

The Prevalence of Perfectionism and Positive Mental Health in Undergraduate Students

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Abstract

The purpose of this cross-sectional survey was to assess the relationship between mental health and perfectionist personality styles within Dalhousie University's undergraduate psychology program ($N = 191$). Positive mental health is characterized by high social, emotional, and psychological functioning in everyday life. Perfectionism has traditionally been studied as a correlate of poor mental health, although relatively recent research has offered a reconceptualization wherein the adaptiveness of perfectionism can support positive mental health. In particular, the perfectionist personality style may be categorized into three types: non-perfectionist, maladaptive perfectionist, and adaptive perfectionist. We classified participants based on their perfectionist personality style and assessed mental health scores across the three perfectionist personality styles. We found that mental health was highest in adaptive perfectionists. Our findings demonstrate that perfectionism can be an adaptive personality style and positively relate to mental health. Our study supports the reconceptualized definition of perfectionism as a potentially adaptive personality style.

Keywords: perfectionism, well-being, mental health continuum, personality, students

Introduction

Perfectionism is typically defined as a pathological personality style that holds negative consequences for well-being (Bieling et al., 2004) and has been coined a destructive quality (Slaney et al., 2001). This traditional concept of perfectionism was derived from clinical research settings and focused on the link between perfectionism and personality or psychological disorders (Birch et al., 2019). By

focusing on clinical perfectionism, researchers only measured the maladaptive (unhealthy) qualities of perfectionism (Birch et al., 2019). This past research represents a traditional understanding of perfectionism as a single category personality style where individuals strive to meet extremely high standards (Birch et al., 2019), often leading to low well-being and distress (Bieling et al., 2004). In the last decade, the traditional definition of perfectionism has

evolved to a more nuanced understanding of the potential adaptivity of the personality style (Bieling et al., 2004; Birch et al., 2019). The reconceptualized definition of perfectionism includes three types: non-perfectionism, maladaptive perfectionism, and adaptive perfectionism (Rice & Ashby, 2007) and can be measured and determined by the Almost Perfect Scale-Revised (APS-R; Slaney et al., 1996). While in the past, researchers were focused on the maladaptive aspects of perfectionism displayed in their clinical research as a negative influence on well-being (Bieling et al., 2004), more recent studies in non-clinical settings have shown perfectionism can be adaptive and contribute to positive influences on well-being (Rice & Ashby, 2007). The purpose of this cross-sectional survey was to assess mental health across different perfectionist personality styles in undergraduate psychology students.

Literature Review

Maladaptive perfectionism can be understood as “unhealthy” perfectionism (Bieling et al., 2004). In particular, maladaptive perfectionists strive for high standards but do not feel they meet them (Rice & Ashby, 2007), creating discord between personal standard and performance, leading to a failure orientation (Enns et al., 2001; Rice & Ashby, 2007). Adaptive perfectionism can be understood as “healthy” perfectionism (Bieling et al., 2004). Adaptive perfectionists also strive for high standards but are generally satisfied with their efforts or performance (Rice & Ashby, 2007) and are achievement oriented (Enns et al., 2001). With this new understanding of the potential adaptiveness of perfectionism comes a conceptual divide in the literature (Bieling et al., 2004; Birch et al., 2019).

Research on positive mental health (Hone et al., 2014; Keyes et al., 2010) has shown that mental health and mental illness can coincide, meaning that efforts to promote positive mental health and to prevent mental illness need not happen in isolation. Unlike traditional mental health conceptions that focus on the absence of mental illness, the dual continuum of mental health recognizes that

those experiencing mental illness are still capable of experiencing positive mental health (e.g., subjective well-being, positive emotions). According to Keyes’s (2002) theory and empirical testing (Keyes, 2005, 2007; Westerhof & Keyes, 2010), it is possible to have positive mental health while also having a mental illness, and likewise, it is possible to have languishing mental health without having a mental illness. This dual-continua model (see Figure 1) is based on the idea that mental health is more than the absence of mental illness, and that they are related but distinct dimensions. This model conceptualizes positive mental health as feelings of happiness and satisfaction with life (emotional well-being), positive individual functioning in terms of self-realization (psychological well-being), and positive societal functioning in terms of being of social value (social well-being). The idea that state of mental health and wellness can encompass dual dimensions has become a central concept of positive mental health (Keyes, 2002, 2007).

With perspectives of mental health as being more than the absence of illness (e.g., the mental health continuum; Keyes, 2002), researchers have been able to provide evidence for an adaptive form of perfectionism where positive mental health is present (Enns et al., 2001; Rice & Ashby, 2007; Slaney et al., 2001). This is especially relevant in research on university students, as they are in an achievement- and success-oriented environment. Enns et al. (2001) studied perfectionism in undergraduate medical students and noted differences between maladaptive and adaptive perfectionism. In particular, the researchers found that adaptive perfectionism in medical students was linked to higher standards and self-reported academic achievement, while maladaptive perfectionism was linked to higher distress and lower well-being (Enns et al., 2001). Rice and Ashby (2007) noted similar qualities in undergraduate university students, with maladaptive perfectionism corresponding to self-imposed high standards and criticism of their work, and

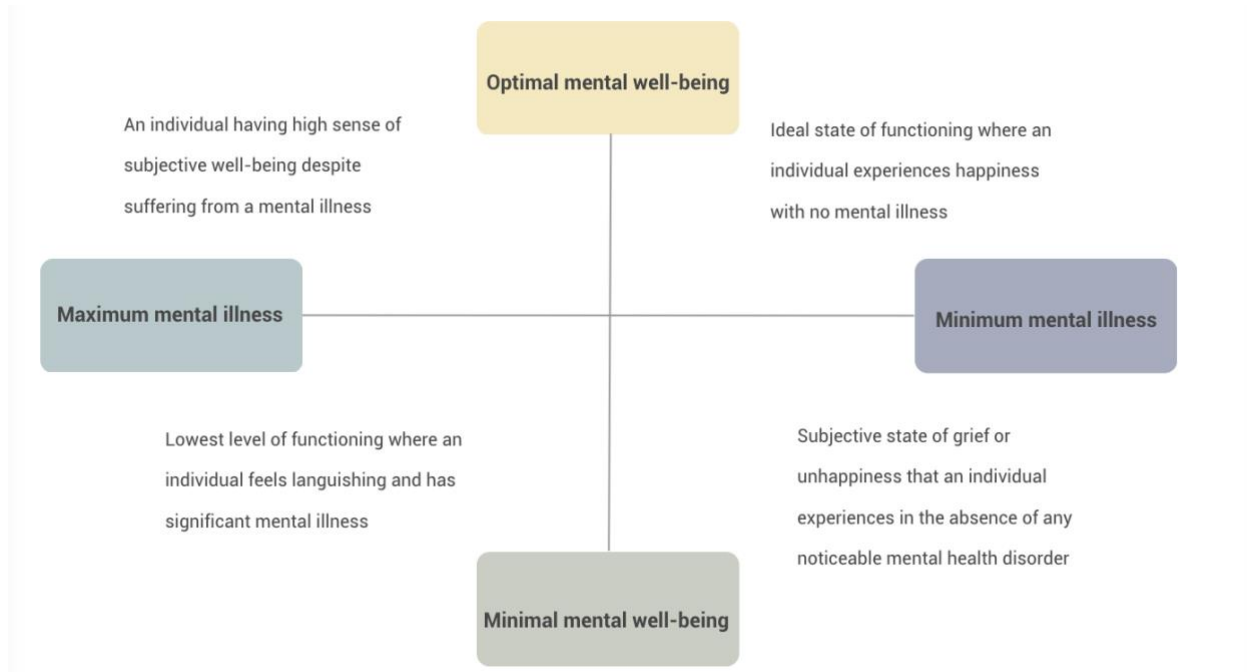


Figure 1

The Dual Continuum of Mental Health

Note. Adapted from “The mental health continuum: From languishing to flourishing in life,” by Keyes, (2002).

adaptive perfectionism corresponding to high standards and life satisfaction. These results support the concept of the adaptiveness of perfectionism and that each perfectionist type influences mental health to varying degrees within students.

Past research has explored perfectionism and positive mental health in students separately, sometimes correlating specific aspects of well-being or perfectionism (Chang, 2006; Moate et al., 2019); however, there is very limited research exploring the relationship between the type of perfectionism and positive mental health. In addition, perfectionism and mental health research has typically been explored in more clinical settings where the negative or pathological aspects of perfectionism as a personality style and mental health disorders are the sole focus (Birch et al., 2019). Unlike these clinical studies, our study aims to investigate a mental health promotion perspective on mental health and perfectionism in students, by using scales that encompass the adaptivity of perfectionism and positive mental

health as a reflection of student well-being in everyday life.

Objective

The purpose of this study was to reinforce the reconceptualized definition of perfectionism by determining the prevalence of positive mental health (i.e., number of flourishers and average positive mental health score) in perfectionists at a medium-sized university in Atlantic Canada. We used the APS-R developed by Slaney et al. (1996) to categorize individuals based on presence and adaptiveness and the Mental Health Continuum-Short Form (MHC-SF) developed by Keyes (2005) to evaluate mental health levels.

Hypothesis

We expect the average score on the MHC-SF to be higher in adaptive perfectionists than maladaptive perfectionists. As we expect non-perfectionists will, on average, be moderately mentally healthy, we have no hypotheses for non-perfectionists.

Methods

Participants

The sample consisted of undergraduate psychology students ($N = 191$) and was mostly female (87.05%). Participants ranged from 17 to 33 years in age ($M = 20.71$). The sample primarily identified as Caucasian (62.30%) or of African descent (24.08%); a description of participant demographics is in Table 1.

Table 1

Demographics of Participants (N = 191)

Variable	N (%) or M
Sex	
Female	168 (87.96%)
Male	22 (11.52%)
Primary Ethnic Identity	
Caucasian	119 (62.04%)
African descent	46 (24.08%)
Asian	6 (3.14%)
Age	20.71

Measures

APS-R

To evaluate an individual’s perfectionist tendencies, we used the APS-R (Slaney et al., 1996), which categorizes individuals’ perfectionism based on the conceptualization of perfectionism as adaptive or maladaptive. The APS-R is a 23-question self-report with responses based on a one (strongly disagree) to seven (strongly agree) Likert scale (Rice & Ashby, 2007). To classify perfectionists, the questions are sorted into three subscales: High Standards, Order, and Discrepancy (Slaney et al., 1996). The High Standards subscale measures

personal standards and expectations, the Order subscale measures organization, and the Discrepancy subscale measures the negative qualities of perfectionism (Rice & Ashby, 2007). To be considered a perfectionist, individuals must score a 42 or higher on the High Standards section. For perfectionists to be categorized in terms of adaptivity, a Discrepancy score less than 42 indicates adaptive perfectionism and a Discrepancy score greater than 42 indicates maladaptive perfectionism (Rice & Ashby, 2007).

MHC-SF

The MHC-SF (Keyes, 2005) enables two types of measurement for mental health: a score for an individual’s level of mental health based on level of psychological, emotional, and social well-being, and classification of mental health into three levels (languishing, moderate, or flourishing). Participants answered 14 questions based on frequency of feelings (Keyes, 2005). The MHC-SF scores on social, emotional, and psychological well-being correspond to a mental health level on the continuum, where high scores generally reflect presence of positive mental health and low scores reflect absence of positive mental health (i.e., languishing). Languishing individuals are identified by low scores (i.e., answering a one or two out of six) on the emotional well-being subscale and low scores on at least half of the questions on the social and psychological well-being subscales (Keyes, 2005). Flourishing individuals are identified by high scores (i.e., a five or six out of six) on each question in the emotional subscale and high scores on at least half of the social and psychological subscale items. Moderately mentally healthy individuals are those who do not fit into languishing or flourishing thresholds. In this study, we focus on the scale score (i.e., average level of mental health) rather than categorizing individuals into mental health levels.

Procedure

This study is part of a larger study on well-being and personality and received ethical approval from the institutional research ethics board. Participants were recruited using

Dalhousie University's undergraduate participant pool platform, wherein any students could register to participate in the study and receive bonus points for an eligible psychology course. Data were collected from participants through a larger online survey that included the APS-R and MHC-SF. Using *R*, we assessed relationships between our continuous data (i.e., overall mental health scores, perfectionism subscale scores, correlation between mental health and perfectionistic standards) and frequency counts of categorical data (i.e., mental health classification, perfectionism type) to understand the relationship between perfectionism and mental health.

Data Analysis Plan

We used the APS-R measure to classify perfectionists; as demonstrated by Rice and Ashby (2007), this scale is an efficient method for classifying perfectionists compared to past studies (e.g., Bieling et al., 2004; Birch et al., 2019) that used both the Frost Multidimensional Perfectionism Scale (Frost et al., 1990) and the Hewitt and Flett Multidimensional Perfectionism Scale (Hewitt & Flett, 1991) to categorize perfectionists. These studies used complex confirmatory factor (Bieling et al., 2004) and cluster analysis (Birch et al., 2019) to group perfectionists, but the calculations used by Rice and Ashby (2007) are a much easier method of classification to understand. We used the mental health continuum to measure the presence of positive mental health (Keyes, 2005). To measure presence of positive mental health, we calculated average scores from the MHC-SF, wherein high scores reflect presence of positive mental health, and low scores reflect absence of positive mental health (Keyes, 2005, 2007). We first assessed the correlation between perfectionism score and mental health score. Due to our interest in assessing differences in mental health (MHC-SF score) across types of perfectionistic individuals (APS-R), we assessed differences in mental health score across perfectionism type.

Results

The majority of individuals were moderately mentally healthy (79%), followed by

flourishers (20%), with very few languishers (1%). In terms of perfectionism, the majority of individuals were maladaptive perfectionists (44%), followed by non-perfectionists (42%), with some adaptive perfectionists (14%). Maladaptive perfectionists tended to be moderately mentally healthy (75%) or flourishing (23%; see Table 2). Adaptive perfectionists were nearly entirely moderately mentally healthy (92%). Non-perfectionists were mostly moderately mentally healthy (78%) followed by flourishers (22%).

Overall, participants' APS-R Standards score was lower than the APS-R Discrepancy score. The APS-R Standards score among languishing participants was higher (i.e., higher perfectionistic standards) than in flourishing and moderately mentally healthy participants (see Table 3). Discrepancy scores (i.e., greater discrepancy between standards and performance) were highest among flourishing individuals. Scores on the APS-R Standards subscale was moderately positively correlated with mental health scores, $r = .38$, 95% CI [.17, .56], $p = .0007$. Due to the ranked nature of perfectionism types (i.e., maladaptive perfectionism is objectively healthier than adaptive or non-perfectionists), we used a Kruskal-Wallis test as a non-parametric analysis of variance (ANOVA). Mental health significantly differed across perfectionistic personality types, $X^2(2) = 10.01$, $p = .007$ (see Table 4). Post-hoc comparisons of mental health scores across perfectionist type showed that the difference was between maladaptive and adaptive perfectionists ($p = .006$).

Discussion

The goal of this study was to reinforce previous research that identified the three types of perfectionism and the understanding that, when classified as adaptive, perfectionism can coincide with positive mental health. We hypothesized that students with an adaptive perfectionistic personality style would have positive mental health, which was supported by the relationship between mental health scores and perfectionism type: mental health was higher in adaptive perfectionists than

Table 2

Prevalence of Mental Health Level by Perfectionism Classification

Mental health	Perfectionism type			Total
	Non-perfectionist	Maladaptive	Adaptive	
<i>N</i> (%)				
Languishing	0 (0%)	2 (1%)	0 (0%)	2 (1%)
Moderate	63 (33%)	63 (33%)	24 (13%)	150 (79%)
Flourishing	18 (9%)	19 (10%)	2 (1%)	39 (20%)
Total	81 (42%)	84 (44%)	26 (14%)	191

Note. Mental health level classified with the MHC-SF; perfectionism classified with the APS-R; percentages represent column percentages.

Table 3

Average Perfectionism Subscale Scores by Mental Health Level

Perfectionism subscale	<i>M</i>		
	Languishing	Moderate	Flourishing
Discrepancy sum	77.00	50.34	59.15
Standards sum	44.50	41.80	41.23

Note. *M* = average; the Order subscale of APS-R was not included, as it is not used in the perfectionism classification procedure.

Table 4

Average Mental Health Score by Perfectionism Type

MHC-SF	Perfectionism Type			
	Non-perfectionist	Maladaptive	Adaptive	Overall
MHC-SF	49.77 (14.47)	45.10 (12.81)	58.91 (10.29)	47.89 (13.52)

Note. *M* (*sd*) presented.

maladaptive perfectionists, and scores on perfectionistic standards and positive mental health were positively correlated.

Mental health in adaptive perfectionists was higher than maladaptive perfectionists, although maladaptive perfectionists did not have significantly higher mental health than non-perfectionists. This suggests that the adaptivity of perfectionism positively relates to mental health. It is not the mere presence of having a perfectionistic personality style that relates to positive mental health, but the adaptivity. These findings are similar to the Birch et al. (2019) study, where researchers determined that adaptive perfectionism encouraged flourishing. Non-perfectionists' mental health was moderate, while maladaptive perfectionists' mental health was the lowest of the three types of perfectionism, suggesting that maladaptive perfectionism negatively relates to mental health or well-being, similar to research by Birch et al.'s (2019) findings, where maladaptive perfectionism was negatively associated with mental health.

Our findings also supported the reconceptualized definition of perfectionism by highlighting the general difference in mental health among types of perfectionism. In particular, maladaptive perfectionism may not always be a detriment to mental health to the point of languishing. Languishing, along with depression, is often associated with significant psychosocial impairment (Keyes, 2002), although many studies measuring mental health distribution show that languishing is fairly uncommon (Keyes, 2005, 2007). Traits associated with maladaptive perfectionism (high concerns, high standards) negatively impact mental health (Bieling et al., 2004); however, these impairments can range in severity and may not always directly result in significant impairment (Rice & Ashby, 2007).

Maladaptive perfectionists had significantly lower average mental health scores compared to the average mental health score of adaptive perfectionists. This demonstrates that perfectionism, when adaptive, can coincide with positive mental health, and supports adaptive

perfectionism model and our hypothesis. There was no significant difference between maladaptive and non-perfectionists' average mental health score, suggesting that maladaptive perfectionism may not be "as bad" for mental health as adaptive perfectionism is "good" for mental health.

More generally, the subscale averages of the APS-R for each level of mental health scores (e.g., languishing, moderate, flourishing) supports the adaptive perfectionism model and our hypothesis of a positive relationship between adaptive perfectionism and mental health. Moderately mentally healthy individuals had the lowest scale average and languishing individuals had the highest scale average score, while flourishing individuals had the moderate score. Further, a moderate positive correlation was identified between perfectionism and mental health scores, suggesting that mental health scores and perfectionistic strivings are positively related, providing additional reinforcement of the average scale score findings and support for a positive relationship between adaptive perfectionism and mental health.

Theoretical Implications

The variation in mental health across the three types of perfectionists support our hypothesis that adaptive perfectionists tend to enjoy higher mental health than maladaptive perfectionists. These results are also similar to those of the Rice and Ashby (2007) study on perfectionism and mental health in undergraduates, which found maladaptive perfectionists had low life satisfaction and higher levels of depression and that adaptive perfectionists had higher life satisfaction and very low levels of depression. The study by Birch et al. (2019) also found that maladaptive perfectionism leads to low mental well-being. Taken together, these findings suggest that adaptive perfectionism and positive mental health can coincide.

The theoretical divide in the literature on perfectionism (i.e., whether perfectionism can be adaptive) may be due to the differences between clinical and non-clinical studies

(Bieling et al., 2004; Birch et al., 2019; Rice & Ashby, 2007). For example, experimental research has provided evidence for the adaptiveness of perfectionism (Birch et al., 2019), while clinical research tends to focus on the personality pathology underlying maladaptive perfectionism (Rice et al., 2007). We use the APS-R measure to classify perfectionism as adaptive or maladaptive, and this measure was developed with a non-clinical population (i.e., undergraduate students; Slaney et al., 1996) and with the adaptiveness conceptualization in mind (Slaney et al., 2001). The mere development of this scale as a way to measure adaptivity in perfectionism, provides indirect support to the reconceptualized definition of perfectionism.

Past research measuring positive mental health (Keyes, 2005, 2007) suggests that most of the general population is moderately mentally healthy with fewer languishing and flourishing individuals, which aligns with the distribution of mental health levels in our sample. Moreover, past research on perfectionism suggests that the majority of the population are non-perfectionists with fewer adaptive or maladaptive perfectionists (Slaney et al., 2001), whereas our sample was disproportionately composed of maladaptive perfectionists. There are many factors that may have affected this discrepancy from the norm, including our small sample size or gender disproportion, as past research has shown gender differences in Discrepancy scores on the APS-R (Rice & Ashby, 2007). It is important to note that students are in an environment centred around achievement and may have additional pressure to succeed academically due to the online environment created by COVID-19. Students' achievement-oriented environments may promote excess concern and pressure over academic achievement, and therefore be responsible for a higher percentage of maladaptive perfectionists in our sample.

Limitations and Future Directions

Our study was limited by our focus on a specific demographic—mostly female, Caucasian, undergraduate psychology students.

Further, the representativeness of our results for the greater population may not be accurate, as the demographics in the general population are not fully reflected in our sample. A consequence of this may be considered through Chang et al.'s (2004) research on perfectionism and mental health, which compares perfectionism and mental health in Caucasian and African American females and illustrates potential differences related to ethnic origins. In addition, past research evaluating factors of the APS-R found gender impacts scores for the APS-R (Rice & Ashby, 2007). Different demographics could influence the results in ways we cannot see with this limited group.

An additional consideration of our study that may have impacted the reported mental health levels are the various and unexplored situational impacts of COVID-19 on students. The COVID-19 pandemic has introduced an unprecedented environment and experience for university students. All students in this sample were completing school remotely due to COVID-19 restrictions and the transition from in-person to remote learning is undocumented. Due to the abnormality of the pandemic and online learning, students are missing out on normal social and educational interaction which may be paired with other pandemic-related stressors outside of their academics. Lukács (2021) used a questionnaire to measure life changes in Hungarian university students before and after a period of social isolation due to COVID-19 and reported a significant negative impact on university student well-being following social isolation. These findings suggest that social isolation associated with COVID-19 may have negatively impacted university student well-being during data collection, producing decreased mental health scores as a result.

Conclusion

Overall, research on perfectionism and mental health is still ongoing because of the divide in the conceptualization of perfectionism and its effects on mental health (Birch et al., 2019). This study provides evidence for the importance of continued research to develop our understanding of the adaptiveness of

perfectionism, a traditionally “unhealthy” personality style, using a health promoting perspective.

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