

Perfectionism and Interpersonal Orientations in Depression: An Analysis of Validation Seeking and Rejection Sensitivity in a Community Sample of Young Adults

Gordon L. Flett, Avi Besser, and Paul L. Hewitt

The current study was conducted to uniquely investigate the associations among trait perfectionism, perfectionistic self-presentation, validation seeking, rejection sensitivity, and depression in a community sample. The authors' primary purpose was to focus on interpersonal orientations as sources of vulnerability that could potentially account for when perfectionism is dysfunctional. A sample of 183 young adults from a community sample completed the Multidimensional Perfectionism Scale, the Perfectionistic Self-Presentation Scale, and measures of growth seeking, validation seeking, rejection sensitivity, and depressive symptoms. Analyses confirmed that validation seeking was associated positively with all of the perfectionism measures with particularly strong associations between validation seeking and perfectionistic self-presentation. As expected, socially prescribed perfectionism and perfectionistic self-presentation had positive associations with rejection sensitivity. Further analyses established that the associations between interpersonal perfectionism and depressive symptoms were mediated by validation seeking, and socially prescribed perfectionism interacted with high rejection sensitivity to predict higher depressive symptoms. Overall, findings indicate that perfectionists are ego-involved individuals who strive for perfection as a means of proving themselves, and they are hypersensitive to interpersonal cues indicating failure and lack of acceptance from others.

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It is now generally accepted that perfectionists are vulnerable individuals who tend to be at risk for a range of psychological difficulties (Ayearst, Flett, & Hewitt, 2012; Blatt, 1995; DiBartolo & Rendon, 2012). Consistent links with measures of maladjustment have been found between depression and various dimensions of maladaptive perfectionism such as concerns over mistakes and doubts about actions as described by Frost and colleagues (Frost & DiBartolo, 2002) and socially prescribed perfectionism as described by Hewitt and Flett (2002). While informant ratings have seldom been used in the perfectionism field, the association between maladaptive perfectionism and psychological distress is also evident based on peer ratings (Flett, Besser, & Hewitt, 2005).

An overarching goal of research in this area is to identify factors and processes associated with perfectionism that help account for these associations between perfectionism and depressive symptoms and illuminate the nature of perfectionism from a construct validity perspective. The current research continues in this tradition by examining individual differences in validation seeking and rejection sensitivity and evaluating their relevance to the links that trait perfectionism and perfectionistic self-presentation have with depressive symptoms.

We evaluated perfectionism according to an extended conceptual model outlined by Hewitt and Flett (2007). This model began with three trait dimensions described by Hewitt and Flett (1991): (a) self-oriented perfectionism; (b) other-oriented perfectionism; and (c) socially prescribed perfectionism. Self-oriented perfectionism is a trait dimension focused on exceptionally high personal standards and the excessive striving associated with trying to attain these standards. Other-oriented perfectionism is a trait dimension focused on demanding that others are perfect and being critical of them for not achieving impossible expectations. Finally, socially prescribed perfectionism is the belief or perception that others demand perfection

of the self. This sense that perfectionistic demands have been imposed on the self is one of the most deleterious forms of perfectionism.

These three dimensions were later supplemented by a focus on perfectionistic self-presentation (i.e., the need to seem perfect in public). This construct also has three facets (or components): perfectionistic self-promotion, avoiding displays of imperfection, and avoiding disclosures of imperfections (Hewitt et al., 2003, 2011). Perfectionistic self-promotion can be regarded as an idealized form of narcissism that reflects a need to seem perfect, while both the nondisclosure and the nondisplay of imperfections are highly defensive orientations focused on "damage control" designed to minimize mistakes and inadequacies in public. While perfectionistic self-presentation is correlated substantially with trait perfectionism, one or more self-presentational facets tend to account uniquely for distress once trait perfectionism is considered, and it has properties that distinguish it from trait perfectionism (Besser, Flett, & Hewitt, 2010a; Hewitt et al., 2011; MacKinnon & Sherry, 2012). Moreover, perfectionistic self-presentation is associated with stress reactions and defensive tendencies in clinical interview situations (Hewitt, Habke, Lee-Baggeley, Sherry, & Flett, 2008). Perfectionistic self-presenters in a clinical interview situation tend to have more negative evaluations of their performance, and they perceive that relative to other people, the clinician also had more negative views of their performance and liked them less (Hewitt et al., 2008). Our current interest in identifying the interpersonal orientations that underscore perfectionistic self-presentation is, in part, an attempt to understand the roots of these negative social appraisals. Accordingly, the personality constructs included in the current study (i.e., validation seeking, growth seeking, and rejection sensitivity) were selected due to their apparent role in depressive symptoms and their apparent relevance to interpersonal perfectionism.

Dykman (1998) proposed that vulnerability to depression is associated with elevated levels of validation seeking and reduced levels of growth seeking. Validation seeking is defined as a fundamental goal seeking orientation that is focused on a need to prove one's basic worth, competence, and likability. It reflects a sense of uncertainty about one's self-concept (Dykman, 1998). Growth seeking is defined as a goal orientation focused on learning, growth, self-improvement, and realizing one's full potential. Some evidence indicates that when it comes to validation seeking, the need to prove oneself stems, at least in part, from exposure to contingent parental regard (Friedman, Cooper, Chladek, & Rudy, 2007), and validation seeking is closely linked with the need to overcome feelings of inferiority (Gilbert et al., 2007). This validation seeking comes at a cost. Research has confirmed that validation seeking in particular is associated with depression and anxiety (e.g., Gilbert et al., 2007; Horvath, Bissix, Sumarah, Crouchman, & Bowdrey, 2008; Horvath & Wambolt, 2009), and validation seeking predicts increased dysphoria in response to an achievement setback (Lindsay & Scott, 2005). Moreover, this reaction was specific to validation seeking and was not associated with other vulnerability factors such as autonomy and sociotropy (Lindsay & Scott, 2005).

At present, relatively little is known about validation seeking and perfectionism. Accordingly, the current study investigated the relationships among dimensions of trait perfectionism, perfectionistic self-presentation, validation seeking, and growth seeking. A basic premise guiding our work is that many perfectionists lack a clear, certain, and positive sense of personal identity, so they develop a strong need to prove themselves in the eyes of other people, but they also need to prove their worth to themselves. A pervasive association between perfectionism and validation seeking would be in keeping with Adler's (1956) original claim that perfectionism reflects striving for superiority in order

to overcome feelings of inferiority. According to this interpretation, perfectionists have a need for recognition and approval that underpins their excessive striving, and this is tied to a sense of inferiority (also see Gilbert et al., 2007). This need to prove oneself and be validated may be chronic, however, because the possibility of being outperformed by others means that perfectionists cannot be complacent. This need for validation should be particularly evident among people high in perfectionism who are self-critical or self-doubting and need reassurance about their sense of worth. Validation seeking should be particularly predominant among people who are high in perfectionistic self-presentation and who tend to have high levels of public self-consciousness and a sense of being scrutinized by others. Indeed, an overarching goal for the perfectionistic self-presenter may be to foster an image designed to prove his or her worth and associated self-image goals.

To our knowledge, only one study thus far has examined dispositional perfectionism and levels of validation seeking and growth seeking. Hill, Hall, Appleton, and Murray (2010) examined self-oriented and socially prescribed perfectionism and levels of validation seeking and growth seeking in 150 young athletes. Hill et al. (2010) posited that perfectionistic athletes would be high in validation seeking because trait perfectionism is underscored by high levels of conditional self-worth and low unconditional self-acceptance (DiBartolo, Frost, Chang, LaSota, & Grills, 2004; Flett, Besser, Davis, & Hewitt, 2003; Hill, Hall, Appleton, & Kozub, 2008; Lundh, 2004; McArdle, 2009; Sturman, Flett, Hewitt, & Rudolph, 2009). It should be noted that Hill et al. (2010) used a modified version of the Goal Orientation Inventory (GOI; Dykman, 1998) adapted for sports contexts rather than the general measure used in the current study. Moreover, they focused on trait perfectionism (self-oriented and socially prescribed perfectionism). They found significant correlations between validation seeking and both self-oriented perfectionism ($r = .21$) and

socially prescribed perfectionism ($r = .52$). In addition, self-oriented perfectionism was associated significantly with growth seeking ($r = .31$) but was not associated significantly with socially prescribed perfectionism ($r = -.15$). These associations were reexamined in the current study. Our study differed in several key respects. We used the standard measure created by Dykman (1998), and we measured both trait perfectionism and perfectionistic self-presentation. Finally, our investigation also differed by using a community sample of young adults. The perfectionism field has not focused extensively on young adults and their ability to adapt to life experiences as they make the transition to adulthood, yet a focus on personal and interpersonal perfectionism in this period of life seems potentially quite important given that there will be substantial differences among young adults in their interpersonal and vocational experiences and outcomes.

Another primary goal of this study was to examine the extent to which a sensitivity to rejection underscores the perfectionism construct. The association between perfectionism and rejection sensitivity has seemingly not been examined at all in previous research. The sensitivity to rejection concept was first introduced by Mehrabian (1970), who went to great lengths, both conceptually and empirically, to distinguish rejection sensitivity from affiliative need (Mehrabian, 1976). Rejection sensitivity is defined in more contemporary work as a disposition to anxiously expect, perceive, and overreact emotionally to rejection (Downey & Feldman, 1996). Rejection sensitivity is conceptualized as a defensive motivational system that incorporates the attentional and perceptual processes underlying social information processing (for discussions, see Pietrzck, Downey, & Ayduk, 2005; Romero-Canyas, Downey, Berenson, Ayduk, & Kang, 2010). Rejection sensitivity has been linked empirically with risk of distress (Mellin, 2008), especially when people high in this personality disposition experience relationship stress (Chango, McElhaney, Allen, Schad, & Mar-

ston, 2012) and have relationships terminated by partners (Ayduk, Downey, & Kim, 2001).

Several sources converge to suggest that socially prescribed perfectionism and perfectionistic self-presentation should both be associated with sensitivity to rejection. At the conceptual level, Hewitt and Flett (2002) posited that individuals with socially prescribed perfectionism have a sense of negative predictive certainty in terms of their evaluation of the possibility of experiencing negative interpersonal events in the future. Empirical research indicates that socially prescribed perfectionism is accompanied by elevations in fear of negative evaluation (Hewitt & Flett, 1991). In addition, recent research has linked interpersonal perfectionism with a tendency to ruminate about negative interpersonal events and reports of more frequent negative social feedback (Nepon, Flett, Hewitt, & Molnar, 2011) and with greater interpersonal conflict (Mushquash & Sherry, 2012).

The current study tested the link between perfectionism and rejection sensitivity and the related hypothesis that people who are characterized jointly by high levels of interpersonal perfectionism and sensitivity to rejection should be particularly prone to experience depressive symptoms. The reasoning behind this prediction is that a heightened sensitivity toward negative feedback should amplify the levels of depressive symptoms experienced by people who perceive that they must be perfect or seem perfect in order to be accepted by other people. Why focus on socially prescribed perfectionism here rather than perfectionistic self-presentation or other trait perfectionism dimensions? Previously, Besser, Flett, and Hewitt (2010b) suggested in conceptual and empirical analyses of perfectionism and self-silencing that socially prescribed perfectionists are particularly high in the need for approval and strive to please others in order to avoid interpersonal rejection.

Finally, the current study also focused on validation seeking as a possible mediator

of the association between perfectionism and depression and rejection sensitivity as a moderator of this same association. Evidence of mediation was provided by Hill et al. (2010); they found that validation seeking mediated the association between socially prescribed perfectionism and burnout. Related research indicates that a construct similar to perfectionism (i.e., autonomy) is associated with validation seeking and validation seeking mediates the link between autonomy and depressive symptoms in a sample of women (Horvath et al., 2008). Accordingly, it was similarly hypothesized in the current study that validation seeking would mediate the link between interpersonal perfectionism and depressive symptoms.

METHOD

Participants

Our sample consisted of 183 Israeli community participants (92 men, 91 women) who were recruited from an area in southern Israel in which they were recruited. Their mean age was 24.23 years ($SD = 2.89$). Participants had an average of 12.37 years of formal education ($SD = 0.91$). Participants completed the questionnaire package individually.

Measures

Multidimensional Perfectionism Scale (MPS). The MPS (Hewitt & Flett, 1991) is a 45-item scale that measures levels of three distinct perfectionism dimensions: self-oriented perfectionism (e.g., "One of my goals is to be perfect in everything I do"); other-oriented perfectionism (e.g., "If I ask someone to do something, I expect it to be done flawlessly"); and socially prescribed perfectionism (e.g., "The better I do, the better I am expected to do"). Extensive research has demonstrated that the MPS is a multidimensional measure with high reliability and validity in

both student and clinical samples (Enns & Cox, 2002; Hewitt & Flett, 2004).

Perfectionistic Self-Presentation Scale (PSPS). The PSPS (Hewitt et al., 2003) is a 27-item measure assessing the need to appear perfect. It is composed of three subscales: perfectionistic self-promotion (e.g., "I strive to look perfect to others"); (b) nondisplay of imperfection (e.g., "I judge myself based on the mistakes I make in front of others"); and nondisclosure of imperfection (e.g., "Admitting failure to others is the worst possible thing"). The PSPS possesses good reliability and validity (Hewitt et al., 2003, 2008).

Goal Orientation Inventory (GOI). The GOI (Dykman, 1998) is a 36-item scale comprising a growth-seeking subscale and a validation-seeking subscale. The GOI requires respondents to make 7-point ratings of the extent to which they agree or disagree with each statement. Dykman (1998) did not report norms for the GOI subscales but did provide extensive data supporting their reliability and validity. The GOI is associated meaningfully with other related constructs such as the striving to avoid inferiority (Gilbert et al., 2007).

The Sensitivity to Rejection Scale (SRS). The SRS (Mehrabian, 1970, 1976) is a 24-item inventory that requires respondents to indicate their disagreement or agreement with a series of statements. Nine-point ratings are made with response options ranging from -4 to $+4$. The SRS has a high level of internal consistency and test-retest reliability (Mehrabian, 1976). Higher levels of sensitivity to rejection are associated with less flexible interpersonal attitudes, anxiety, and lack of dominance (Mehrabian, 1970, 1976).

Center for Epidemiological Studies-Depression Scale (CES-D). The CES-D (Radloff, 1977) is a 20-item measure assessing the present level of depressive symptoms in the general population. An emphasis is placed on affective (e.g., "I felt sad") and somatic

TABLE 1. Descriptive Statistics: Means for the Total Sample, Men, and Women

	Total (N = 183)		Women (n = 91)		Men (n = 92)	
	M	SD	M	SD	M	SD
Self Oriented Perfectionism (SOP)	70.22	15.58	71.55	15.80	68.90	15.33
Socially Prescribed Perfectionism (SPP)	50.39	13.89	48.92	14.77	51.85	12.89
Other Oriented Perfectionism (OOP)	59.33	8.16	59.25	7.90	59.41	8.44
Perfectionism Self-Promotion (PSP)	38.62	11.43	37.12	12.46	40.11	10.16
Nondisplay of Imperfection (NDI)	39.00	10.96	39.74	11.39	38.28	10.54
Nondisclosure of Imperfection (NDSI)	22.45	8.47	20.71	8.49	24.16	8.13
Validation-Seeking (VS)	65.17	22.02	62.12	22.38	68.20	21.35
Growth-Seeking (GS)	86.51	18.24	86.03	17.04	86.99	19.45
Rejection Sensitivity (RS)	1.02	19.73	3.11	19.56	-1.05	19.78
Depressive Symptoms (CES-D)	17.19	10.85	18.46	11.66	15.92	9.89
% = > 16 cutoff		50.8%		52.7%		48.9%

** $p < .001$ (two-tailed).

(e.g., "I did not feel like eating; my appetite was poor") symptoms. The CES-D has exhibited acceptable reliability and validity (Radloff, 1977).

RESULTS

Overview of Data Analyses

We used the Kolmogorov-Smirnov test, the Lilliefors test, and the Shapiro-Wilk test to examine the normality of the distributions of the variables in the present study. The results of these tests indicated that the distributions of these measures were relatively normal ($p > .43$). We also examined multicollinearity among trait perfectionism and perfectionistic self-presentation scales, validation seeking and rejection sensitivity variables, and depression scores. Eigenvalues of the scaled and uncentered cross-products matrix, condition indices, and variance decomposition proportions, along with variance inflation factors and tolerances from multicollinearity analyses, indicated the absence of multicollinearity. We investigated whether rejection sensitivity moderated the relationship between the personality vulnerability factors of perfectionism and perfec-

tionistic self-presentation scales, and depressive symptoms using hierarchical multiple regressions with interactions represented by product terms (Aiken & West, 1991).

Finally, we investigated whether validation seeking mediates the associations between perfectionism and depression. We used Structural Equation Modeling (Hoyle & Smith, 1994) to investigate the proposed mediation model, following Baron and Kenny's (1986) criteria for mediation. Using this strategy for testing the mediational hypothesis, we first analyzed the direct associations between each of the personality vulnerability factors (i.e., in the first model, for the observed variable socially prescribed perfectionism, and in the second model, for the latent factor perfectionistic self-presentation defined by three observed scales) and depressive symptoms scores. Then we specified the models of the direct and indirect associations with validation seeking as the mediator. The following fit indices were used: the χ^2/df ratio, the root mean square error of approximation (RMSEA), the comparative fit index (CFI), and the non-normed fit index (NNFI). A model in which χ^2/df was ≤ 3 , CFI and NNFI were greater than .90, and the RMSEA index was between .00 and .08 (Hu & Bentler, 1999) was considered acceptable.

TABLE 2. Correlations Among Perfectionism and Validation Seeking and Rejection Sensitivity and Depressions

	1	2	3	4	5	6	7	8	9	10
1. Self Oriented Perfectionism (SOP)	—									
2. Socially Prescribed Perfectionism (SPP)	.46***	—								
3. Other Oriented Perfectionism (OOP)	.38***	.39***	—							
4. Perfectionism Self-Promotion (PSP)	.48***	.67***	.49***	—						
5. Nondisplay of Imperfection (NDI)	.29***	.53***	.44***	.77***	—					
6. Nondisclosure of Imperfection (NDSI)	.15*	.56***	.39***	.66***	.61***	—				
7. Validation Seeking (VS)	.32***	.57***	.37***	.61***	.59***	.44***	—			
8. Growth Seeking (GS)	.17*	-.23***	.02	-.10	-.20**	-.30***	-.16*	—		
9. Rejection Sensitivity (RS)	-.04	.23***	.24***	.29***	.50***	.36***	.30***	-.31***	—	
10. Depressive Symptoms (CES-D)	.12	.30***	.08	.18*	.27***	.15*	.32***	-.26***	.36***	—
α	.84	.79	.81	.86	.84	.84	.94	.88	.80	.90

Note. N = 183. *p < .05, two-tailed. **p < .01, two-tailed. ***p < .001, two-tailed.

TABLE 3. Hierarchical Multiple Regressions of MPS on Depressive Symptomatology: Moderational Effects of Rejection Sensitivity

Predictors	R	R ²	ΔR ²	β	t/F	p <
Step 1	.17	.03			1.84	<i>ns</i>
Gender				-.06	-.63	<i>ns</i>
Age				-.15	-1.68	<i>ns</i>
Education				.05	.59	<i>ns</i>
Step 2	.36	.13	+10%		6.61	.0001
SOP				-.03	-.03	<i>ns</i>
SPP				.34	4.12	.0001
OOP				-.05	-.60	<i>ns</i>
Step 3	.46	.21	+9%		19.09	.0001
RS				.32	4.37	.0001
Step 4	.51	.26	+5%		3.61	.01
SOP × RS				-.36	-1.06	<i>ns</i>
SPP × RS				.74	2.90	.004
OOP × RS				-.87	-1.85	<i>ns</i>

Note. Two-tailed tests. $N = 183$; $n = 91$ women and $n = 92$ men. $t = t$ value associated with β ; $F = F$ associated with the changes in R^2 ; SOP = self-oriented perfectionism; OOP = other-oriented perfectionism; SPP = socially prescribed perfectionism; RS = rejection sensitivity.

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We evaluated the proposed mediation models by studying the sampling variability of estimates of the indirect association using the bootstrap framework. We implemented this procedure in the direct and mediational models, which involved drawing 5,000 bootstrapping samples. We found that 100% of the bootstrap samples converged for all of the tested models. The two-sided 95% confidence intervals and the confidence intervals based on the bias-corrected (BC) bootstrap for the direct and indirect associations in these models were consistent with the conclusion that the direct and indirect associations are significantly different from zero (SE and two-sided 95% CI values based on the bias-corrected bootstrap are reported in parentheses). These results suggest that this procedure led to a stable estimate of the distributions. All analyses were performed using AMOS (Version 18.0.0; Arbuckle, 2009) and the maximum-likelihood method.

Descriptive Results and Correlational Analyses

The means and standard deviations for each of the measures for men, women, and the total sample are shown in Table 1. Table 2 presents the alphas and the correlations of the perfectionism construct and validation seeking and rejection sensitivity and depression. Correlations involving validation seeking showed that all six measures of perfectionism were associated significantly with validation seeking, with r s ranging from .32 to .61. Stronger correlations were found between validation seeking and socially prescribed perfectionism, perfectionistic self-promotion, and the nondisplay of imperfections. Rejection sensitivity was correlated positively with interpersonal trait perfectionism and all PSPS facets. Depressive symptoms were associated significantly with elevated levels of validation seeking and rejection sensitivity and lower levels of growth

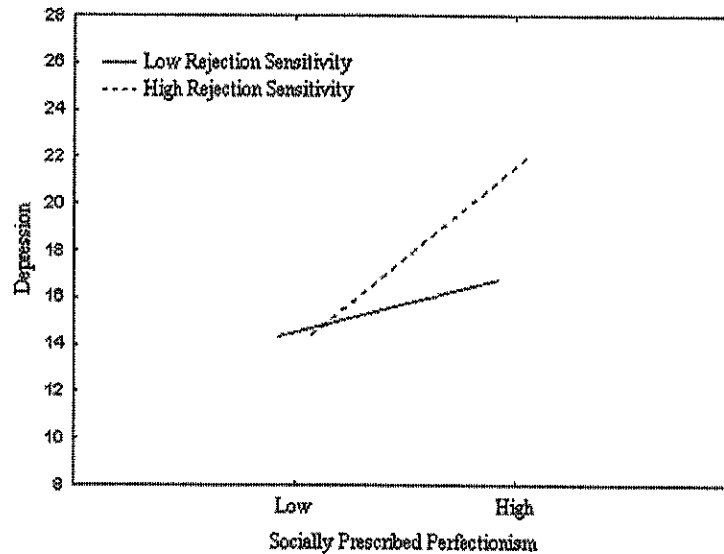


FIGURE 1. The relationships between socially prescribed perfectionism and depressive symptomatology for levels of rejection sensitivity.

seeking and with interpersonal perfectionism.

Moderational Analyses

Moderational analyses were conducted to test the prediction that rejection sensitivity moderates the association between interpersonal perfectionism and depression. As can be seen in Table 3, among the trait perfectionism scales, only socially prescribed perfectionism was uniquely and significantly associated with depression. Rejection sensitivity added significantly to the prediction of depression beyond perfectionism. Finally, the interaction of socially prescribed perfectionism and rejection sensitivity added significantly to the prediction of depression. The socially prescribed perfectionism \times rejection sensitivity interaction is presented in Figure 1. Here it is shown that the interaction effect qualifies the zero-order correlation between socially prescribed perfectionism and depression; participants high on socially prescribed perfectionism are significantly more vulnerable to depression if they also have elevated

sensitivity to rejection. Low levels of sensitivity to rejection were thus found to protect against (moderate) the association between high socially prescribed perfectionism and depression. Simple slope analysis indicated that the association between socially prescribed perfectionism and depression for high sensitivity to rejection ($\beta = .44, t = 4.61, p < .0001$) is significantly higher than for low sensitivity to rejection ($\beta = .10, t = 1.02, ns$). As can be seen in Table 4, there were no significant interactions of perfectionistic self-presentation with rejection sensitivity.

MEDIATIONAL ANALYSES

The next series of analyses examined whether validation seeking mediates the associations between perfectionism and depression.

Direct-Association Models

Direct-Association Models for Socially Prescribed Perfectionism. As expected (see Fig-

TABLE 4. Hierarchical Multiple Regressions of PSPS on Depressive Symptomatology: Moderational Effects of Rejection Sensitivity

Predictors	R	R ²	ΔR^2	β	<i>t</i> / <i>F</i>	<i>p</i> <
Step 1	.17	.03			1.84	<i>ns</i>
Gender				-.06	-.63	<i>ns</i>
Age				-.15	-1.68	<i>ns</i>
Education				.05	.59	<i>ns</i>
Step 2	.30	.09	+6%		3.97	.01
PSP				-.01	-.11	<i>ns</i>
NDSI				.24	1.99	.05
NDI				.03	.30	<i>ns</i>
Step 3	.40	.16	+7%		14.23	.0001
RS				.31	3.77	.0001
Step 4	.41	.17	+1%		.34	<i>ns</i>
PSP \times RS				.10	.24	<i>ns</i>
NDSI \times RS				.16	.61	<i>ns</i>
NDI \times RS				-.06	-.15	<i>ns</i>

Note. Two-tailed tests. $N = 183$; $n = 91$ women and $n = 92$ men. $t = t$ value associated with β ; $F = F$ associated with the changes in R^2 ; PSP = perfectionistic self-promotion; NDSI = nondisclosure of imperfection; NDI = nondisplay of imperfection; RS = rejection sensitivity.

ure 2A and also Table 2), socially prescribed perfectionism was significantly associated with depressive symptoms, $\beta = .30$, $t = 4.22$, $p < .0001$; $SE = 0.06$, BC 95% confidence interval (CI) [0.11, 0.36], $p < .001$. This model has zero degrees of freedom so fit could not be estimated.

Direct-Association Models for Perfectionistic Self-Presentation. This model (see Figure 3A) fit the observed data very well: $\chi^2(2) = 4.12$, $p > .13$, $\chi^2/df = 2.06$, NNFI = .99, CFI = .99, RMSEA = .07. As shown in Figure 2, perfectionistic self-presentation was significantly associated with depressive symptoms, $\beta = .24$, $t = 3.15$, $p < .002$; $SE = 0.11$, BC 95% CI [0.06, 0.48], $p < .01$.

The Mediating Model for Socially Prescribed Perfectionism. This is another model with zero degrees of freedom so fit could not be estimated. As expected (see Figure 2B and also Table 2), socially prescribed perfectionism was significantly associated with validation seeking, $\beta = .57$, $t = 9.43$, $p < .0001$; $SE = 0.10$, BC 95% CI [0.69, 1.10], $p < .001$, and this, in turn, was associated with depres-

sive symptoms, $\beta = .22$, $t = 2.60$, $p < .009$; $SE = 0.05$, BC 95% CI [0.004, 0.211], $p < .04$. The relationship between socially prescribed perfectionism and depressive symptoms was mediated by high levels of validation seeking, $SE = 0.048$, BC 95% CI [0.008, 0.199], $p < .03$, as indicated by the finding that, after the introduction of validation seeking as the mediator, the direct path from socially prescribed perfectionism to depressive symptoms significantly decreased in comparison with the direct-effects model, $\beta = .17$, $t = 2.04$, $p < .04$; $SE = 0.08$, BC 95% CI [-0.021, 0.305], $p > .10$.

The Mediating Model for Perfectionistic Self-Presentation. This model (see Figure 3B) fit the observed data very well: $\chi^2(4) = 5.38$, $p > .25$, $\chi^2/df = 1.34$, NNFI = .99, CFI = 1.0, RMSEA = .04. As shown in Figure 3B, perfectionistic self-presentation was significantly associated with validation seeking, $\beta = .67$, $t = 9.88$, $p < .0001$; $SE = 0.20$, BC 95% CI [1.21, 1.98], $p < .0001$, and this, in turn, was associated with depressive symptoms, $\beta = .29$, $t = 2.87$, $p < .004$; $SE = 0.06$, BC 95% CI [0.014, 0.25], $p < .03$. The relationship

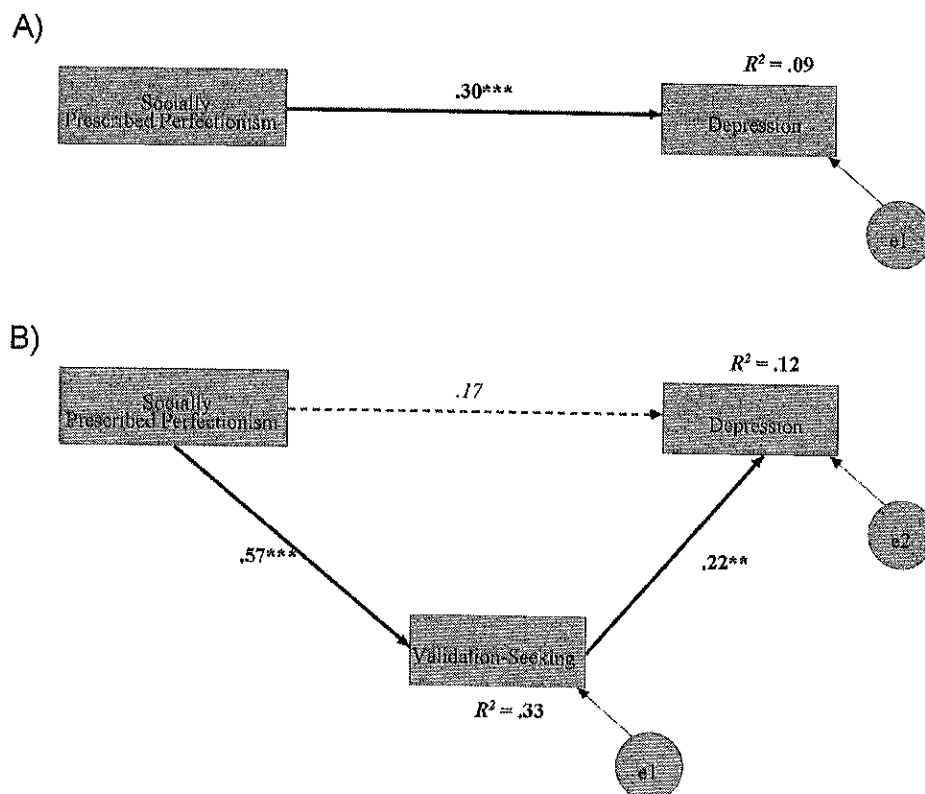


FIGURE 2. The direct (A) and mediating (B) association models for socially prescribed perfectionism. Rectangles indicate measured variables. Small circles reflect residuals (e). Bold numbers above or near endogenous variables represent the amount of variance explained (R^2). Unidirectional arrows depict hypothesized directional links. Standardized maximum likelihood parameters are used. Bold estimates are statistically significant. $**p < .01$, $***p < .001$ (two-tailed).

between perfectionistic self-presentation and depressive symptoms was mediated by high levels of validation seeking, $SE = 0.091$, BC 95% CI [0.036, 0.395], $p < .03$, as indicated by the finding that, after the introduction of validation seeking as mediator, the direct path from perfectionistic self-presentation to depressive symptoms significantly decreased in comparison with the direct-effects model, $\beta = .05$, $t = 0.48$, $p > .63$; $SE = 0.15$, BC 95% CI [-0.22, 0.39], $p > .69$.

DISCUSSION

The current study clarified the interpersonal needs and orientations that underscore perfectionism and perfectionistic self-

presentation in a community sample of young adults. Analyses established that validation seeking was associated pervasively with all dimensions of trait perfectionism and facets of perfectionistic self-presentation. The pattern of correlations established that particularly strong associations were found between validation seeking and perfectionistic self-presentation, attesting to the extreme need for public recognition and approval that is needed by those people who are psychologically invested in presenting an image of flawlessness to others. Clearly, perfectionistic self-presenters are not simply presenting a facade to avoid negative feedback from others and feelings of shame and embarrassment; they are also seeking a sense of validation due to an uncertain sense of self that seems very much in keeping with Horney's (1942)

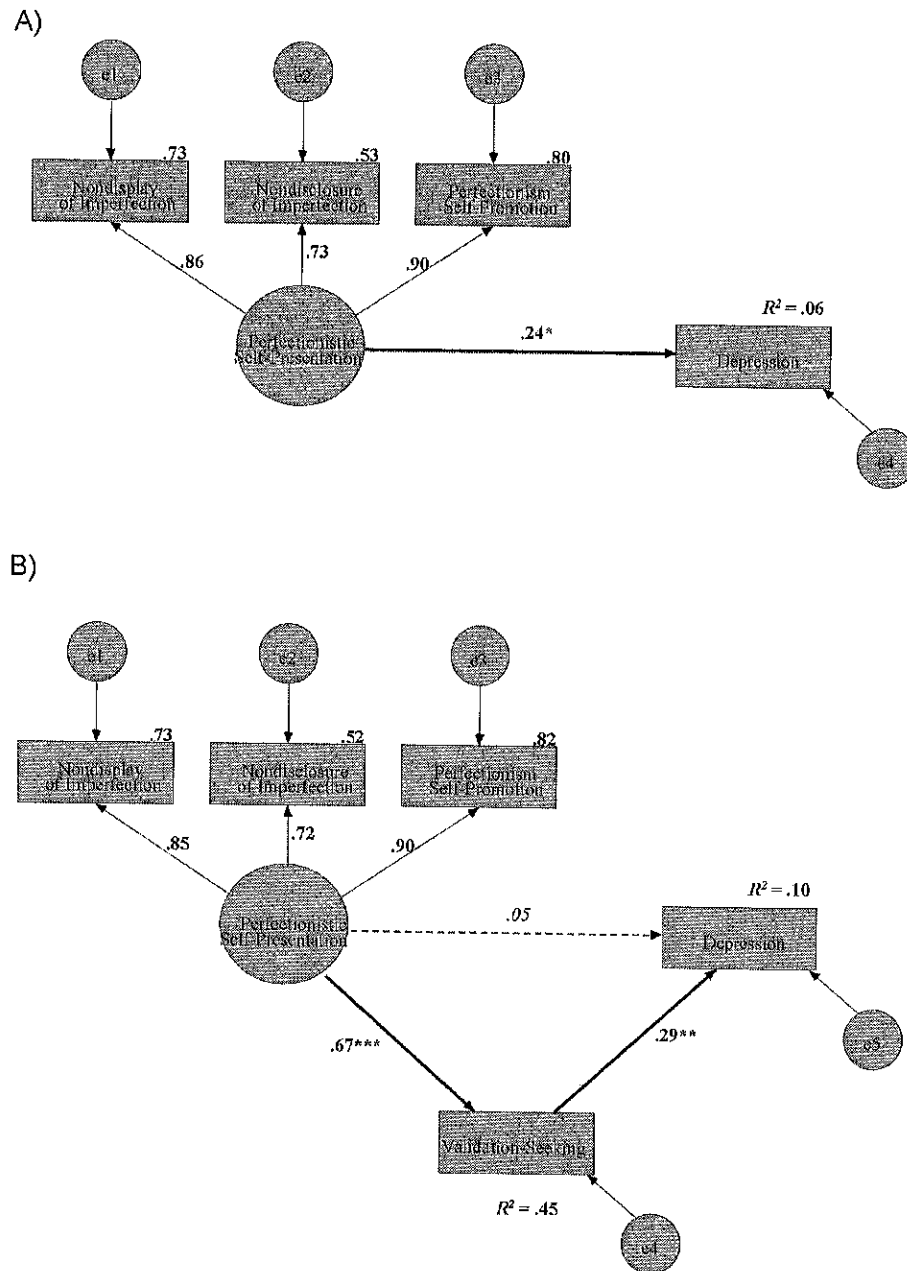


FIGURE 3. The direct (A) and mediating (B) association models for perfectionistic self-presentation. Rectangles indicate measured variables and the large circles represent latent constructs. Small circles reflect residuals (e). Bold numbers above or near endogenous variables represent the amount of variance explained (R^2). Unidirectional arrows depict hypothesized directional links. Standardized maximum likelihood parameters are used. Bold estimates are statistically significant. * $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed).

classic description of neurotic needs such as the need for approval and recognition and the need for prestige. Our correlational results suggest that the tendency for perfectionistic self-presenters to be invested in validation seeking is accompanied by diminished interest in growth-seeking tendencies; we found that two facets of perfectionistic self-presentation were associated negatively with growth seeking, which suggests that perfectionistic self-presenters have a defensive focus with little investment in activities associated with learning, self-improvement, and reaching their potential. This set of findings illustrates that certain individuals want to seem perfect but are unwilling or unable to engage in activities that can potentially reduce self-discrepancies.

As was the case in the original Hill et al. (2010) study, we found that self-oriented perfectionism was associated jointly with validation seeking and growth seeking. While Hill et al. found a stronger association between self-oriented perfectionism and growth seeking, we found a much stronger association between self-oriented perfectionism and validation seeking. Perhaps the stronger associations between perfectionism and validation seeking found here are, in part, a reflection of our focus on young adults who are still seeking to establish and solidify their sense of personal identity and the life experiences they have encountered thus far. Clearly, more research is needed on the experiences and adjustment levels of goal-directed perfectionists as transitions are experienced in the early adulthood period.

Our results have clear implications for diathesis–stress interpretations of perfectionism and depression and the emphasis of these models on examining perfectionism within the context of life events such as personal failures (Hewitt & Flett, 2002). People with high levels of validation seeking tend to react strongly and negatively to disappointments and negative feedback (Horvath & Wambolt, 2009; Lindsay & Scott, 2005), so those perfectionists with strong needs for validation should be highly reactive to feedback

that makes them feel incompetent and inadequate. In light of these observations, a potentially fruitful avenue for future research is to examine perfectionism, validation seeking, and growth seeking in longitudinal research that involves daily assessments. It is important to consider the emotional reactions and responses of perfectionists during challenging life periods when they are experiencing failure feedback and circumstances involving disapproval and other forms of negative feedback.

Tests of rejection sensitivity revealed small positive associations between sensitivity to rejection and both other-oriented and socially prescribed perfectionism, but much stronger associations between rejection sensitivity and the facets of perfectionistic self-presentation. Thus, for some individuals, their focus on not making mistakes in public is likely rooted in beliefs about the likelihood of anticipated rejections; these people are engaged in a proactive style of coping designed to limit their life disappointments. Unfortunately, however, evidence of the self-defeating tendencies of perfectionistic self-presenters is mounting (Mushquash & Sherry, 2012), and it is quite possible that engaging in highly defensive forms of self-presentation may generate interpersonal stress and may contribute to the types of feared outcomes that represent the worst-case scenario for people who are highly invested in needing to seem perfect.

Additional correlational analyses showed that one element of trait perfectionism (i.e., socially prescribed perfectionism) and the various facets of perfectionistic self-presentation were associated with elevated depressive symptoms. Past research has found similarly that socially prescribed perfectionism and perfectionistic self-presentation, relative to self-oriented perfectionism and other-oriented perfectionism, have more consistent positive associations with depressive symptoms (Hewitt & Flett, 1991, 2002; Hewitt et al., 2003). It is for these reasons that our statistical tests of moderation and mediation focused on these dimensions. It

was also established that greater depressive symptoms were associated with greater validation seeking, lower growth seeking, and greater sensitivity to rejection. It is particularly noteworthy that according to the zero-order correlations, the strongest association involving depression was with sensitivity to rejection.

Our subsequent tests of moderation confirmed that the joint combination of high socially prescribed perfectionism and elevated sensitivity to rejection was indeed associated with elevated depressive symptoms. This is not surprising in the sense that people should be quite prone to depressive symptoms if they are high in sensitivity to rejection in a way that could actually elicit social rejection and they also perceive that they are chronically low in acceptance as a result of having to live up to impossible expectations coming from the people in their lives and from society in general. Socially prescribed perfectionism is often accompanied by negative appraisals of available social support (Sherry, Law, Hewitt, Flett, & Besser, 2008), and there is some evidence that low social support from significant others exacerbates the vulnerabilities inherent in sensitivity to rejection (McDonald, Bowker, Rubin, Laursen, & Duchene, 2010).

Our hypotheses focused on the interaction of socially prescribed perfectionism and sensitivity to rejection, and we did not explicitly predict interactions involving facets of perfectionistic self-presentation and elevated sensitivity to rejection. Why not also predict interactions incorporating individual differences in extreme self-presentation? Our emphasis was on the obtained interaction involving socially prescribed perfectionism because of certain key elements inherent in socially prescribed perfectionism such as the sense of hopelessness and helplessness inherent in extreme pressures imposed on the self (for a discussion, see Hewitt & Flett, 1991). In addition, socially prescribed perfectionism is often accompanied by self-criticism and has been interpreted as a type of self-critical

perfectionism (Dunkley & Blankstein, 2000; Dunkley, Zuroff, & Blankstein, 2003). Depression should be intensified when this orientation is combined with the tendency to readily anticipate, perceive, and react strongly to depression.

One potentially significant finding is the apparent role of validation seeking as a mediator of the link that perfectionistic self-presentation and socially prescribed perfectionism had with depressive symptoms. This finding is generally in keeping with results reported by Hill et al. (2010), who found that validation seeking mediated the link between trait perfectionism and burnout in young athletes. These results highlight the relevance of an uncertain sense of self in perfectionism and depression, and they accord with past suggestions that a conditional sense of self-acceptance and self-worth underscores many of the psychological difficulties experienced by vulnerable perfectionists.

Although we did not explicitly examine the variables in the current study in a clinical context, it should be evident that there are several clinical implications that follow from our results. For instance, when it comes to understanding people in clinical contexts who have elevated levels of perfectionistic self-presentation, our results indicate that their stress reactions and heightened defensiveness are, to a substantial extent, by-products of their strong need for validation while also being highly sensitive to rejection and likely anticipating rejection. For these individuals, ambiguous feedback will be interpreted negatively and it is important to establish a safe and non-evaluative therapeutic environment. At the same time, their need to prove themselves should be monitored because this may generalize to attempts to seek validation from therapists. These observations accord with the results of the previous investigation by Hewitt et al. (2008) that examined perfectionistic self-presentation in a clinical interview situation. This earlier investigation yielded findings showing that perfectionistic self-presenters are highly de-

fensive and reactive. These previous results combine with the current results to indicate that perfectionistic self-presenters can be in quite a bind; that is, they are sensitive to rejection and they strongly desire validation, but when they are actually in an assessment situation, "they feel particularly threatened, they assume they will do poorly, and they predict they will be judged harshly. They are more stressed by the process and feel worse afterwards" (Hewitt et al., 2008, p. 117). In many respects, this description fits with the reactions of perfectionistic people with social anxiety who are highly focused on the threat of negative social evaluation to the extent that ambiguous or positive feedback might be construed as negative feedback. Clearly, there is need for more research on the roles of socially prescribed perfectionism and perfectionistic self-presentation in the therapeutic process. People high in these tendencies seem particularly in need of empathy and a nonjudgmental milieu in keeping with the Rogerian notion of unconditional regard.

The results of our current study suggest some other clear directions for future research. Most notably, the generalizability of these findings should be explored, in keeping with the increasing focus in the literature on the nature and correlates of perfectionism from a comparative cross-cultural perspective (Dibartolo & Rendon, 2012). In the current context, it will be important to examine the replicability of these findings with various participants, including participants from Canada and the United States. However, it should be noted here that we anticipate that future research should yield data consistent with the general pattern of our current findings. Young adults who are highly perfectionistic, especially in an interpersonal sense, and who have a need for validation are likely to be at risk in general, especially when initial experiences in early adulthood are not in keeping with their personal and interpersonal needs.

Second, another key direction for future research is to explore other interpersonal factors and processes and associated emotional states that likely contributed to the current findings. For instance, there have been suggestions about the need to distinguish neurotic perfectionists who feel discrepant from expectations and narcissistic perfectionists who defensively portray themselves as seemingly perfect. Data implicate interpersonal perfectionism, including perfectionistic self-presentation, in various forms of personality dysfunction, including indices of dramatic and erratic tendencies (Ayearst et al., 2012; Sherry, Hewitt, Flett, Lee-Baggeley, & Hall, 2007), and factors such as validation seeking and rejection sensitivity could be quite illuminating to study within the context of various types of dysfunctional perfectionism. This research could incorporate the important conceptual and empirical distinctions between grandiose and vulnerable narcissism, given their relevance to situations involving interpersonal rejection and achievement failures and situations involving visible humiliations (Besser & Priel, 2010; Besser & Ziegler-Hill, 2010). On a related note, research is also needed to examine the interpersonal consequences and reactions that ensue when those interpersonal perfectionists who already feel a sense of anger and resentment toward others (Hewitt & Flett, 1991) experience situations when they have been invalidated or actually rejected by significant others. Rejection sensitivity and validation seeking are important factors that should be incorporated into research programs on perfectionism and relationship adjustment.

The limitations of the current study must be acknowledged. Causal statements based on these data obviously cannot be made due to the correlational nature of this research. As mentioned earlier, longitudinal studies and daily measures would be useful in order to advance our understanding of the relationships among these variables. The is-

sues addressed in the current study should also be reexamined after controlling for variance attributable to broad personality traits such as neuroticism. However, here it should be noted that there have been several recent demonstrations of perfectionism accounting for unique variance in outcomes after controlling for broad personality traits such as neuroticism and conscientiousness (e.g., Fry & Debats, 2009).

In summary, despite its limitations, this study found uniquely in a community sample of young adults that socially prescribed perfectionism and perfectionistic self-presentation were linked with elevated levels of rejection sensitivity, and all of the perfectionism measures were associated with validation seeking. Given that perfectionism, rejection sensitivity, and validation seeking were all associated with depressive symptoms and our focus was on explicating the link between perfectionism and depression, a series of moderation and mediation analyses were conducted. Here it was found that socially prescribed perfectionism combines with rejection sensitivity to produce elevated depressive symptoms, and there is strong evidence that validation seeking mediates the link between interpersonal perfectionism and depressive symptoms. These findings suggest that young adults with high levels of perfectionism seem particularly at risk when they have other defensive attributes such as a need for validation and a need to protect oneself from rejection. Clearly, situations and life circumstances that involve actual rejection and lack of validation should be particularly difficult for certain vulnerable perfectionists who seem to place too much importance on the need to prove themselves and the need to be accepted by others.

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