

**Exploring Social Disconnection through the Lens of Excellencism and Perfectionism: A
Look at Loneliness, Social Achievement Goals, Social Sacrifices, and Relatedness**

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Abstract

The Model of Excellencism and Perfectionism (MEP) differentiates striving toward high and realistic standards from striving for perfectionistic standards. Two studies situated excellencism and perfectionism within the nomological network of the Perfectionism Social Disconnection Model (PSDM). Study 1 ($n=284$) showed that excellencism and perfectionism were distinctively associated with loneliness, social goals, self-presentation strategies, and sacrificing social and community goals. Study 2 ($n=396$) replicated the associations with loneliness and showed higher frustration of the need for relatedness in perfection strivers than in excellence strivers. The results emphasized the importance of distinguishing between perfectionism and excellencism to understand their unique roles in psychological and social adjustment, with perfectionism leading to social disconnection and excellencism promoting healthier relationships.

Keywords: Perfectionism, Excellencism, Loneliness, Social Disconnection, Sacrifice, Social Goals

Highlights

- Connecting excellencism and perfectionism in the Social Disconnection Model.
- Perfectionistic standards are uniquely associated with loneliness.
- Excellencism is negatively associated with loneliness.
- Perfectionism and excellencism are differentially linked to social goals.
- Different associations with sacrifices and frustration of relatedness need.

Exploring Social Disconnection through the Lens of Excellencism and Perfectionism: A Look at Loneliness, Social Achievement Goals, Social Sacrifices, and Relatedness

1. Introduction

The feeling of being alone or socially disconnected is a significant risk factor for psychological maladjustment among emerging adults (e.g., Park et al., 2020). Over the last thirty years, both perfectionism and loneliness have significantly increased among young adults (Buecker et al., 2021; Curran & Hill, 2019). As young adults perceive more social pressure to be perfect (Curran & Hill, 2022), many risk sacrificing their social relationships, viewing friendship and romance as interfering with their goals. Perfectionism is a multidimensional construct, and recent research has drawn attention to the difference between people who pursue perfection and those who strive for excellence. The nuanced perspectives in the *Model of Excellencism and Perfectionism* (MEP; Gaudreau, 2019) can further our understanding of the role of perfectionism in psychological and social adjustment. However, the distinction between excellencism and perfectionism has yet to inform theories and research on how perfectionism relates to social disconnection. We conducted two studies to deepen our understanding of perfectionism and loneliness. Study 1 investigated loneliness, social goals, and self-regulation tactics of emerging adults pursuing perfection compared to those pursuing excellence. Study 2 aimed to probe unexpected findings from Study 1 by replicating the distinct associations of perfectionism and excellencism with social connection and social disconnection indicators, including satisfaction and frustration of the need for relatedness.

1.1. Perfectionism and Excellencism

The MEP introduces the concept of excellencism as a counterweight to clarify the definition of perfectionism (Gaudreau, 2019). People with excellencism pursue high standards in an engaged and flexible manner. Such high standards have frequently been conceptualized and measured as a facet of perfectionism (e.g., Frost et al., 1990; Slaney et al., 2001). However, perfectionism has traditionally been portrayed in a way that involves the aiming and pursuing of standards that go above and beyond the high standards involved in excellencism (e.g., Egan et al., 2016; Hewitt et al., 2017; Smith et al., 2022). Excellence is a realistic and attainable endpoint whereas perfection is a strictly unattainable standard based on the relentless pursuit of flawlessness. The MEP formalizes the distinction between the high but realistic standards involved in excellencism and the extremely high, and unrealistic perfectionistic standards involved in perfectionism (Gaudreau, 2019; Gaudreau et al., 2022). The MEP offers a conceptual framework to investigate the unique role of excellencism and perfectionism in psychological and social adjustment.

The MEP conceptualizes perfectionistic standards as the *core definitional feature* of perfectionism (Gaudreau, 2021; Gaudreau et al., 2023). People who strive toward perfection will express their perfectionism in various ways. Perfectionism is a multidimensional construct and constitutive elements such as concerns over mistakes, doubts about actions, socially prescribed perfectionism, other-oriented perfectionism, automatic perfectionistic thoughts, and perfectionistic self-presentation tactics (for a review, see Smith et al., 2022) are re-conceptualized as *signature expressions of perfectionism* in the MEP. These signature expressions are differential features that shape the unique phenomenological experience of being a perfectionist. Growing empirical support has supported this hypothesis (e.g., Gaudreau et al.,

2022; Tape et al., 2024). Compared to people who aim toward excellence (i.e., excellence strivers), those who aim toward perfection (i.e., perfection strivers) are more likely to experience the many signature expressions of perfectionism. Excellencism and perfection both involve the pursuit of high standards (Bien et al., 2024), but only the stringent, rigid, and extreme perfectionistic standards seem to activate the many signature expressions of perfectionism (e.g., Gaudreau et al., 2022; Tape et al., 2024) that are closely associated with the development and maintenance of symptoms of psychopathology (e.g., Limburg et al., 2017).

Excellencism and perfectionism are part of a dualistic system in which their respective effects on psychological adjustment are interpreted together rather than in isolation (Gaudreau, 2019; Gaudreau et al., 2024). Different combinations of positive, null, and negative effects of excellencism and perfectionism have been described in the nine hypothetical scenarios of the MEP (Gaudreau et al., 2024). To conclude that perfectionism is beneficial, perfection strivers must show better outcomes than excellence strivers. If their outcomes are comparable, it suggests perfectionism is unneeded. Perfection strivers use more resources and experience more strain to achieve the same results, indicating inefficiency and unsustainability. If perfection strivers have worse outcomes, it supports the view that perfectionism is harmful.

Empirical studies on the MEP have helped to clarify inconsistent evidence regarding the outcomes associated with perfectionistic standards. For example, past studies concluded that perfectionism can either be a booster (e.g., Chou et al., 2019) or a creativity killer (e.g., Ferrari & Mautz, 1997). Results of two studies using different measures of creative achievement showed that the positive effects sometimes reported in the literature were attributable to the high standards often conflated with measures of perfectionistic standards (Goulet-Pelletier et al., 2022). More precisely, creativity was positively associated with excellencism and negatively

associated with perfectionism, hinting that perfectionism is harmful. Similar results have been found with academic achievement (Gaudreau et al., 2022; Tape et al., 2024) and various psychological adjustment constructs (Cheek & Goebel, 2020; Gaudreau & Schellenberg, 2024; Gaudreau et al., 2022; Tape et al., 2024). Overall, the separation between excellencism and perfectionism is a theoretical step to clarify how perfectionistic standards can contribute to psychological and social adjustment.

1.2. Social Disconnection in the MEP

Researchers have yet to apply the MEP to the study of social adjustment, but the idea that perfectionists are likely to experience social difficulties is a common theme in the perfectionism literature (e.g., Hewitt et al., 2017; Smith et al., 2020). The Perfectionism Social Disconnection Model (PSDM) posits that perfectionism contributes to feelings of loneliness and social disconnection due to difficulties in forming and maintaining close relationships (Hewitt et al., 2006). Hostility toward others and avoidance of social situations may hinder one's capacity to create trustful, caring, and respectful social ties needed to feel socially connected and satisfied (e.g., Flett & Hewitt, 2022; Smith et al., 2020). In that context, asserting that perfectionists are particularly vulnerable to the burdens of social disconnection is logically defensible.

Support for the presumed association between perfectionism and loneliness varies across the conceptual landscape of the perfectionism construct. Facets operationalized as signature expressions of perfectionism in the MEP (e.g., concerns over mistakes, doubts about actions, socially prescribed perfectionism, discrepancy, perfectionistic self-presentation) have systematically been positively and strongly associated with feelings of loneliness (Smith et al., 2020). However, studies examining the association between perfectionistic standards and loneliness have produced inconsistent results. Most studies have reported correlations between

indicators of perfectionistic standards (e.g., high standards, self-oriented perfectionism) and loneliness that were small/negative (Chang et al., 2011; Chang et al., 2008; Flett et al., 1996; Muyan & Chang, 2015; Wang et al., 2009) or a small/positive (Chang, 2013, 2017; Dobos et al., 2024; Harper et al., 2020). Some studies even decided to exclude measures of perfectionistic standards to focus on perfectionistic concerns (e.g., Flett et al., 2016; Mackinnon et al., 2012). Only a few studies found a moderate positive correlation (from .17 to .27) between self-oriented perfectionism and loneliness (Rnic et al., 2021; Robinson et al., 2022; Visvalingam et al., 2023; Zhao et al., 2024).

The MEP places perfectionistic standards as the core definitional feature of perfectionism. Following that, the lack of a systematic association between perfectionistic standards and loneliness contradicts the position that perfectionism is a risk factor for social disconnection. In this study, we created bridges between the MEP and the PSDM to clarify the relationship between perfectionistic standards and loneliness, which is essential to support the notion that perfectionism contributes to social disconnection. We forwarded and investigated two explanations to unravel these theoretically unexpected and contradictory findings.

On the one hand, what happens to the association between perfectionistic standards and loneliness remains to be seen once perfectionism is clearly differentiated from excellencism. Based on the MEP, expecting a negative association between excellencism and loneliness is defensible because excellence strivers operate under a “good enough principle” that could help them invest the resources needed to develop and maintain fulfilling social relationships. Several studies relied on measures that conflated high standards (excellencism) and perfectionistic standards (perfectionism) which may have dragged down the positive association between perfectionistic standards and psychological outcomes (e.g., Gaudreau, 2019; Osenk et al., 2020),

such as loneliness. If we accept this rationale, then we should expect MEP studies to find a significant and positive association between perfectionism and loneliness. In other words, perfection strivers are hypothesized to exhibit higher loneliness than excellence strivers. Separating the effect of perfectionism from excellencism will help to reevaluate whether perfectionism is socially unhealthy, unneeded, or beneficial (e.g., Gaudreau et al., 2022; Gaudreau et al., 2024).

On the other hand, perfectionism has often been dubbed as a double-edged sword (e.g., Stoeber, 2014). In the context of social relationships, perfection strivers may be prone to pursue social goals that could be antagonistically related to social adjustment (Ryan & Shim, 2008). Social achievement goals offer individuals different paths to express their natural desire to satisfy their needs for social competence and relatedness (Hirsch & Clark, 2019). Not all social achievement goals are equally associated with desirable social outcomes (e.g., Liem, 2016; Michou et al., 2016; Mouratidis & Sideridis, 2009; Ryan & Shim, 2006). *Social development goals*, which focus on developing deeper connections (e.g., becoming a better friend, finding better ways to get along with people, and becoming a better listener), are generally associated with positive social outcomes like reduced loneliness (e.g., Shim et al., 2024). Another type of approach-oriented motivation, *social demonstration goals*, involves seeking social validation and being favorably judged by others. This can be pursued by hanging out with highly liked people, wanting to be perceived as popular and cool, and doing things that look good in front of others. These goals can lead to a mix of outcomes, such as perceived popularity but also less prosocial behavior. *Social demonstration avoidance goals* encompass actions to shield oneself from potential embarrassment or ridicule, such as refraining from behaviors that might provoke

laughter, teasing, or mockery. These avoidance goals are typically associated with negative social outcomes, including loneliness (e.g., Shim et al., 2024).

The epitomizing pursuit of avoidance-oriented social achievement goals shares similarities with *perfectionistic self-presentation tactics*. Perfection strivers try to promote themselves as being perfect while avoiding displaying and disclosing their imperfections (Hewitt et al., 2003). Perfectionistic self-presentation tactics are positively and strongly associated with an increased risk of social disconnection (Smith et al., 2020) and loneliness (Arce & Polo, 2017; Robinson et al., 2022). Far less empirical attention has been allocated to the potential links between perfectionism and the pursuit of social achievement goals. Perfectionistic standards (measured with high standards) have been found to relate positively to each of the three social achievement goals (Fletcher & Shim, 2019; Shim & Fletcher, 2012). It remains uncertain just how much these findings are tainted by the fact that high standards measure a mixture of excellencism and perfectionism. Within the MEP framework, excellencism should positively correlate with social development goals whereas perfectionism should positively correlate with approach and avoidance social demonstration goals. If so, the antagonistic approach and avoidance goals of perfection strivers could explain the small and inconsistent association between perfectionistic standards and loneliness in previous studies (for another illustration of the antagonistic effects of avoidance and approach motivation, see Sommet & Elliot, 2023). Such findings would be consistent with perfectionism being a double-edged sword.

Several streams of research inform us of the difficulty of finding the right balance in pursuing our goals (e.g., Taris & Jonge, 2024). Balancing professional (e.g., school, work) with interpersonal life (e.g., friends, family, community) can be facilitated when someone aims toward realistically achievable goals. Excellence strivers follow a “good enough principle”

allowing them to balance various activities. For instance, a study found that student-athletes who are excellence strivers feel less interference between school and sports compared to perfection strivers (Gaudreau et al., 2021). Several theorists have described perfectionism as an unreasonable and inflexible quest in which the person is prepared to sacrifice everything to achieve their goals (Egan et al., 2016; Hewitt et al., 2017). Occasional sacrifices are ubiquitously needed to prioritize urgent and essential tasks in our daily lives. However, sacrificing one's health, relationships, and community engagement solely for personal ambitions can pose significant risks for social disconnection and loneliness (e.g., Holding et al., 2020). Prioritizing extrinsic (e.g., fame, glory, appearance) rather than intrinsic goals (e.g., healthy, relationships, community) is negatively associated with psychological well-being (Bradshaw et al., 2022). Such a tendency to sacrifice reduces a person's self-concept by putting all their eggs in one basket (e.g., Linville, 1985). This overspecialization of the self-concept places the person in a vulnerable situation that increases the risk of isolation and obsessive development centered on realizing a narrow, reductionist self-concept (e.g., Vallerand, 2015). Repeated sacrifices of social relationships and community engagement can lead to frustration with the need for relatedness, and sacrificing one's psychological needs has been associated with decreased well-being and life satisfaction (e.g., Houliort et al., 2022).

Very few studies have looked at the potential links between perfectionism and the sacrifices made to pursue personal goals. Perfectionists have a bottom-line mentality (Gaudreau & Schellenberg, 2022). They will do anything to achieve their goals to the point it could cause them harm. Drawing on the theoretical literature on perfectionism and MEP, we expected that people who pursue perfection make more significant social sacrifices (social relationships, community engagement) than people who pursue excellence.

2. Study 1

We aimed to deepen our understanding of loneliness by differentiating the social goals, sacrifices, and self-presentation of emerging adults who pursue perfection versus excellence. We expected perfection strivers to rely on perfectionistic self-presentation tactics and to make social sacrifices (e.g., interpersonal and community) to a larger extent than excellence strivers. We also explored the idea that perfectionism is tied to an antagonistic pursuit of social achievement goals that are associated with desirable and undesirable social outcomes. While social demonstration goals could help perfection strivers expand their networks, they may lack the deep, reciprocal bonds needed to fully satisfy the need for affiliation in a healthy and lasting way (Baumeister & Leary, 1995; Bradshaw et al., 2022). Nevertheless, these goals potentially enable perfectionists to maintain enough social relationships to reduce feelings of loneliness. Simultaneously, social avoidance goals can be appealing to perfection strivers to shield themselves from embarrassing social blunders. Much like the tactics to avoid displaying and disclosing one's imperfection, these avoidance goals can exacerbate social anxiety and increase feelings of loneliness (e.g., Hewitt et al., 2003; Hofmann, 2007; Knoll et al., 2019). Overall, excellence and perfection strivers are expected to differ on social achievement goals, willingness to sacrifice their social relationships, and perfectionistic self-presentation strategies, which could explain their respective likelihood of experiencing lower and higher levels of loneliness.

2.1. Method

2.1.1. *Participants*

A sample of 300 university students from Canada, USA, and UK completed an online questionnaire and were recruited via the Prolific Academic platform in January 2023. This

sample size is in line with the previous research using the MEP and is sufficient to detect the effect of personality on proximal outcomes using regression models. After removing 11 participants who failed the attention check, and five univariate outliers, the final sample consisted of 284 students between 18 and 30 years of age (mean = 22.56, $SD = 3.29$). The sample comprises 150 men, 127 women, and 7 identifying as non-binary. The participants were mostly undergraduates ($n=218$) and some graduate students ($n=60$). In the sample, 53% self-identified as White, Hispanic (5.6%), Asian (21.5%), Black (13%), Middle Eastern (1.4%), African (1%), and mixed-raced or multi-ethnic (4.5%). All participants provided their informed consent, and the study was approved by the Research Ethics Board of the (MASKED FOR REVIEW).

2.1.2. Measures

Excellencism and Perfectionism. Participants answered each of the 22 questions from the Scale of Perfectionism and Excellencism (SCOPE, Gaudreau et al. 2022) on a scale from 1 (*Not at all agree*) to 7 (*Totally agree*). The SCOPE asks about striving with “As a person, my general goal in life is to...” and has a two-factor structure with subscales measuring excellencism (e.g. “attain difficult but realistic goals”) and perfectionism (e.g. “accomplish great things perfectly”). The questionnaire has been validated and used in samples of students in the past (Gaudreau et al., 2022; Tape et al., 2024). Internal consistency coefficients of the SCOPE (and all other measures used in this study) are presented in Table 1.

Perfectionistic Self-Presentation. Three ways to control self-presentation are identified in the 18-item Perfectionistic Self-Presentation Scale-Junior Form (PSPS-Jr; Hewitt et al., 2011): Perfectionistic self-promotion (“I like trying to look perfect to other people”), nondisplay of imperfection (“I feel bad about myself when I make mistakes in front of other people”), and nondisclosure of imperfection (“I should always keep my problems secret”). Participants self-

reported their responses on a scale from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Scores for each subscale and a total composite score were calculated along with their internal reliability (see Table 1).

Social Achievement Goals. The Social Achievement Goal orientations were measured using the three subscales of the 12-item questionnaire from the Social Achievement Goals (Ryan, 2006). The subscales are social development (“In general, I strive to develop my interpersonal skills”), social demonstration approach (“It is important to me that others think of me as popular”), and social demonstration avoidance (“I would be successful if I could avoid being socially awkward”). Participants rated statements from 1 (*Not at all true of me*) to 5 (*Totally true of me*). Internal consistency was acceptable across the three subscales (see Table 1).

Social Sacrifices. We used two 5-item scales measuring meaningful relationships and community contributions from the Life Aspiration Index (Kasser & Ryan, 1993). These items have been used to measure goal endorsement and goal attainment in past studies (Bradshaw et al., 2022). In this study, we modified the instructions to evaluate the extent to which people made sacrifices in their relational (e.g., “To feel that there are people who really love me, and who I love.”) and community aspirations (e.g., “To assist people who need it, asking nothing in return”). Items were preceded with this instruction: “Over the last few weeks, which of these things have you sacrificed in the pursuit of your goals?”. Participants answered each item on a scale from 1 (*Not at all agree*) to 7 (*Totally agree*). Internal consistency of the scores was excellent in this sample (see Table 1).

Feelings of Loneliness. Feelings of Loneliness were measured with the UCLA Loneliness Scale version 3 (Russell, 1996) a 20-item questionnaire asking (“How often do you feel that there is no one you can turn to?”) on a scale of 1 (*Never*) to 4 (*Always*). The third

version of the questionnaire contains 9 reversed items (“How often do you feel that there are people you can talk to?”) that were added to avoid systematic response bias. However, reversed items can create validity and interpretability problems, and even distort correlations with other variables (e.g., Gehlbach, 2015). Russell (1996) reported an effect of the negative items on the factorial structure, which had been questioned by other researchers (Maes et al., 2022). Results from our own factor analysis showed that a two-factor model separating positive and negative items improves significantly model fit ($\Delta\chi^2=282.99, p < 0.01$). Therefore, we decided to analyze our data twice: once using the total score and once separating the loneliness items (i.e., social disconnection) and the reversed items (i.e., social connection). Internal consistency was excellent for all scores.

2.1.3. Plan of Analyses

Regression models were tested using Mplus Version 8.7 following the 7-step plan of analyses that accompanies the MEP (Gaudreau et al., 2024). The two predictors (i.e., excellencism and perfectionism) were mean-centered. Four multivariate multiple regressions were performed on (1) perfectionistic self-presentation tactics, (2) social achievement goals, (3) social sacrifices, and (4) loneliness. Predicted values of the dependent variables were calculated at $\pm 1SD$ from the mean of excellencism and perfectionism, and they were graphed to visually represent nonexcellence/nonperfection strivers (low excellencism and low perfectionism), excellence strivers (high excellencism and low perfectionism), and perfection strivers (high excellencism and high perfectionism). All figures were created using the publicly available MEP Shiny App: https://model-of-excellencism-and-perfectionism.shinyapps.io/Shiny_Version2/

2.2. Results

Table 1. *Sample 1 Descriptive Statistics and Bivariate Correlations*

Variables	<i>M(SD)</i>	1	2	3	4	5	6	7	8	9
1.Excellencism	5.41(1.07)	.95								
2.Perfectionism	3.51(1.56)	.46**	.97							
3.Loneliness	2.31(0.58)	-.16**	.02	.94						
4.PSP	2.85(0.82)	.11	.48**	.40**	.93					
5.Rel.Sac.	2.78(1.71)	.15*	.34**	.21**	.26**	.95				
6.Com.Sac.	2.79(1.61)	.15*	.31**	.10	.17**	.66**	.96			
7.Dev.App.	3.45(0.79)	.40**	.13*	-.28**	-.01	.06	.13*	.72		
8.Dem.App.	1.86(0.91)	.20**	.48**	.11	.47**	.35**	.32**	.25**	.86	
9.Dem.Av.	2.45(0.91)	.09	.34**	.46**	.60**	.24**	.25**	.10	.51**	.70

Note. *N*= 284. Omega reported on the diagonal. PSP= Perfectionistic Self-Presentation, Rel.Sac.= Relational Sacrifices, Com.Sac.= Community Sacrifices, Dev.App.= Social Development Approach, Dem.App.= Social Demonstration Approach, Dem.Av.= Social Demonstration Avoidance. Two-tailed test ** $p < .01$. * $p < .05$.

Table 2. *Study 1: Associations of Excellencism and Perfectionism with Dependent Variables*

Dependent Variables	Intercept	<u>Excellencism</u>			<u>Perfectionism</u>			R ²
		B	SE	β	B	SE	β	
Model 1a								
Loneliness All Items	2.318	-0.118	0.037	-.218**	0.045	0.025	.123	.038
Model 1b								
Social Connection	2.87	0.149	0.040	.265**	-0.034	0.026	-.089	.056
Social Disconnection	2.479	-0.104	0.039	-.174**	0.063	0.027	.154*	.029
Model 2a								
Perfectionistic Self-Presentation	2.917	-0.09	0.046	-.121*	0.245	0.028	.486**	.197
Model 2b								
Self-Promotion	2.451	-0.115	0.049	-.118*	0.413	0.033	.617**	.328
Nondisclosure of imperfection	3.043	-0.048	0.055	-.058	0.156	0.034	.278**	.066
Nondisplay of imperfection	3.267	-0.107	0.059	-.130	0.166	0.036	.295**	.069
Model 3								
Social Relationship Sacrifices	2.787	-0.008	0.113	-.005	0.372	0.074	.339**	0.113
Community Sacrifices	2.819	0.025	0.101	.017	0.309	0.078	.299**	0.094
Model 4								
Social Demonstration Approach	1.863	-0.037	0.048	-.044	0.294	0.037	.504**	.235
Social Demonstration Avoidance	2.456	-0.066	0.052	-.083	0.220	0.036	.401**	.137
Social Development Approach	3.445	0.323	0.062	.403**	-0.036	0.032	-.066	.142

Note. $N=284$. Two-tailed test ** $p<.01$. * $p<.05$.

Table 3. *Study 1: Cohen's d effect size with 95% CI*

	Excel vs Non	Perfect vs Excel	Perfect vs Non
Loneliness all items	-0.437** [-0.706, -0.168]	0.245 [-0.020, 0.510]	-0.192 [-0.502, 0.119]
Social Connection	0.529** [0.252, 0.806]	-0.179 [-0.442, 0.085]	0.351* [0.035, 0.667]
Social Disconnection	-0.347** [-0.604, -0.091]	0.308* [0.047, 0.569]	-0.039 [-0.333, 0.254]
Perfectionistic Self-Presentation	-0.242 [-0.486, 0.001]	0.972** [0.757, 1.187]	0.730** [0.466, 0.995]
Social Relationship Sacrifices	-0.011 [-0.287, 0.265]	0.678** [0.415, 0.940]	0.667** [0.389, 0.945]
Community Sacrifices	0.033 [-0.230, 0.296]	0.598** [0.302, 0.895]	0.631** [0.356, 0.906]
Demonstration Approach	-0.087 [-0.307, 0.132]	1.002** [0.753, 1.250]	0.914** [0.673, 1.156]
Demonstration Avoidance	-0.156 [-0.394, 0.083]	0.752** [0.511, 0.992]	0.596** [0.332, 0.860]
Development Approach	0.868** [0.332, 1.194]	-0.143 [-0.386, 0.100]	0.725** [0.391, 1.059]

Note. $N = 284$. Excel= Excellence strivers. Perfect= Perfection strivers. Non= Nonexcellence/nonperfection strivers. Effect size is calculated by subtracting two predicted values before dividing it by the *SD* of the dependent variable. Two-tailed test. ** $p < .01$. * $p < .05$.

Loneliness. Results of our regression analysis showed that excellencism was significantly associated with lower levels of loneliness (see Table 2, Model 1a). However, the association between perfectionism and loneliness was not statistically significant. As shown in Panel A of Figure 1, loneliness was lower in excellence strivers compared to nonexcellence/nonperfection strivers whereas excellence and perfection strivers reported comparable loneliness. The effect size of the differences between the predicted values is reported in Table 3.

Concerns have been raised about the fact that loneliness and reversed items (social connection) are distinct constructs that tend to have their own nomological network (e.g., Dueber et al., 2022). We separated loneliness and reversed items into separate dependent variables: *social disconnection* and *social connection* respectively. Results showed that perfectionism is

significantly and positively associated with loneliness (social disconnection) and that the effect was diluted due to the null association with social connection (see Model 1b in Table 2). These differential effects are not present in excellencism which is significantly associated with more social connection and less disconnection. Social disconnection (i.e., loneliness) was higher in perfection strivers than excellence strivers, while social connection did not significantly differ (Figure 1, Panel B). Overall, these results outlined the need to draw a clear distinction between loneliness and social connection when testing the hypothesis from the MEP and PSDM.

Perfectionistic Self-Presentation. The total score of perfectionistic self-presentation tactics was significantly and positively predicted by perfectionism and negatively associated with excellencism (see Table 2, Model 2a). These findings indicated that perfection strivers relied on more perfectionistic self-presentation than excellence strivers who used these tactics to a lesser extent than nonexcellence/nonperfection strivers (see Figure 2, Panel A). All three subscales were significantly associated with perfectionism, but the strongest association was for perfectionistic self-promotion (see Table 2, Model 2b).

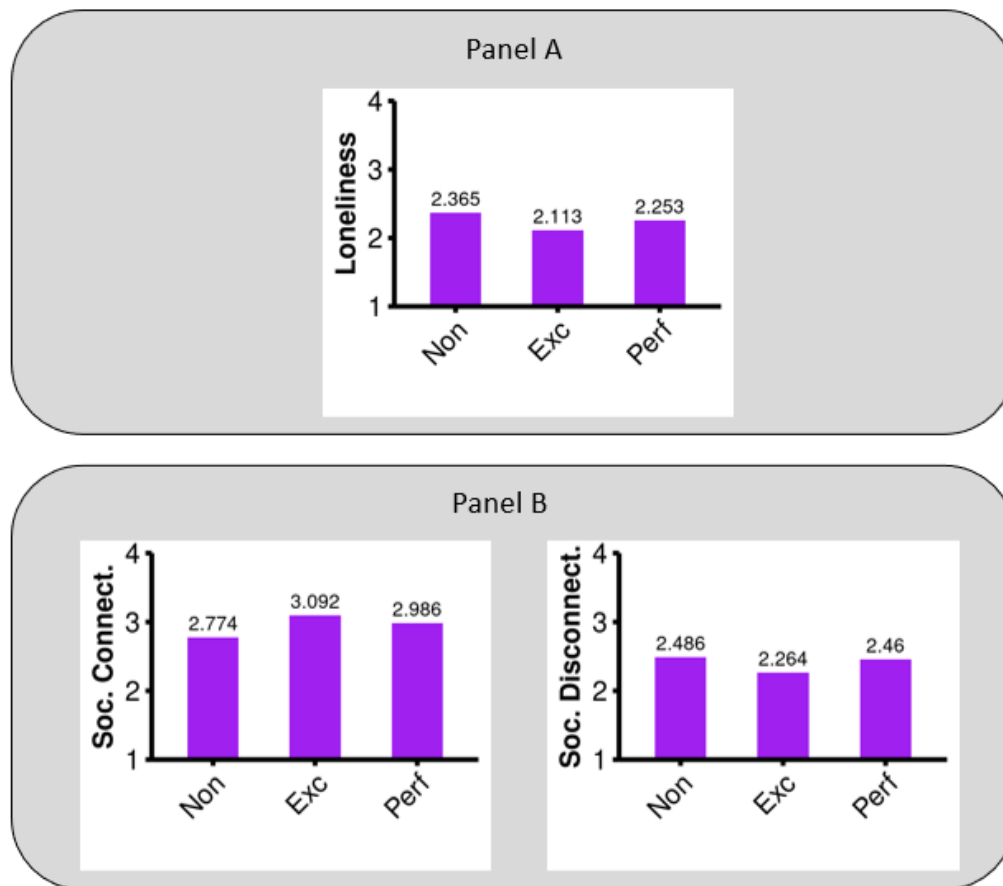
Social and Community Sacrifices. The results were similar across the two types of sacrifices (see Table 2, Model 3). Sacrificing interpersonal relationships and community engagement were positively and significantly associated with perfectionism (but not excellencism). Perfection strivers were more likely to sacrifice their social and community lives compared to both excellence strivers and nonexcellence/nonperfection strivers (see Figure 2, Panel B).

Social Achievement Goals. The multivariate multiple regression showed nuanced effects of excellencism and perfectionism (see Table 2, Model 4). First, perfectionism (but not excellencism) was positively associated with *social demonstration goals*. The same pattern

emerged for the *social demonstration approach* and *avoidance goals*. Perfection strivers had higher social demonstration goals than excellence strivers, which did not significantly differ from nonexcellence/nonperfection strivers. Second, excellencism (but not perfectionism) was positively associated with *social development goals*. Excellence strivers had higher social development goals than nonexcellence/nonperfection strivers. Excellence and perfection strivers did not significantly differ on this goal. Overall, this pattern of effects indicated that perfection strivers have an antagonistic style of social goals in which they try to demonstrate their social competence while avoiding the display of social incompetence (see Figure 2, panel C).

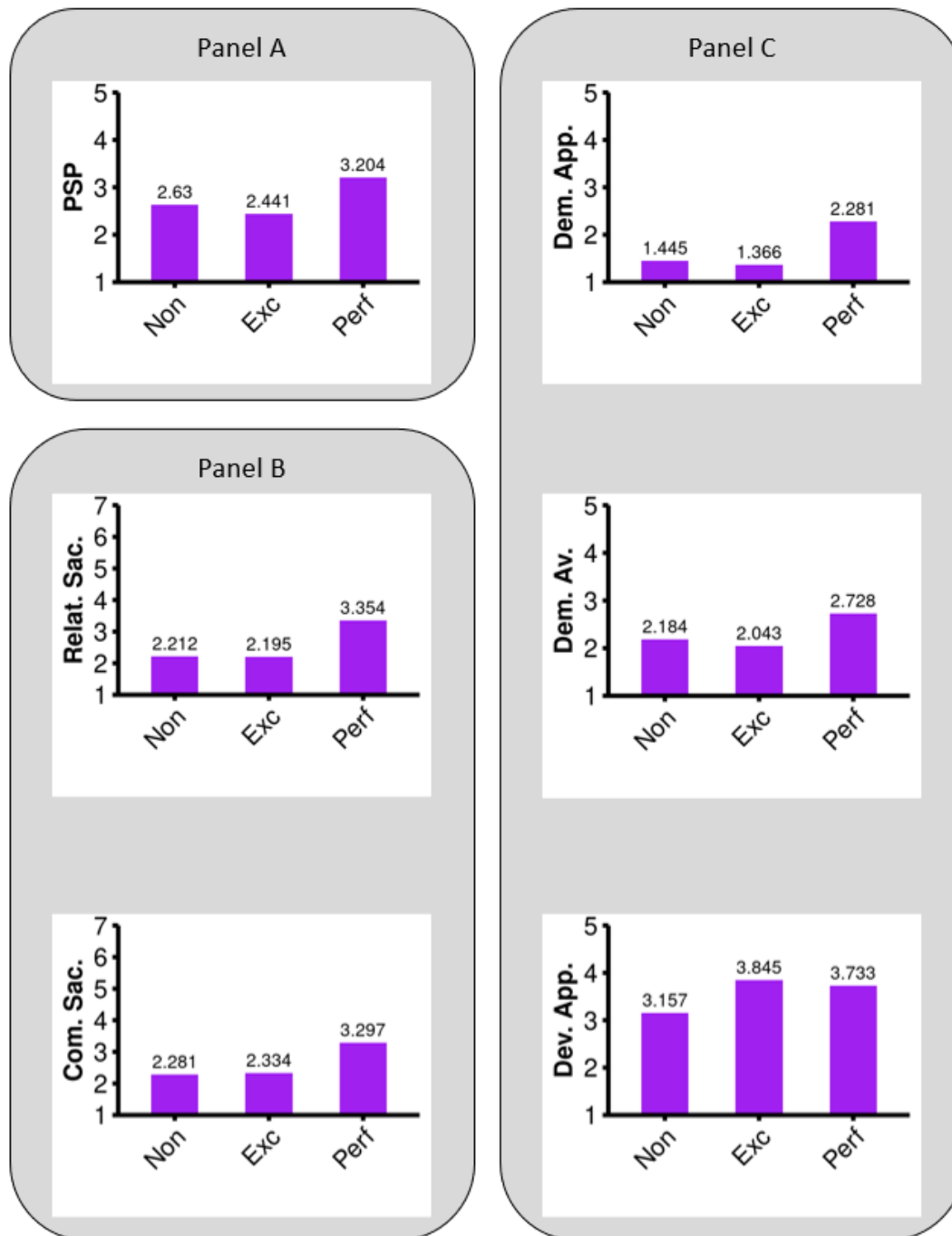
2.3. Brief Discussion

Perfectionism was not significantly associated with loneliness until we accounted for the conceptual distinction between feelings of social connectedness and disconnection (i.e., loneliness). Perfectionism is significantly associated with increased feelings of loneliness whereas excellencism seemed to be a protective factor with a negative association with loneliness. These contrasting findings generalized to other factors involved in the nomological network of loneliness/social disconnection. Excellencism and perfectionism differed in their associations with social goals, willingness to sacrifice social relationships and community engagement, and the desire to appear perfect in front of others. Overall, revisiting the PSDM through the lens of the MEP seems to reconcile the theories, qualitative studies, and empirical findings regarding the experience of loneliness amongst perfectionists. Still, our distinction between social connection and disconnection (i.e., loneliness) was made a posteriori and requires replication in a new sample.

Figure 1. *Study 1: Predicted Values of Loneliness from the Regression Model*

Note. Non = nonexcellence/nonperfection strivers. Exc = excellence strivers. Perf = perfection strivers. Soc. Connect. = Social connection (reversed loneliness). Soc. Disconnect. = Social disconnection (loneliness).

Figure 2. Study 1: Predicted Values from the Regression Models



Note. Non = nonexcellence/nonperfection strivers. Exc = excellence strivers. Perf = perfection strivers. Soc. Connect. = Social connection (reversed loneliness). Soc. Disconnect. = Social disconnection (loneliness). PSP = perfectionistic self-presentation. Dem App and Dem Av = Demonstration approach and avoidance social goals. Dev App = Development approach social goals. Relat and Com Sac = Relationships and community sacrifices.

3. Study 2

The difference between social connection and social disconnection was unexpected in Study 1. We aimed to replicate these findings using two approaches. First, we reverted to an older version of the UCLA loneliness scale that did not contain reversed loneliness items. In recent years, experts in scale development have recommended against the inclusion of reversed items unless a questionnaire tries to measure negatively related constructs (e.g., Gehlbach, 2015; Roszkowski & Soven, 2010; Weijters et al., 2013). The loneliness scale was never intended to measure social inclusion and loneliness, and most researchers have created a unidimensional score that may have conflated two separate constructs. In Study 2, we tried to replicate our loneliness/social disconnection findings from Study 1 with a loneliness scale that would minimize the risk of contamination by items capturing the opposite of loneliness. Consistent with the social disconnection findings from Study 1, we expected to find a negative association for excellencism and a positive association for perfectionism.

Second, similar distinctions have been made between inclusion versus exclusion, belonging versus ostracism, and the satisfaction versus frustration of the need for relatedness. According to self-determination theory (Ryan & Deci, 2017), the need for relatedness is a universal and basic psychological need. When satisfied, it is hypothesized to contribute to the development and maintenance of optimal psychological functioning (e.g., Cerasoli et al., 2016). However, this need can be threatened, or thwarted, and such experiences are hypothesized to contribute to the development and maintenance of psychological distress (e.g., Vansteenkiste & Ryan, 2013). In Study 2, we relied on relatedness as a proxy of social connectedness and disconnection. We hypothesized that excellencism (but not perfectionism) would be positively associated with relatedness satisfaction. We expected that relatedness frustration would mimic

the results of loneliness and be negatively associated with excellencism and positively associated with perfectionism. These findings would replicate those of Study 1 for social connection and social disconnection.

3.1. Method

3.1.1. Participants

The needed sample size to reach a statistical power of 80% (two-tailed $p < .05$) for effect size ($b = .14$, $f^2 = .019$), like the effect of perfectionism on loneliness in Study 1, was 395. We recruited 433 university students from Canada, USA, and United Kingdom via the Prolific Academic platform in August 2024. After removing participants who were not students ($n = 7$), failed at least one of our three attention checks ($n=22$), and were univariate outliers (Z score $> |3|$) on some of the variables in our analyses ($n=8$), the final sample consisted of 396 students between 18 and 39 years of age (mean = 22.73, $SD = 3.40$; 17 missing). The sample comprises 174 men, 214 women, and 8 identifying as non-binary. Most participants were college students ($n = 42$), undergraduates ($n = 225$), and graduate students ($n = 114$). In the sample, 42.9% self-identified as White, Hispanic (4.3%), Asian (25.6%), Black (11.6%), Middle Eastern (4%), African (4%), and mixed-raced or multi-ethnic (4%). The consent and ethics protocols were identical to those employed in Study 1.

3.1.2. Measures

Excellencism and Perfectionism. We used the 10-item version of the SCOPE. The instructions and the rating scale were identical to Study 1.

Loneliness. Feelings of loneliness were measured with the original UCLA Loneliness Scale (Russell et al., 1978) a 20-item questionnaire where participants report how often they

experience feelings of loneliness (“I feel completely alone”) on a scale of 1 (*Never*) to 4 (*Often*). Internal consistency is presented in Table 4.

Relatedness frustration and relatedness satisfaction. The relatedness subscales from the Basic Psychological Need Satisfaction and Frustration Scale (Chen et al., 2015) were used to measure the satisfaction (“I feel like people I care about also care about me”) and frustration (“I feel excluded from the group I want to belong to”) of the need for relatedness. Respondents rated each item on a 7-point scale from 1 (*not at all agree*) to 7 (*totally agree*). The two subscales with eight items each had good reliability (see Table 4).

3.1.3. Plan of Analysis

Like Study 1, we conducted a multiple regression analysis with loneliness as the dependent variable. We also conducted a multivariate multiple regression with relatedness frustration and satisfaction as two correlated dependent variables.

3.2. Results

Table 4. *Study 2: Descriptive Statistics and Bivariate Correlations*

Variable	<i>M(SD)</i>	1	2	3	4	5
1.Excellencism	5.661(1.064)	.885				
2.Perfectionism	4.005(1.648)	.519**	.962			
3.Loneliness	2.072(1.020)	-.156**	.025	.950		
4.Relatedness frustration	2.489(0.763)	-.092	.167**	.505**	.879	
5.Relatedness satisfaction	5.192(0.888)	.284**	.117*	-.561**	-.413**	.899

Note. *N* = 396. Omega reported on the diagonal. Two-tailed test. ** $p < .01$. * $p < .05$.

Loneliness. The results showed that loneliness was negatively associated with excellencism and positively associated with perfectionism (see Table 5, Model 1). As such, perfection strivers reported higher loneliness than excellence strivers. Excellence strivers reported lower loneliness than nonexcellence/nonperfection strivers (see Figure 3, Panel A).

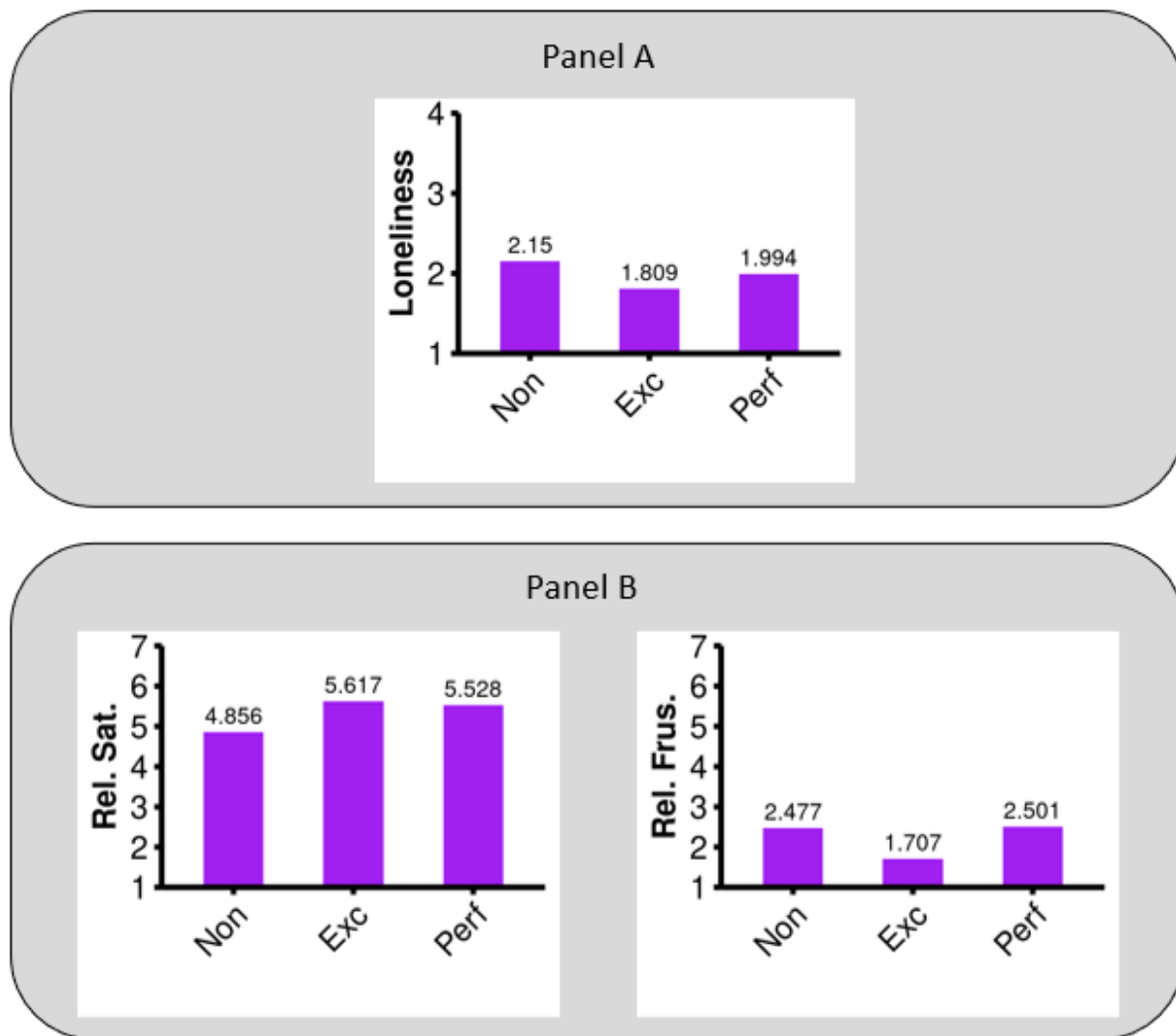
Relatedness. The results showed that *relatedness frustration* was negatively associated with excellencism and positively associated with perfectionism (see Table 5, Model 2). As such, perfection strivers reported higher frustration with their need for relatedness than excellence strivers. Excellence strivers reported lower frustration with their need for relatedness than nonexcellence/nonperfection strivers (see Figure 3, Panel B).

The results differed for *relatedness satisfaction* with only excellencism as significantly associated with relatedness satisfaction. As such, excellence strivers reported higher satisfaction with their need for relatedness than nonexcellence/nonperfection strivers. In contrast, perfection and excellence strivers reported similar satisfaction with their need for relatedness (see Figure 3, Panel B).

Table 5. *Study 2: Associations of Excellencism and Perfectionism with Dependent Variables*

Dependent variables	<u>Excellencism</u>				<u>Perfectionism</u>			<i>R</i> ²
	Intercept	B	<i>SE</i>	<i>β</i>	B	<i>SE</i>	<i>β</i>	
Model 1								
Loneliness	2.072	-0.160	0.043	-.231**	0.056	0.023	.145*	.056
Model 2								
Relatedness frustration	2.489	-0.362	0.088	-.245**	0.241	0.047	.294**	.072
Relatedness satisfaction	5.192	0.358	0.067	.306**	-0.027	0.040	-.042	.082
<hr/>								
Cohen's <i>d</i> effect size with 95% CI ^a								
	<u>Excel vs. Non</u>		<u>Perfect vs. Excel</u>		<u>Perfect vs. Non</u>			
Loneliness	-0.463** [-.707, -.218]		0.290* [.060, .521]		-0.172 [-.397, .052]			
Relatedness frustration	-0.490** [-.724, -.256]		0.588** [.361, .815]		0.098 [-.117, .312]			
Relatedness satisfaction	0.612** [.388, .836]		-0.084 [-.323, .155]		0.528** [.302, .753]			

Note. $N = 396$. Excel= Excellence strivers. Perfect= Perfection strivers. Non= Nonexcellence/nonperfection strivers. Effect size is calculated by subtracting two predicted values before dividing it by the SD of the dependent variable. Two-tailed test. ** $p < .01$. * $p < .05$.

Figure 3. *Study 2: Predicted Values from the Regression Models*

Note. Non = nonexcellence/nonperfection strivers. Exc = excellence strivers. Perf = perfection strivers. Rel Sat = relatedness satisfaction. Rel Frus = relatedness frustration.

3.3. Brief Discussion

The results of Study 2 replicated those of Study 1 by showing the importance of distinguishing social connection and disconnection. Using a loneliness measure explicitly focusing on social disconnection, our results supported the idea that perfection strivers are

lonelier than excellence strivers. These effects not only replicated those of Study 1 but also generalized to the experiences of frustration with the need for relatedness. In other words, perfection strivers were more frustrated with their need for relatedness but not less satisfied than excellence strivers. As such, our findings indicate that the unhealthy effects of perfectionism on social adjustment are revealed only when we focus on feelings of social disconnection. Feelings of social connection are not significantly lower among perfection strivers.

4. General Discussion

Results of a recent qualitative study described perfectionism as a sad and lonely place in which perfectionists feel isolated, and out of touch with others (Binder et al., 2023). While such an assertion is compelling, past quantitative studies found inconsistent support for the positive association between perfectionistic standards and loneliness. We conducted the first-ever study revisiting this social disconnection hypothesis within the confines of the MEP. Our results showed that perfectionistic standards and excellencism were respectively positively and negatively linked to loneliness. The distinction between excellencism and perfectionism is novel and clarifies the social disconnection hypothesis. Across two studies, we found that perfectionism was linked to loneliness but only when we looked at feelings of social disconnection, not social connection. In contrast, excellencism was associated with reduced social disconnection and increased social connection. The results of our study offer three possible explanations to clarify the weaker-than-expected relationship that has generally been observed in previous research. More specifically, (a) the difference between excellencism and perfectionism, (b) the difference between social disconnection and social connection, and (c) the potentially antagonistic mechanisms involved in perfectionism all need to be considered to better our understanding of the perfectionists' psychological experience of social disconnection.

4.1. On the Difference Between Excellencism and Perfectionism

According to Gaudreau (2019), previous studies have potentially overlooked that the effects of perfectionistic standards can differ from those associated with simply striving for high standards. Across two studies, we found support for this fundamental assumption of the MEP. Loneliness was negatively associated with excellencism and positively associated with perfectionistic standards. Past studies sometimes found negative or null associations between loneliness and perfectionistic standards (Arslan et al., 2010; Hasnain & Fatima, 2012). These counterintuitive findings are expected if we combine excellencism and perfectionism into a single construct. Our results are informative because they indicate that excellencism is a driving force that can potentially lower social disconnection and increase social connection. Those who pursue high standards – the excellence strivers – experienced better social adjustment outcomes (i.e., social connection, satisfaction of the relatedness need) than the nonexcellence/nonperfection strivers. They also experienced less loneliness and frustration in their need for relatedness compared to perfection strivers. This is theoretically important as it indicates that high standards are not at play in the psychological experiences of social disconnection. What seems to be at play is the over-and-above effect of pursuing the extreme, unrealistic, exacting, and unattainable standards involved in perfectionism. Overall, our two studies offered the first empirical test to demonstrate the importance of separating excellencism and perfectionism to clarify the effects hypothesized in the SDMP.

In Study 1, we proposed and found evidence for the idea that perfectionism significantly relates to a propensity to make sacrifices in one's social relationships and community engagement. Sacrificing social lives to pursue personal goals can be seen as a form of inflexible over-engagement likely to contribute to the psychological experience of social disconnection.

Perfection strivers were found to be more likely to make such sacrifices than excellence strivers. The grueling standards involved in perfectionism rather than the high standards involved in excellencism are the ones implicated in the social sacrifices. Activities within one's social and community lives are considered as intrinsic goals strongly associated with well-being and psychological adjustment (Bradshaw et al., 2022). In our study, sacrifices correlated positively with loneliness. As such, our results contribute to an emerging line of research showing that sacrifices can harm one's psychological and social adjustment (Houlfort et al., 2022).

Finally, perfectionism was significantly associated with all three perfectionistic self-presentation tactics. Excellencism was negatively associated with perfectionistic self-promotion, which are lower in excellence strivers than nonexcellence/nonperfection strivers. On the one hand, excellence strivers are confident in their image and feel less of a need to project a perfect image than the perfection and the nonexcellence/nonperfection strivers. On the other hand, perfection strivers are more likely to conceal and mask their imperfections than excellence strivers. Often hiding one's flaws and striving to appear perfect can hinder genuine connections and accentuate feelings of social disconnection.

4.2. On the Difference Between Social Disconnection and Connection

Past studies on the SDMP did not differentiate between social disconnection and connection, which is a second factor that could explain the somewhat inconsistent association between perfectionistic standards and loneliness. Support was found for this position across our two studies. In Study 1, we found that perfectionistic standards were not significantly associated with loneliness when the psychological experiences of social connection and disconnection were lumped into a single construct. When specifically looking at social disconnection, our results across two studies showed the expected positive association of perfectionistic standards with

loneliness. Similar results were found in Study 2 when examining the need for relatedness. Perfectionism was significantly associated with frustration with the need for relatedness (i.e., social disconnection) but not with satisfaction for the relatedness need (i.e., social connection).

The notion that perfectionism is a double-edged sword that relates to mixed feelings is part of the MEP expectations because it is a rallying theme among perfectionism scholars (e.g., Missildine, 1963; Stoeber, 2014). As such, our findings highlighted the complex phenomenological experiences that differentiate perfectionism from excellencism. Perfection strivers are just as likely to feel in tune with others, part of a group, or that they have others they can talk to and turn to. No significant difference was found between the feelings of social connectedness of excellence and perfection strivers or their satisfaction with the need for relatedness. At the same time, perfection strivers feel isolated, left out, and not close to others. Their social relationships are superficial, and they feel no one knows them well and shares the same interests and values as they do. Perfection strivers more frequently experience frustration with their need for relatedness than excellence strivers.

Perfection strivers, more than excellence strivers, feel like their lives are not up to par with their expectations (Gaudreau et al., 2022). This discrepancy is also a proposed mechanism involved in loneliness and social dissatisfaction (Peplau & Perlman, 1982; Russell et al., 2012). Perfection strivers are potentially expecting too much out of their social relationships. Their social network is potentially composed of enough people who offer support, friendship, and love. Yet, they tend to expect that others will be perfect, demand too much out of others, and think that others should do whatever is needed for them to live in a perfectly satisfying relationship all the time (e.g., Hewitt & Flett, 1991; Smith et al., 2016). What they get from social relationships creates frustration because what they expect from people is unattainable. Their perfectionism

puts them on a discrepancy enlarging loop (Carver & Scheier, 1998) because of their extreme personal standards that translate and define the standards they impose onto others (Gaudreau et al., 2022; Hewitt & Flett, 1991). Their unattainable standards create frequent dissatisfaction, making them feel alone, socially disconnected, and frustrated in their need for relatedness.

4.3. On the Antagonistic Social Goals of Perfection Strivers

The tortuous pattern of feelings socially connected and disconnected simultaneously could be reinterpreted as an approach-avoidance conflict arising from the simultaneous desire to succeed and to avoid failure (Flett & Hewitt, 2022; Gaudreau et al., 2022). The fact that perfectionism could relate to opposing motivation forces is another factor that could explain the somewhat inconsistent association between perfectionistic standards and loneliness.

In Study 1, we explored the idea that perfection strivers are motivated to seek social affiliation while being simultaneously motivated to avoid social rejection. This complex expression of social motivation was demonstrated through the unique social achievement goals espoused by perfection strivers. Both excellence and perfection strivers were motivated to develop their social relationships. However, perfection strivers additionally relied on antagonistic social demonstration goals that either do not or negatively correlate with loneliness. Perfection strivers endorsed social demonstration approach goals (e.g., wanting to be perceived as popular and cool, and letting others believe that we have many friends), which were not significantly associated with lower loneliness. Although such goals can help to expand one's social network, they are relatively superficial and may not satisfy their needs for social affiliation in a healthy and lasting way (e.g., Baumeister & Leary, 1995). Additionally, their social demonstration avoidance goals (e.g., refraining from behaviors that might provoke laughter, teasing, or mockery from others) were strongly associated with higher loneliness. Trying to avoid social

embarrassment risks placing and keeping perfectionists on the sidelines. These attempts to stay away and maintain distance from others are mechanisms for developing and maintaining social anxiety (e.g., Hofmann, 2007). In summary, perfectionism provides superficial and harmful forms of social goals that nullify the benefits of the social development goals derived from striving for excellence. The net sum of these positive and negative antagonistic effects on loneliness is a potential explanation that explains the weaker-than-expected association between perfectionistic standards and loneliness.

4.4.Limitations and Future Research

Our two studies were conducted with students in post-secondary education. Our findings are limited to educated emerging adults in Western countries. Future research will need to replicate our findings across the lifespan, with adolescents and adults recruited in different countries. Perfectionism is increasing among newer generations of emerging adults (Buecker et al., 2021; Curran & Hill, 2019) and excellencism needs to be involved to avoid underestimating the impact of this rise. Therefore, future longitudinal research, using more diversified samples, is required to pursue our understanding of the complex associations between increases in perfectionism and loneliness during adolescence and emerging adulthood while accounting for excellencism.

In this study, the role of social goals, sacrifices, and perfectionistic self-presentation in the differential feelings of loneliness of perfection and excellence strivers was only addressed theoretically and cross-sectionally. Future research should delve deeper into the developmental effects these variables could have on the relationship between perfectionism and loneliness. Furthermore, the SDMP proposes three paths by which perfectionism influences perceptions of loneliness (Flett & Hewitt, 2022): (a) moving toward people for validation seeking, (b) moving

away from people to avoid rejection, and (c) moving against people. Future research on the MEP will need to investigate the more hostile forms of social disconnection that were not studied in our studies.

Antagonistic effects observed in perfectionism could suggest that unaccounted situational variations are at play in the relationship between perfectionism and loneliness. Different social events can momentarily activate either approach or avoidance goals and self-regulation processes for people who pursue perfection. Perfection strivers would be motivated to demonstrate their social skills and values in certain situations. At other times, they would be motivated to avoid looking foolish and ridicule. These variations in situational activations of antagonistic motivations could explain the complex results of reporting both satisfaction and frustration with the need for connectedness. Future studies using the experience sampling method could clarify these antagonistic mechanisms involved in perfectionism.

5. Conclusion

The MEP assumes that the difference between excellencism and perfectionism needs to be understood in the context of deeply interconnected relational and social ties (Gaudreau et al., 2022). A grim picture with real-life implications is starting to emerge as perfectionism and excellencism are differentially associated with distinct expressions of social disconnection. First, perfection strivers are more likely to use perfectionistic self-presentation strategies, which are known to be a questionable approach to maintaining healthy social relationships (Casale et al., 2024). Second, they also make important social sacrifices in their quest to pursue their unrealistic goals, which can, paradoxically, impair their satisfaction of psychological needs, social wellness, and quality of life (Holding et al., 2020). Third, perfection strivers are highly motivated to increase their popularity while relying on avoidance goals through which they run the risk of

disconnecting themselves from the social environment. The pursuit of fame, fortune, and appearance goals (Bradshaw et al., 2022) and the efforts to avoid making social mistakes (Shim et al., 2024) are known to be associated with lower well-being. Overall, our findings further our understanding of the different social disconnection pathways through which perfectionism and excellencism are differentially linked to psychological experiences of social disconnection.

Open Practices

Although the study was not pre-registered, the hypotheses were derived from the MEP and the analyses followed the 7-step published and publicly available plan of analyses of the MEP (Gaudreau et al., 2024). The de-identified data from both studies, as well as the Mplus codes and outputs are available on the Open-Science Framework (OSF) platform:

https://osf.io/m92cg/?view_only=b342cbcba2684b5e928ce05d4ac8953d

Declaration of generative AI in scientific writing

We relied on Chat GPT to improve readability and shorten some sentences in our text. We reviewed, edited, and took full responsibility for the content of this manuscript.

References

- Arce, A. B. G., & 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>
- Arslan, C., Hamarta, E., Üre, Ö., & Özyeşil, Z. (2010). An investigation of loneliness and perfectionism in university students. *Procedia - Social and Behavioral Sciences*, 2(2), 814-818. <https://doi.org/10.1016/j.sbspro.2010.03.109>

- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529. <https://doi.org/10.1037/0033-2909.117.3.497>
- Bien, K., Wagner, J., & Brandt, N. D. (2024). Who tends to be a perfectionistic adolescent? Distinguishing perfectionism from excellencism and investigating the links with the Big Five and self-esteem. *British Journal of Psychology*, n/a(n/a). <https://doi.org/10.1111/bjop.12739>
- Binder, P. E., Woodfin, V. I., & Hjeltne, A. (2023). Perfection is a sad and lonely place: A study of existential vulnerability in the life stories of persons struggling with perfectionism. *International Journal of Qualitative Studies on Health and Well-Being*, 18(1), Article 2219513. <https://doi.org/10.1080/17482631.2023.2219513>
- Bradshaw, E. L., Conigrave, J. H., Steward, B. A., Ferber, K. A., Parker, P. D., & Ryan, R. M. (2022). A meta-analysis of the dark side of the American dream: Evidence for the universal wellness costs of prioritizing extrinsic over intrinsic goals. *Journal of Personality and Social Psychology*, 124, 873-899. <https://doi.org/10.1037/pspp0000431>
- Buecker, S., Mund, M., Chwastek, S., Sostmann, M., & Luhmann, M. (2021). Is loneliness in emerging adults increasing over time? A preregistered cross-temporal meta-analysis and systematic review. *Psychological Bulletin*, 787-805. <https://doi.org/10.1037/bul0000332>
- Carver, C. S., & Scheier, M. F. (1998). *On the self-regulation of behavior*. Cambridge University Press.
- Casale, S., Svicher, A., Fioravanti, G., Hewitt, P. L., Flett, G. L., & Pozza, A. (2024). Perfectionistic self-presentation and psychopathology: A systematic review and meta-

analysis. *Clinical psychology & psychotherapy*, 31(2), e2966.

<https://doi.org/https://doi.org/10.1002/cpp.2966>

Cerasoli, C. P., Nicklin, J. M., & Nassreelrgawi, A. S. (2016). Performance, incentives, and needs for autonomy, competence, and relatedness: A meta-analysis. *Motivation and Emotion*, 40, 781-813. <https://doi.org/10.1007/s11031-016-9578-2>

Chang, E. C. (2013). Perfectionism and loneliness as predictors of depressive and anxious symptoms in Asian and European Americans: Do self-construal schemas also matter? *Cognitive Therapy and Research*, 37(6), 1179-1188. <https://doi.org/10.1007/s10608-013-9549-9>

Chang, E. C. (2017). Perfectionism and loneliness as predictors of depressive and anxious symptoms in African American adults: Further evidence for a top-down additive model. *Cognitive Therapy and Research*, 41(5), 720-729. <https://doi.org/10.1007/s10608-017-9843-z>

Chang, E. C., Hirsch, J. K., Sanna, L. J., Jeglic, E. L., & Fabian, C. G. (2011). A preliminary study of perfectionism and loneliness as predictors of depressive and anxious symptoms in Latinas: A top-down test of a model. *Journal of Counseling Psychology*, 58(3), 441-448. <https://doi.org/10.1037/a0023255>

Chang, E. C., Sanna, L. J., Chang, R., & Bodem, M. R. (2008). A preliminary look at loneliness as a moderator of the link between perfectionism and depressive and anxious symptoms in college students: Does being lonely make perfectionistic strivings more distressing? *Behaviour Research and Therapy*, 46(7), 877-886. <https://doi.org/10.1016/j.brat.2008.03.012>

- Cheek, N. N., & Goebel, J. (2020). What does it mean to maximize?“Decision difficulty,” indecisiveness, and the jingle-jangle fallacies in the measurement of maximizing. *Judgment and Decision Making*, 15(1), 7-24.
<https://doi.org/10.1017/s1930297500006884>
- Chen, B., Vansteenkiste, M., Beyers, W., Boone, L., Deci, E. L., Van der Kaap-Deeder, J., Duriez, B., Lens, W., Matos, L., Mouratidis, A., Ryan, R. M., Sheldon, K. M., Soenens, B., Van Petegem, S., & Verstuyf, J. (2015). Basic psychological need satisfaction, need frustration, and need strength across four cultures. *Motivation and Emotion*, 39(2), 216-236. <https://doi.org/10.1007/s11031-014-9450-1>
- Chou, C.-C., Huang, M.-Y., Lin, T.-W., Lu, F. J.-H., Chiu, Y.-H., & Chen, J.-F. (2019). Moderating effect of self-esteem on the relationship between perfectionism and creative thinking among collegiate dancers. *Creativity Research Journal*, 31(2), 188-197.
<https://doi.org/10.1080/10400419.2019.1606620>
- 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, 410-429.
<https://doi.org/10.1037/bul0000138>
- Curran, T., & Hill, A. P. (2022). Young people’s perceptions of their parents’ expectations and criticism are increasing over time: Implications for perfectionism. *Psychological Bulletin*, 148, 107-128. <https://doi.org/10.1037/bul0000347>
- Dobos, B., Mellor, D., & Piko, B. F. (2024). Exploring fear of happiness among university students: The role of perfectionism, academic burnout, loneliness, and hopelessness. *Scandinavian Journal of Psychology*. <https://doi.org/10.1111/sjop.13001>

- Dueber, D. M., Toland, M. D., Lingat, J. E., Love, A. M. A., Qiu, C., Wu, R., & Brown, A. V. (2022). To reverse item orientation or not to reverse item orientation, that Is the question. *Assessment*, 29(7), 1422-1440. <https://doi.org/10.1177/10731911211017635>
- Egan, S. J., Wade, T. D., Shafran, R., & Antony, M. M. (2016). *Cognitive-behavioral treatment of perfectionism*. Guilford.
- Ferrari, J. R., & Mautz, W. T. (1997). Predicting perfectionism: Applying tests of rigidity. *Journal of Clinical Psychology*, 53(1), 1-6. [https://doi.org/10.1002/\(sici\)1097-4679\(199701\)53:1<1::aid-jclp1>3.0.co;2-y](https://doi.org/10.1002/(sici)1097-4679(199701)53:1<1::aid-jclp1>3.0.co;2-y)
- Fletcher, K. L., & Shim, S. S. (2019). How do adolescents approach social relationships?: The cost of perfectionistic concerns. *Personality and Individual Differences*, 147, 177-182. <https://doi.org/10.1016/j.paid.2019.04.029>
- Flett, G. L., & Hewitt, P. L. (2022). *Perfectionism in childhood and adolescence: A developmental approach*. American Psychological Association.
- Flett, G. L., Hewitt, P. L., & DeRosa, T. (1996). Dimensions of perfectionism, psychosocial adjustment, and social skills. *Personality and Individual Differences*, 20(2), 143-150. [https://doi.org/10.1016/0191-8869\(95\)00170-0](https://doi.org/10.1016/0191-8869(95)00170-0)
- Flett, G. L., Schmidt, D. H., Besser, A., & Hewitt, P. (2016). Interpersonal personality vulnerabilities, stress, and depression in adolescents: Interpersonal hassles as a mediator of sociotropy and socially prescribed perfectionism. *International Journal of Child and Adolescent Resilience*, 4(1), 103-121.
- 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, 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., Benoit, A., & Boileau, L. (2023). Questions, critical reflections, and advances with the Model of Excellencism and Perfectionism. In A. P. Hill (Ed.), *Perfectionism in sport, dance, and exercise* (2nd ed., pp. 377-398). Routledge.
- Gaudreau, P., Boileau, L., & Schellenberg, B. J. I. (2021). Peur de l'échec à l'école et dans les sports: Apport du modèle de l'excellencisme et du perfectionnisme [Fear of failure in sport and school: Contribution of the model of excellencism and perfectionism]. *Revue Quebecoise de Psychologie*, 42(3), 173-194.
- 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., & Schellenberg, B. J. I. (2024). The impact of Internet-Based Cognitive Behavior Therapy for Perfectionism: A reinterpretation through the lens of the Model of Excellencism and Perfectionism. *Behavioural and Cognitive Psychotherapy*, 52, 288-300. <https://doi.org/10.1017/S1352465823000516>
- 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, 1117–1145. <https://doi.org/10.1037/pspp0000411>
- Gaudreau, P., Schellenberg, B. J. I., & Quesnel, M. (2024). From theory to research: Interpretational guidelines, statistical guidance, and a Shiny App for the Model of Excellencism and Perfectionism. *European Journal of Personality*, 38, 839-860. <https://doi.org/10.1177/08902070231221478>
- Gehlbach, H. (2015). Seven Survey Sins. *The Journal of Early Adolescence*, 35(5-6), 883-897. <https://doi.org/10.1177/0272431615578276>
- 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, 176-207. <https://doi.org/10.1111/bjop.12530>
- Harper, K. L., Eddington, K. M., & Silvia, P. J. (2020). Perfectionism and loneliness: The role of expectations and social hopelessness in daily life. *Journal of Social and Clinical Psychology*, 39(2), 117-139. <https://doi.org/10.1521/jscp.2020.39.02.117>
- Hasnain, S. F., & Fatima, I. (2012). Perfectionism, loneliness and life satisfaction in engineering students. *Journal of Behavioural Sciences*, 22(3).
- Hewitt, P. L., Blasberg, J. S., Flett, G. L., Besser, A., Sherry, S. B., Caelian, C., Papsdorf, M., Cassels, T. G., & Birch, S. (2011). Perfectionistic self-presentation in children and adolescents: Development and validation of the Perfectionistic Self-Presentation Scale—Junior Form. *Psychological Assessment*, 23(1), 125-142. <https://doi.org/10.1037/a0021147>
- 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, 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*. Guilford.
- Hewitt, P. L., Flett, G. L., Sherry, S. B., & Caelian, C. (2006). Trait perfectionism dimensions and suicidal behavior. In T. E. Ellis (Ed.), *Cognition and suicide: Theory, research, and therapy*. (pp. 215-235). American Psychological Association.
- Hewitt, P. L., Flett, G. L., Sherry, S. B., Habke, M., Parkin, M., Lam, R. W., McMurtry, B., Ediger, E., Fairlie, P., & Stein, M. B. (2003). The interpersonal expression of perfection: Perfectionistic self-presentation and psychological distress. *Journal of Personality and Social Psychology*, 84, 1303-1325. <https://doi.org/10.1037/0022-3514.84.6.1303>
- Hirsch, J. L., & Clark, M. S. (2019). Multiple paths to belonging that we should study together. *Perspectives on Psychological Science*, 14(2), 238-255. <https://doi.org/10.1177/1745691618803629>
- Hofmann, S. G. (2007). Cognitive factors that maintain social anxiety disorder: a comprehensive model and its treatment implications. *Cogn Behav Ther*, 36(4), 193-209. <https://doi.org/10.1080/16506070701421313>
- Holding, A. C., St-Jacques, A., Verner-Filion, J., Kachanoff, F., & Koestner, R. (2020). Sacrifice—But at what price? A longitudinal study of young adults' sacrifice of basic psychological needs in pursuit of career goals. *Motivation and Emotion*, 44, 99-115. <https://doi.org/10.1007/s11031-019-09777-7>

- Houliort, N., Cécire, P., Koestner, R., & Verner-Filion, J. (2022). Managing the work-home interface by making sacrifices: Costs of sacrificing psychological needs. *Motivation and Emotion*, 46(5), 658-671. <https://doi.org/10.1007/s11031-022-09971-0>
- Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology* 65, 410-422.
- Knoll, R. W., Valentiner, D. P., & Holzman, J. B. (2019). Development and initial test of the Safety Behaviors in Test Anxiety Questionnaire: Superstitious behavior, reassurance Seeking, test anxiety, and test performance. *Assessment*, 26(2), 271-280. <https://doi.org/10.1177/1073191116686685>
- Liem, G. A. D. (2016). Academic and social achievement goals: Their additive, interactive, and specialized effects on school functioning. *British Journal of Educational Psychology*, 86(1), 37-56. <https://doi.org/10.1111/bjep.12085>
- Limburg, K., Watson, H. J., Hagger, M. S., & Egan, S. J. (2017). The relationship between perfectionism and psychopathology: A meta-analysis. *Journal of Clinical Psychology*, 73, 1301-1326. <https://doi.org/10.1002/jclp.22435>
- Linville, P. W. (1985). Self-complexity and affective extremity: Don't put all of your eggs in one cognitive basket. *Social Cognition*, 3(1), 94-120.
- Mackinnon, S. P., Sherry, S. B., Antony, M. M., Stewart, S. H., Sherry, D. L., & Hartling, N. (2012). Caught in a bad romance: Perfectionism, conflict, and depression in romantic relationships. *Journal of Family Psychology*, 26(2), 215-225. <https://doi.org/10.1037/a0027402>

Maes, M., Qualter, P., Lodder, G. M. A., & Mund, M. (2022). How (not) to measure loneliness:

A review of the eight most commonly used scales. *International Journal of Environmental Research and Public Health*, 19(17), 10816. <https://www.mdpi.com/1660-4601/19/17/10816>

Michou, A., Mouratidis, A., Ersoy, E., & Uğur, H. (2016). Social achievement goals, needs

satisfaction, and coping among adolescents. *Personality and Individual Differences*, 99, 260-265. <https://doi.org/10.1016/j.paid.2016.05.028>

Missildine, W. H. (1963). *Your inner child of the past*. Simon & Schuster.

Mouratidis, A. A., & Sideridis, G. D. (2009). On social achievement goals: Their relations with

peer acceptance, classroom belongingness, and perceptions of loneliness. *The Journal of Experimental Education*, 77(3), 285-308. <https://doi.org/10.3200/JEXE.77.3.285-308>

Muyan, M., & Chang, E. C. (2015). Perfectionism as a predictor of suicidal risk in Turkish

college students: Does loneliness contribute to further risk? *Cognitive Therapy and Research*, 39(6), 776-784. <https://doi.org/10.1007/s10608-015-9711-7>

Osenk, I., Williamson, P., & Wade, T. D. (2020). Does perfectionism or pursuit of excellence

contribute to successful learning? A meta-analytic review. *Psychological Assessment*, 32, 972-983. <https://doi.org/10.1037/pas0000942>

Park, C., Majeed, A., Gill, H., Tamura, J., Ho, R. C., Mansur, R. B., Nasri, F., Lee, Y.,

Rosenblat, J. D., Wong, E., & McIntyre, R. S. (2020). The effect of loneliness on distinct health outcomes: A comprehensive review and meta-analysis. *Psychiatry Research*, 294, 113514. <https://doi.org/10.1016/j.psychres.2020.113514>

Peplau, L. A., & Perlman, D. (1982). *Loneliness: A source- book of current theory, research, and therapy*. Wiley.

- Rnic, K., Hewitt, P. L., Chen, C., Jopling, E., Lemoult, J., & Flett, G. L. (2021). Examining the link between multidimensional perfectionism and depression: A longitudinal study of the intervening effects of social disconnection. *Journal of Social and Clinical Psychology*, 40(4), 277-303. <https://doi.org/10.1521/jscp.2021.40.4.277>
- Robinson, A., Moscardini, E., Tucker, R., & Calamia, M. (2022). Perfectionistic self-Presentation, socially prescribed perfectionism, self-oriented perfectionism, interpersonal hopelessness, and suicidal ideation in US adults: Reexamining the Social Disconnection Model. *Archives of Suicide Research*, 26(3), 1447-1461. <https://doi.org/10.1080/13811118.2021.1922108>
- Roszkowski, M. J., & Soven, M. (2010). Shifting gears: Consequences of including two negatively worded items in the middle of a positively worded questionnaire. *Assessment & Evaluation in Higher Education*, 35(1), 117-134. <https://doi.org/10.1080/02602930802618344>
- Russell, D., Peplau, L. A., & Ferguson, M. L. (1978). Developing a measure of loneliness. *Journal of Personality Assessment*, 42(3), 290-294. https://doi.org/10.1207/s15327752jpa4203_11
- Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment*, 66(1), 20-40. https://doi.org/10.1207/s15327752jpa6601_2
- Russell, D. W., Cutrona, C. E., McRae, C., & Gomez, M. (2012). Is loneliness the same as being alone? *J Psychol*, 146(1-2), 7-22. <https://doi.org/10.1080/00223980.2011.589414>

- Ryan, A. M., & Shim, S. (2008). An exploration of young adolescents' social achievement goals and social adjustment in middle school. *Journal of Educational Psychology*, 100, 672-687. <https://doi.org/10.1037/0022-0663.100.3.672>
- Ryan, A. M., & Shim, S. S. (2006). Social achievement goals: The nature and consequences of different orientations toward social competence. *Personality and Social Psychology Bulletin*, 32(9), 1246-1263. <https://doi.org/10.1177/0146167206289345>
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford.
- Shim, S. S., Cho, Y., Helsper, C. A., Kiefer, S. M., & Wang, C. (2024). How do social achievement goals affect early adolescents' academic engagement? The role of feeling stressed and lonely. *The Journal of Early Adolescence*, 02724316241273409. <https://doi.org/10.1177/02724316241273409>
- Shim, S. S., & Fletcher, K. L. (2012). Perfectionism and social goals: What do perfectionists want to achieve in social situations? *Personality and Individual Differences*, 52(8), 919-924. <https://doi.org/10.1016/j.paid.2012.02.002>
- Slaney, R. B., Rice, K. G., Mobley, M., Trippi, J., & Ashby, J. S. (2001). The Revised Almost Perfect Scale. *Measurement & Evaluation in Counseling & Development*, 34, 130-145. <https://doi.org/10.1080/07481756.2002.12069030>
- Smith, M. M., Saklofske, D. H., Stoeber, J., & Sherry, S. B. (2016). The Big Three Perfectionism Scale: A new measure of perfectionism. *Journal of Psychoeducational Assessment*, 34, 670-687. <https://doi.org/10.1177/0734282916651539>

- Smith, M. M., Sherry, S. B., Ge, S. Y., Hewitt, P. L., Flett, G. L., & Baggle, D. L. (2022). Multidimensional perfectionism turns 30: A review of known knowns and known unknowns. *Canadian Psychology*, 63, 16-31. <https://doi.org/10.1037/cap0000288>
- Smith, M. M., Sherry, S. B., Vidovic, V., Hewitt, P. L., & Flett, G. L. (2020). Why does perfectionism confer risk for depressive symptoms? A meta-analytic test of the mediating role of stress and social disconnection. *Journal of Research in Personality*, 86, 103954. <https://doi.org/10.1016/j.jrp.2020.103954>
- Sommet, N., & Elliot, A. J. (2023). A competitiveness-based theoretical framework on the psychology of income inequality. *Current Directions in Psychological Science*, 32(4), 318-327. <https://doi.org/10.1177/09637214231159563>
- Stoeber, J. (2014). Perfectionism in sport and dance: A double-edged sword. *International Journal of Sport Psychology*, 45(4), 385-394.
- Tape, N., Dry, M., Monaghan, B., Tan, N., & Turnbull, D. (2024). The Scale of Perfectionism and Excellencism (SCOPE): an adolescent-based validation study for the measurement of perfectionism and excellencism. *Educational and Developmental Psychologist*, 41, 3-11. <https://doi.org/10.1080/20590776.2023.2289627>
- Taris, T. W., & Jonge, J. d. (2024). Workaholism: Taking stock and looking forward. *Annual Review of Organizational Psychology and Organizational Behavior*, 11(1), 113-138. <https://doi.org/10.1146/annurev-orgpsych-111821-035514>
- Vallerand, R. J. (2015). *The psychology of passion: A dualistic model*. Oxford University Press.
- Vansteenkiste, M., & Ryan, R. M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal of Psychotherapy Integration*, 23(3), 263-280. <https://doi.org/10.1037/a0032359>

Visvalingam, S., Magson, N. R., Newins, A. R., & Norberg, M. M. (2023). Going it alone:

Examining interpersonal sensitivity and hostility as mediators of the link between perfectionism and social disconnection. *Journal of Personality*.

<https://doi.org/10.1111/jopy.12868>

Wang, K. T., Yuen, M., & Slaney, R. B. (2009). Perfectionism, depression, loneliness, and life satisfaction: a study of high school students in Hong Kong. *Counseling Psychologist*,

37(2), 249-274. <https://doi.org/10.1177/0011000008315975>

Weijters, B., Baumgartner, H., & Schillewaert, N. (2013). Reversed item bias: An integrative model. *Psychological Methods*, 18, 320-334. <https://doi.org/10.1037/a0032121>

Zhao, W., Wu, A. M. S., Feng, C., Yu, K., Wang, Z., & Jiao, K. (2024). Perfectionism and suicidal ideation: the serial mediating roles of appearance-based rejection sensitivity and loneliness. *Current Psychology*. <https://doi.org/10.1007/s12144-024-06230-y>