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Personality and Individual Differences

journal homepage: www.elsevier.com/locate/paid

Perfectionism, discrepancies, and depression: Testing the perfectionism social disconnection model in a short-term, four-wave longitudinal study

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ARTICLE INFO

Article history:

Received 23 May 2012

Received in revised form 17 November 2012

Accepted 21 November 2012

Available online 20 December 2012

Keywords:

Perfectionism
Discrepancies
Social maladjustment
Depression

ABSTRACT

Perfectionistic concerns (i.e., negative reactions to failures, exaggerated concerns over others' criticism and expectations, and nagging self-doubts) are linked to social disconnection and depressive symptoms. According to the perfectionism social disconnection model, perfectionistic concerns contribute to social disconnection (i.e., feeling rejected, excluded, and unwanted by others) which, subsequently, contributes to depressive symptoms. The social world is replete with chances for interpretations. In interpreting their social worlds, people high in perfectionistic concerns tend to perceive interpersonal discrepancies, a distressing form of social disconnection that involves perceptions of others as dissatisfied with them and as disapproving of them. These interpretations are also conceptualized as having depressing consequences for people high in perfectionistic concerns. This study tested whether perceived interpersonal discrepancies mediate the relation between perfectionistic concerns and depressive symptoms; 240 participants were recruited and this mediational model was tested with a four-wave, 4-week longitudinal design. Structural equation modeling with bootstrapped tests of mediation indicated the perfectionistic concerns-depressive symptoms relationship was mediated by interpersonal discrepancies (even after controlling for perfectionistic strivings). People high in perfectionistic concerns perceive others as dissatisfied with them and as disapproving of them. Feeling rejected, excluded, and unwanted by others, people high in perfectionistic concerns are vulnerable to depression.

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1. Introduction

Perfectionism is a risk factor for and maintenance factor in emotional distress (Stoeber & Yang, 2010). In particular, perfectionism is linked with depressive symptoms—even after controlling for well-established contributors to depressive symptoms such as neuroticism (Sherry & Hall, 2009). Although perfectionism plays an important role in depressive symptoms, the mechanisms through which perfectionism influences depressive symptoms need explication.

1.1. Improving research on perfectionism and depressive symptoms

Notable limitations exist in research on perfectionism and depressive symptoms. Most research in this area uses cross-sectional or two-wave longitudinal designs. Cross-sectional designs

prevent causal inferences, since they fail to address directionality or temporal precedence. Two-wave longitudinal designs capture a narrow slice of change and often involve temporal confounding (e.g., a mediator and a criterion both measured at Wave 2). Collecting three or more waves of data better captures changes over time and, for mediational designs, permits assessment of temporally independent predictors, mediators, and outcomes. In the present study, we used a four-wave longitudinal design that enabled stronger causal inferences.

Longitudinal studies with widely spaced measurement intervals (e.g., 12 months) test long-term relationships, but may miss important experiences due to infrequent sampling. Our study involved weekly measurement intervals, which minimize recall bias. Data collected over shorter intervals may also better capture short-term micro-transactions between participants and their social environments. This is important as social phenomena were key to our study. Short-term, multiwave longitudinal designs also increase reliability by repeatedly assessing events.

Studies show links among perfectionism and depressive symptoms, perfectionism and social problems, and social problems and

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depressive symptoms (Hewitt, Flett, Sherry, & Caelian, 2006). However, research seldom integrates these findings (for exceptions, see Cox, Clara, & Enns, 2009; Dunkley, Sanislow, Grilo, & McGlashan, 2006). In contrast, our study aimed to provide an integrative model explaining how perfectionistic concerns (i.e., negative reactions to failures, exaggerated concerns over others' criticism and expectations, and nagging self-doubts) contribute to depressive symptoms via social problems.

Whereas past perfectionism research often relied on single indicators of study constructs (Sherry, Law, Hewitt, Flett, & Besser, 2008), our study measured constructs with latent variables each composed of multiple indicators. For example, we operationalized perfectionism using a perfectionistic concerns latent variable. This latent variable represents a theoretical and empirical synthesis of several well-researched dimensions of perfectionism (Dunkley, Blankstein, Halsall, Williams, & Winkworth, 2000; Stoeber & Otto, 2006). Latent variables also provide a more encompassing assessment of constructs that is not reliant on the properties of any one single scale. Moreover, latent variables result in more reliable statistical estimates, take measurement error into account, and allow tests of models with multiple predictors, mediators, and outcomes (Kline, 2005).

We address the above limitations by testing an integrative theoretical model using latent variables and a short-term, four-wave longitudinal design. Our study thus represents a needed contribution to research on perfectionism and depressive symptoms.

1.2. Perfectionism social disconnection model (PSDM)

The social world is nuanced and replete with opportunities for interpretations. For example, a supervisor asking a supervisee a seemingly straight forward question—"How is your thesis going?"—may be interpreted in many ways, including a benign question from a supportive supervisor or a pressure-filled criticism from a dissatisfied supervisor. Considered from this perspective, our social worlds are heavily influenced by interpretations—and the interpretations we make can profoundly influence our mood.

According to the PSDM (Hewitt et al., 2006; see Cox et al., 2009), people high in perfectionistic concerns are vulnerable to depressive symptoms because they experience social disconnection (i.e., feeling rejected, excluded, and unwanted by others). Whether a person feels a sense of connectedness (e.g., care, nurturance, and support) or disconnection (e.g., judgment, criticism, and rejection) depends heavily upon interpretations. People high in perfectionistic concerns tend to perceive themselves as not accepted or not belonging and to see themselves as consistently falling short of others' expectations (Hewitt et al., 2006; Stoeber, 2012). Feeling others are dissatisfied with them and disapproving of them also appears to have depressing consequences for people high in perfectionistic concerns (Sherry et al., 2008). The sense of close connection to others that is essential to well-being is elusive for people high in perfectionistic concerns.

Given a social world filled with ambiguities, personality traits (e.g., perfectionistic concerns) may guide social cognition (i.e., how people attend to and interpret social information in their efforts to understand their social worlds). Perfectionistic concerns involve a chronic, dispositional tendency to view others as hypercritical, demanding, and intolerant of mistakes (Dunkley et al., 2006; Hewitt et al., 2006). This disposition may influence how people high in perfectionistic concerns interpret and make meaning of their social worlds.

It seems people high in perfectionistic concerns are often "defective detectives" when interpreting their social worlds—prone to experiencing interpersonal discrepancies, a form of social cognition where they conclude they are letting others down. Consistent with this assertion, perfectionistic concerns and

interpersonal discrepancies are linked (Sherry & Hall, 2009). In fact, across various contexts and occasions, interpersonal discrepancies appear to be a prototypic form of social cognition for people high in perfectionistic concerns. This tendency to see others as dissatisfied with them and as disapproving of them leaves people high in perfectionistic concerns in a bind: On one hand they want approval, acceptance, and belonging, but on the other hand they consistently perceive the opposite—disapproval, rejection, and criticism (Hewitt et al., 2006). Interpersonal discrepancies may thus be a particularly depressing form of social disconnection for people high in perfectionistic concerns, especially given their fear of evaluation and need for approval (Hewitt & Flett, 1991).

1.3. Hypotheses

We hypothesized perfectionistic concerns would indirectly affect depressive symptoms through social disconnection. Specifically, we hypothesized perfectionistic concerns would contribute to social disconnection which, in turn, would contribute to depressive symptoms. Social disconnection was operationalized as interpersonal discrepancies (see Fig. 1). We also based this hypothesis on two preliminary cross-sectional pilot studies (Sherry et al., 2008, 2012), where a similar pattern of indirect effects was predicted and observed.

We hypothesized all paths in the PSDM would remain virtually unchanged after controlling for perfectionistic strivings (i.e., ceaselessly demanding perfection of oneself). Shafran, Cooper, and Fairburn (2002) propose perfectionistic strivings play a key role in the perfectionism-psychopathology link and suggest research should focus on strictly *intrapersonal* models of perfectionism. In contrast, perfectionistic concerns represent personality traits where *interpersonal* concerns (e.g., social-evaluative fears) figure prominently. Given Shafran et al.'s (2002) call to use an entirely *intrapersonal* model of perfectionism, it is important to test if perfectionistic concerns add incrementally to our understanding of depressive symptoms beyond perfectionistic strivings.

2. Method

2.1. Participants

A sample of 240 undergraduates (200 women; 40 men) was recruited from psychology courses at Dalhousie University. Participants averaged 20.00 years of age ($SD = 3.23$) and were primarily in first (42.9%), second (20.4%), and third (20.8%) year of university. Participants reported living in Canada for an average of 18.37 years ($SD = 5.84$) and were predominantly (86.7%) of European descent. Most participants were single (47.5%) or dating (40.0%), with 7.5% cohabitating, 3.8% married, and 0.4% separated.

2.2. Measures

2.2.1. Perfectionistic concerns

The latent perfectionistic concerns variable was measured using three observed indicators and 13 items: A 5-item short form of the concern over mistakes subscale (COM; e.g., "If I fail at work/school, I am a failure as a person") of the *Frost Multidimensional Perfectionism Scale* (FMPS; Cox, Enns, & Clara, 2002; Frost, Marten, Lahart, & Rosenblate, 1990), the 4-item doubts about actions subscale (DAA; e.g., "I usually have doubts about the simple everyday things I do") of the FMPS, and the 4-item interpersonal perceptions subscale (IP) of the FMPS. We selected these three manifest indicators for our latent perfectionistic concerns variable as theory and evidence suggest they measure core cognitive, behavioral, and interpersonal features of perfectionistic concerns (e.g., Dunkley et al., 2000).

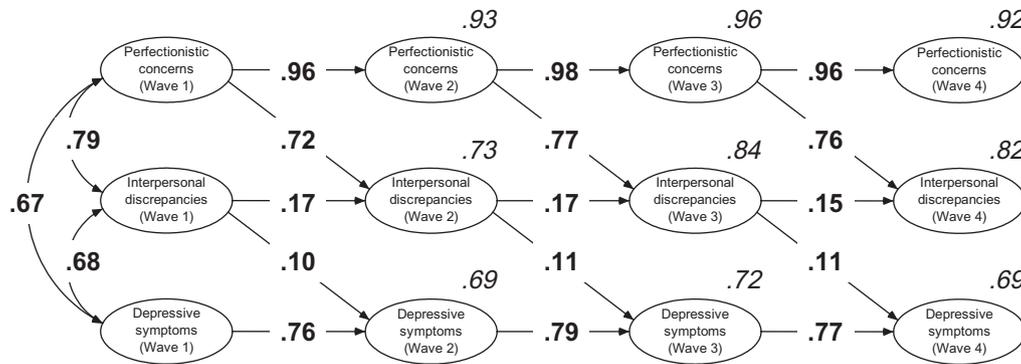


Fig. 1. Structural model for the perfectionism social disconnection model. Ovals represent latent variables. Double-headed black arrows represent significant latent correlations ($p < .05$). Single-headed black arrows represent significant paths ($p < .05$). Standardized path coefficients appear in bold. Italicized numbers (e.g., .69) appearing in the upper right hand of endogenous variables (e.g., Depressive symptoms [Wave 4]) represent the proportion of variance accounted for by associated exogenous variables.

The COM was changed into a 5-item scale by Cox et al. (2002) by selecting the five highest factor loadings from Frost et al.'s original, 9-item COM. Cox et al. found the psychometric properties of the COM improved after it was reduced from 9 to 5 items. The COM is comprised of items 9, 13, 14, 23, and 34 from Frost et al.'s original, 9-item COM. The DAA subscale was not modified. The IP is a modified (but not shortened in terms of scale length) version of the parental perceptions subscale of the FMPS.¹ For example, "As a child, I was punished for doing things less than perfect" on the parental perceptions subscale was modified to "Others punish me for doing things less than perfect" on the IP. Modifying the IP in this way enabled us to assess perfectionistic concerns apart from childhood history. The COM, DAA, and IP are rated on a 5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Evidence supports the reliability and validity of these subscales (Cox et al., 2002; Frost, Heimberg, Holt, & Mattia, 1993; Sherry & Hall, 2009). Sherry (2012) found the COM and IP have high alpha reliabilities (.86 and .81 respectively) and strong correlations ($r_s = .91$ and .68 respectively) with their original subscales. The alpha reliability for the DAA was .99 in Sherry.

2.2.2. Perfectionistic strivings

Perfectionistic strivings were measured using a 4-item short form of the personal standards subscale (PS; e.g., "I set higher goals than others") of the FMPS. The PS is rated on a 5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The reliability and validity of the PS is supported by research (Cox et al., 2002). In Sherry (2012), the PS had high alpha reliability (.87) and a strong correlation with the original subscale ($r = .98$).

2.2.3. Interpersonal discrepancies

The latent interpersonal discrepancies variable was measured using three observed indicators and 14 items: A 5-item short form of the interpersonal discrepancies subscale (e.g., "I felt I had disappointed others.") of the *Reconstructed Depressive Experiences Questionnaire* (RDEQ-ID; Bagby, Parker, Joffe, & Buis, 1994), the 5-item interpersonal discrepancies subscale (e.g., "Were you unable to reach goals others have imposed on you?") of the *Multidimensional Discrepancies Inventory* (MDI-ID; Flett & Hewitt, 2012), and the 4-item interpersonal discrepancies subscale (e.g., "My best was not good enough for others.") of the *Almost Perfect Scale-Revised* (APS-R-ID; Slaney, Rice, Mobley, Trippi, & Ashby, 2001; see Sherry

& Hall, 2009). We selected these three manifest indicators for our latent interpersonal discrepancies variable as research suggests they adequately measure central features of the interpersonal discrepancies construct and cohere together in a valid way (e.g., Mushquash & Sherry, 2012). Consistent with our study design, measures of interpersonal discrepancies were modified to have a short-term timeframe (i.e., during the past 7 days). The RDEQ-ID and APS-R-ID are rated on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*). The MDI-ID is rated on a 4-point scale from 1 (*not at all*) to 4 (*very much*). Studies support the reliability and validity of these subscales (Mushquash & Sherry, 2012). Sherry (2012) found the RDEQ-ID, MDI-ID, and APS-R-ID have high alpha reliabilities (.85, .85, .91 respectively) and correlate strongly with their original subscales ($r_s = .68$, .63, .58 respectively). Discriminant validity analyses indicate interpersonal discrepancies and perfectionistic concerns are best represented as distinct constructs (Mushquash & Sherry, 2012). Such results suggest that feeling one has not achieved others' standards (interpersonal discrepancies) is different from negative reactions to failures, concerns over others' criticism, and nagging self-doubts (perfectionistic concerns).

2.2.4. Depressive symptoms

The latent depressive symptoms variable was measured using three observed indicators and 24 items: A 4-item short form of the depression subscale (e.g., "sad") of the *Profile of Mood States* (POMS-D; McNair, Lorr, & Droppleman, 1992), the 13-item depression subscale (e.g., "Feeling hopeless about the future") of the *Symptom Checklist-90-R* (SCL-90-D; Derogatis, 1994), and the 7-item depression subscale (e.g., "I felt that I had nothing to look forward to.") of the 21-item *Depression Anxiety and Stress Scale* (DASS-D; Lovibond & Lovibond, 1995). The SCL-90-D and DASS-D were not altered. We selected these three manifest indicators for our latent depressive symptoms variable as they measure core affective, cognitive, interpersonal, and physiological features of depressive symptoms (e.g., Barker-Collo, 2003). All three manifest indicators are needed to adequately represent these core features. A 7-day timeframe was used for measures of depressive symptoms. The POMS-D and SCL-90-D are rated on a 5-point scale from 0 (*not at all*) to 4 (*extremely*). The DASS-D is rated on a 4-point scale from 0 (*did not apply to me at all*) to 3 (*applied to me very much, or most of the time*). Research supports the reliability and validity of all three subscales (Antony, Bieling, Cox, Enns, & Swinson, 1998). Sherry (2012) found the POMS-D has high alpha reliabilities (.84) and is strongly correlated with the original subscale ($r = .87$). In Sherry, the alpha reliabilities for the SCL-90-D and the DASS-D were .92 and .89 respectively.

¹ A cross-sectional study was conducted to assess the psychometric properties of modified scales we used. This study involved 119 undergraduates (79.0% women). Participants averaged 20.58 years of age ($SD = 4.33$). This study is referenced as Sherry (2012).

2.3. Procedure

Dalhousie University's Research Ethics Board approved this study. Participants completed questionnaires once a week for four consecutive weeks. After Wave 4, participants received \$10 and a 3.0% bonus credit.

In total, 240 (100%), 238 (99.2%), 230 (95.8%), and 232 (96.7%) participants completed Waves 1, 2, 3, and 4, respectively. Waves 2, 3, and 4, occurred an average of 7.04 ($SD = 0.44$), 14.13 ($SD = 0.66$), and 21.20 ($SD = 1.23$) days after Wave 1, respectively.

2.4. Data analysis

Confirmatory factor analysis (CFA) tested the measurement model for the perfectionism social disconnection model (PSDM). Structural equation modeling (SEM) tested the structural model for the PSDM. Bootstrapping analyses tested the mediational hypothesis in this structural model. Incremental validity analyses tested if paths in the PSDM remained significant when controlling for perfectionistic strivings.

3. Results

3.1. Descriptive statistics

Means and standard deviations for manifest variables (see Table 1) were computed by aggregating across all waves. Aggregated means from our study fell within one standard deviation of means from studies involving similar samples (e.g., Sherry & Hall, 2009). This suggests means from our study are consistent with research involving comparable samples.

3.2. Alpha reliabilities and bivariate correlations

Manifest indicators of latent variables were standardized (i.e., transformed into z -scores) and summed prior to analyses. For example, the RDEQ-ID was standardized, the MDI-ID was standardized, and the APS-R-ID was standardized; these subscales were then summed to create the interpersonal discrepancies variable in Table 2. Alpha reliabilities were adequate across all four waves: perfectionistic concerns (.89–.92), perfectionistic strivings (.87–.89), interpersonal discrepancies (.92–.94), and depressive symptoms (.94–.95).

Across all waves, (a) perfectionistic concerns were significantly correlated with interpersonal discrepancies and depressive symptoms and (b) interpersonal discrepancies and depressive symptoms were significantly correlated with each other (see Table 2).

Table 1
Means and standard deviations for manifest variables.

	<i>M</i>	<i>SD</i>
<i>Perfectionistic concerns</i>		
FMPS concern over mistakes	10.01	9.57
FMPS doubts about actions	8.39	4.81
FMPS interpersonal perceptions	4.27	3.57
<i>Perfectionistic strivings</i>		
FMPS personal standards	12.93	4.27
<i>Interpersonal discrepancies</i>		
RDEQ interpersonal discrepancies	12.68	8.07
MDI interpersonal discrepancies	8.63	6.72
APS-R interpersonal discrepancies	3.43	5.64
<i>Depressive symptoms</i>		
POMS-D depressive symptoms	3.17	11.33
SCL-90-D depressive symptoms	6.11	3.08
DASS-D depressive symptoms	9.81	7.50

Perfectionistic strivings significantly correlated with all but one of the variables in the PSDM (i.e., Wave 1 perfectionistic strivings was not significantly correlated with Wave 3 depressive symptoms). These correlations suggested perfectionistic strivings are a suitable covariate. Demographics were not included as covariates, as none correlated with the variables in the PSDM. High test–retest correlations for perfectionistic concerns ($r_s = .82$ –.92), perfectionistic strivings ($r_s = .81$ –.92), interpersonal discrepancies ($r_s = .66$ –.80), and depressive symptoms ($r_s = .66$ –.78) supported the reliability of the measures (see Table 2).

3.3. SEM

SEM analyses used AMOS 7.0. A χ^2/df ratio around 2, a comparative fit index (CFI) and an incremental fit index (IFI) around .95, and a root-mean-square error of approximation (RMSEA) around .06 indicate good model fit (Kline, 2005). RMSEA values are reported with 90% confidence intervals (CI). The Akaike information criterion (AIC) was used in model comparisons. Smaller AIC values indicate greater parsimony and better fit.

3.4. Measurement model for the perfectionism social disconnection model (PSDM)

The measurement model involved the 12 latent variables shown in Fig. 1 (i.e., four perfectionistic concerns latent variables, four interpersonal discrepancies latent variables, and four depressive symptoms latent variables). CFA indicated this model had acceptable fit: $\chi^2(492, N = 240) = 801.84, p = .000; \chi^2/df = 1.63; CFI = .97; IFI = .97; RMSEA = .05$ (90% CI: .05, .06). This model also had significant ($p < .001$) standardized factor loadings for manifest indicators. Factor loadings ranged from .60 to .82 for perfectionistic concerns, .86 to .96 for interpersonal discrepancies, and .84 to .97 for depressive symptoms.

3.5. Structural model for the perfectionism social disconnection model (PSDM)

3.5.1. Model testing

Fit indices suggested the structural model for the PSDM (see Fig. 1) fit the data well: $\chi^2(157, N = 240) = 312.6, p = .00; \chi^2/df = 1.99; CFI = .97; IFI = .97; RMSEA = .06$ (90% CI: .05, .07); AIC = 1297.97. All autoregressive path coefficients were significant (see Fig. 1). For example, the perfectionistic concerns latent variable at Wave 1 significantly predicted the perfectionistic concerns latent variable at Wave 2; the perfectionistic concerns latent variable at Wave 2 significantly predicted the perfectionistic concerns latent variable at Wave 3; and the perfectionistic concerns latent variable at Wave 3 significantly predicted the perfectionistic concerns latent variable at Wave 4. As Fig. 1 shows, paths from the perfectionistic concerns latent variable to the interpersonal discrepancies latent variable and paths from the interpersonal discrepancies latent variable to the depressive symptoms latent variable were significant. Paths in the PSDM were therefore congruent with the hypothesized structural model for the PSDM.

3.5.2. Mediational analyses

Analysis of the hypothesized indirect effects in the PSDM was conducted using bootstrapping (Kline, 2005). Random sampling with replacement was used to make 20,000 ($n = 240$) bootstrap samples. Bootstrap estimates indicated the hypothesized indirect effect in the PSDM was significant $B = .26, [95\% CI: .08, .60]$, and $SE = .12$. That is, the indirect effect of perfectionistic concerns on depressive symptoms through interpersonal discrepancies was significant.

Table 2
Bivariate correlations.

Manifest variables	Wave 1				Wave 2				Wave 3				Wave 4			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<i>Wave 1</i>																
1. Perfectionistic concerns	–	0.36	0.6	0.56	0.86	0.38	0.63	0.56	0.83	0.4	0.65	0.47	0.82	0.36	0.62	0.48
2. Perfectionistic strivings		–	0.18	0.18	0.35	0.85	0.18	0.22	0.35	0.84	0.2	0.06	0.35	0.81	0.18	0.17
3. Inter. discrepancies			–	0.62	0.62	0.21	0.68	0.57	0.19	0.66	0.46	0.59	0.2	0.66	0.54	
4. Depressive symptoms				–	0.55	0.23	0.52	0.73	0.5	0.24	0.51	0.7	0.53	0.25	0.5	0.66
<i>Wave 2</i>																
5. Perfectionistic concerns					–	0.46	0.72	0.6	0.91	0.46	0.68	0.47	0.89	0.44	0.69	0.48
6. Perfectionistic strivings						–	0.23	0.28	0.45	0.9	0.23	0.13	0.43	0.89	0.23	0.23
7. Inter. discrepancies							–	0.65	0.67	0.26	0.76	0.48	0.69	0.26	0.72	0.5
8. Depressive symptoms								–	0.58	0.31	0.57	0.78	0.6	0.32	0.56	0.72
<i>Wave 3</i>																
9. Perfectionistic concerns									–	0.49	0.71	0.5	0.92	0.46	0.69	0.48
10. Perfectionistic strivings										–	0.27	0.16	0.44	0.92	0.25	0.23
11. Inter. discrepancies											–	0.63	0.72	0.28	0.8	0.58
12. Depressive symptoms												–	0.51	0.18	0.52	0.78
<i>Wave 4</i>																
13. Perfectionistic concerns													–	0.47	0.71	0.53
14. Perfectionistic strivings														–	0.28	0.22
15. Inter. discrepancies															–	0.63
16. Depressive symptoms																–

Note: Inter = interpersonal. Test–retest correlations are bolded. Bivariate correlations $\geq .13$ are significant ($p < .05$).

3.5.3. Incremental validity

Perfectionistic strivings at Wave 1 were added to Fig. 1 as a covariate. As hypothesized, paths in the structural model for the PSDM were virtually unchanged in terms of magnitude and significance after controlling for perfectionistic strivings at Wave 1. When added to the structural model shown in Fig. 1, perfectionistic strivings were not significantly related to perfectionistic concerns ($\beta = .01, p > .05$) or depressive symptoms ($\beta = .01, p > .05$). However, perfectionistic strivings were negatively and significantly related to interpersonal discrepancies ($\beta = -.06, p < .05$). The fit of the structural model was eroded when perfectionistic strivings were included in Fig. 1 (AIC = 1477.48). The PSDM was not improved by including perfectionistic strivings and paths in the PSDM were still significant once perfectionistic strivings were taken into account.

4. Discussion

The perfectionism social disconnection model (PSDM) relates perfectionistic concerns to depressive symptoms through interpersonal discrepancies. Analyses indicated the measurement model for the PSDM fit the data well. The structural model for the PSDM fit the data well and all hypothesized paths were significant. Interpersonal discrepancies also mediated the link between perfectionistic concerns and depressive symptoms in the hypothesized manner. All paths in the PSDM were virtually unaltered after controlling for perfectionistic strivings, thus supporting our hypotheses.

4.1. Structural model for the perfectionism social disconnection model (PSDM)

Our study clarified one mechanism through which perfectionistic concerns influence depressive symptoms: perceiving other people as dissatisfied and as disapproving. Consistent with the PSDM, perfectionistic concerns indirectly affected depressive symptoms through interpersonal discrepancies. These results are congruent with past tests of the PSDM that involved cross-sectional designs (Sherry et al., 2008, 2012). Our study also improves on these two

studies by stringently testing the PSDM using a longitudinal design that sheds light on directionality and temporal precedence.

Attempting to understand the social world, and one's unique place in it, relies greatly on interpretations. Personality traits can shape the interpretations we make, and the interpretations we make can influence our mood. Across various contexts and occasions, people high in perfectionistic concerns appear to interpret diverse social stimuli similarly and negatively (Sherry & Hall, 2009). In particular, our study suggests these people interpret others in their social worlds as dissatisfied with them and disapproving of them. To people high in perfectionistic concerns, an innocuous gesture, benign question, or supportive comment may all seem loaded with dissatisfaction or disapproval. Perfectionistic concerns involve viewing others as hypercritical, demanding, and intolerant of mistakes (Hewitt et al., 2006); thus it seems fitting people high in perfectionistic concerns report they are continually letting others down. From this perspective, depressive symptoms may be brought on by the powerful sense of others' dissatisfaction and disapproval experienced by people high in perfectionistic concerns. Indeed, perfectionistic concerns may thwart the feelings of connection to and acceptance by others that are crucial to emotional well-being.

4.2. Incremental validity

As hypothesized, results supported the incremental validity of the PSDM beyond a relevant covariate, perfectionistic strivings. These findings are important given Shafran et al.'s (2002) calls to return to an exclusively *intrapersonal* model of perfectionism. In contrast to Shafran et al.'s assertion, our results suggest an important role for perfectionistic concerns (a predominantly interpersonal trait) beyond perfectionistic strivings (an exclusively intrapersonal trait) when seeking to understand depressive symptoms.

4.3. Limitations

Our study was limited by the use of self-report measures, which may lead to biased responses (e.g., defensiveness). Moreover, using a short-term time lag between measurement occasions may have

lead to overestimation of stability effects and underestimation of other effects (e.g., paths from perfectionistic strivings to depressive symptoms). Our use of modified scales is another limitation; less is known about the psychometrics of our modified scales.

5. Conclusions

Our study integrates perfectionistic concerns, interpersonal discrepancies, and depressive symptoms into the perfectionism social disconnection model, a coherent theoretical framework for understanding why people high in perfectionistic concerns are vulnerable to depressive symptoms. As they go about their lives, people who are high in perfectionistic concerns tend to perceive others as dissatisfied with them and as disapproving of them. Feeling rejected, excluded, and unwanted by others, people high in perfectionistic concerns are vulnerable to depression.

Acknowledgments

This manuscript was supported by a Grant from the Social Sciences and Humanities Research Council of Canada. Simon Sherry was funded by the H.J. Eysenck Memorial Fund Award. Fund sources were not involved in any aspect of this manuscript.

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