge. https://doi.org/10.4324/9781315536255-20

Hill, A. P., & Curran, T. (2016). Multidimensional perfectionism and burnout: a meta-analysis. *Personality and Social Psychology Review*, *20*(3), 269–288. https://doi.org/10.1177/1088868315596286

Hill, A. P., Mallinson-Howard, S. H., & Jowett, G. E. (2018). Multidimensional perfectionism in sport: a meta-analytical review. *Sport, Exercise, and Performance Psychology*, *7*(3), 235–270. https://doi.org/10.1037/spy0000125

Hill, R. W., Huelsman, T. J., & Araujo, G. (2010). Perfectionistic concerns suppress associations between perfectionistic strivings and positive life outcomes. *Personality and Individual Differences*, *48*(5), 584–589. https://doi.org/10.1016/j.paid.2009.12.011

Index of Economic Freedom. (2022). *Country rankings.* https://www.heritage.org/index/ranking

International Test Commission. (2017). *The ITC Guidelines for Translating and Adapting Tests* (2nd ed.). https://www.intestcom.org/

Lorenzo-Seva, U., Timmerman, M. E., & Kiers, H. A. (2011). The Hull Method for Selecting the Number of Common Factors. *Multivariate Behavioral Research*, *46*(2), 340–364. https://doi.org/10.1080/00273171.2011.564527

Lunn, J., Greene, D., Callaghan, T., & Egan, S. J. (2023). Associations between perfectionism and symptoms of anxiety, obsessive-compulsive disorder and depression in young people: a meta-analysis. *Cognitive Behaviour Therapy*, *52*(5), 460–487. https://doi.org/10.1080/16506073.2023.2211736

Madigan, D. J. (2019). A meta-analysis of perfectionism and academic achievement. *Educational Psychology Review*, *31*(4), 967–989. https://doi.org/10.1007/s10648-019-09484-2

Mansur-Alves, M., Muniz, M., Rueda, F. J. M., & Zeferino, G. G. (2023). Psychometric properties of the Hewitt and Flett Multidimensional Perfectionism scale in Brazilian adults. *Psicologia: Teoria e Pesquisa*, *39*, e39nspe09. https://doi.org/10.1590/0102.3772e39nspe09.en

Mari, J., & Williams, P. (1986). A validity study of a Psychiatric Screening Questionnaire (SRQ-20) in primary care in the city of Sao Paulo. *The British Journal of Psychiatry*, *148*(1), 23–26. https://doi.org/10.1192/bjp.148.1.23

Miller, R., Hilsenroth, M. J., & Hewitt, P. L. (2017). Perfectionism and therapeutic alliance: a review of the clinical research. *Research in Psychotherapy: Psychopathology, Process, and Outcome*, *20*(1), 19–29. https://doi.org/10.4081%2Fripppo.2017.264

Molnar, D. S., Sirois, F. M., Flett, G. L., & Sadava, S. (2020). A person-oriented approach to multidimensional perfectionism: Perfectionism profiles in health and well-being. *Journal of Psychoeducational Assessment, 38*(1), 127–142. https://doi.org/10.1177/0734282919877754

Muthén, L. K., & Muthén, B. O. (2012). *Mplus User's Guide* (7th ed.). Muthén & Muthén.

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

Robinson, A., Stasik-O'Brien, S., & Calamia, M. (2022). Toward a more perfect conceptualization of perfectionism: an exploratory factor analysis in undergraduate college students. *Assessment, 29*(3), 385–396. https://doi.org/10.1177/1073191120976859

Robinson, K., & Wade, T. D. (2021). Perfectionism interventions targeting disordered eating: a systematic review and meta-analysis. *International Journal of Eating Disorders, 54*(4), 473–487. https://doi.org/10.1002/eat.23483

Rosseel, Y. (2012). lavaan: An R Package for Structural Equation Modeling. *Journal of Statistical Software, 48*(2), 1–36. https://doi.org/10.18637/jss.v048.i02

RStudio Team. (2015). *RStudio: Integrated Development Environment for R*. http://www.rstudio.com/

Shim, S. S., Rubenstein, L. D., & Drapeau, C. W. (2016). When perfectionism is coupled with low achievement: the effects on academic engagement and help seeking in middle school. *Learning and Individual Differences, 45*, 237–244. https://doi.org/10.1016/j.lindif.2015.12.016

Slaney, R., Rice, K., Mobley, M., Trippi, J., & Ashby, J. S. (2001). The Revised Almost Perfect Scale. *Measurement and Evaluation in Counseling & Development, 34*(3), 130–145. https://doi.org/10.1080/07481756.2002.12069030

Smith, M. M., Saklofske, D. H., Yan, G., & Sherry, S. B. (2015). Perfectionistic strivings and perfectionistic concerns interact to predict negative emotionality: support for the tripartite model of perfectionism in Canadian and Chinese university students. *Personality and Individual Differences, 81*, 141–147. https://doi.org/10.1016/j.paid.2014.09.006

Smith, M. M., Vidovic, V., Sherry, S. B., & Saklofske, D. H. (2018). Self-oriented perfectionism and socially prescribed perfectionism add incrementally to the prediction of suicide ideation beyond hopelessness: a meta-analysis of 15 studies. In U. Kumar (Ed.), *Handbook of suicidal behaviour* (pp. 349–369). Springer. https://doi.org/10.1007/978-981-10-4816-6_19

Smith, M. M., Sherry, S. B., Chen, S., Saklofske, D. H., Flett, G. L., & Hewitt, P. L. (2016). Perfectionism and narcissism: a meta-analytic review. *Journal of Research in Personality, 64*, 90–101. https://doi.org/10.1016/j.jrp.2016.07.012

Smith, M. M., Sherry, S. B., Ge, S. Y. J., 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

Smith, M. M., Sherry, S. B., Chen, S., Saklofske, D. H., Mushquash, C., Flett, G. L., & Hewitt, P. L. (2018). The perniciousness of perfectionism: a meta-analytic review of the perfectionism-suicide relationship. *Journal of Personality, 86*(3), 522–542. https://doi.org/10.1111/jopy.12333

Soper, D. S. (2024). *A-priori Sample Size Calculator for Structural Equation Models* [Software]. https://www.danielsoper.com/statcalc

Stackpole, R., Greene, D., Bills, E., & Egan, S. J. (2023). The association between eating disorders and perfectionism in adults: A systematic review and meta-analysis. *Eating Behaviors, 50*, 101769. https://doi.org/10.1016/j.eatbeh.2023.101769

Stoeber, J. (2011). The dual nature of perfectionism in sports: Relationships with emotion, motivation, and performance. *International Review of Sport and Exercise Psychology, 4*(2), 128–145. https://doi.org/10.1080/1750984X.2011.604789

Stoeber, J. (2014). Perfectionism in sport and dance: A double-edged sword. *International Journal of Sport Psychology*, *45*(4), 385–394. https://kar.kent.ac.uk/id/eprint/41917

Stoeber, J., & Damian, L. E. (2016). Perfectionism in employees: Work engagement, workaholism, and burnout. In F. M. Sirois & D. S. Molnar (Eds.), *Perfectionism, Health, and Well-Being* (pp. 265–283). Springer. https://doi.org/10.1007/978-3-319-18582-8_12

Stricker, J., Kröger, L., Johann, A. F., Küskens, A., Gieselmann, A., & Pietrowsky, R. (2023). Multidimensional perfectionism and poor sleep: A meta-analysis of bivariate associations. *Sleep Health*, *9*(2), 228–235. https://doi.org/10.1016/j.sleh.2022.09.015

Tabachnick, B. G., & Fidell, L. S. (2012). *Using Multivariate Statistics* (6th ed). Person Education.

Timmerman, M. E., & Lorenzo-Seva, U. (2011). Dimensionality assessment of ordered polytomous items with parallel analysis. *Psychological Methods*, *16*(2), 209–220. https://doi.org/10.1037/a0023353

World Inequality Lab. (2022). *World Inequality Report*. https://wir2022.wid.world/download/

World Medical Association. (2013). World medical association Declaration of Helsinki: Ethical principles for medical research involving human subjects. *Journal of the American Medical Association*, *310*(20), 2191–2194. https://doi.org/10.1001/jama.2013.281053

Zheng, B. Q., & Bentler, P. M. (2024). Enhancing Model Fit Evaluation in SEM: Practical Tips for Optimizing Chi-Square Tests. *Structural Equation Modeling: A Multidisciplinary Journal*, *32*(1), 136–141. https://doi.org/10.1080/10705511.2024.2354802