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Perfectionism and Emotional Reactions to Perfect and Flawed Achievements:

Satisfaction and Pride Only When Perfect

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Author Note

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Abstract

Perfectionists have excessively high standards and thus are prone to experience dissatisfaction and embarrassment. But what if they achieve perfection? The present study investigated in a sample of 194 university students how self-oriented and socially prescribed perfectionism predicted emotional reactions (satisfaction, dissatisfaction, pride, embarrassment) to imagined situations in which students achieved either perfect or flawed outcomes. Self-oriented perfectionism showed positive correlations with satisfaction and pride after perfect outcomes, and positive correlations with dissatisfaction and embarrassment after flawed outcomes. In contrast, socially prescribed perfectionism showed positive correlations with dissatisfaction after both perfect and flawed outcomes. Moreover, socially prescribed perfectionism moderated the relationship of self-oriented perfectionism with satisfaction and pride after perfect outcomes: Self-oriented perfectionism predicted higher satisfaction and pride only in students with low levels of socially prescribed perfectionism. The findings show that perfectionists high in self-oriented perfectionism, but low in socially prescribed perfectionism may experience more pride and greater satisfaction than nonperfectionists, but only when they achieve perfection.

Keywords: perfectionism; satisfaction; dissatisfaction; self-conscious affect; pride; embarrassment; success; failure

Introduction

Perfectionists 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 perfectionists—because they have excessively high standards and are overly self-critical—regard all their achievements as under-achievements and thus are prone to experience shame and embarrassment and are unable to experience pride (e.g., Sorotzkin, 1985; see Tangney, 2002, for a comprehensive review).

This view, however, disregards that perfectionism is best conceptualized as a multidimensional personality characteristic (Frost et al., 1990; Hewitt & Flett, 1991; Slaney, Rice, Mobley, Trippi, & Ashby, 2001; see Enns & Cox, 2002 for a review). Regarding multidimensional measures of perfectionism, one of the most widely used measures is the Multidimensional Perfectionism Scale (MPS; Hewitt & Flett, 1991). The MPS differentiates between three dimensions of perfectionism of which two are relevant in the present context: self-oriented perfectionism and socially prescribed perfectionism. Self-oriented perfectionism captures perfectionistic striving, self-imposed perfectionistic standards, and the personal belief that it is important to be perfect. In comparison, socially prescribed perfectionism captures beliefs that others have high expectations and exert pressure on oneself to be perfect and that others' approval is conditional on one's being perfect (Hewitt & Flett, 1991, 2004).

A number of studies have investigated how self-oriented perfectionism and socially prescribed perfectionism relate to self-conscious affect by examining correlations with proneness to pride, shame, and embarrassment (Fee & Tangney, 2000; Hewitt & Flett, 1991; Klibert, Langhinrichsen-Rohling, & Saito, 2005; Lutwak & Ferrari, 1996; Tangney, 2002). Across studies, socially prescribed perfectionism showed significant positive correlations with proneness to shame and proneness to embarrassment. In contrast, self-oriented perfectionism showed significant positive correlations with proneness to shame in some studies, but not in

others. Moreover, it did not show significant positive correlations with proneness to embarrassment. Finally, neither self-oriented perfectionism nor socially prescribed perfectionism showed significant negative correlations with proneness to pride (see Stoeber, Harris, & Moon, 2007, for a review).

The findings call into question whether perfectionists are generally prone to experience shame and embarrassment and unable to experience pride. Moreover, a recent study (Stoeber, Kempe, & Keogh, 2008) provided the first evidence that, under certain conditions, people with high levels of self-oriented perfectionistic striving may experience more pride than people with low levels of self-oriented perfectionistic striving. The study investigated how facets of selforiented perfectionism (perfectionistic striving, importance of being perfect) and socially prescribed perfectionism (others' high standards, conditional acceptance) predicted emotional reactions to success and failure. Participants were presented with the task of finding errors in a series of cartoons. Half of the participants were assigned to the success condition: they were told that each cartoon contained five errors, and all cartoons in the series contained five errors. The other half was assigned to the failure condition: they too were told that each cartoon contained five errors, but the last cartoon in the series contained only four errors. After the task, participants completed measures of state pride and shame. The study found that all four facets showed significant positive correlations with shame after failure. Moreover, the two facets of socially prescribed perfectionism showed significant negative correlations with pride after success. In contrast, the perfectionistic striving facet of self-oriented perfectionism showed a significant positive correlation with pride after success, indicating that people with high levels of self-oriented perfectionistic striving may experience more pride than people with low levels when they achieve a perfect result.

Open Questions

Stoeber et al.'s (2008) study, however, had a number of limitations. First, the study investigated only facets of self-oriented and socially prescribed perfectionism, and the positive

correlation between self-oriented perfectionism and pride was significant for only one facet of self-oriented perfectionism (perfectionistic striving), but not for the other facet (importance of being perfect). Consequently, it is unclear whether self-oriented perfectionism as a whole would have shown the same effect. Second, the sample was rather small. In the success condition, only 34 participants achieved a perfect result finding all errors in all cartoons. Finally, while the manipulation of the experimental task (finding errors in cartoons) was successful in evoking pride—participants who achieved a perfect result showed significantly higher pride than participants who failed to achieve a perfect result—it is unclear whether the study's findings would generalize to everyday experiences. Consequently, it would be important to investigate whether the findings would replicate in a study investigating and manipulating everyday achievements.

In addition, it would be important to investigate further emotional reactions such as satisfaction and dissatisfaction. Because of their striving for flawlessness and setting excessively high standards, perfectionists are prone to experience dissatisfaction (Slade, Newton, Butler, & Murphy, 1991). In particular, perfectionists high in self-oriented perfectionism have been shown to report high dissatisfaction when told that their performance was flawed (Besser, Flett, & Hewitt, 2004).

Finally, it would be important to investigate whether socially prescribed perfectionism moderates the relationships of self-oriented perfectionism with emotional reactions to success and failure. According to the two-factor theory of perfectionism (Frost, Heimberg, Holt, Mattia, & Neubauer, 1993; Stoeber & Otto, 2006; Yang & Shen, 2008), two broad factors of perfectionism can be differentiated: perfectionistic strivings and perfectionistic concerns. When combined, the two factors can be used to differentiate between two kinds of perfectionists named "healthy perfectionists" (showing high perfectionistic strivings and low perfectionistic concerns) and "unhealthy perfectionists" (showing high perfectionistic strivings and high perfectionistic concerns). Studies have shown that healthy perfectionists show higher levels of

psychological adjustment and lower levels of distress than unhealthy perfectionists (see Stoeber & Otto, 2006, for a review). Moreover, studies have shown that self-oriented perfectionism forms part of the perfectionistic strivings dimension, and socially prescribed perfectionism forms part of the perfectionistic concerns dimension (see again Stoeber & Otto, 2006). Accordingly, perfectionists who are high in self-oriented perfectionism and low in socially prescribed perfectionism have been found to show lower levels of distress and negative self-conscious affect (less depression, anxiety, shame, and guilt) than perfectionists who were high in self-oriented perfectionism and high in socially prescribed perfectionism (Klibert et al., 2005). Consequently, it can be expected that perfectionists high in self-oriented perfectionism and low in socially prescribed perfectionism show more positive emotional reactions to achieving success than perfectionists who are high in self-oriented perfectionism and high in socially prescribed perfectionism.

The Present Study

The aim of the present study was to examine the relationships of self-oriented and socially prescribed perfectionism with positive and negative emotional reactions following the achievement of perfect outcomes compared to flawed outcomes, investigating both cognitive-evaluative emotions (satisfaction, dissatisfaction) and self-conscious emotions (pride, embarrassment). Regarding self-conscious emotions, we chose to investigate embarrassment instead of shame because embarrassment is the less intense emotion felt in response to more minor errors and transgressions compared to shame (Tangney, 2002). To investigate emotional reactions, we presented participants with a series of vignettes asking them to imagine achieving perfect and flawed outcomes. Expanding on Stoeber et al.'s (2008) findings, we expected self-oriented perfectionism to be associated with positive emotions (dissatisfaction, pride) when achieving perfect outcomes and with negative emotions (dissatisfaction, embarrassment) when achieving flawed outcomes. In contrast, we expected socially prescribed perfectionism to be associated with negative emotions (dissatisfaction, embarrassment) regardless of outcome. In

addition, we aimed to examine whether socially prescribed perfectionism moderated the relationship between self-oriented perfectionism and emotional reactions. In line with Stoeber and Otto's (2006) review and Klibert et al.'s (2005) findings, we expected that participants with high levels of self-oriented perfectionism and low levels of socially prescribed perfectionism would show more positive emotional reactions (satisfaction, pride) to achieving success than perfectionists with high levels of self-oriented perfectionism and high levels of socially prescribed perfectionism. Because both forms of perfectionism have been associated with negative emotional reactions after failure, we did not expect a moderation effect for negative emotional reactions (dissatisfaction, embarrassment).

Method

Participants and Procedure

A sample of 194 undergraduate students (98 male, 96 female) was recruited at a large university in the eastern coastal region of the People's Republic of China. Mean age of students was 20.7 years (SD = 1.5, range: 17 – 24 years). Students were recruited after class and volunteered to participate in the study without compensation.

Measures

Perfectionism. To measure self-oriented and socially prescribed perfectionism, we used the respective scales of the Chinese version of the Multidimensional Perfectionism Scale (MPS; Hewitt & Flett, 1991, 2004; Chinese version: Zhou, Song, & Li, 2008): self-oriented perfectionism (15 items; e.g., "I demand nothing less than perfection of myself") and socially prescribed perfectionism (15 items; e.g., "People expect nothing less than perfection of me"). The Chinese version of the MPS has been investigated in a number of studies and has shown psychometric characteristics comparable to the original version (e.g., Chen, Guan, Zhang, & Li, 2008; Guan, Song, & Li, 2008; Zhou et al., 2008). With Cronbach's alphas of .87 (self-oriented perfectionism) and .73 (socially prescribed perfectionism), both scales' scores showed satisfactory reliability (Nunnally, 1967). Self-oriented perfectionism showed a mean of M =

65.00~(SD = 14.84) and socially prescribed perfectionism a mean of M = 52.86~(SD = 10.88) which are comparable to the means and standard deviations Hewitt and Flett (2004) report for community sample respondents 18-24 years old.

Emotional reactions. To measure emotional reactions, we used a set of 14 scenarios developed by Stoeber and Kobori (2006) in which the protagonist achieves either a perfect outcome or a flawed outcome: (1) Birthday Card, (2) Project Report, (3) Cleaning Glasses, (4) Deadline, (5) Weekend Picnic, (6) Take Your Pills, (7) Holiday Trip, (8) Movie Night, (9) Returning a Book, (10) Organizing a Dinner, (11) Spending, (12) List of Tasks, (13) Grandmother's Ten Pills, and (14) Revision (see Appendix for examples). The scenarios were translated from English to Chinese by the university's translation department using the standard backtranslation procedure recommended by Brislin, Lonner, and Thorndike (1973). To have all participants respond to perfect and flawed outcomes, two versions of the measure were constructed. In Version 1, the even-numbered scenarios were presented with the perfect outcome and the odd-numbered scenarios with the flawed outcome. In Version 2, the oddnumbered scenarios were presented with the perfect outcome and the even-numbered scenarios with the flawed outcome. Participants were instructed to carefully read the description of each situation, imagine vividly that the situation was happening to them, and then indicate how much satisfaction, dissatisfaction, pride, and embarrassment they would feel if this situation happened to them, answering on a scale from 0 (not at all) to 5 (extremely). To obtain measures of satisfaction, dissatisfaction, pride, and embarrassment after achieving a perfect versus flawed outcome, we computed the average of the responses from the seven perfect scenarios and the seven flawed outcomes, respectively. With Cronbach's alphas between .68 and .91, all scores showed reliabilities acceptable for research purposes (Nunnally, 1967).

¹The full list of scenarios is available from the first author upon request.

Preliminary Analyses

Manipulation check. First, we computed pairwise t-tests to examine whether the students reacted to the manipulation of the scenarios' outcomes (perfect vs. flawed) in the expected direction: stronger positive emotional reactions (satisfaction, pride) to perfect compared to flawed outcomes, and stronger negative emotional reactions (dissatisfaction, embarrassment) to flawed compared to perfect outcomes. All differences were significant in the expected direction (see Table 1).

Transformations. Inspecting the distribution of scores, results showed that both the negative emotional reactions (dissatisfaction, shame) to achieving perfect outcomes and the positive emotional reactions (satisfaction, pride) to achieving flawed outcomes showed L-shaped distributions. Not surprisingly, most participants responded with a score of 0 (not at all) when imaging how much dissatisfaction and embarrassment they felt after achieving a perfect outcome and how much satisfaction and pride they felt after achieving a flawed outcome. Consequently, as recommended by Tabachnick and Fidell (2007), these scores were transformed using the formula for L-shaped distributions with zero (in SPSS syntax): NEWX = -1 / (X - 1).

Multivariate outliers. Because multivariate outliers can severely distort the results of correlation and regression analyses, we inspected the data for multivariate outliers. Two participants showed data with a Mahalanobis distance larger than the critical value of $\chi^2(10) = 29.59$, p < .001 (Tabachnick & Fidell, 2007) and were excluded from the analyses.

Gender. To examine whether the variance–covariance matrices differed between male and female participants, we computed a Box's M test. Because this test is highly sensitive, differences are tested on the p < .001 level (Tabachnick & Fidell, 2007). Box's M was nonsignificant with M = 78.50, F(55, 116578) = 1.31, p = .044. Consequently, data were collapsed across gender.

First, we computed bivariate correlations between all variables to examine our hypotheses that the two forms of perfectionism—self-oriented perfectionism and socially prescribed perfectionism—showed different relationships with emotional reactions to achieving perfect versus flawed outcomes. Next, we computed moderated regression analyses (Aiken & West, 1991) to examine whether socially prescribed perfectionism moderated the relationships of self-oriented perfectionism with emotional reactions to achieving perfect versus flawed outcomes.

Results

Bivariate Correlations

Table 2 shows the bivariate correlations between all variables. As expected, self-oriented perfectionism and socially prescribed perfectionism showed different patterns of correlations with the emotional reactions. Self-oriented perfectionism showed positive correlations with satisfaction and pride after achieving a perfect outcome, and positive correlations with dissatisfaction and embarrassment after achieving a flawed outcome. In contrast, socially prescribed perfectionism showed positive correlations with dissatisfaction regardless of the outcome, as was predicted. Unexpectedly, socially prescribed perfectionism showed a significant positive correlation with embarrassment after achieving a perfect outcome, whereas the positive correlation between socially prescribed perfectionism and embarrassment when achieving a flawed outcome failed to reach statistical significance (p = .065).

Moderated Regression Analyses

Next, we examined interaction effects of the two forms of perfectionism on emotional reactions to perfect and flawed achievements by computing moderated regression analyses with interactions between continuous predictors following Aiken and West (1991, Chapter 2). Results showed significant interaction effects of self-oriented perfectionism \times socially prescribed perfectionism for three emotional reactions: (a) satisfaction after achieving a perfect outcome, B = -0.18, SE B = 0.05, p = .001; (b) pride after achieving a perfect outcome, B = -0.18, SE B = 0.05, p = .001; (b) pride after achieving a perfect outcome, B = -0.18.

-0.18, $SE\ B = 0.09$, p = .045; and (c) satisfaction after achieving a flawed outcome, B = -0.03, $SE\ B = 0.02$, p = .043.

To understand the nature of these interactions, regression graphs for values of one standard deviation above and below the means of the two interacting variables were plotted and the slopes tested for significance (see again Aiken & West, 1991, Chapter 2). Regarding satisfaction after achieving a perfect outcome, results showed that self-oriented perfectionism showed a positive association with satisfaction only in students with low levels of socially prescribed perfectionism, B = 0.38, SE B = 0.08, p < .001, but not in students with high levels of socially prescribed perfectionism, B = 0.02, SE B = 0.10, p = .847 (see Figure 1, Panel A). Regarding pride after a perfect outcome, results showed that self-oriented perfectionism showed a positive association with pride only in students with low levels of socially prescribed perfectionism, B = 0.37, SE B = 0.13, p = .004, but not in students with high levels of socially prescribed perfectionism, B = 0.01, SE B = 0.16, p = .959 (see Figure 1, Panel B). Regarding satisfaction after a flawed outcome, however, results showed that neither of the individual slopes was significant: Self-oriented perfectionism showed a nonsignificant positive association with satisfaction in students with low levels of socially prescribed perfectionism, B = 0.04, SEB = 0.02, p = .068; and it showed a nonsignificant negative association with satisfaction in students with high levels of socially prescribed perfectionism, B = -0.02, SE B = 0.03, p = .407(no figure).

Discussion

The aim of the present study was to investigate how self-oriented and socially prescribed perfectionism relate to positive and negative emotional reactions to achieving perfect outcomes and flawed outcomes. As expected, self-oriented perfectionism and socially prescribed perfectionism showed different patterns of relationships with emotional reactions. Socially prescribed perfectionism showed positive correlations with dissatisfaction regardless of outcome: participants high in socially prescribed perfectionism felt more dissatisfaction than

participants low in socially prescribed perfectionism not only when achieving a flawed outcome, but also when achieving a perfect outcome. In contrast, self-oriented perfectionism showed positive correlations with satisfaction and pride when achieving a perfect outcome, and positive correlations with dissatisfaction and embarrassment when achieving a flawed outcome. However, self-oriented perfectionism was associated with higher satisfaction and pride after achieving a perfect outcome only in participants with low levels of socially prescribed perfectionism. In participants with high levels of socially prescribed perfectionism, self-oriented perfectionism was not associated with higher satisfaction and pride. This finding suggests that socially prescribed perfectionism prevents people high in self-oriented perfectionism from experiencing satisfaction and pride when achieving a perfect outcome.

The findings extend the findings of Stoeber et al.'s (2008) study by showing that people high in self-oriented perfectionism can feel more pride than people low in self-oriented perfectionism. In addition, the present findings show that they can also feel greater satisfaction. However, this is dependent on two conditions: (a) only after achieving a perfect outcome and (b) only if they are low in socially prescribed perfectionism do they feel more pride and greater satisfaction. With this the findings support the view of the two-factor theory of perfectionism (Stoeber & Otto, 2006) that perfectionists who are high in perfectionistic strivings (e.g., self-oriented perfectionism) and low in perfectionistic concerns (e.g., socially prescribed perfectionism) show more healthy characteristics than perfectionists who are high in perfectionistic strivings and high in perfectionistic concerns (see also Klibert et al., 2005). Moreover, the findings support Hamachek's (1978) view that not all perfectionists are unable to experience pride, but that there are so-called "normal perfectionists" who are able to enjoy their achievements and experience pride. The present findings suggest that it is perfectionists high in self-oriented perfectionism, but low in socially prescribed perfectionism who are the normal perfectionists that Hamachek had in mind.

The present study has some limitations. First, the emotional reactions we examined

were imagined emotional reactions to scenarios describing hypothetical situations. While eliciting affective responses to scenarios has been shown to be a valid method of indicating affective responses in real life, showing convergence of real and imagined reactions to emotional stimuli (Robinson & Clore, 2001), future studies need to show that the present findings can be replicated when affective reactions to real-life experiences of achieving perfect versus flawed outcomes are examined. Second, the present study failed to find the expected strong links between socially prescribed perfectionism and embarrassment (Tangney, 2002; see also Sagar & Stoeber, 2009). Unexpectedly, socially prescribed perfectionism showed a significant positive correlation with embarrassment only after achieving a perfect outcome, but not after achieving a flawed outcome. Consequently, future studies need to further explore how (and when) self-oriented perfectionism is associated with embarrassment. Finally, the present findings were obtained with a sample of Chinese students. While most studies on perfectionism investigating perfectionism in Chinese students showed the same pattern of findings as studies with Western samples (e.g., Zhang, Gan, & Cham, 2007), there are studies that found subtle differences (e.g., Cheng, Chong, & Wong, 1999; Wang, Slaney, & Rice, 2007). Therefore, future studies may want to replicate the present findings with student samples from Western cultures.

Nevertheless, the present findings have important implications for the understanding of perfectionism and emotional reactions to success and failure as they provide further evidence that there are perfectionists who are able to experience more pride and greater satisfaction than nonperfectionists. These findings contradict views that all perfectionists are unable to feel pride and to experience satisfaction from their achievements. However, the findings suggest that the experience of elevated pride and satisfaction is restricted to perfectionists with high levels of self-oriented perfectionism and low levels of socially prescribed perfectionism. Moreover, and more importantly, the experience of pride and satisfaction is restricted to situations where they achieve perfect results.

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Table 1
Satisfaction, Dissatisfaction, Pride, and Embarrassment Following Perfect and Flawed
Achievements

		Achievement						
	Per	fect	Flaw	Flawed				
Emotional reaction	M	SD	M	SD	t(193)			
Satisfaction	3.75	0.92	0.80	0.79	39.44***			
Dissatisfaction	0.26	0.46	3.06	0.99	-36.00***			
Pride	1.87	1.44	0.31	0.56	16.99***			
Embarrassment	0.14	0.39	1.93	1.09	-22.95***			

Note. N = 194. Emotional reactions were measured on a scale from 0 (not at all) to 5 (extremely).

^{***}p < .001.

Table 2 Completions

	2							
	2	3	4	5	6	7	8	9
<**								
<**	.00							
	.23**	11						
<	.05	.45***	.18*					
	.19**	13	.62***	.16*				
-	06	.29***	.34***	.43***	.32***			
<**	.19**	.41***	.09	.39***	.01	06		
	.14	.12	.47***	.53***	.50***	.65***	05	
*	.13	.35***	.23**	.55***	.18*	.14	.61***	.23**
	·** · · ·***	0619**14	06 .29***10 .23**1105 .45***1306 .29***14 .12	*** .00 .23**11 .05 .45*** .18* .19**13 .62*** 06 .29*** .34*** *** .19** .41*** .09 .14 .12 .47***	*** .00 .23**11 .05 .45*** .18* .19**13 .62*** .16* 06 .29*** .34*** .43*** *** .19** .41*** .09 .39*** .14 .12 .47*** .53***	*** .00 .23**11 .05	*** .00 .23**11 .05 .45*** .18* .19**13 .62*** .16* 06 .29*** .34*** .43*** .32*** *** .19** .41*** .09 .39*** .01 06 .14 .12 .47*** .53*** .50*** .65***	*** .00 .23**11 .05 .45*** .18* .19**13 .62*** .16* 06 .29*** .34*** .43*** .32*** *** .19** .41*** .09 .39*** .01 06 .14 .12 .47*** .53*** .50*** .65*** 05

Note. N = 192. Dissatisfaction and embarrassment after achieving a perfect outcome, and satisfaction and pride after achieving a flawed outcome are transformed scores (see Preliminary Analyses for details).

^{*}p < .05. **p < .01. ***p < .001.

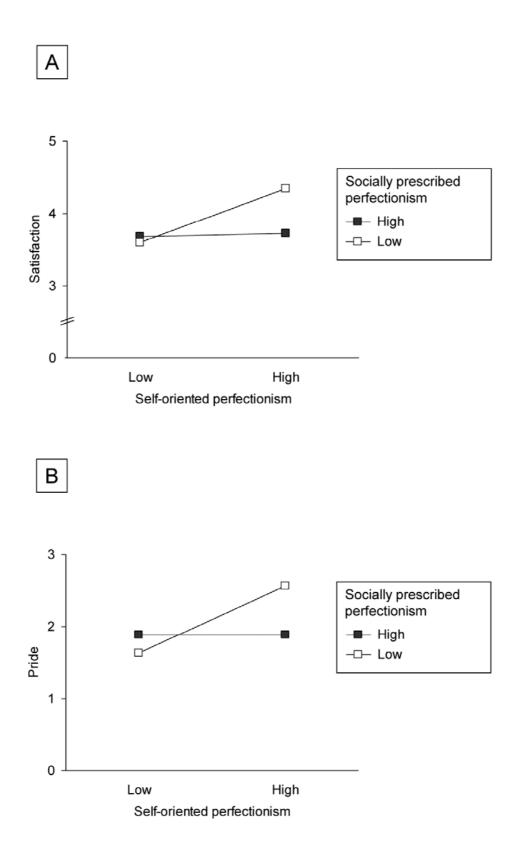


Figure 1. Interaction effects of self-oriented perfectionism and socially prescribed perfectionism on emotional reactions after achieving a perfect outcome: satisfaction (Panel A) and pride (Panel B).

Appendix

Sample Scenarios

Birthday card. You are invited to a friend's birthday and have bought a very nice and expensive birthday card to go with your present. You add a few personal lines to the birthday card in your very best handwriting, [Perfect] and the card really looks perfect / [Flawed] but when you hand over the card you notice that you have misspelled your friend's name.

Cleaning glasses. You have a part-time job at an expensive restaurant. For a banquet of important guests, you have to polish the wine glasses. After the guests arrive and sit down at the table, [Perfect] you look around and all glasses are crystal clear with perfect shine / [Flawed] you notice that one of the glasses shows some fingerprints.

Grandmother's ten pills. While your parents are away, you have taken over the task of caring for your grandmother who has been very ill for a long time. Your grandmother has to take 10 different pills every day according to a certain schedule. You observe the schedule meticulously [Perfect] and you give your grandmother each and every pill every day exactly as prescribed / [Imperfect] but on one day you mix up one of the evening pills with one of the morning pills.