



# Self-critical perfectionism and depressive symptoms: Low self-esteem and experiential avoidance as mediators

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## ABSTRACT

This study of community adults ( $N = 210$ ) aimed to gain a better understanding of the links among self-critical (SC) perfectionism, self-esteem, experiential avoidance, and depressive symptoms. Participants completed self-report questionnaires assessing perfectionism dimensions, self-esteem, experiential avoidance, and depressive symptoms. Confirmatory factor analysis supported SC perfectionism, self-esteem, experiential avoidance, and depressive symptoms as distinct, but related, constructs. Structural equation modeling (SEM) demonstrated that the relation between SC perfectionism and depressive symptoms was mediated by lower self-esteem. SEM also showed that experiential avoidance independently mediated the relation between SC perfectionism and depressive symptoms, controlling for the effects of lower self-esteem. These results distinguish SC perfectionism from lower self-esteem by demonstrating that individuals with higher SC perfectionism have a unique propensity toward experiential avoidance, which, in turn, incrementally explains why they experience higher levels of depressive symptoms.

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## 1. Introduction

In recent decades, there has been a focus on exploring cognitive–personality factors such as perfectionism that are thought to increase vulnerability to depression (see Egan, Wade, & Shafran, 2011). Although perfectionism has been conceptualized and measured in different ways, factor analytic studies have consistently yielded two higher-order dimensions of perfectionism, which we refer to as personal standards (PS) perfectionism and self-critical (SC) perfectionism, that encompass the diverse conceptualizations of this construct (see Dunkley, Blankstein, Masheb, & Grilo, 2006). PS perfectionism involves setting and striving for excessively high goals and standards for the self. SC perfectionism involves constant and harsh self-scrutiny and critical self-evaluation of one's own behavior, and continuous worry about others' approval, criticism, and rejection (see Dunkley, Zuroff, & Blankstein, 2003). While PS perfectionism is often unrelated to depressive symptoms, SC perfectionism consistently exhibits a strong relation with depressive symptoms (e.g., Dunkley et al., 2006; Stoeber & Otto, 2006). This strong consistent relation between SC perfectionism and depressive symptoms has inspired several studies to investigate possible mediating mechanisms. The present study examined lower self-esteem and experiential avoidance as mediators of this relation.

Lower self-esteem, which represents a global negative appraisal of the self (Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995), has received attention as a potential mediator in the relation between SC perfectionism and depressive symptoms. Previous clinical perspectives have linked SC perfectionism and self-esteem (Hamachek, 1978; Horney, 1950). It has been posited that self-critical evaluations of the self maintain the perceived gap between an individual's ideal self and their actual self, resulting in experiences of low self-esteem. Previous studies using structural equation modeling (SEM) found support for lower self-esteem as an important mediator that partially explained the relation between SC perfectionism and depressive symptoms in college student populations (Blankstein, Dunkley, & Wilson, 2008; Rice, Ashby, & Slaney, 1998) and in a sample of binge eating disorder patients (Dunkley & Grilo, 2007). As these previous studies supported self-esteem only as a partial mediator in the relation between SC perfectionism and depressive symptoms, research is needed to establish which other maladaptive characteristics of SC perfectionism explain its unique association with depressive symptoms.

SC perfectionism differs conceptually from low self-esteem as it involves a critical and harsh self-evaluation relating to feelings of failure to live up to one's own or others' expectations (Dunkley & Grilo, 2007). It has been posited that these unique characteristics of individuals with higher SC perfectionism may serve as motivation to avoid feelings, thoughts, or situations of failure and disappointment (Santanello & Gardner, 2007). Accordingly, experiential avoidance is one potential mediating mechanism that might further explain the relation between SC perfectionism and depressive symptoms. Experiential avoidance

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can be broadly defined as an individuals' unwillingness to remain in contact with uncomfortable internal experiences, such as distressing thoughts, feelings, and sensations, and involves attempts to avoid these experiences and situations that produce them (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). It has been suggested that individuals, particularly those with higher SC perfectionism, may engage in experiential avoidance in order to regulate feelings of low self-esteem (Santanello & Gardner, 2007). In addition, the desire to escape from unpleasant emotional states that are associated with discrepant and self-critical views of the self may independently contribute to a greater use of experiential avoidance to escape from negative self-awareness (Heatherton & Baumeister, 1991). Individuals with higher SC perfectionism are thought to adopt a helplessness orientation when faced with obstacles, which contributes to their tendency to engage in avoidant types of coping (see Dunkley et al., 2003).

Research has shown experiential avoidance to be related to various negative outcomes, including depression (e.g., Gámez et al., 2011). Findings suggest that emotional avoiders have a greater tendency toward experiences of depressive symptoms, particularly when they engage in thought suppression (Wegner & Zanakos, 1994). In fact, attempts to control or avoid internal experiences may actually increase these unwanted feelings and thoughts.

Santanello and Gardner (2007) examined experiential avoidance, which reflects a broader dispositional conceptualization of avoidance as compared with other constructs that focus on one specific aspect of avoidance (e.g. avoidant coping). They found that experiential avoidance partially mediated the relationship between maladaptive perfectionism and worry. A number of other studies have shown that avoidant coping mediates the relation between SC perfectionism and depressive symptomatology (e.g., Dunkley, Blankstein, Halsall, Williams, & Winkworth, 2000; Dunkley et al., 2003; Noble, Ashby, & Gnilka, 2014). Therefore, there is clear evidence that individuals with higher SC perfectionism have a tendency toward avoidance, which can augment and maintain their negative affect and depressive symptoms.

The main goal of the present study was to gain a better understanding of the links among SC perfectionism, self-esteem, experiential avoidance, and depressive symptoms in a sample of community adults. Fig. 1 presents the hypothesized mediational model of the relation between SC perfectionism and depressive symptoms as follows: (1) SC perfectionism would be related to both lower self-esteem and experiential avoidance; (2) lower self-esteem would be related to experiential avoidance; and (3) lower self-esteem and experiential avoidance would be related to depressive symptoms. We expected that both lower self-esteem and experiential avoidance would mediate the relation between SC perfectionism and depressive symptoms. Finally, it was hypothesized that experiential avoidance would emerge as a unique characteristic associated with SC perfectionism that further explains why SC perfectionism is consistently related to depressive symptoms over and above lower self-esteem.

## 2. Method

### 2.1. Participants

Participants included 210 English- and French-speaking community adults holding paid employment, who were recruited through newspaper, bulletin, and internet advertisements in order to obtain a representative community sample from a bilingual North American city. Of the 210 participants, 125 participants (40 male, 85 female) completed the English version of the questionnaires, whereas 85 participants (34 male, 51 female) completed the French version of the questionnaires. The results of a T test revealed no significant difference in average age between English-speaking ( $M = 39.02$ ,  $SD = 14.91$ ) and French-speaking ( $M = 40.65$ ,  $SD = 12.60$ ) participants. Similar proportions of English-speaking (79%) and French-speaking (80%) participants had graduated from college or university. A larger proportion of French-speaking participants (85%) than English-speaking participants (58%) were of European descent. On the other hand, larger proportions of English-speaking participants were of Asian (14%), East Indian (6%), and Aboriginal (2%) descent, whereas there were not any French-speaking participants of these ethnicities. There were similarly small proportions of English- and French-speaking participants of South American (7%, 6%), African (4%, 5%), Middle Eastern (5%, 2%), multi-ethnic (3%, 1%), and other (1%, 1%) descent.

### 2.2. Procedure

Participants completed a package of questionnaires during a 1.5 to 2-hour lab session assessing measures of perfectionism, self-esteem, experiential avoidance, and depressive symptoms. Participants were compensated \$25 to complete the questionnaires.

### 2.3. Measures

#### 2.3.1. SC and PS perfectionism

SC and PS perfectionism latent factors were obtained using combinations of indicators from the 35-item Frost Multidimensional Perfectionism Scale (FMPS; Frost, Marten, Lahart, & Rosenblate, 1990), 45-item Hewitt and Flett Multidimensional Perfectionism Scale (HMPS; Hewitt & Flett, 1991), and 23-item Revised Almost Perfect Scale (APS-R; Slaney, Rice, Mobley, Trippi, & Ashby, 2001). Based on previous factor analytic studies (e.g., Dunkley, Blankstein, & Berg, 2012; Stoeber & Otto, 2006), FMPS concern over mistakes, HMPS socially prescribed perfectionism, and APS-R discrepancy subscales were used as indicators of the latent factor of SC perfectionism. PS perfectionism was indicated by the FMPS personal standards, HMPS self-oriented perfectionism, and APS-R high standards subscales. The PS perfectionism latent variable was included in supplementary measurement model analyses. The reliability and validity of the FMPS (Frost et al., 1990), HMPS (Hewitt & Flett,

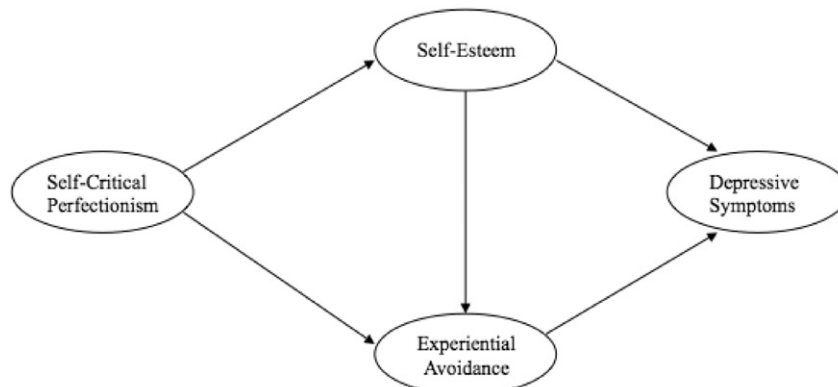


Fig. 1. Hypothesized structural model relating self-critical perfectionism, self-esteem, experiential avoidance, and depressive symptoms.

1991), and APS-R (Slaney et al., 2001) have all been well established. Available French translations were used for French-speaking participants, and previous studies have demonstrated comparable reliability and validity to the original English versions (see Dunkley et al., 2012).

2.3.2. Rosenberg Self-Esteem Scale

(RSES; Rosenberg, 1979). The 10-item RSES is a widely used measure of global self-esteem, with higher scores indicating a global positive view of the self. The scale has established adequate internal consistency and validity across diverse samples (see Rosenberg, 1979). The French version of the RSES has demonstrated comparable reliability and validity, and was used for French-speaking participants (Vallieres & Vallerand, 1990). In order to control for measurement error, two 5-item parcels were created to serve as indicators of the self-esteem latent factor for the measurement and structural models, consistent with Dunkley and Grilo (2007). These two 5-item parcels correspond to the self-assessment and self-acceptance subscales of the RSES identified by Tafarodi and Milne (2002).

2.3.3. Multidimensional Experiential Avoidance Questionnaire

(MEAQ; Gámez et al., 2011). The MEAQ is a 62-item measure of experiential avoidance (EA) that comprises six subscales. The behavioral avoidance and distress aversion subscales that have been found to reflect the core features of the higher-order EA construct were used as the two indicators of the experiential avoidance latent factor (see Gámez et al., 2011). The behavioral avoidance subscale (11 items) assesses situational avoidance of physical discomfort and distress, whereas the distress aversion subscale (13 items) captures nonacceptance of or negative attitudes toward distress. The subscales have demonstrated good reliability and validity (Gámez et al., 2011). Monestès, Baeyens, Cheval, and Villatte (2012) French translation of the MEAQ was administered to participants completing the study in French.

2.3.4. Beck Depression Inventory

(BDI; Beck & Steer, 1987). The BDI is a 21-item measure of depression symptoms that was used to assess the severity of current depressive symptoms over the last week. The BDI is a widely used measure with substantial support for its internal consistency and validity across a variety of samples (Beck, Steer, & Garbin, 1988). Bourque and Beaudette's (1982) French translation of the BDI was administered to French-speaking participants. The internal consistency and validity of the French BDI has been found to be similar to the original English version (Bourque & Beaudette, 1982). To control for measurement error, we constructed three distinct 7-item parcels by selecting every third item of the BDI, consistent with Dunkley and Grilo (2007). The parcels then served as three indicators of the depressive symptoms latent factor

in the measurement and structural models. The alpha coefficients for the first, second, and third indicators were .62, .70, and .67, respectively, in the present study.

3. Results

3.1. Descriptive statistics

The means and standard deviations for the perfectionism, self-esteem, experiential avoidance, and depressive symptoms measures were comparable to those found previously in nonclinical samples. T-tests revealed no differences in any mean scores on the indicators of these variables between participants who completed the English version of the questionnaires and those who completed the French version of the questionnaires. The internal consistencies and intercorrelations among the measures for the English and French participants are presented in Table 1. A multiple groups approach to test invariance of the covariance matrices between English and French community participants was performed using Analysis of Moment Structures Version 5.0 (AMOS 5.0; Arbuckle, 2003). The covariances among the indicators of perfectionism, self-esteem, experiential avoidance, and depressive symptoms for participants completing the English version of the questionnaires were constrained to be equal to those for participants completing the French version. The fit of this constrained model was compared with the fit of a model in which the covariances were freely estimated between English and French participants. The nonsignificant difference between the constrained model and the freely estimated model,  $\chi^2_{diff} (55, n = 210) = 40.54, ns$ , suggested that the correlations among variables were comparable between English and French participants.

3.2. Measurement model

Confirmatory factor analysis (CFA) was conducted using AMOS 5.0 to test the measurement model, which consisted of four latent variables (self-critical perfectionism, self-esteem, experiential avoidance, depressive symptoms), each with two or more indicators. The measurement model was fit to the data and produced the following acceptable fit indices:  $\chi^2 (29, N = 210) = 63.29, p < .001; \chi^2/df = 2.18; GFI = .94; IFI = .98; CFI = .97; RMSEA = .075$ . Convergent validity was supported for the measures, as factor loadings ranged from .75 to .99 and all were highly significant at the  $p < .001$  level. The latent variables were all strongly interrelated with correlations ranging from |.48| to |.74| ( $p < .001$ ). A supplementary measurement model was tested with PS perfectionism, given that it is highly correlated with SC perfectionism. As expected, PS perfectionism was unrelated to self-esteem, experiential avoidance, and

Table 1 Intercorrelations for measures of perfectionism, self-esteem, experiential avoidance, and depressive symptoms.

Variables	1	2	3	4	5	6	7	8	9	10	11
1. Discrepancy	<b>.94 .94</b>	.75***	.68***	.29**	.49***	.34**	-.55***	-.66***	.55***	.44***	.59***
2. CM	.68***	<b>.89 .91</b>	.72***	.45***	.60***	.48***	-.46***	-.55***	.40***	.32**	.51***
3. Social Presc.	.57***	.65***	<b>.83 .87</b>	.43***	.59***	.35**	-.35**	-.47***	.51***	.48***	.44***
4. Pers. Stds.	.29**	.47***	.39***	<b>.81 .85</b>	.73***	.81***	.13	.04	.10	.15	.06
5. Self-Orient.	.38***	.50***	.38***	.63***	<b>.88 .91</b>	.75***	-.01	-.14	.32**	.31**	.24*
6. High Stds.	.26**	.37***	.24**	.77***	.69***	<b>.88 .88</b>	.12	.03	.16	.17	.15
7. Self-Asses.	-.57***	-.42***	-.27**	.13	-.01	.17	<b>.79 .80</b>	.85***	-.39***	-.23*	-.59***
8. Self-Acc.	-.63***	-.54***	-.42***	.05	-.08	.09	.85***	<b>.83 .81</b>	-.53***	-.41***	-.68***
9. Beh. Avoid.	.25**	.22*	.23*	-.10	.03	-.12	-.26**	-.32***	<b>.80 .86</b>	.80***	.55***
10. Distr. Aver.	.35***	.30**	.47***	.08	.18*	.04	-.29**	-.37***	.61***	<b>.87 .88</b>	.45***
11. BDI total	.46***	.34***	.39***	-.06	.08	-.01	-.63***	-.67***	.25**	.35***	<b>.86 .87</b>

Note. English participant correlations are below the diagonal; French participant correlations are above the diagonal. Internal consistencies are in bold on the diagonal, with English participant alphas on the left and French participant alphas on the right. CM = concern over mistakes. Social Presc. = Socially Prescribed Perfectionism. Pers. Stds. = Personal Standards. Self-Orient. = Self-Oriented Perfectionism. High Stds. = High Standards. Self-Asses. = Self-Assessment. Self-Acc. = Self-Acceptance. Beh. Avoid. = Behavioral Avoidance. Distr. Aver. = Distress Aversion. BDI = Beck Depression Inventory.

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

depressive symptoms, which supported the decision to not include PS perfectionism in the hypothesized structural model.

### 3.3. Structural model

SEM was used to test the hypothesized relations among SC perfectionism, lower self-esteem, experiential avoidance, and depressive symptoms. The fully mediated model (see Fig. 1), which constrained the path from SC perfectionism to depressive symptoms to zero, was estimated and resulted in the following excellent fit indices:  $\chi^2$  (30, N = 210) = 64.86,  $p < .001$ ;  $\chi^2/df = 2.16$ ; GFI = .94; IFI = .97; CFI = .97; RMSEA = .075; AIC = 114.86; BIC = 198.54. Next, the fully mediated model was compared with a partially mediated model, which estimated the path from SC perfectionism to depressive symptoms. The partially mediated model did not significantly improve the model fit,  $\chi^2_{diff}$  (1, N = 210) = 1.57, *ns*, and had a higher AIC value (115.29) and a higher BIC value (202.31) compared to the fully mediated model. Smaller AIC and BIC values are preferred (see Arbuckle, 2003), which supported the more parsimonious fully mediated model over the partially mediated model. Additionally, the path from SC perfectionism to BDI depressive symptoms was nonsignificant ( $\beta = .12$ ).

Next, the 95% confidence intervals of the specific indirect effects leading from SC perfectionism to depressive symptoms were tested. In order to test the significance of all the specific indirect effects in this study, Selig and Preacher (2008) web-based utility was used to derive confidence intervals for each indirect effect, which ranged from simple mediation to two sequential mediators. Their Monte Carlo Method generates and runs R code for simulating the sampling distribution of an indirect effect, and for each indirect effect, unstandardized estimates of each path, their standard errors, a 95% confidence interval (CI), and 20,000 repetitions were used. If the generated values of a 95% CI did not include zero, then the specific indirect effect was deemed significant at the  $p < .05$  level.

The 95% CIs from SC perfectionism to depressive symptoms supported the significance of the specific indirect effects of SC perfectionism to depressive symptoms through (1) self-esteem as a single mediator (.362, .535) and (2) experiential avoidance as a single mediator (.048, .101). On the other hand, the 95% CI (CI =  $-.060, 0.113$ ) of the indirect effect of SC perfectionism to depressive symptoms through self-esteem and experiential avoidance as two sequential mediators was

nonsignificant. Additionally, the 95% CI ( $-.162, .083$ ) did not support the indirect effect from self-esteem to depressive symptoms through experiential avoidance.

Fig. 2 presents the standardized factor loadings and parameter estimates for the paths of the final structural model. The mediation results can be clearly understood by considering the significant paths leading from SC perfectionism to depressive symptoms. First, lower self-esteem mediated the relationship between SC perfectionism and depressive symptoms. Second, experiential avoidance independently mediated the relationship between SC perfectionism and depressive symptoms, controlling for the effects of lower self-esteem.

Although Fig. 2 represents one plausible representation of the data, other plausible alternative models were considered. For instance, it is possible that SC perfectionism could mediate the effect of lower self-esteem on depressive symptoms. Accordingly, we tested an alternative model where the SC perfectionism to self-esteem path in the hypothesized model (see Fig. 1) was reversed in direction from self-esteem to SC perfectionism, a path from SC perfectionism to depressive symptoms was specified, and the path from self-esteem to depressive symptoms was constrained to zero. This alternative fully mediated model resulted in a worse fit to the data than the hypothesized model (Fig. 2),  $\chi^2$  (30, N = 210) = 107.44,  $p < .001$ ;  $\chi^2/df = 3.58$ ; GFI = .91; IFI = .94; CFI = .94; RMSEA = .11; AIC = 157.44; BIC = 241.12. Further, there was a greater proportion of variance in depressive symptoms left unaccounted for in the alternative fully mediated model (54%) than the hypothesized fully mediated model (43%). In addition, estimating the path from self-esteem to depressive symptoms in the alternative model resulted in an essentially identical fit as the hypothesized fully mediated model, but the direct relation between self-esteem and depressive symptoms remained strong ( $\beta =  $-.58, p < .001$ ) even when controlling for the effects of SC perfectionism and experiential avoidance. Therefore, the hypothesized model demonstrated greater explanatory value in fully explaining why SC perfectionism was related to depressive symptoms, whereas the alternative model provided a relatively weaker explanation of why lower self-esteem was linked to depressive symptoms.$

### 4. Discussion

The present study used SEM to examine the relationship between self-critical perfectionism, self-esteem, experiential avoidance, and

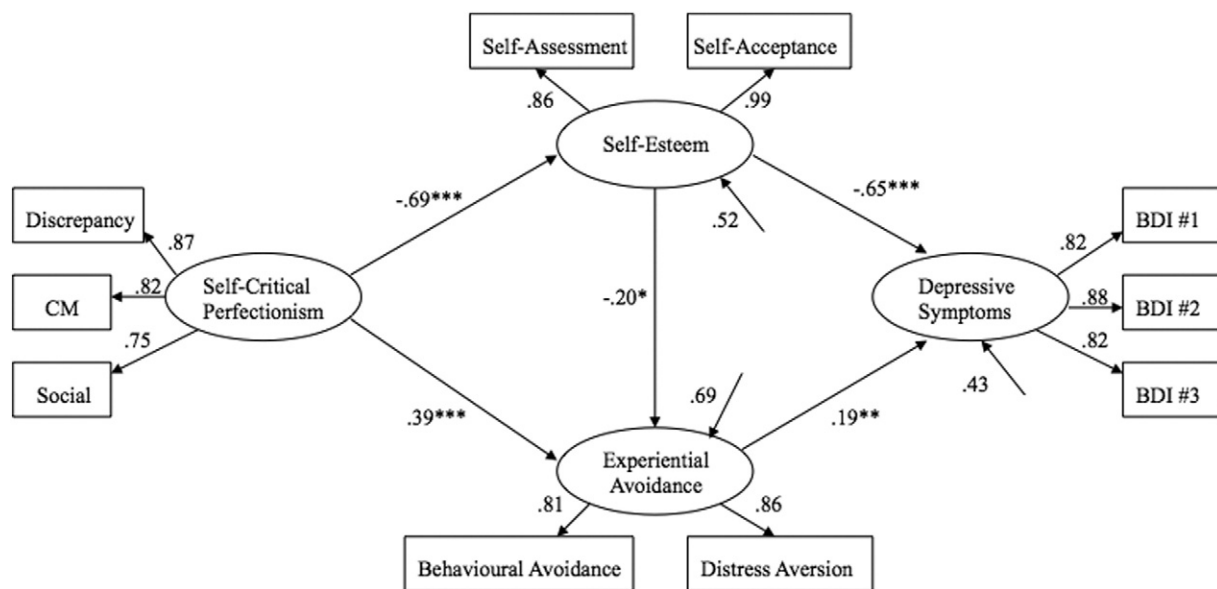


Fig. 2. Standardized factor loadings and parameter estimates of the final structural model relating self-critical perfectionism, self-esteem, experiential avoidance, and depressive symptoms. Latent variables are represented by oval-shaped line and measured variables are represented by rectangular-shaped line. The residual arrows denote the proportion of variance in the endogenous latent variable that was unaccounted for by other variables in the model. CM = concern over mistakes. Social = socially prescribed perfectionism. BDI = Beck Depression Inventory. Note. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ . All factor loadings are significant at  $p < .001$ .



depressive symptoms in a sample of community adults. An advantage of using SEM with a relatively large sample size ( $N = 210$ ) is that it allowed for the assessment of multiple relations to be tested simultaneously. Additionally, by using latent factors, we were able to control for measurement error in the mediators and obtain a more accurate estimate of their effects (Baron & Kenny, 1986). We used SEM to examine both low self-esteem and experiential avoidance as mediators in the relation between SC perfectionism and depressive symptoms in community adults. We found that SC perfectionism was significantly indirectly related to depressive symptoms through low self-esteem and experiential avoidance.

The present study replicated and extended previous findings (e.g., Dunkley & Grilo, 2007; Rice et al., 1998) by supporting lower self-esteem as a mediator of the relation between SC perfectionism and depressive symptoms in a sample of community adults. Our findings are consistent with theory dating back to Horney (1950) stating that low self-esteem stems from perfectionistic individuals' perceived discrepancy between their ideal and actual self, and suggests that this finding applies across university students, community adults, and patients. Moreover, though SC perfectionism and low self-esteem are closely related constructs, these results indicate that the effects of SC perfectionism cannot be simply thought of in terms of low self-esteem. Our study found that experiential avoidance mediated the relation between SC perfectionism and depressive symptoms, controlling for the effects of low self-esteem. Furthermore, experiential avoidance did not mediate the relation between self-esteem and depressive symptoms, demonstrating that experiential avoidance is a unique maladaptive characteristic associated with SC perfectionism. The results suggest that experiential avoidance is not necessarily used to regulate feelings of low self-esteem. Rather, our findings indicate that experiential avoidance is used to deal or cope with the negative feelings associated with SC perfectionism, specifically the harsh self-scrutiny and perceived criticism from others that are key facets of SC perfectionism. Individuals with higher SC perfectionism may develop a pattern of escape, or avoidance, of aversive self-awareness in order to diminish the impact of self-critical thoughts and concerns about negative perceptions by others (see Santanello & Gardner, 2007).

The results indicate that higher levels of SC perfectionism were significantly associated with a greater tendency to experientially avoid distressing thoughts and feelings. This finding expands previous research that demonstrates this relation within more specific aspects or strategies of avoidance, such as avoidant coping (e.g., Dunkley et al., 2000, 2003; Noble et al., 2014). These results can be understood in relation to escape theory, where individuals can be motivated by a desire to escape from aversive self-awareness (Heatherton & Baumeister, 1991). Furthermore, the persistent use of experiential avoidance has been shown to be ineffective and potentially harmful in the long-term, leading to greater experiences of depressive symptoms and demonstrating that what we resist, persists (Hayes et al., 1996). The present results also extend previous models that found evidence for experiential avoidance as a mediator between maladaptive perfectionism and worry (see Santanello & Gardner, 2007) by demonstrating that experiential avoidance mediated the relationship between SC perfectionism and depressive symptoms.

A limitation of the current study is that the data are cross-sectional, which prevents causal statements. As causal relationships often go in both directions, future research should use a multi-wave longitudinal study to address questions of directionality. Additionally, this study's findings are based on retrospective summary questionnaires and are therefore susceptible to the recall biases and distortions inherent in this type of methodology. Replicating these findings using a repeated-measures methodology with less retrospection (e.g., daily diaries) would be beneficial (see Dunkley, Berg, & Zuroff, 2012). In addition, as this study relied on a global measure of self-esteem, future research should examine whether these findings extend to different domains of self-esteem (e.g., achievement, interpersonal; see Blankstein et al.,

2008). Finally, given that our study consisted of nonclinical community adults, it is possible that these findings may not generalize to clinical samples. Nevertheless, we can speculate that the mediational model proposed in this study is not specific to a community sample, given that similar findings have been shown in samples of undergraduate students (Santanello & Gardner, 2007; Rice et al., 1998) and binge eating disorder patients (Dunkley & Grilo, 2007).

In conclusion, this study clarifies the relations among self-critical perfectionism, self-esteem, experiential avoidance, and depressive symptoms. The findings highlight the importance of the mediators of lower self-esteem and experiential avoidance in explaining the relationship between SC perfectionism and depressive symptoms in a sample of community adults. This study illustrated that SC perfectionism is distinct from low self-esteem by demonstrating that experiential avoidance is a unique maladaptive characteristic associated with SC perfectionism in relation to depressive symptoms.

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## References

- Arbuckle, J. L. (2003). *AMOS 5.0*. Chicago, IL: Smallwaters.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182. <http://dx.doi.org/10.1037/0022-3514.51.6.1173>.
- Beck, A. T., & Steer, R. A. (1987). *Manual for the Beck Depression Inventory*. San Antonio, TX: Psychological Corporation.
- Beck, A. T., Steer, R. A., & Garbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: 25 years of evaluation. *Clinical Psychology Review*, 8, 77–100.
- Blankstein, K. R., Dunkley, D. M., & Wilson, J. (2008). Evaluative concerns and personal standards perfectionism: Self-esteem as a mediator and moderator of relations with personal and academic needs and estimated GPA. *Current Psychology*, 27, 29–61. <http://dx.doi.org/10.1007/s12144-008-9022-1>.
- Bourque, P., & Beaudette, D. (1982). Étude psychométrique du questionnaire de dépression de Beck auprès d'un échantillon d'étudiants universitaires francophones. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 14, 211. <http://dx.doi.org/10.1037/h0081254>.
- Dunkley, D. M., Berg, J. L., & Zuroff, D. C. (2012a). The role of perfectionism in daily self-esteem, attachment, and negative affect. *Journal of Personality*, 80, 633–663. <http://dx.doi.org/10.1111/j.1467-6494.2011.00741.x>.
- Dunkley, D. M., Blankstein, K. R., & Berg, J. (2012b). Perfectionism dimensions and the five-factor model of personality. *European Journal of Personality*, 26, 233–244. <http://dx.doi.org/10.1002/per.829>.
- Dunkley, D. M., Blankstein, K. R., Halsall, J., Williams, M., & Winkworth, G. (2000). The relation between perfectionism and distress: Hassles, coping, and perceived social support as mediators and moderators. *Journal of Counseling Psychology*, 47, 437–453. <http://dx.doi.org/10.1037/0022-0167.47.4.437>.
- Dunkley, D. M., Blankstein, K. R., Masheb, R. M., & Grilo, C. M. (2006). Personal standards and evaluative concerns dimensions of "clinical" perfectionism: A reply to Shafran et al. (2002, 2003) and Hewitt et al. (2003). *Behaviour Research and Therapy*, 44, 63–84. <http://dx.doi.org/10.1016/j.brat.2004.12.004>.
- Dunkley, D. M., & Grilo, C. M. (2007). Self-criticism, low self-esteem, depressive symptoms, and over-evaluation of shape and weight in binge eating disorder patients. *Behaviour Research and Therapy*, 45, 139–149. <http://dx.doi.org/10.1016/j.brat.2006.01.017>.
- Dunkley, D. M., Zuroff, D. C., & Blankstein, K. R. (2003). Self-critical perfectionism and daily affect: Dispositional and situational influences on stress and coping. *Journal of Personality and Social Psychology*, 84, 234–252. <http://dx.doi.org/10.1037/0022-3514.84.1.234>.
- Egan, S. J., Wade, T. D., & Shafran, R. (2011). Perfectionism as a transdiagnostic process: A clinical review. *Clinical Psychology Review*, 31, 203–212. <http://dx.doi.org/10.1016/j.cpr.2010.04.009>.
- Frost, R. O., Marten, P. A., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, 14, 449–468. <http://dx.doi.org/10.1007/BF01172967>.
- Gámez, W., Chmielewski, M., Kotov, R., Ruggero, C., & Watson, D. (2011). Development of a measure of experiential avoidance: The Multidimensional Experiential Avoidance Questionnaire. *Psychological Assessment*, 23, 692–713. <http://dx.doi.org/10.1037/a0023242>.

- Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology: A Journal of Human Behavior*, 15, 27–33.
- Hayes, S. C., Wilson, K. G., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996). Experiential avoidance and behavioral disorders: A functional dimensional approach to diagnosis and treatment. *Journal of Consulting and Clinical Psychology*, 64, 1152–1168. <http://dx.doi.org/10.1037/0022-006X.64.6.1152>.
- Heatherton, T. F., & Baumeister, R. F. (1991). Binge eating as escape from self-awareness. *Psychological Bulletin*, 110, 86–108. <http://dx.doi.org/10.1037/0033-2909.110.1.86>.
- 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. <http://dx.doi.org/10.1037/0022-3514.60.3.456>.
- Horney, K. (1950). *Neurosis and human growth: The struggle towards self-realization*. New York: Norton.
- Monestès, J. L., Baeyens, C., Cheval, S., & Villatte, M. (2012). *French translation of the Multidimensional Experiential Avoidance Questionnaire*. France: Centre Hospitalier Félix Guyon, Réunion.
- Noble, C. L., Ashby, J. S., & Gnilka, P. B. (2014). Multidimensional perfectionism, coping, and depression: Differential prediction of depression symptoms by perfectionism type. *Journal of College Counseling*, 17, 80–94. <http://dx.doi.org/10.1002/j.2161-1882.2014.00049.x>.
- Rice, K. G., Ashby, J. S., & Slaney, R. B. (1998). Self-esteem as a mediator between perfectionism and depression: A structural equations analysis. *Journal of Counseling Psychology*, 45, 304–314. <http://dx.doi.org/10.1037/0022-0167.45.3.304>.
- Rosenberg, M. (1979). *Conceiving the self*. New York: Basic Books.
- Rosenberg, M., Schooler, C., Schoenbach, C., & Rosenberg, F. (1995). Global self-esteem and specific self-esteem: Different concepts, different outcomes. *American Sociological Review*, 60, 141–156. <http://dx.doi.org/10.2307/2096350>.
- Santanello, A. W., & Gardner, F. L. (2007). The role of experiential avoidance in the relationship between maladaptive perfectionism and worry. *Cognitive Therapy and Research*, 31, 319–332. <http://dx.doi.org/10.1007/s10608-006-9000-6>.
- Selig, J. P., & Preacher, K. J. (2008, June). Monte Carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects [computer software] (Available from <http://quantpsy.org/>).
- Slaney, R. B., Rice, K. G., Mobley, M., Trippi, J., & Ashby, J. S. (2001). *The Almost Perfect Scale-Revised*. *Measurement and evaluation in counseling and development*, 34, 130–145.
- Stoeber, J., & Otto, K. (2006). Positive conceptions of perfectionism: Approaches, evidence, challenges. *Personality and Social Psychology Review*, 10, 295–319. [http://dx.doi.org/10.1207/s15327957pspr1004\\_2](http://dx.doi.org/10.1207/s15327957pspr1004_2).
- Tafarodi, R. W., & Milne, A. B. (2002). Decomposing global self-esteem. *Journal of Personality*, 70, 443–483. <http://dx.doi.org/10.1111/1467-6494.05017>.
- Vallieres, E. F., & Vallerand, R. J. (1990). Traduction et validation Canadienne-Française de l'échelle de l'estime de soi de Rosenberg. *International Journal of Psychology*, 25, 305–316. <http://dx.doi.org/10.1080/00207599008247865>.
- Wegner, D. M., & Zanakos, S. (1994). Chronic thought suppression. *Journal of Personality*, 62, 615–640. <http://dx.doi.org/10.1111/j.1467-6494.1994.tb00311.x>.