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The Role of Self-Compassion Among Adaptive and Maladaptive Perfectionists in University Students

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Abstract

Using the tripartite model of perfectionism that accounts for combined characteristics of the Perfectionistic Strivings and Perfectionistic Concerns dimensions, this study explored the mediating role of self-compassion to explain differences between adaptive and maladaptive perfectionists in four psychological distress domains: depression, generalized anxiety, social anxiety, and academic distress. A sample of 3,112 university students were classified into adaptive, maladaptive, and nonperfectionists. Results of mediation analyses comparing adaptive and maladaptive perfectionists indicated that adaptive perfectionists reported significantly greater self-compassion and lower psychological distress levels in all four areas. Self-compassion significantly mediated the associations between perfectionist groups in all four domains. These findings were largely supported across

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various ethnic and international student groups in the analyses by subgroups. Furthermore, parallel mediation analyses demonstrated the unique contributions of individual self-compassion subscales as mediators. Implications for clinical practice, training, and future research are discussed.

Keywords
adaptive, perfectionism, self-compassion, psychological distress, college student mental health

Significance of the Scholarship Statement
To explore adaptive aspects of perfectionism, this study uncovers the role of self-compassion among adaptive and maladaptive perfectionists in commonly reported psychological distress domains with a university student sample. Results indicate significant mediation—self-compassion significantly explains the differences between adaptive and maladaptive perfectionists in all four psychological distress domains. Self-compassion appears to have adaptive functioning for perfectionists who inevitably need to accept their imperfection.

University student perfectionism has long been linked to adverse psychological outcomes, such as depression, anxiety, test anxiety (e.g., Bieling et al., 2004), suicidal ideation, and self-destructive behaviors (e.g., Blatt, 1995; Smith et al., 2018). Recent data suggest that students report greater levels of perfectionism than previous generations (Curran & Hill, 2017). This rise coincides with the steadily increasing prevalence rates and severity of psychological conditions reported by university students for the past 10 years (American College Health Association, 2020; Center for Collegiate Mental Health, 2020; University of Michigan Counseling and Psychological Services, 2018). The present study explores the mechanism of self-compassion among adaptive and maladaptive perfectionists in relation to their mental health and provides implications for treatment, outreach programming, training, and research.

Perfectionism and Its Dimensions

Perfectionism and its psychological impact have been studied among scholars over many decades. The most prominent characteristics of perfectionism include the desire to be flawless, extremely high standards, and hypercritical performance concerns (Frost, et al., 1990; Stoeber & Otto,

2006). For example, Hollender (1965) defined perfectionism as the practice in which one "demand[s] a certain level of performance," "cannot accept or be content with anything short of perfection," and "strives to perform in a manner that is perfect" (p. 94). In addition to the conventional pathological view of perfectionism, Hamachek (1978) gave light to a healthy type, normal versus neurotic. Normal perfectionists are able to set high, yet reasonable, flexible standards for themselves, and enjoy the process of achieving their standards. In contrast, neurotic perfectionists tend to set high and unreasonable, inflexible standards for themselves, and feel highly distressed while working towards their goals. Presently, perfectionism is considered a multidimensional and multicategorical construct. The current widely used measures of perfectionism, the Multidimensional Perfectionism Scale (Frost et al., 1990), the Multidimensional Perfectionism Scale (Hewitt & Flett, 1991), and the Almost Perfect Scale-Revised (APS-R; Slaney et al., 2001), assess both conceptually similar as well as different facets. Reviewing the existing measures of perfectionism and conducting meta-analyses of the research findings, Stoeber and Otto (2006) defined perfectionism with two higher-order dimensions that emerged—Perfectionistic Strivings (PS; e.g., positive strivings, high personal standards, and self-oriented perfectionism) and Perfectionistic Concerns (PC; e.g., self-critical evaluation, self-doubts, and perceived discrepancy between one's ideal goals and actual performance).

On the basis of the two higher-order perfectionism dimensions, PS is associated with beneficial psychological outcomes and is considered adaptive, whereas PC is associated with various psychological problems and is considered maladaptive. For example, with university student samples, the PS dimension is associated with greater levels of positive affect (Frost et al., 1993) and inversely associated with anxiety (Kawamura et al., 2001), dysregulation of emotions, and psychological distress (Aldea & Rice, 2006). The PC dimension has been linked to depression, anxiety, test anxiety (Bieling et al., 2004), negative affect (Frost et al., 1993), rumination (Harris et al., 2008), and fear of being negatively evaluated (Shafique et al., 2017). Thus, multifaceted scales of perfectionism have furthered understanding of the facets and the associated psychological outcomes.

Tripartite Model: Classification of Perfectionists

Using the two higher-order dimensions, PS and PC, Stoeber and Otto (2006) described the tripartite classification model of perfectionists: healthy/adaptive (elevated PS and unelevated PC), unhealthy/maladaptive (elevated PS and PC), and nonperfectionists (unelevated PS). This comprehensive classification model allows researchers to operationalize the

construct using both perfectionism dimensions and to explore the adaptive and maladaptive aspects. More specifically, the self-critical evaluation of the maladaptive dimension (PC) is contingent on the other high strivings dimension (PS) in defining perfectionism, while the self-critical evaluation (PC) itself fails to capture maladaptive perfectionism, as people who are not perfectionists can be self-critical. Among existing scales of perfectionism, the APS-R (Slaney et al., 2001) classifies individuals using the tripartite model based on the combinations of scores on the higher-order dimensions of PS-High Standards (one's high standards and performance expectations) and PC-Discrepancy (one's perpetual performance concerns characterized by the perceptions of not meeting one's own performance expectations). Rice and Ashby (2007) operationalized the tripartite model and validated the APS-R by establishing cutoff scores for High Standards and Discrepancy to classify individuals into adaptive, maladaptive, and nonperfectionists, with evidence for both statistical and clinical significance.

Associated Psychological Characteristics of Adaptive and Maladaptive Perfectionists

Research findings with university students support the tripartite model of perfectionism with three distinctive group differences in High Standards, Discrepancy, and psychological outcomes. Adaptive perfectionists report lower proneness to shame (Stoeber et al., 2007), as well as greater life satisfaction, presence of meaning in life, subjective happiness (Suh et al., 2017), and self-esteem (Grzegorek et al., 2004; Lo & Abbott, 2013), whereas maladaptive perfectionists report greater self-criticism (Grzegorek et al, 2004), anxiety, and stress (Lo & Abbott, 2013), and lower levels of life satisfaction (Rice & Ashby, 2007) than other groups. Actual performance in adaptive and maladaptive perfectionists does not vary significantly (Elion et al., 2012; Grzegorek et al., 2004), yet maladaptive perfectionists evaluate their performance more critically.

Self-Compassion

Compassion is described as kind feelings that arise within oneself in an attempt to alleviate the suffering of others by being open, understanding, and feeling connected towards their emotional pain (Wispe, 1991). Self-compassion is defined as a similar process except that compassion is directed inward toward one's own suffering in the face of failures and shortcomings (Neff, 2003). According to Neff, self-compassion consists of three interrelated elements. Self-kindness, as opposed to self-judgment, is described as a kind attitude toward oneself in the face of suffering. Common humanity, as opposed to isolation, is a perception and understanding of one's difficult

experiences as part of humankind rather than feeling alone. Mindfulness, as opposed to over-identification, is defined as the balanced awareness of difficult thoughts and feelings in contrast to over-identification or suppression. These elements are considered to interact with each other to generate a self-compassionate, adaptive frame of mind.

A large body of research suggests that self-compassion is inversely associated with psychological concerns with notably large effect sizes (overall $r = .54$ among 20 studies; MacBeth & Gumley, 2012), such as lower levels of depression, anxiety (Raes, 2010), homesickness, adjustment difficulties (Terry et al., 2013), rumination (Raes, 2010), and fear of failure (Neff et al., 2005). Furthermore, self-compassion is significantly associated with psychological well-being; meta-analyses of 79 published studies revealed medium to large effect sizes (overall $r = .47$; Zessin et al., 2015). For instance, self-compassion is positively correlated with emotional intelligence (Heffernan et al., 2010), self-esteem, self-determination, competence, and autonomy (Neff, 2003). Thus, self-compassion is a significant resilience factor associated with various cognitive and emotional strengths, serving as a buffer against psychological problems. In the studies by Leary et al. (2007), self-compassion alleviated negative emotional reactions to difficult life situations such as failure, humiliation, and rejection among college students. Controlling for self-esteem, the authors demonstrated that self-compassionate individuals were better able to accurately assess themselves and accept responsibility for their actions, while they were less likely to ruminate and judge themselves critically. As a result, greater self-compassion was associated with lower degrees of negative affect, such as sadness, anxiety, and anger.

Self-Compassion and Perfectionism

Theories of perfectionism posit that perpetual, unrelenting self-critical performance concerns are one of the key defining elements of maladaptive perfectionists who hold unrealistically high standards and goals, resulting in adverse psychological outcomes (Aldea & Rice, 2006; Smith et al., 2018; Stoeber & Otto, 2006). Maladaptive perfectionism is considered a transdiagnostic personality disposition (Dunkley, et al., 2012; Stoeber & Otto, 2006), reflecting one's ideal self as being close to perfect and feelings of dissatisfaction and incongruence with their actual self. Self-compassion is defined as a loving and accepting attitude towards oneself when faced with failures (Neff, 2003). Maladaptive perfectionists engage in hypercritical performance evaluation which is tied to their self-worth, whereas self-compassion promotes a mindset that one's self-worth is not contingent on their performance or achievement (Finlay-Jones, 2017). Conceptually, self-compassion would likely have a psychologically adaptive role in the

combined dimensions of perfectionism. A recent study shows that the maladaptive perfectionism dimension is associated with lower self-compassion, as it likely interferes with developing a self-compassionate mindset (Linnett & Kibowski, 2020). Using structural equation modeling, the authors examined relationships between three perfectionism facets (PS-Striving for Excellence, PC-Discrepancy, and Concern Over Mistakes) and six self-compassion subscales with a hierarchical latent variable of overall perfectionism. Results indicated that PC-Discrepancy and Concern Over Mistakes significantly predicted all six self-compassion subscales as hypothesized. Contrary to expectations, PS-Striving for Excellence was significantly and positively associated with only one subscale, Self-Judgment. However, the combined effects of PS and PC on self-compassion are yet to be explored.

Students are particularly vulnerable when they matriculate at a university where students often face academic challenges, are routinely evaluated for their progress in learning, and must reflect on their performance. Many students consider their academic success being closely tied to success in their future careers and more globally, their self-worth. University students who are perfectionists are likely to face failures, as they set extremely high goals. Hence, adaptive perfectionists who do not show perpetual perceptions of incongruence and inadequacy may lead to developing and adopting a self-compassionate mindset when faced with failures, resulting in better psychological outcomes. In contrast, the presence of extremely high levels of perfectionistic strivings and perceived incongruence between goals and actual performance among maladaptive perfectionists may result in distress through low self-compassion as these combined dimensions of perfectionism are likely to lead to self-judgment, over-generalization, and self-blame, rather than self-kindness, mindfulness, and perceptions of common humanity when faced with difficulties. There are several studies in recent years that have examined self-compassion as a mediator between the maladaptive dimension of perfectionism and psychological conditions. In a study of adults who have been diagnosed with bipolar disorder, self-compassion mediated the associations between perfectionistic concerns and depression, anxiety, and emotion regulation difficulties (Fletcher et al., 2019). In other studies with university student samples, self-compassion partially mediated the associations between perfectionistic concerns and depressive symptoms (Mehr & Adams, 2016) and body image dissatisfaction (Barnett & Sharp, 2016).

When investigating perfectionism, facets of the maladaptive dimension, PC, such as hyper-critical performance concerns, have usually been the focus of research on perfectionism (Ferrari et al., 2018; Fletcher et al., 2019; Mehr & Adams, 2016). Given the fact that perfectionism cannot be defined in the absence of the other PS dimension, there is a need for research that

addresses adaptive aspects and the combinations of the perfectionism dimensions beyond the pure effect of each dimension. Empirical findings in recent years support the tripartite model providing evidence for combined effects of two higher-order dimensions of perfectionism (Rice & Ashby, 2007; Sirois et al., 2019; Smith et al. 2015; Stoeber et al., 2020; Suh et al., 2017). It can be assumed that when faced with one's shortcomings, adaptive perfectionists (high PS-High Standards without high PC-Discrepancy) are better able to accept their imperfection as they are more self-compassionate, leading to lower psychological distress, in comparison to maladaptive perfectionists. To the best of our knowledge, this has never been empirically tested. Uncovering healthy and unhealthy aspects among adaptive and maladaptive perfectionists by simultaneously examining six self-compassion facets would inform clinicians of more targeted treatment interventions. Given that depression, generalized anxiety, social anxiety, and academic distress are the top four psychological concerns among university students (American College Health Association, 2020; Center for Collegiate Mental Health, 2020; University of Michigan Counseling and Psychological Services, 2018), and perfectionism has become highly prevalent among this population (Curran & Hill, 2017), the primary purpose of this study was to evaluate two types of perfectionists, operationalized by combinations of the perfectionism dimensions (PS-High Standards and PC-Discrepancy of the APS-R) in relation to their psychological outcomes and examine the mediating role of self-compassion. In addition, analyses by subgroups were conducted to explore universal and culturally specific aspects of perfectionism. Furthermore, unique contributions of self-compassion subscales as parallel mediators were examined to unveil their specific associations with perfectionist groups and distress domains, followed by comparisons of results using Discrepancy as a predictor among perfectionists.

Hypotheses

This study examined whether self-compassion would significantly mediate the associations between two types of perfectionists and four psychological distress domains. Hypothesis 1 addressed associations between variables included in the mediation analyses. Hypothesis 1a (Path *a*): comparing self-compassion scores (*M*) by perfectionist groups (*X*), adaptive perfectionists would report significantly greater self-compassion than maladaptive perfectionists. Hypothesis 1b (Path *b*): there would be significant negative associations between self-compassion (*M*) and four domains of psychological distress: depression, generalized anxiety, social anxiety, and academic distress ($Y_{1,2,3,4}$). Hypothesis 1c (Path *c*): as compared to maladaptive perfectionists, adaptive perfectionists would report significantly lower psychological distress levels in all four domains ($Y_{1,2,3,4}$). Hypothesis 2

(Path *c*'): self-compassion (*M*) would significantly mediate the associations between perfectionist groups (*X*) and four psychological distress domains ($Y_{1,2,3,4}$). In addition, there were three explanatory questions: Would the mediation models be supported across various ethnic groups and international students? Would individual subscales of self-compassion uniquely mediate the associations between perfectionist groups and their psychological distress? If so, how would the results differ when Discrepancy is used as a predictor among all perfectionists (discrepancy model) rather than the group categorization (tripartite model)?

Method

Participants

Participants were students enrolled at a midwestern university in the United States. The study was approved by the university's institutional review board. Students were randomly selected by the registrar's office and received an email invitation to participate in an anonymous online survey. Out of 19,916 students who were invited, approximately 18% participated in the survey. The final data consisted of 3,112 students who self-identified as White (34.5%), Asian American (22.4%), international students (20.5%), multiracial (7.1%), Latinx (6.6%), African American (5.8%), and other (3.2%). Among them, 56.5% identified as woman, 41.9% as man, and 1.6% as transgender/gender fluid. By academic standing, 17.6% were first-year, 14.7% sophomore, 15.2% junior, 13.3% senior, and 39.1% graduate or professional students. The overall mean age was 21.84 years (SD = 4.36).

Measures

Perfectionism. The APS-R was administered for the tripartite classification of perfectionists. The measure consists of 23 items using a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), and is comprised of three subscales: High Standards, Order, and Discrepancy (Slaney et al., 2001). The High Standards and Discrepancy scores are used to classify participants into three distinct empirically validated groups: adaptive, maladaptive, and nonperfectionists (Rice & Ashby, 2007; Smith et al., 2015; Suh et al., 2017). The High Standards subscale (7 items) assesses the PS dimension by measuring high self-performance expectations and strivings (e.g., "I have high expectations for myself"). The Discrepancy subscale (12 items) assesses the PC dimension and measures perpetual perceptions of not meeting one's performance expectations and dissatisfaction with one's own performance (e.g., "My best just never seems to be good enough for me"). Evidence for discriminant and convergent validity has been reported (Mobley et al., 2005;

Rice et al., 2007). The factor structure has been confirmed (Mobley et al., 2005; Rice et al., 1998; Suddarth & Slaney, 2001). Good internal consistencies have been reported among university students with the Cronbach's alphas of .85 for High Standards and .91 for Discrepancy (Slaney et al., 2001). In the present study, the internal consistencies were .87 and .96, respectively.

Self-Compassion. Self-compassion was measured by the Self-Compassion Scale (Neff, 2003) which is comprised of 26 items and 6 subscales (Self-Kindness, Common Humanity, Mindfulness, Self-Judgment, Isolation, and Over-Identification). Respondents are asked to rate how often they behave in the manner described in each item when facing difficulties, using a 5-point Likert-type scale ranging from 1 (*almost never*) to 5 (*almost always*). Total self-compassion scores were calculated using mean scores after reversing the scores of Self-Judgment, Isolation, and Over-Identification; thus, higher scores indicate greater self-compassion. Evidence for construct and discriminant validity, as well as good reliability (the internal consistencies using Cronbach's alpha ranging from .75 to .81 for six subscales, and .92 for a total score), have been reported with U.S. university students (Neff, 2003). Test–retest reliability over a three-week interval using Cronbach's alpha ranged from .80 to .88 (six subscales), and .93 (total score; Neff, 2003). The internal consistencies in the present study ranged from .80 to .85.

Psychological Distress. The Counseling Center Assessment of Psychological Symptoms-62 (CCAPS-62) is a 62-item self-report measure and assesses eight psychological distress domains among university students (Locke et al., 2011). Respondents rate how well each item describes them for the prior two weeks on a 5-point Likert-type scale ranging from 0 (*not at all*) to 4 (*extremely well*). The higher mean scores indicate greater psychological distress. Out of eight domains, four subscales (Depression, Generalized Anxiety, Social Anxiety, and Academic Distress) were used as outcome variables in this study. The factor structure has been examined and confirmed (Locke et al., 2011). Using Cronbach's alpha, good internal consistency (ranging from .78 to .91 among eight subscales) and test-retest reliability over one-week and two-week intervals (ranging from .78 to .93, and from .76 to .92, respectively) have been reported (Locke et al., 2011). The internal consistencies in the present study ranged from .83 to .92.

Procedures

All statistical analyses were conducted using the IBM SPSS (Version 27). Given our large sample size and a total of 32 mediation analyses being conducted, using the Bonferroni adjustment, all *p*-values were set at .001 for

statistical significance. Of importance, our mediation hypotheses were based on the tripartite model of perfectionism (adaptive, maladaptive, and nonperfectionists), using perfectionism dimensions (PS-High Standards and PC-Discrepancy). There are two major approaches in operationalizing perfectionism and exploring the combined characteristics of the perfectionism dimensions. One approach treats the PS and PC dimensions as continuous variables (Stoeber et al., 2020) and the other uses the tripartite classification based on the combinations of the scores (Rice & Ashby, 2007). The continuous variable approach does not assess the combined characteristic of adaptive perfectionists and relies on the assumption that there is no interaction between these dimensions and psychological outcomes. However, interaction effects of combined dimensions have been reported (Hill et al., 2010; Smith et al., 2015). Our study used the tripartite classification to examine both adaptive and maladaptive perfectionist groups. Results were compared with an alternative model, using Discrepancy as a predictor among perfectionists (High Standards $\geq$ 42).

Preliminary analyses included all participants (N = 3,112) and examined whether three perfectionist groups differed in High Standards and Discrepancy (the multivariate analysis of covariance [MANCOVA] 1) and psychological distress (the MANCOVA 2) as intended. In mediation analyses, adaptive and maladaptive perfectionists (n = 1,734) were included. Each of the psychological distress domains was analyzed separately with PROCESS (Version 3.3; Hayes, 2018), which uses ordinary least squares regression to produce regression coefficients and conducts bootstrapping to derive confidence intervals. Significant indirect effects were indicated if their 95% confidence intervals based on 5,000 bootstrap samples did not contain zero.

Perfectionist Groups. The following classification cutoff scores for High Standards and Discrepancy were used (Rice & Ashby, 2007): students with High Standards ($\geq$ 42) and Discrepancy (< 42) were classified as adaptive (n = 624); with High Standards ($\geq$ 42) and Discrepancy ($\geq$ 42) as maladaptive (n = 1,110); and with High Standards (< 42) as nonperfectionists (n = 1,378). In mediation analyses, the adaptive and maladaptive perfectionist groups were coded as 0 and 1, respectively.

Covariates. Significant associations between demographic variables and the variables in the study were examined. Subsequently, four dichotomous variables were created: birth sex (0 = male, 1 = female); sexual orientation (0 = heterosexual, 1 = all other); ethnic/cultural group (0 = White American, 1 = all other); and undergraduate/graduate student (0 = undergraduate, 1 = graduate). Financial stress was an ordinal variable. Thus, these five demographic variables were controlled for as covariates.

Results

Preliminary Analysis

Missing Values and Outliers. The analysis of missing values indicated that data were missing completely at random. The cases with missing values were less than 10% of the total sample, and the sample size was large; therefore, listwise deletion was used. The standardized residual analyses indicated 23 univariate outliers, and Mahalanobis distance indicated one multivariate outlier. Given that the number was less than 2% and they represented valid data points, outliers were retained in this study (Cohen et al., 2013).

Evaluation of the Tripartite Model. As preliminary analyses, the tripartite model of perfectionism was evaluated. Two MANCOVAs were performed while controlling for five covariates (Table 1). The results supported the tripartite model, $F(4, 6208) = 1650.77$, $p < .001$, Pillai's Trace = 1.03, $\eta_p^2 = .52$, and $F(8, 6204) = 84.51$, $p < .001$, Pillai's Trace = .20, $\eta_p^2 = .10$, respectively. The Games-Howell post hoc analyses indicated significant group differences in High Standards and Discrepancy. The High Standards scores between adaptive and maladaptive perfectionists did not differ significantly, while their Discrepancy scores differed significantly. Nonperfectionists had significantly lower scores in High Standards than the other two groups, and maladaptive perfectionists had significantly lower scores in Discrepancy as compared to the other groups. Significant group differences were found in all of the distress scores: depression, generalized anxiety, social anxiety, and academic distress. Adaptive perfectionists reported significantly lower levels of psychological distress than maladaptive and nonperfectionists in all four distress domains. Maladaptive perfectionists reported significantly higher levels of depression and generalized anxiety compared to nonperfectionists.

Mediation Analyses

The assumptions of linear regression were assessed visually and statistically. A correlation matrix of all variables and the variance inflation factors were inspected for multicollinearity. Table 2 presents bivariate correlations among variables for adaptive and maladaptive perfectionists separately, followed by correlations among all variables with a binary variable of the perfectionist groups (0 = adaptive, 1 = maladaptive). Combined results of the mediation analyses by four outcome variables, while controlling for covariates, are illustrated with unstandardized regression coefficients (see Figure 1.1). Perfectionist groups and self-compassion together accounted for 47% of the

Table 1. Perfectionist Group Differences in the APS-R Subscale Scores (MANCOVA 1) and the CCAPS-62 Subscale Scores (MANCOVA 2)

	All Sample (N = 3,112)	AP (n = 624)	MP (n = 1,110)	NP (n = 1,378)	error			
Dependent Variable	M (SD)	M (SD)	M (SD)	M (SD)	F	df	Df	η_p^2
MANCOVA 1:					1650.77	4	6208	.52***
High Standards	41.10 (6.74)	45.64_a (2.34)	45.79_a (2.39)	35.27_b (5.86)	2291.40	2	3109	.60***
Discrepancy	49.40 (18.30)	28.92_a (7.88)	62.95_b (12.68)	47.77_c (16.07)	1273.34	2	3109	.45***
MANCOVA 2:					84.51	8	6204	.10***
Depression	1.09 (0.86)	0.49_a (.49)	1.33_b (.86)	1.17_c (.87)	230.36	2	3109	.13***
Generalized Anxiety	1.10 (0.85)	0.63_a (.59)	1.39_b (.90)	1.07_c (.81)	177.55	2	3109	.10***
Social Anxiety	1.76 (0.89)	1.23_a (.79)	1.95_b (.88)	1.85_b (.86)	154.13	2	3109	.09***
Academic Distress	1.41 (0.93)	0.68_a (.58)	1.63_b (.92)	1.57_b (.91)	285.18	2	3109	.16***

Note. APS-R = the Almost Perfect Scale-Revised, CCAPS-62 = the Counseling Center Assessment of Psycholgical Symptoms-62, AP = adaptive perfectionists, MP = maladaptive perfectionists, NP = nonperfectionists. Means with different subscripts differ at the alpha level set at .01 (Bonferroni correction) by Games-Howell post hoc comparisons.
***$p < .001$.

Table 2. Bivariate Correlations Among all Variables (Pearson Correlation Coefficient)

Variable	1(a)	1(b)	2	3	4	5	6	7	8	9	10	11	12
Disaggregated By Adaptive and Maladaptive Perfectionist Groups													
1(a). High Standards	—	.12***	−.08**	−.01	.01	.04	.19***	.09**	.10***	.01	.09**	−.01	−.04
1(b). Discrepancy	−.07	—	−.42***	−.28***	−.14***	−.18***	.46***	.37***	.38***	.50***	.38***	.34***	.46***
2. Self-Compassion Total	−.04	−.33***	—	.75***	.70***	.74***	−.73***	−.70***	−.68***	−.56***	−.42***	−.44***	−.37***
3. Self-Kindness	.02	−.23***	.76***	—	.63***	.68***	−.41***	−.29***	−.22***	−.39***	−.24***	−.28***	−.26***
4. Common Humanity	−.01	−.02	.60***	.54***	—	.63***	−.23***	−.25***	−.17***	−.24***	−.11***	−.18***	−.16***
5. Mindfulness	.07	−.15***	.74***	.67***	.60***	—	−.27***	−.25***	−.32***	−.27***	−.20***	−.25***	−.18***
6. Self-Judgment	.10*	.37***	−.75***	−.48***	−.18***	−.32***	—	.62***	.65***	.52***	.42***	.39***	.32***
7. Isolation	.05	.32***	−.72***	−.35***	−.14***	−.33***	.61***	—	.61***	.52***	.39***	.42***	.34***
8. Over-Identification	.06	.32***	−.74***	−.32***	−.16***	−.35***	.63***	.62***	—	.47***	.46***	.39***	.32***
9. Depression	−.09*	.29***	−.48***	−.31***	−.21***	−.27***	.38***	.45***	.43***	—	.68***	.55***	.60***
10. Generalized Anxiety	−.02	.28***	−.40***	−.18***	−.10*	−.21***	.35***	.36***	.50***	.62***	—	.51***	.50***
11. Social Anxiety	−.11**	.30***	−.39***	−.23***	−.12**	−.22***	.32***	.42***	.38***	.42***	.46***	—	.35***
12. Academic Distress	−.10**	.30***	−.28***	−.17***	−.12**	−.20***	.18***	.26***	.25***	.52***	.45***	.28***	—
AP: *M* (*SD*)	45.64 (2.34)	28.92 (7.88)	3.45 (.64)	3.42 (.78)	3.33 (.95)	3.69 (.80)	2.64 (.86)	2.51 (.96)	2.62 (.99)	.49 (.49)	.63 (.86)	1.23 (.79)	.68 (.58)
MP: *M* (*SD*)	45.79 (2.39)	62.95 (12.68)	2.63 (.63)	2.68 (.87)	2.87 (.99)	3.15 (.86)	3.73 (.80)	3.63 (.90)	3.57 (.89)	1.33 (.86)	1.39 (.90)	1.95 (.88)	1.63 (.92)

(continued)

Table 2. (continued)

Variable	1(a)	1(b)	2	3	4	5	6	7	8	9	10	11	12
		1	2	3	4	5	6	7	8	9	10	11	12
		Adaptive Perfectionists (coded as 0) and Maladaptive Perfectionists (coded as 1)											
1. AP/MP Groups		—											
2. Self-Compassion Total		−.53***	—										
3. Self-Kindness		−.39***	.80***	—									
4. Common Humanity		−.22***	.67***	.63***	—								
5. Mindfulness		−.30***	.75***	.71***	.64***	—							
6. Self-Judgment		.54***	−.81***	−.55***	−.29***	−.39***	—						
7. Isolation		.51***	−.79***	−.44***	−.29***	−.38***	.72***	—					
8. Over-Identification		.44***	−.77***	−.38***	−.25***	−.41***	.72***	.70***	—				
9. Depression		.47***	−.64***	−.48***	−.30***	−.37***	.60***	.61***	.56***	—			
10. Generalized Anxiety		.41***	−.53***	−.35***	−.18***	−.30***	.53***	.50***	.55***	.73***	—		
11. Social Anxiety		.38***	−.53***	−.37***	−.23***	−.32***	.49***	.52***	.49***	.60***	.57***	—	
12. Academic Distress		.49***	−.51***	−.38***	−.24***	−.30***	.47***	.48***	.44***	.68***	.59***	.45***	—
M		—	2.92	2.95	3.03	3.34	3.34	3.22	3.23	1.02	1.12	1.69	1.29
(*SD*)		—	(.74)	(.91)	(1.00)	(.88)	(.98)	(1.06)	(1.03)	(.85)	(.88)	(.92)	(.94)

Note. AP = adaptive perfectionists, MP = maladaptive perfectionists. Coefficients for the maladaptive perfectionist group are presented to the right of and above the diagonal.

*$p < .05$. **$p < .01$. ***$p < .001$.

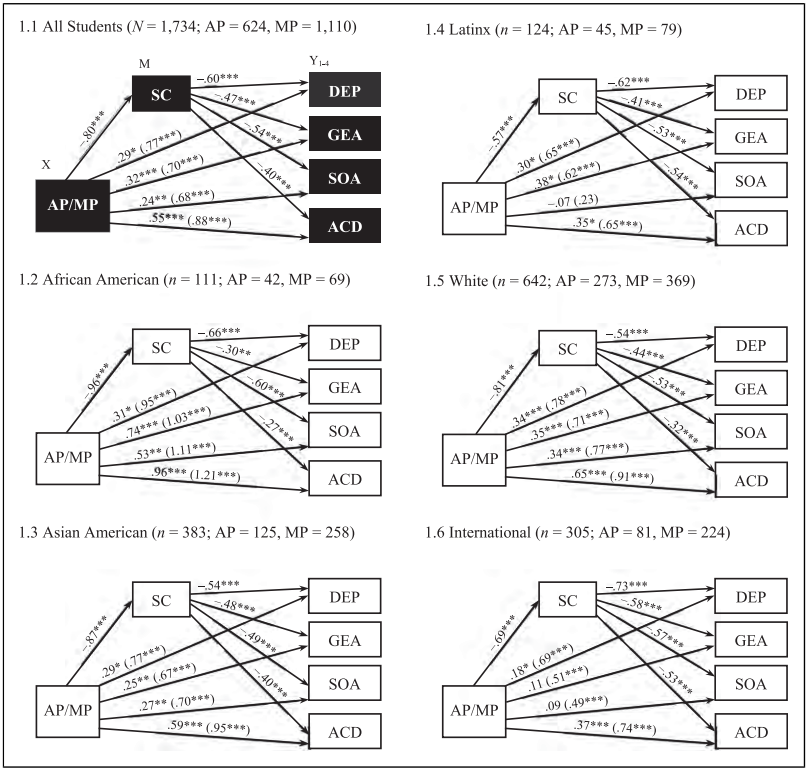

Figure 1. Combined mediation model by psychological distress domains: all students and by subgroups

Note. AP = adaptive perfectionists; MP = maladaptive perfectionists; SC = self-compassion; DEP = depression; GEA = generalized anxiety; SOA = social anxiety; ACD = academic distress. Unstandardized regression coefficients. The direct effect *c'* followed by the total effect *c* in parentheses are presented between *X* and $Y_{1\text{-}4}$. With all sample (*N* = 3,112), adaptive perfectionists were overrepresented and nonperfectionists were underrepresented among White students, whereas adaptive perfectionists were underrepresented and nonperfectionists were overrepresented among international students, $\chi^2(12, N = 3{,}112) = 54.78$, $p < .001$, $V = .09$, $w = .13$.

*$p < .05$. **$p < .01$. ***$p < .001$.

variance in depression, 37% in generalized anxiety, 31% in social anxiety, and 37% in academic distress. Supporting Hypothesis 1a (Path *a*), adaptive perfectionists had significantly higher self-compassion scores than maladaptive perfectionists, $a = -0.80$, $p < .001$, 95% CI [−0.87, −0.74]. Supporting Hypothesis 1b (Path *b*), higher self-compassion scores were significantly associated with lower degrees of depression (Path *b*), $b_1 = -0.60$, $p < .001$, 95% CI [−0.64, −0.55]; generalized anxiety, $b_2 = -0.47$, p

< .001, 95% CI [−0.52, −0.41]; social anxiety, $b_3 = -0.54$, $p < .001$, 95% CI [−0.60, −0.49]; and academic distress, $b_4 = -0.40$, $p < .001$, 95% CI [−0.46, −0.34]. Hypothesis 1c (Path *c*) was also supported: as compared to maladaptive perfectionists, adaptive perfectionists reported significantly lower degrees of depression, $c_1 = 0.77$, $p < .001$, 95% CI [0.70, 0.85]; generalized anxiety, $c_2 = 0.70$, $p < .001$, 95% CI [0.62, 0.78]; social anxiety, $c_3 = 0.68$, $p < .001$, 95% CI [0.60, 0.76]; and academic distress, $c_4 = 0.88$, $p < .001$, 95% CI [0.79, 0.95]. Supporting Hypothesis 2, the indirect effects (*ab*) of self-compassion on all four distress domains were significant (see Table 3). The direct effects (*c'*) remained significant: depression, $c'_1 = 0.29$, $p < .001$, 95% CI [0.22, 0.37]; generalized anxiety, $c'_2 = 0.32$, $p < .001$, 95% CI [0.24, 0.40]; social anxiety, $c'_3 = 0.24$, $p < .001$, 95% CI [0.15, 0.33]; and academic distress, $c'_4 = 0.55$, $p < .001$, 95% CI [0.47, 0.64].

In summary, self-compassion significantly explained the perfectionist group differences in all four dependent variables and demonstrated significant mediation. The effect sizes were calculated using P_M, the proportion of variance explained through a mediator, as our results met the conditions to use this measure (Wen & Fan, 2015). The indirect effect of self-compassion accounted for 62% of the total effect; that is, perfectionist group differences in their mean scores in depression, 54% in generalized anxiety, 64% in social anxiety, and 36% in academic distress.

Mediation Analyses by Ethnicity and International Student Groups. To explore if the mediation models were supported across various ethnic groups of students, the models were further analyzed by the following subgroups: African American, Asian American, Latinx, White, and international students, while four covariates except for ethnicity were controlled for. The results for individual groups are presented in Figures 1.2 to 1.6. The indirect effects are shown in Table 3. Across all subgroups, adaptive perfectionists reported significantly greater self-compassion, self-compassion was associated with lower levels of distress, and adaptive perfectionists had significantly lower levels of psychological distress in all domains as compared to maladaptive perfectionists ($p < .001$). The mediation models were also supported, the group differences in their distress levels were significantly explained through self-compassion with one exception. Social anxiety scores among Latinx students did not differ significantly between the perfectionist groups (total effect $c_3 = 0.23$, SE = 0.15, $p = .15$), while self-compassion was inversely associated with social anxiety, $b_3 = -0.53$, SE = 0.12, p < .001, and the indirect effect was significant, $ab^3 = 0.30$, SE = 0.09, 95% CI [0.15, 0.49].

Table 3. Indirect Effects of Self-Compassion as a Mediator for Overall Sample and by Subgroups

	Depression			Generalized Anxiety			Social Anxiety			Academic Distress		
		95% CI			95% CI			95% CI			95% CI	
Sample	*B*	[LL, UL]	SE	*B*	[LL, UL]	SE	*B*	[LL, UL]	SE	*B*	[LL, UL]	SE
All Students	**.48***	**[.43, .54]**	**.03**	**.38***	**[.32, .43]**	**.03**	**.44***	**[.38, .50]**	**.03**	**.32***	**[.27, .38]**	**.03**
African American	.31*	[.40, .92]	.13	.28*	[.08, .50]	.11	.57*	[.33, .85]	.13	.25*	[.02, .54]	.13
Asian American	.48*	[.36, .61]	.06	.42*	[.30, .56]	.07	.43*	[.31, .56]	.06	.35*	[.24, .48]	.06
Latinx	.35*	[.19, .54]	.09	.24*	[.08, .43]	.09	.30*	[.15, .49]	.09	.31*	[.14, .49]	.09
White	.44*	[.36, .52]	.04	.36*	[.28, .45]	.04	.43*	[.34, .54]	.05	.26*	[.18, .34]	.04
International Students	.51*	[.36, .66]	.08	.40*	[.29, .53]	.06	.40*	[.25, .56]	.08	.37*	[.24, .51]	.07

Note. *B* = unstandardized coefficient; CI = bias corrected confidence interval using 5,000 bootstrap samples; LL = lower limit; UL = upper limit. The mediation models included: *X* = adaptive perfectionists (0) and maladaptive perfectionists (1), *M* = self-compassion, *Y* = depression, generalized anxiety, social anxiety, academic distress. Results for all students are shown in bold.

*Significant indirect effect: 95% confidence interval does not contain zero.

Parallel Multiple Mediator Analyses of Self-Compassion Subscales

Tripartite Model. The specific indirect effects of the six self-compassion subscales as mediators were tested simultaneously by the parallel multiple mediator analyses, controlling for five demographic variables as covariates. Figure 2 and Table 4 present the results. As shown, maladaptive perfectionists had significantly lower mean scores by 0.74, 0.48, and 0.54 points on Self-Kindness, Common Humanity, and Mindfulness, respectively, as compared to adaptive perfectionists. In addition, maladaptive perfectionists had significantly higher mean scores by 1.08, 1.08, and 0.91 points than adaptive perfectionists on Self-Judgment, Isolation, and Over-Identification, respectively. While holding the perfectionist groups and other self-compassion subscales constant, Self-Kindness, Isolation, and Over-Identification were significantly associated with all distress domains (unstandardized coefficients ranging from −0.18 to 0.23, $p < .001$). Furthermore, these three subscales independently and significantly mediated the associations between perfectionist groups and all areas of psychological distress. The bootstrap confidence intervals for the indirect effects were entirely above zero (unstandardized coefficients ranging from 0.06 to 0.22). However, Common Humanity and

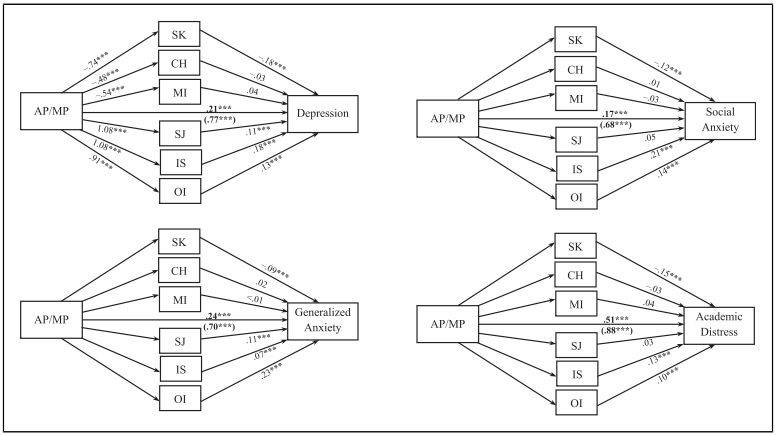

Figure 2. Parallel mediator analyses by self-compassion subscales for associations between perfectionist groups and four psychological distress domains

Note. AP = adaptive perfectionists; MP = maladaptive perfectionists; SK = self-kindness; CH = common humanity; MI = mindfulness; SJ = self-judgment; IS = isolation; OI = over-identification. Unstandardized coefficients are shown. Demographic variables were controlled for. Coefficients between AP/MP and each of the six mediators (SK, CH, MI, SJ, IS, OI) are shown in the diagram predicting depression but are omitted in other diagrams to avoid redundancy. Coefficients in bold represent the direct effect *c'* and the total effect *c* in parentheses in each model. $N = 1{,}734$.
***$p < .001$.

Table 4. Specific Indirect Effects of Six Self-Compassion Subscales as Parallel Multiple Mediators Between Perfectionist Groups and Psychological Distress Domains

	Depression			Generalized Anxiety			Social Anxiety			Academic Distress		
		95% CI			95% CI			95% CI			95% CI	
Mediator	*B*	[LL, UL]	SE	*B*	[LL, UL]	SE	*B*	[LL, UL]	SE	*B*	[LL, UL]	SE
Total	.56*	[.51, .62]	.03	.45*	[.40, .52]	.03	.51*	[.45, .58]	.03	.36*	[.31, .43]	.03
Specific Indirect effect (*ab*)												
1. Self-Kindness (a_1b_1)	.13*	[.51, .62]	.03	.06*	[.02, .11]	.02	.09*	[.04, .14]	.03	.11*	[.06, .16]	.03
2. Common Humanity (a_2b_2)	.02	[.00, .04]	.01	−.01	[−.03, .01]	.01	.00	[−.03, .02]	.01	.01	[−.01, .04]	.01
3. Mindfulness (a_3b_3)	−.03	[−.06, .01]	.02	.00	[−.03, .03]	.02	.02	[−.02, .06]	.02	−.02	[−.06, .01]	.02
4. Self-Judgment (a_4b_4)	.12*	[.06, .18]	.03	.12*	[.05, .19]	.03	.06	[−.01, .13]	.04	.04	[−.03, .11]	.04
5. Isolation (a_5b_5)	.20*	[.15, .25]	.03	.08*	[.02, .13]	.03	.22*	[.16, .29]	.03	.14*	[.08, .20]	.03
6. Over-identification (a_6b_6)	.12*	[.08, .16]	.02	.21*	[.16, .26]	.03	.13*	[.08, .19]	.03	.09*	[.04, .14]	.03

Note. *B* = unstandardized coefficient; CI = bias-corrected confidence interval using 5,000 bootstrap samples; LL = lower limit; UL = upper limit; *ab* = product of the unstandardized coefficients of Path *a* (*X*: perfectionist groups to *M*: six self-compassion subscales) and Path *b* (*M*: six mediators to *Y*: four psychological distress variables). Adaptive perfectionists = 0, maladaptive perfectionists = 1. All mediators were simultaneously entered into the model. N = 1,734.
*Significant specific indirect effect: 95% confidence interval does not contain zero.

Mindfulness subscales were not independently associated with any of the four distress domains while holding other variables constant. In addition to those two subscales, Self-Judgment did not significantly and independently predict social anxiety and academic distress, and the specific indirect effects were not significant.

Alternative Discrepancy Model. With Discrepancy as a continuous predictor variable, the discrepancy models were tested by parallel multiple mediator analyses, controlling for High Standards and five demographic variables. The results (see Figure 3 and Table 5) were compared with those of the tripartite classification model. The discrepancy model predicted 54%, 43%, 36%, and 45% of the variance in depression, generalized anxiety, social anxiety, and academic distress, similar to 50%, 41%, 34%, and 38% of the tripartite model, respectively. While the specific indirect effects were almost identical between these two models, the discrepancy model accounted for much smaller proportions of the mediation effects: the self-compassion subscales together accounting for the associations between discrepancy and four distress domains, using P_M, corresponded to 52%, 55%, 59%, and 21%, as compared to 73%, 64%, 75%, and 41% of the tripartite model, respectively.

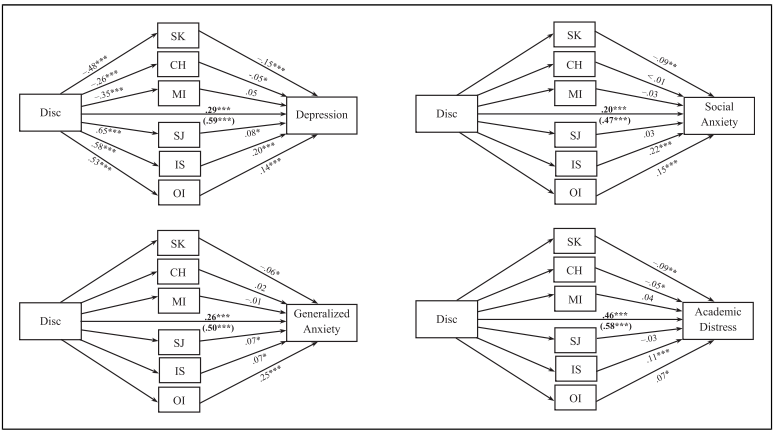

Figure 3. Parallel mediator analyses by self-compassion subscales for associations between discrepancy and four psychological distress domains among perfectionists
Note. Disc = discrepancy; SK = self-kindness; CH = common humanity; MI = mindfulness; SJ = self-judgment; IS = isolation; OI = over-identification. Standardized coefficients are shown. High Standards and demographic variables were controlled for. Coefficients between Discrepancy and each of the six mediators (SK, CH, MI, SJ, IS, OI) are shown in the diagram predicting depression but are omitted in other diagrams to avoid redundancy. Coefficients in bold represent the direct effect *c'* and the total effect *c* in parentheses in each model. N = 1,734.
*p < .05. **p < .01. ***p < .001.

Table 5. Specific Indirect Effects of Six Self-Compassion Subscales as Parallel Multiple Mediators Between Discrepancy and Psychological Distress Domains

	Depression			Generalized Anxiety			Social Anxiety			Academic Distress		
		95% CI			95% CI			95% CI			95% CI	
Mediator	*B*	[LL, UL]	SE	*B*	[LL, UL]	SE	*B*	[LL, UL]	SE	*B*	[LL, UL]	SE
Total	.31*	[.27, .34]	.02	.24*	[.20, .27]	.02	.27*	[.24, .31]	.02	.12*	[.09, .16]	.02
Specific Indirect effect (*ab*)												
1. Self-Kindness (a_1b_1)	.07*	[.04, .10]	.01	.03	[.00, .06]	.02	.04*	[.01, .07]	.02	.04*	[.01, .08]	.02
2. Common Humanity (a_2b_2)	.01	[.00, .03]	.01	−.01	[-.02, .01]	.01	.00	[−.02, .01]	.01	.01	[.00, .03]	.01
3. Mindfulness (a_3b_3)	−.02	[−.04, .00]	.01	.00	[-.02, .02]	.01	.01	[−.02, .01]	.01	−.02	[−.04, .01]	.01
4. Self-Judgment (a_4b_4)	.05*	[.01, .09]	.02	.05	[.00, .09]	.09	.02	[−.03, .07]	.02	−.02	[−.06, .03]	.03
5. Isolation (a_5b_5)	.12*	[.09, .15]	.02	.04	[.00, .07]	.02	.13*	[.09, .16]	.02	.06*	[.03, .10]	.02
6. Over-identification (a_6b_6)	.07*	[.04, .10]	.01	.13*	[.02, .10]	.02	.08*	[.04, .11]	.02	.04*	[.01, .07]	.02

Note. *B* = completely standardized effect; CI = bias-corrected confidence interval using 5,000 bootstrap samples; LL = lower limit; UL = upper limit; *ab* = product of the unstandardized coefficients of Path *a* (*X*: Discrepancy to *M*: six self-compassion subscales) and Path *b* (*M*: six mediators to *Y*: four psychological distress variables). All mediators were simultaneously entered into the model. *N* = 1,734.

*Significant specific indirect effect: 95% confidence interval does not contain zero.

Discussion

Building on previous studies of self-compassion as a partial mediator between the PC dimension and psychological distress (Barnett & Sharp, 2016; Fletcher et al., 2019; Mehr & Adams, 2016), the present study accounted for another conceptual dimension of perfectionism, PS-High Standards, to operationalize perfectionism using the tripartite model. This study examined the role of self-compassion as a mediator for the associations between perfectionist groups and four psychological distress domains among university students. Consistent with previous findings (e.g., Hill et al., 2010; Smith et al., 2015), preliminary analyses support the tripartite model in that adaptive perfectionists are psychologically healthy, while maladaptive perfectionists are prone to psychological distress. Separate bivariate correlations for adaptive and maladaptive groups also provide evidence for their unique associations with High Standards, Discrepancy, and distress domains. These findings together highlight the need for future research to examine both adaptive and maladaptive perfectionists defined by the combined characteristics on the perfectionism dimensions for their associated psychological outcomes.

In mediation analyses, the role of self-compassion was examined as a mediator between adaptive and maladaptive perfectionists and their psychological distress levels. Supporting our hypotheses, self-compassion significantly, but not fully, explained the differences between adaptive and maladaptive perfectionists in all four distress domains. In the analyses by subgroups, the mediating role of self-compassion was consistently supported among ethnic and international student groups with one exception with Latinx students and social anxiety. Perfectionism dimensions can be universal, but also culturally syntonic (Elion et al., 2012; Yoon & Lau, 2008), and should be considered within one's cultural and sociopolitical context. Social anxiety among Latinx students may be more strongly associated with culturally specific factors, such as acculturative stress and financial stress (Jardin, et al., 2018).

The results of self-compassion subscales as parallel mediators indicate their relative importance, individually accounting for the associations between perfectionist groups and distress levels, and highlight the unique beneficial characteristics of Self-Kindness and unbeneficial characteristics of Isolation and Over-Identification above and beyond other subscales. While the self-compassion subscales are intercorrelated (with the highest r = .72 in this study), Common Humanity and Mindfulness as parallel mediators did not significantly and independently explain group differences in any areas of distress when holding other subscales constant. In addition, Self-Judgment as a parallel mediator also did not significantly and independently explain the group differences in social anxiety and academic distress

domains. These findings seem to suggest a somewhat different nature of social anxiety and academic distress that may be more distinctively associated with other factors, such as evaluative concerns by others rather than self-judgment, whereas self-judgment is a unique predictor and a mediator for depression and generalized anxiety among perfectionist groups. The parallel mediation results using the tripartite model were further compared with the discrepancy model, controlling for High Standards among perfectionists. While the results were almost identical, the mediating roles of individual subscales and the total score of self-compassion were more strongly supported with the tripartite model. The adaptive/maladaptive classification appears to capture more nuanced, greater differences among perfectionists in their self-compassion facets as compared to the discrepancy model.

Past empirical findings indicate that, when facing difficulties, self-compassionate individuals are better able to regulate negative emotions by showing accurate self-appraisals without engaging in critical self-judgment or rumination (Leary et al., 2007), are more likely to focus on mastery goals than performance goals (Neff et al., 2005), and report greater motivation to improve themselves (Breines & Chen, 2012). Our findings further unfold this mechanism among perfectionists. Extending the study by Brenner et al. (2018), our results support relative and unique contributions of individual self-compassion elements in relation to distress domains. It can be inferred that adaptive perfectionists are more likely to be self-compassionate when faced with their shortcomings, of note is their ability to treat themselves with kindness without overidentification and isolation, resulting in lower psychological distress across all domains. Our results did not indicate full mediation; hence, other factors such as cognitive causal attributes (Weiner, 1979), motivational attributes (fear of failure vs. hope of success; Stoeber & Becker, 2008), and types of goals (rigid vs. flexible; Hamachek, 1978; performance vs. mastery; Neff, et al., 2005) may further explain their healthy and unhealthy characteristics. For instance, while pursuing extremely high goals, adaptive perfectionists may be able to set more flexible goals as compared to rigid goals of maladaptive perfectionists, leading to lower psychological distress.

Limitations

Despite the strengths of our study, several limitations should be noted. First, causality between variables cannot be established in the cross-sectional design. Second, the tripartite model which uses the categorical classification has its limitations despite that it allows researchers to explore both adaptive and maladaptive perfectionists and accounts for the combined characteristics of the PS and PC dimensions. Therefore, the

discrepancy model was further tested in our study to compare the results with the tripartite model. Third, although participants were fairly diverse, they were recruited from a single university that promotes an academically rigorous culture. In addition, Asian American and international students were over-represented by 10% and 5% points, respectively, which may limit the generalizability of our findings. However, having a large diverse sample as a strength, demographic variables were examined in our preliminary analyses and controlled for as covariates. In addition, our mediation analyses by subgroups provides evidence that our findings are supported across various ethnic and international student groups, as well as the culturally specific finding with Latinx students.

Implications for Practice, Advocacy, Education, Training, and Research

Our findings offer important implications for student mental health. A major obstacle among perfectionists is to change their perfectionistic expectations that they highly value. In addition, maladaptive perfectionists are often reluctant to abandon their excessive performance concerns, such as self-criticism, with a belief that being less self-critical would result in lower achievement. They are more likely to accept practicing self-compassion if they learn about adaptive perfectionists who hold high standards and self-compassionate mindsets when facing difficulties. For example, psychoeducation to students who are struggling with perfectionism can include explaining the two dimensions of perfectionism and the detrimental effect of hypercritical performance concerns on their psychological well-being when combined with unrealistically high goals. Practicing and cultivating specific facets of self-compassion to combat maladaptive aspects of perfectionism can be implemented in traditional therapeutic interventions (Barnard & Curry, 2011; Kirby 2017), outreach activities, workshops (Finlay-Jones, 2017; Germer & Neff, 2019; Seekis et al., 2020), and online self-help resources (Krieger et al., 2016) to reach the larger student populations. University programming that encourages a campus culture where student high standards are promoted and goals are supported alongside messages of self-compassion would be beneficial for student mental health.

As implications for training, psychology graduate programs can include the topic of perfectionism as a transdiagnostic trait that has been found to be prevalent across various psychological conditions (Blatt, 1995; Fletcher et al., 2019). Perfectionism is a multifaceted and multicategorical construct that has other facets besides its higher-order dimensions. Students in training would likely benefit from learning about those dimensions/facets, adaptive and

maladaptive characteristics, and targeted interventions for perfectionism, including self-compassion practice.

Our findings offer several directions for future research. A pilot study conducted by James and Rimes (2018) provides clinical evidence that self-compassion practice is effective and greater self-compassion is attainable for maladaptive perfectionists. Expanding our findings of self-compassion as a significant adaptive factor for perfectionists, longitudinal studies are needed to assess the actual and relative effectiveness of self-compassion practice over time for maladaptive perfectionists. Implications of perfectionism for one's mental health differ among various populations, such as African American youth (Lambert et al., 2014) and people with chronic health conditions (Smith & Arnett, 2013). Our results support both universal and culturally specific aspects of perfectionism. Future research is needed to address perfectionism in multicultural contexts.

Conclusion

The purpose of this study was to examine the mediating role of self-compassion and its individual facets among adaptive and maladaptive perfectionists in relation to commonly reported psychological distress domains among university students. Supporting the tripartite model, our findings indicate that adaptive perfectionists tend to be psychologically healthier than maladaptive perfectionists and that self-compassion plays a significant role in this difference. Self-compassion appears to have adaptive functioning for perfectionists who inevitably need to accept their imperfection. Our study highlights the need for research to examine the combined characteristics of the perfectionism dimensions and the importance of self-compassion practice for students who struggle with perfectionism.

Declaration of Conflicting Interests

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