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Evidence for three factors of perfectionism: Perfectionistic Strivings, Order, and Perfectionistic Concerns

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ABSTRACT

The factor structure of perfectionism is inconsistent across models. Most models distinguish between adaptive and maladaptive aspects of perfectionism, but often do not include elements representing order. Order, however, is theoretically important and distinct from the broad adaptive perfectionism factor. Therefore, a three-factor model of perfectionism was tested in a sample of undergraduate students ($N = 208$) who completed the Almost Perfect Scale-Revised and the Frost Multidimensional Perfectionism Scale. According to the chi-squared difference test and CFI differences, model fit improved when representing Order as a separate factor. In addition, Order and Perfectionistic Strivings factors showed significantly different correlations with Conscientiousness and Neuroticism, academic performance expectation, and four achievement goal orientations, providing further evidence of their distinctiveness. Therefore, including Order as a separate factor represents a better model of perfectionism.

1. Introduction

Historically, perfectionism has been represented as a unidimensional trait, closely associated with maladjustment and psychopathy (Burns, 1980). The dominant model of perfectionism is currently a multidimensional one distinguishing adaptive from maladaptive perfectionism (Stoeber & Otto, 2006). However, there is no clear consensus on whether Order should be considered as an element of perfectionism or not, and if so, whether it should be considered as a part of an adaptive perfectionism dimension or a dimension of its own.

The current study assesses the validity of a perfectionism model that includes a separate Order factor in two ways. First, we use confirmatory factor analysis to test the fit of perfectionism models including versus not including a separate Order factor. We use the facet scales of two perfectionism rating scales (both including order content) in this structural analysis. Second, we compare the strength of the associations of Order versus other perfectionism factors with theoretically-relevant variables: (a) personality domains theoretically aligned with perfectionism (Conscientiousness and Neuroticism); and (b) educationally relevant measures not yet fully explored in perfectionism research (academic performance expectation and achievement goal orientations).

Our proposed model postulates three factors of perfectionism: (a) Perfectionistic Strivings (the tendency to set high standards for oneself); (b) Perfectionistic Concerns (the anxiety and worry associated with one's thoughts and behavior); and (c) Order (the tendency to be precise, neat and systematic). The structural validity of this model is tested by comparing the incremental fit of our three factor model over a two-factor baseline model consisting of Adaptive Perfectionism (encompassing both Perfectionistic Strivings and Order) and Maladaptive Perfectionism (Perfectionistic Concerns).

1.1. Order as an element of perfectionism

Order represents a preference for systematic organization and neatness, which has been inconsistently included in past perfectionism research. Some have perceived Order as a negligible element of perfectionism and so exclude it from their investigations. The justification has been the relatively low correlations with other perfectionism subscales and with total perfectionism score (Frost, Marten, Lahart, & Rosenblate, 1990). Others who include Order have often conceptualized it as part of Perfectionistic Strivings and not a separate dimension.

Evidence suggests that Order should be included in the perfectionism model and recognized as a separate factor from Perfectionistic Strivings. Qualitative studies in the United States and in India have highlighted that orderliness is part of people's definition of perfectionism (Rice, Bair, Castro, Cohen, & Hood, 2003; Slaney & Ashby, 1996; Slaney, Chadha, Mobley, & Kennedy, 2000). Empirical evidence also supports the validity of Order. An exploratory factor analysis of the Almost Perfect Scale-Revised (APS-R; Slaney, Rice,

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Mobley, Trippi, & Ashby, 2001), Multidimensional Perfectionism Scale (FMPS; Frost et al., 1990), and Multidimensional Perfectionism Scale (HMPS; Hewitt & Flett, 1991) established the emergence of three factors: a maladaptive factor, an adaptive factor, and an Order/Organization factor (Suddarth & Slaney, 2001). Furthermore, a confirmatory factor analysis on the APS-R, FMPS, and HMPS also supported Order as a separate factor (Rice, Lopez, & Vergara, 2005). However, neither of these prior studies used nested models to assess whether including an Order factor significantly improved model fit, nor did they test whether the Order factor showed significantly different relationships with relevant outcomes. The current study examines both of these questions to assess whether Order is a structurally distinct factor and whether Order has a distinct nomological network than other factors of perfectionism.

1.2. Correlations between perfectionism factors and theoretically-relevant variables

Some key correlates of Perfectionism include Conscientiousness, Neuroticism, academic performance expectation, and achievement goal orientations. If these constructs show significantly different levels of correlation with Order versus other factors of Perfectionism, this provides additional validity evidence for the distinctiveness of Order.

The five-factor model of Personality is a widely accepted taxonomy of personality consisting of Conscientiousness, Neuroticism, Openness, Extraversion, and Agreeableness domains (John & Srivastava, 1999). Conscientiousness and Neuroticism are conceptually relevant to perfectionism. Conscientiousness is one's level of engagement in task- and goal-directed behaviors, such as organizing and prioritizing tasks (John, Naumann, & Soto, 2008; John & Srivastava, 1999). A fundamental quality within Conscientiousness is order; specifically, one's preference for tidiness and task planning (MacCann, Duckworth, & Roberts, 2009). Indeed, Conscientiousness shows higher correlations with Order and Organization than with High Standards and Personal Standards (Rice, Ashby, & Slaney, 2007; Stumpf & Parker, 2000). However, the statistical significance of these differences has not been tested. Neuroticism is one's level of negative emotionality such as feeling anxious, nervous, sad, and tense (John & Srivastava, 1999; John et al., 2008). According to Hamachek (1978), maladaptive perfectionism originates from Neuroticism; specifically, the neurotic need to please others. This is manifested as one's excessive fear of failure and feelings of anxiety, self-doubt, and self-condemnation. Indeed, Neuroticism is consistently positively associated with maladaptive perfectionism factors but minimally with order factors (e.g., Rice et al., 2007; Stumpf & Parker, 2000). Again, the significance of these differences has not been empirically tested. In this study, we test whether: (a) Conscientiousness shows significantly stronger correlations with Order versus Perfectionistic Strivings; and (b) Neuroticism shows significantly stronger correlations with Perfectionistic Concerns versus Order.

Academic performance expectation is students' expectancies of their future academic performance (e.g., future GPA prediction). It is an under-utilized indicator of academic outcomes in perfectionism research even though it shows the second largest relationship to GPA of 50 non-cognitive variables in a recent meta-analysis (Richardson, Abraham, & Bond, 2012). Academic performance expectation shows significant positive correlations with Perfectionistic Strivings but not with Order (e.g., Brown et al., 1999; Cox, Enns, & Clara, 2002). However, these previous studies did not test whether the difference in correlation for Perfectionistic Strivings versus Order was significant, which will therefore be examined in the current study.

Achievement goals are aims set to demonstrate or improve one's competence (Dweck & Leggett, 1988). Achievement motivation theory can be understood in terms of a 2×2 framework of mastery/performance $\times$ approach/avoidance goal orientations (Elliot & McGregor, 2001). Specifically, there are four types of achievement goals: mastery-approach (striving to succeed in a task or to meet intrapersonal standards), performance-approach (striving to meet normative standards), mastery-avoidance (striving to avoid failing in a task or not meeting intrapersonal standards), and performance-avoidance (striving to avoid not meeting normative standards).

Evidence to date seems to indicate that both Order and Perfectionistic Strivings relate to approach goals but Perfectionistic Strivings also relates to avoidance goals (Eum & Rice, 2011; Fletcher, Shim, & Wang, 2012). These studies, however, either did not consider all four goal orientations or excluded Order, and only used a single perfectionism scale. To consolidate these findings, our study examines the relationship of all three perfectionism factors with the four goal orientations. We expect that Order will positively correlate with the two approach goals only, whereas Perfectionistic Strivings will positively correlate with all four goals. Furthermore, as setting achievement goals is inherently associated with setting standards we expect that the two achievement goals will show significantly stronger correlations with Perfectionistic Strivings than with Order.

1.3. This study

To assess the structural validity of perfectionism, two models of perfectionism are compared: (1) *Model 1* is a two-factor model differentiating Perfectionistic Strivings (encompassing the adaptive aspects of perfectionism) from Perfectionistic Concerns (encompassing the maladaptive aspects of perfectionism); and (2) *Model 2* is a three-factor model bifurcating the Perfectionistic Strivings factor from *Model 1* into an Order factor and a factor representing non-order aspects of Perfectionistic Strivings. We hypothesize that *Model 2* will show better fit to the data than *Model 1*, reflecting Order as a distinct factor (H1). Moreover, we expect criterion correlations will significantly differ for Order versus the other two perfectionism factors. Specifically, Order will have a stronger correlation with Conscientiousness (H2), a weaker correlation with academic performance expectation (H3), and weaker correlations with the four achievement goal orientations (H4; as compared to Perfectionistic Strivings). Furthermore, Order will have a weaker correlation with Neuroticism compared to Perfectionistic Concerns (H5). Lastly, Order will be significantly correlated only with the two approach goals whereas Perfectionistic Strivings will do so with all four goals (H6).

2. Method

2.1. Participants

Participants were 208 first-year undergraduate psychology students (151 female) who participated in the study for course credit (this total excludes 14 participants with zero variability in their ratings). Five participants did not complete the Academic Performance Expectation question. Participants' age ranged between 16 and 47 years (M = 19.61, SD = 4.07).

2.2. Measures

2.2.1. Almost Perfect Scale–Revised (Slaney et al., 2001)

This 23-item self-report questionnaire measures three dimensions of perfectionism: High Standards (7 items; e.g., 'I try to do my best at everything I do'), Order (4 items; e.g., 'I am an orderly person'), and Discrepancy (12 items; e.g., 'My performance rarely