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Perfectionism, self-efficacy, and aspiration level: differential effects of perfectionistic striving and self-criticism after success and failure

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ABSTRACT

Despite over 15 years of research on multidimensional perfectionism, it is still unclear how different forms of perfectionism are related to self-efficacy, aspiration level, and reactions to success and failure in performance situations. Differentiating between positive striving perfectionism and self-critical perfectionism, the present study investigated in $N = 100$ undergraduate students how perfectionistic striving and self-criticism were related to self-efficacy, aspiration level, and performance and how manipulated success and failure feedback affected these relationships. Results showed that perfectionistic striving was positively correlated with self-efficacy and aspiration level prior to manipulated feedback. Moreover, perfectionistic striving predicted increases in aspiration level following success feedback. In contrast, self-criticism was negatively correlated with self-efficacy prior to feedback and predicted decreases in self-efficacy following failure feedback. The findings corroborate the view that perfectionism has both adaptive and maladaptive aspects: whereas self-criticism is associated with low self-efficacy and makes perfectionists lose confidence after failure, perfectionistic striving is associated with higher aspiration levels and makes perfectionists reach for higher aims after success.

1. Introduction

Individuals high in perfectionism are characterized by striving for flawlessness and setting excessively high standards for performance accompanied by tendencies for overly critical evaluations of their behavior (Flett & Hewitt, 2002; Frost, Marten, Lahart, & Rosenblate, 1990). Therefore, it has been argued that individuals high in perfectionism—because they have excessively high standards and are overly self-critical—are particularly vulnerable to failure and react more negatively to failure regarding cognitions, affect, and performance than individuals low in perfectionism (e.g., Anshel & Mansouri, 2005; Besser, Flett, & Hewitt, 2004).

Perfectionism, however, is a multidimensional and multifaceted characteristic (Benson, 2003). In particular, two major dimensions of perfectionism need to be differentiated (Frost, Heimberg, Holt, Mattia, & Neubauer, 1993; Stoeber & Otto, 2006). The first dimension has been described as positive striving perfectionism (Frost et al., 1993) and captures those facets of perfectionism that relate to perfectionistic striving, having perfectionistic personal standards, and setting exacting standards for one's performance. This dimension has shown positive correlations with indicators of good psychological adjustment such as positive affect, endurance, academic achievement, and test performance (e.g., Bieling, Israeli, Smith, & Antony, 2003; Frost et al., 1993; Stoeber & Kersting, 2007; Stumpf & Parker, 2000). The second dimension has been described as self-critical perfectionism (Dunkley, Zuroff, & Blankstein, 2003) and captures those facets of perfectionism that relate to critical self-evaluations of one's performance, feelings of discrepancy between expectations and results, perfectionistic concern over mistakes and others' high expectations, and fears that others' acceptance is conditional on one's being perfect. This dimension has shown positive correlations with indicators of maladjustment such as negative affect, low self-esteem, and low self-efficacy (e.g., Dunkley et al., 2003; Frost et al., 1993; Stumpf & Parker, 2000; see Stoeber & Otto, 2006, for a comprehensive review).

However, regarding self-efficacy, the findings are not consistent. Self-efficacy has been defined as "people's belief about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives" (Bandura, 1994, p. 71). Moreover, general self-efficacy is seen as a personal resource that refers to the optimistic self-belief in one's competence to exercise control over a range of difficult tasks and to generally cope well with adverse events (Schwarzer & Jerusalem, 1995). In a first investigation of how perfectionism relates to self-efficacy differentiating between self-oriented perfectionism and socially prescribed perfectionism (Hewitt & Flett, 1991), Hart, Gilner, Handal, and Gfeller (1998) found self-oriented perfectionism to be associated with low self-efficacy and socially prescribed perfectionism with high self-efficacy. Because self-oriented perfectionism has been

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shown to form part of positive striving perfectionism (Frost et al., 1993) and socially prescribed perfectionism to form part of self-critical perfectionism (Dunkley et al., 2003), the findings suggest that positive striving perfectionism is associated with low self-efficacy and self-critical perfectionism with high self-efficacy.

Whereas Hart et al.'s findings support Flett and Hewitt's (2006) critical view of self-oriented perfectionism and positive striving perfectionism, they are at odds with the majority of findings from research on positive striving perfectionism and self-critical perfectionism (see Stoeber & Otto, 2006). In particular, they contradict the findings from Dunkley et al.'s (2003) study that showed self-critical perfectionism to be associated with low self-efficacy, not high self-efficacy. Consequently, the question of how perfectionism relates to self-efficacy deserves further research. In this, it may be important to have positive and negative aspects of perfectionism clearly separated as was demonstrated by LoCicero and Ashby (2000) who found that adaptive perfectionists (high perfectionistic standards, low feelings of discrepancy) showed significantly higher levels of general self-efficacy than both maladaptive perfectionists (high standards, high discrepancy) and nonperfectionists (low standards). Because perfectionistic standards are a facet of positive striving perfectionism and feelings of discrepancy a facet of self-critical perfectionism, LoCicero and Ashby's findings suggest that positive striving perfectionism should be associated with higher self-efficacy once the overlap with self-critical perfectionism is controlled for.

The distinction between positive striving perfectionism and self-critical perfectionism may also be important with regard to the question of how perfectionism relates to aspiration level. Because a higher aspiration level is a defining characteristic of the perfectionism construct, it comes as a surprise that so far only two studies have investigated whether perfectionists do have higher aspirations. The first study (Hewitt & Flett, 1991, Study 3) investigated the relationship between perfectionism and general standards for academic performance, and did not find any significant correlations between perfectionism and standards. The second study (Bieling et al., 2003) investigated standards for performance in a specific exam, and found significant correlations between perfectionism and standards. Prior to an important midterm exam, undergraduates responded to a number of questions about their standards for performance in this exam. When responses were averaged to an overall measure of standards for performance, positive striving perfectionism and self-critical perfectionism both showed positive correlations with standards, indicating that perfectionists do set higher standards for performance. However, the correlation of positive striving perfectionism with standards for performance was significantly higher than that of self-critical perfectionism, suggesting that it is mainly the striving dimension of perfectionism that is related to aspiration level.

But what happens if perfectionists fail to fulfill their aspirations, and what if they succeed? So far, four studies have investigated how perfectionists react to experimental manipulations of success and failure (Anshel & Mansouri, 2005; Besser et al., 2004; Stoeber, Harris, & Moon, 2007; Stoeber, Kempe, & Keogh, 2008). Unfortunately, the findings are inconsistent. Whereas Stoeber et al. (2007) did not find perfectionists to show any different affective reactions to success and failure in comparison to nonperfectionists, Anshel and Mansouri (2005) found that athletes high in perfectionism showed decreased positive affect and poorer performance after repeated failure compared to athletes low in perfectionism. Moreover, Besser et al. (2004) found that university students high in self-oriented perfectionism reacted more negatively to failure (e.g., decreased positive affect, increased rumination) than students low in self-oriented perfectionism, but did not find any differential effects for success. In contrast, Stoeber et al. (2008) found that, whereas all aspects of perfectionism predicted higher levels of shame after failure, perfectionistic striving predicted higher levels of pride after success, corroborating previous findings that perfectionistic striving is associated with positive characteristics, processes, and outcomes (Stoeber & Otto, 2006).

Against this background, the present study had two aims. First, we aimed to investigate how the defining facets of positive striving perfectionism and self-critical perfectionism—perfectionistic striving and self-criticism—were related to self-efficacy, aspiration level, and test performance when the expected overlap between perfectionistic striving and self-criticism was controlled for (Stoeber & Otto, 2006). Based on the literature that positive striving perfectionism is associated with positive characteristics, processes, and outcomes, we expected perfectionistic striving to be positively correlated with self-efficacy, aspiration level, and performance. In contrast, we expected self-criticism to be negatively correlated with self-efficacy (e.g., Dunkley et al., 2003; Sturman & Mongrain, 2008), but unrelated to aspiration level and performance. Second, we aimed to investigate whether perfectionistic striving and self-criticism predicted differential reactions to experimentally manipulated success and failure by investigating whether individual differences in perfectionistic striving and self-criticism predicted changes in self-efficacy, aspiration level, and performance following success or failure. Particularly, we expected perfectionistic striving to be associated with positive changes (i.e., increases in self-efficacy, aspiration level, and/or performance) following success, whereas we expected self-criticism to be associated with negative changes (i.e., decreases in self-efficacy, aspiration level, and/or performance) following failure.

2. Method

2.1. Participants

A sample of $N = 100$ undergraduate students (18 male, 82 female) was recruited at a British university. Mean age was 21.2 years ($SD = 6.7$; range = 18–51 years). In exchange for participation, students received extra course credit.

2.2. Procedure

All participants were tested individually and were randomly allocated to two feedback conditions: success ($n = 50$) or failure ($n = 50$)[1] Upon arrival in the laboratory, the experimenter (the second or third author) informed participants that the study was about how personality related to task choice and aptitude test performance. Participants then completed the measures of perfectionistic striving and self-criticism and the measure of self-efficacy at Time 1. Afterwards, participants were presented with seven large manila envelopes, containing the first test (Test 1), numbered and labeled from "1 = very easy" to "7 = very difficult" (unknown to the participants, all contained the same test). Participants were asked to choose one envelope, and their choice was used to measure aspiration level at Time 1. Then they completed the test, for which they were given 13 min, measured by the experimenter with a stop watch to assess test performance at Time 1 (for further details, see Section 2.3).

Afterwards, the experimenter told participants that she would score the number of correct test answers before continuing with the second part of the study, sat down at a separate table, and pretended (in full sight of the participant) to score the number of correct answers by checking the participants' answer sheet against a scoring sheet from the test manual—scoring more answers as correct when participants were in the success condition, and less answers when they were in the failure condition—and to compare the

[1] Gender distribution and mean age did not differ between groups (gender: $\chi^2[1] = 1.09$, $p > .29$; age: $t[98] = 0.69$, $p > .49$).