

The Importance of Item Wording: The Distinction Between Measuring High Standards Versus Measuring Perfectionism and Why It Matters

Journal of Psychoeducational Assessment
2016, Vol. 34(7) 702–717
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sagepub.com/journalsPermissions.nav
DOI: 10.1177/0734282916653701
jpa.sagepub.com



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Abstract

In the current research, we illustrate the impact that item wording has on the content of personality scales and how differences in item wording influence empirical results. We present evidence indicating that items in certain scales used to measure “adaptive” perfectionism fail to capture the disabling all-or-nothing approach that is synonymous with the individual who is driven to attain perfection. Original and modified versions of two perfectionism measures of high personal standards and modified perfectionistic standards versions of these scales were administered to three samples of participants. A series of analyses established that item wording does indeed matter. In particular, our results differed for a modified version of the Almost Perfect Scale–Revised when the focus was on a conceptualization and assessment of perfectionism that is fundamentally different from conscientious striving. The current findings are discussed in terms of their implications for scale construction and item wording in general and for the measurement of perfectionism in particular. The specific implications of these findings are examined in terms of understanding dysfunctional perfectionism and the current debate about whether certain aspects of perfectionism are adaptive versus maladaptive.

Keywords

perfectionism, standards, conscientiousness, depression, anxiety, suicide

In research addressing personality constructs, our derived understanding is dependent on a foundation of accurate measurement. Careful development of measures meant for use in both research and/or clinical settings is sine qua non for acceptance for concept development and understanding. Poorly designed measures have consequences for our interpretation of research data and, ultimately, of our understanding of human behavior. At a micro level of scale development, it is of paramount importance that individual scale items accurately represent the construct of

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interest, especially since flaws at the item-level necessarily influences subsequent levels of scale development and validation (Clark & Watson, 1995).

The current multi-sample study examines these issues in terms of the importance of item-wording in the measurement of perfectionism and how it relates to a key debate about the extent to which perfectionism may be adaptive rather than maladaptive. The issues involved in this debate are now examined in greater detail.

Conceptualizations of Perfectionism

Perfectionism researchers have long disagreed about whether the concept of perfectionism reflects a maladaptive personality variable or if it can also be considered to be adaptive.

Our argument here, and in previous work (see Flett & Hewitt, 2006; Greenspon, 2000; Hall, 2006; Hewitt, Flett, & Mikail, in press), is that setting high standards or striving for excellence may be adaptive, but high standards or striving for excellence has little to do with perfectionism (also, see Frost, Marten, Lahart, & Rosenblate, 1990). Specifically, Flett and Hewitt (2006) suggested that the high-standard setting characterized as “adaptive perfectionism” is better conceptualized as a relatively healthy form of conscientious achievement striving as opposed to the extreme orientation that is expressed by perfectionistic individuals.

The crucial need to distinguish between conscientious striving for excellence versus requiring perfection of the self or others was illustrated in research that examined the associations among self-oriented perfectionism, conscientiousness, and job performance in a sample of about 500 psychology professors (see Sherry, Hewitt, Sherry, Flett, & Graham, 2010). This study found that conscientiousness was adaptive in that it was associated positively with the number of scholarly publications and the established impact rating of these publications. In contrast, self-oriented perfectionism was associated negatively with these outcomes; that is, more perfectionistic professors were less academically accomplished. These data illustrate that there is a key distinction between conscientious achievement striving versus the pressure of striving for perfection.

Mixed Evidence for the Adaptiveness of Perfectionism

Studies exploring the potential adaptiveness of perfectionism have found mixed results. Some research has shown that self-oriented perfectionism is associated with depressive symptoms and other indicators of maladjustment (e.g., Downey & Chang, 2007; Flamenbaum & Holden, 2007; Hewitt & Flett, 1991, 1993) whereas other research has shown no association with maladjustment (e.g., Clara, Cox, & Enns, 2007; Gilbert, Durrant, & McEwan, 2006). Other research using a variety of operationalizations of adaptive perfectionism as high personal standard setting has found positive associations with positive outcomes such as life satisfaction (Chang, Watkins, & Banks, 2004) and positive affect (Molnar, Reker, Culp, Sadava, & DeCourville, 2006). Various authors have concluded based on either this mixed overall pattern of results or their own findings that high standards are not pathological *per se* and that problems in adjustment stem from how perfectionists respond when they do not live up to their set standards (e.g., Lundh, 2004; Slaney, Rice, Mobley, Trippi, & Ashby, 2001; Stoeber, Otto, Pescheck, Becker, & Stoll, 2007; Van Yperen & Hagedoorn, 2008).

Issues in the Measurement of Adaptive Perfectionism

One question that has not been addressed extensively is whether the measures designed to assess high standards actually capture the construct of perfectionism. When the distinction between striving for perfectionism versus striving for excellence is used as a frame of reference, possible problems become increasingly apparent. The Almost Perfect Scale–Revised (APS-R; Slaney

et al., 2001) is a particularly illustrative example, given the word “perfect” never actually appears in any of the scale items despite the fact that the word “perfect” appears in the name given to this measure. The item “I expect the best from myself,” for example, may better represent a conscientious striving for achievement than perfectionism. Re-worded as “I expect perfection from myself,” it becomes more appropriately face valid as a measure of perfectionism. We maintain that these relatively simple distinctions are of vital importance in terms of the subsequent relationships that are found with the scale, and this influences our understanding of the perfectionism construct. Scale items purporting to tap self-oriented perfectionism should be worded and phrased in ways that capture the urgent and imperative and perhaps compulsive need to be perfect according to exceptionally high standards.

The Importance of Item Wording

There are many demonstrations of how item wording substantially affects subsequent results (e.g., Sinclair & Tetrick, 2000; Torangeau & Rasinski, 1988), including evidence that more extreme and neutral scales in terms of items can yield dissimilar results (Ben-Artzi, 2003). Items used in scale construction must be evaluated individually to confirm that they reflect the construct in question. Haigler and Widiger (2001) devised an experimental version of a well-known five-factor personality inventory, the NEO Personality Inventory-Revised (NEO-PI-R)(Costa & McCrae, 1992), to explore noted difficulties in capturing maladaptive aspects of personality using the five-factor model. Items were altered to reflect more extreme personality characteristics by adding words such as “excessive” and “too much” to make them more extreme. For example, the NEO-PI-R conscientiousness item “I keep my belongings neat and clean” was modified to “I keep my belongings excessively neat and clean.”

Haigler and Widiger (2001) revealed that although the personality dimensions of the original version showed primarily negative or nonsignificant correlations with several dimensions of disordered personality, the extreme dimensions tapped by their experimental version showed a very different profile of positive associations with various forms of personality psychopathology.

Other authors have noted that there is a maladaptive side to conscientiousness that is often not tapped by existing measures, and as a result, the true degree of association between the conscientiousness construct and compulsive personality dysfunction has been underestimated in empirical research using these conscientiousness measures (see Samuel & Gore, 2012). Support for this position was provided by Aelterman, De Clercq, De Bolle, and De Fruyt (2011) in their research with a large sample of children and adolescents. They showed that the identification of obsessive-compulsive tendencies improved only when scales believed to reflect maladaptive conscientiousness (including a Perfectionism subscale) were taken into account. These data suggest that it is important to go beyond what a scale purports to measure and carefully consider the actual items and themes represented in the scale.

In this regard, an early study in the perfectionism field conducted by Flett, Hewitt, and Mittelstaedt (1991) underscored the importance of item wording and scale content when assessing perfectionism. This study found that assessing high standards with a subscale from a measure of self-punitiveness developed by Carver and Ganellen (1983), the High Standards subscale was not correlated with depression nor did not interact with other components of self-punitiveness to predict elevated depression. However, when an alternative measure of high standards was used, the High Self-Expectancies subscale of the Irrational Beliefs Test (Jones, 1968), very different results emerged in the same sample of participants. This measure of perfectionistic self-standards was correlated significantly with depression and interacted with other components of self-punitiveness to predict elevated depression. These results clearly illustrate the need to be attentive to the specific wording and item content of scale items believed to measure a perfectionistic orientation.

In light of these observations, we assessed the importance of item-wording by modifying two existing measures of high standards (the Personal Standards subscale from Frost and colleagues' [1990] measure of perfectionism and the High Standards subscale from the Slaney and colleagues' [2001] APS-R) and administering these modified versions and the original versions of these subscales to three independent samples of young adults. The original and modified versions of these scales are found in the appendix. In general, the re-wording was much more extensive with the APS-R. Participants in two of our three samples then responded to both the original and more perfectionistic versions of the APS-R and the Frost Multidimensional Perfectionism Scale (FMPS). In our other sample, some participants completed the original scales while the other participants completed versions with more perfectionistic item wordings.

The original and perfectionistically worded versions of these measures were then compared using various statistical approaches. For instance, factor analysis was used to assess the effect of the item-wording changes. Items that have been made more perfectionistic should still cluster with the original items if measures of high standards truly capture perfectionistic standards. However, if the perfectionistic items form a separate factor, this would suggest that these items may be tapping a different construct from the original scale.

We then took these various perfectionism and high standards measures and evaluated their respective links with measures of adjustment, maladjustment, and well-being to determine the extent to which results varied across the scales purporting to measure perfectionism. Various measures were included. For instance, in our third sample, we added a measure of self-conscious emotions (state pride, shame, and guilt) as well as a measure of suicidal ideation. Recent research has shown that "adaptive perfectionism" is related to the increased experience of pride and the reduced experience of shame and guilt (Stoeber, Harris, & Moon, 2007; Stoeber, Kempe, & Keogh, 2008), so it was important to include them here as potential adaptive outcomes of perfectionism. Suicidal ideation was included as a measure of a serious negative outcome in light of growing research establishing links between perfectionism and suicide ideation (Flett, Hewitt, & Heisel, 2014; O'Connor, 2007). Not only should an adaptive form of perfectionism exert a protective effect in the form of reduced suicidal thoughts, but that relationship should hold, and even strengthen, when measures of adaptive perfectionism are made more perfectionistic through changes in item wording.

Method

Participants

Three university samples were collected using a psychology department participant pool. Participants received course-credit in exchange for completing a questionnaire package. All procedures were subjected to ethical review.

Sample 1. Sample 1 included 123 university students (72% female; M age = 21.13 years, SD = 3.66 years). Participants completed measures of positive and negative affect, self-esteem, life satisfaction, depressive and anxious symptomatology, and both the modified and original versions of the APS-R High Standards and FMPS Personal Standards subscales, as described below.

Sample 2. Sample 2 was split into two subgroups, and participants were assigned randomly to either a "high standards" condition (n = 108; 76% female, M age = 20.89 years, SD = 4.73 years) or a "perfectionistic standards" condition (n = 109; 75% female, M age = 21.45 years, SD = 4.24 years). Aside from completing either the original high standards measures of "adaptive" perfectionism or the new perfectionistic versions, participants completed the same outcome measures completed by participants in Sample 1.

Sample 3. Sample 3 consisted of 371 university students (61% female; M age = 21.01 years, SD = 2.82 years). All participants were administered the original and modified APS-R, all outcome measures administered to the other samples plus additional measures of state shame, guilt, pride (State Shame and Guilt Scale [SSGS]; Marschall, Sanftner, & Tangney, 1994), and suicidal ideation (Scale for Suicide Ideation [SSI]; Beck, Steer, & Ranieri, 1988). A subset of 71 participants also completed the FMPS-PS measures.

Materials

Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988). The PANAS is a well-used scale that assesses positive and negative state affect. The scale scores demonstrate excellent internal consistency with Cronbach's alpha of .89 for the Positive Affect scale and .85 for the Negative Affect scale.

The Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). The SWLS is a brief measure of life satisfaction. A sample item is "I am satisfied with my life." Diener and colleagues (1985) reported evidence of the scale scores' validity and reliability.

Beck Depression Inventory (BDI; Beck, Rush, Shaw, & Emery, 1979). The BDI is a well-known measure of symptoms of depression; it is both temporally stable and internally consistent for nonpsychiatric samples (Beck, Steer, & Garbin, 1988).

Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988). The BAI is a 21-item self-report inventory measuring symptoms of anxiety. It has excellent internal consistency (α = .92) and is capable of discriminating between anxious and non-anxious diagnostic groups (Beck, Epstein, et al., 1988).

The Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965). The RSES is a commonly used 10-item measure of global self-esteem (e.g., "I take a positive attitude toward myself").

SSGS (Marschall et al., 1994). The SSGS is a measure of state shame, guilt, and pride. The SSGS has been used in previous perfectionism-related research and excellent coefficients alpha have been reported as .85, .87, and .87 for the Pride, Shame, and Guilt subscale scores, respectively, (Stoeber, Harris, & Moon, 2007).

SSI (Beck, Steer, & Ranieri, 1988). The SSI is a 22-item scale measuring suicidal thoughts and behaviors. The SSI is considered a widely used and reliable (α = .93; Beck, Steer, et al., 1988) research tool for measuring suicidal symptomatology.

Modification of the "Adaptive" Perfectionism Measures' Scale Items

We focused on two measures assessing high personal standards—the Personal Standards subscale of the FMPS (FMPS-PS; Frost et al., 1990) and the High Standards subscale of the revised APS (APS-R-HS; Slaney et al., 2001). Both scale scores demonstrate good reliability in the literature (e.g., Frost et al., 1990; Slaney et al., 2001) and in our samples (average coefficients alphas across our samples were .81 for the FMPS and .87 for the APS-R).

Scale items were examined by a team comprised of one professor of psychology and two graduate students. Our goal was to modify items as little as possible but where necessary, items were re-written to reflect the extreme nature of perfectionism, rather than simply high standards or striving for excellence. In most instances, one or two words (e.g., high, excellence, best) were replaced with variants of the word "perfection" (e.g., perfect, perfectly, perfectionistic). Six of

Table 1. Means and Standard Deviations for All Measures Across Samples.

	Sample 2			
	Sample 1	HS	PS	Sample 3
	M (SD)	M (SD)	M (SD)	M (SD)
APS-R HS	34.80 (8.24)	36.27 (6.80)	—	37.32 (6.68)
APS-R PS	30.45 (10.09)	—	29.95 (10.32)	29.27 (8.72)
FMPS-HS	22.93 (5.46)	22.72 (5.05)	—	23.89 (5.26)
FMPS-PS	22.07 (5.69)	—	22.01 (5.78)	21.94 (5.78)
BDI	9.94 (7.76)	9.67 (7.81)	8.42 (6.48)	9.36 (7.57)
BAI	11.16 (9.17)	10.90 (9.56)	9.16 (7.77)	10.62 (9.24)
NA	15.59 (7.00)	15.63 (7.78)	14.06 (4.70)	16.09 (6.71)
PA	23.30 (7.81)	23.11 (8.42)	23.75 (8.50)	25.56 (8.43)
SWLS	20.24 (6.41)	21.19 (6.49)	21.55 (6.80)	21.65 (6.69)
RSES	24.05 (5.60)	24.61 (5.36)	25.36 (5.49)	25.24 (5.42)
SSGS-Pride				16.93 (4.07)
SSGS-Guilt				10.50 (4.61)
SSGS-Shame				8.79 (3.70)
SSI				1.40 (3.88)

Note. HS = High Standards; PS = Perfectionistic Standards; APS-R = Almost Perfect Scale-Revised; FMPS = Frost Multidimensional Perfectionism Scale; BDI = Beck Depression Inventory; BAI = Beck Anxiety Inventory; NA = Negative Affect; PA = Positive Affect; SWLS = Satisfaction With Life Scale; RSES = Rosenberg Self-Esteem Scale; SSGS = State, Shame, and Guilt Scale; SSI = Scale for Suicide Ideation.

the APS-R items were modified; five out of seven FMPS items were modified (see the appendix). A reliability analysis showed a coefficient alpha of .93 and .94 for the APS-R Perfectionistic Standards subscale in Samples 1 and 2, respectively, and of .89 in Sample 3. The FMPS Perfectionistic Personal Standards subscale demonstrated coefficients alpha of .82, .85, and .86 in Samples 1, 2 and 3, respectively, suggesting that scores on the modified scales show similarly acceptable levels of reliability to their original counterparts.

The modified measures in the first and second sample also included additional instructions on the modified APS-R. To control for individual differences in participants' definition of perfectionism, the sentence "Please note that the term *perfection*, or *perfectionistic* means absolutely perfect, as opposed to simply a high level of excellence or high standard" was appended to the instructions in bold. Participants in the third sample completed the modified scale without the additional instruction.

Procedure

Participants completed a questionnaire package after informed consent was obtained. In Samples 1 and 3, the original scale was presented before the modified scale in all cases to avoid unintentional cueing of the concept of perfectionism and was separated by four outcome measures.

Results

Descriptive Statistics

The means and standard deviations for all three samples are reported in Table 1. Although statistical tests for differences between the modified and original scale means are not feasible or

meaningful,¹ it is worth noting that the means and standard deviations for the original and revised FMPS measures are nearly equivalent; however, the more perfectionistic version of the APS-R subscale yielded a substantially lower mean than the mean obtained for the original APS-R subscale.

Factor Analysis

A principal components analysis with varimax rotation was performed on all respective scale items using participants from both Samples 1 and 3 ($n = 492$ for APS-R; $n = 194$ for FMPS). A principal components analysis was used to extract factors in light of the exploratory nature of our analyses. Moreover, some authors (e.g., Church & Burke, 1994; McCrae, Zonderman, Costa, Bond, & Paunonen, 1996) have described problems that can arise when using confirmatory factor analysis to test the structure of personality measures.

For all analyses, we determined the number of factors based on factors with eigenvalues greater than one (Guttman, 1954; Thompson, 2004). When both the original and modified APS-R items were analyzed together, a three-factor solution was extracted explaining 71.48% of total variance. Factor loadings are presented in the top half of Table 2. With the exception of Item 5, all the modified items loaded on the first factor, explaining 50.02% of the total variance, while all the original items loaded on the second factor, explaining 13.17% of the total variance. Item 5 of both the modified and original APS-R loaded on the third factor, which explained an additional 8.3% of variance. Perhaps this reflects the fact that Item 5 is worded in a unique way that seems to reflect a general dysfunctional attitude or belief (i.e., "If you don't expect much of yourself, you will never succeed").

The results were less clear for the FMPS. When all original and modified items were analyzed together, a three-factor solution emerged explaining 67.45% of the total variance (presented in the lower half of Table 2). In all cases, the modified and original items loaded together in a complex manner; many items loaded more or less equally on multiple factors. For instance, Factor 1 consisted of Items 12, 16, 19, and 30 of both the original and modified scales and explained 47.09% of the total variance. Item 6 was the strongest loading item on Factor 2, with Items 12, 19, and 30 of both scales loading on Factor 2 and together explaining 12.70% of the total variance. Overall, the results with the FMPS suggest that both the original and perfectionistic items of the Personal Standards scale tend to hang together more closely and measure the same construct, ostensibly interpretable as perfectionism.

Sample 1

Zero-order correlations. As expected, there were strong positive correlations between the original and modified versions of the perfectionism measures. The original APS-R and FMPS subscales correlated with the modified versions at .72 and .87, respectively, (both $p < .001$). Correlations between perfectionism measures and outcomes in Sample 1 are displayed in Table 3. With the exception of the BAI, which was positively associated with the "adaptive" High Standards subscale, no other outcome measures, positive or negative, were associated with the original APS-R subscale. In contrast, the perfectionistic APS-R Standards subscale was modestly positively correlated with both depressive and anxious symptoms.

As for the FMPS-PS, both the original and perfectionistic standards versions of the subscale were positively correlated with anxiety; no other significant correlations were found. In addition, none of the outcome correlations with the perfectionistic standards measure were significantly different from correlations with the high standards measure.

Table 2. Rotated Factor Loadings for High Standards and Perfectionistic Items (Combined Samples 1 and 3).

APS-R items (<i>n</i> = 492)	Factor 1	Factor 2	Factor 3
PS14	.87		
PS8	.84		
PS22	.81		
PS18	.81		
PS1	.74		
PS12	.73		
HS1		.83	
HS8		.80	
HS14		.77	
HS12		.74	
HS18		.68	
HS22		.68	
HS5			.87
PS5			.86
FMPS items (<i>n</i> = 194)	Factor 1	Factor 2	Factor 3
HS16	.82		
PS16	.80		
HS12	.65	.46	
PS12	.63	.52	
HS19	.57	.53	
PS19	.49	.51	.43
HS30	.52	.57	
PS30	.48	.53	
HS6		.82	
PS6		.77	
HS4			.74
PS4			.77
HS24			.65
PS24			.63

Note. Factor loadings below .40 were not reported for ease of reading. APS-R = Almost Perfect Scale-Revised; PS = Perfectionistic (modified) Standards item; HS = High (original) Standards item; FMPS = Frost Multidimensional Perfectionism Scale. Item numbers are from original scales.

Regression analysis. Next, we examined the ability of the original and modified subscales to uniquely predict positive and negative outcomes; both subscales were entered into regression analyses predicting each of the positive and negative outcome measures (see Table 4). Regarding the APS-R measures, with the exception of the models predicting positive and negative affect, all regression models were statistically significant. It can be seen that only the extreme perfectionistic standards version was significantly predictive of greater anxiety and depression in a manner fitting with the notion that perfectionism is maladaptive. The original High Standards subscale did not predict any negative outcomes, but it was positively predictive of increased self-esteem and life satisfaction; in contrast, the Perfectionistic Standards scale was *negatively* predictive of these positive outcomes. Regression models with the FMPS Personal Standards measures were also examined, and although they demonstrated a trend toward similar findings, none of the

Table 3. Correlations Between High Standards and Perfectionistic Standards and Outcome Measures for Sample 1.

Scale	Depression	Anxiety	Negative affect	Positive affect	Self-esteem	Life satisfaction
APS-R						
HS	.17 [†]	.19*	.01	.15	.10	.12
PS	.26**	.25**	.09	.10	-.08	-.07
FMPS						
HS	.12	.20*	.16	.13	.04	.05
PS	.17	.24**	.17 [†]	.16	-.02	.00

Note. APS-R = Almost Perfect Scale–Revised; HS = High Standards; PS = Perfectionistic Standards; FMPS = Frost Multidimensional Perfectionism Scale.

[†] $p \leq .06$. * $p < .05$. ** $p < .01$.

Table 4. Regression of Outcome Measures on High Standards and Perfectionistic Standards for Sample 1.

Scale	DEP		ANX		LS		SE		PA ^a		NA ^a	
	R ²	β	R ²	β	R ²	β	R ²	β	R ²	β	R ²	β
APS-R												
HS	.07*	-.02	.07*	.00	.07*	.36**	.05*	.31*	.02	.16	.02	-.12
PS		.27*		.25 [†]		-.33*		-.30*		-.01		.18
FMPS												
HS	.03	-.10	.06*	-.03	.01	.21	.01	.23	.03	-.03	.03	.05
PS		.26		.27		-.18		-.23		.18		.13

Note. DEP = Depressive Symptoms; ANX = Anxiety Symptoms; LS = Life Satisfaction; SE = Self-Esteem; PA = Positive Affect; NA = Negative Affect; APS-R = Almost Perfect Scale–Revised; HS = High Standards; PS = Perfectionistic Standards; FMPS = Frost Multidimensional Perfectionism Scale.

^a $n = 122$.

[†] $p \leq .06$. * $p < .05$. ** $p < .01$.

regression models or their predictors reached significance with the exception of the model predicting anxiety.

Sample 2

Recall that the two separate groups in Sample 2 completed only one version of the APS-R and FMPS to take into account possible order or within-subjects effects. Participants were assigned randomly to either the perfectionism item group ($n = 109$), who completed the modified perfectionistic versions of the APS-R and FMPS, or the original item group ($n = 108$) who completed the original APS-R and FMPS. Groups did not differ significantly in age or on any of the dependent variables and completed all outcome measures similar to Sample 1. A comparison of the correlations between the two groups is shown in Table 5. Only the perfectionistic version of the APS-R was positively correlated with depressive symptoms; however, both versions of the APS-R were positively correlated with anxiety and (marginally) with negative affect.

For the FMPS scales, only the perfectionistic version was correlated with increased anxiety. Unexpectedly, the perfectionistic standards versions of both measures were also positively associated with positive affect. Correlations were nonsignificant between either subscales and self-esteem and life satisfaction.

Table 5. Correlations Between High and Perfectionistic Standards and Outcome Measures for Sample 2.

Condition/scale	DEP	ANX	NA ^a	LS	SE	PA ^b
HS condition (<i>n</i> = 108)						
APS-R	.08	.20*	.19 [†]	.16 _a	.11	.18 [†]
FMPS	.15	.16	.15	.06	.03	.18
PS condition (<i>n</i> = 109)						
APS-R	.25**	.28**	.25*	-.11 _b	-.13	.22*
FMPS	.13	.22*	.17	-.02	.00	.28**

Note. DEP = Depressive Symptoms; ANX = Anxiety Symptoms; NA = Negative Affect; LS = Life Satisfaction; SE = Self-Esteem; PA = Positive Affect; HS = High Standards; APS-R = Almost Perfect Scale–Revised; FMPS = Frost Multidimensional Perfectionism Scale; PS = Perfectionistic Standards. Correlations marked with differing subscripts are significantly different at $p < .05$.

^a*n* = 106 for both conditions.

^b*n* = 106/107 for HS/PS conditions, respectively.

[†] $p \leq .06$. * $p < .05$. ** $p < .01$.

Table 6. Correlations Between High and Perfectionistic Standards and Outcome Measures for Sample 3.

Scale	DEP	ANX	NA	Shame	Guilt	SUI ^a	PA	Pride	LS	SE
APS-R										
HS (<i>n</i> = 371)	.06 _a	.09 _a	.08 _a	-.07 _a	-.01 _a	.07	.21 _a **	.18 _a **	.12 _a *	.08 _a
PS (<i>n</i> = 368)	.23 _b **	.29 _b **	.28 _b **	.22 _b **	.16 _b **	.10 [†]	.05 _b	-.07 _b	-.04 _b	-.15 _b **
FMPS										
HS (<i>n</i> = 71)	.28*	.37*	.16	.21	.11	.07	.23 [†]	.11	-.03	-.05
PS (<i>n</i> = 72)	.22 [†]	.35*	.17	.22	.12	.05	.21	.01	-.07	-.14

Note. DEP = Depression Symptoms; ANX = Anxiety Symptoms; NA = Negative Affect; SUI = Suicidal Ideation; PA = Positive Affect; LS = Life Satisfaction; SE = Self-Esteem; APS-R = Almost Perfect Scale–Revised; HS = High Standards; PS = Perfectionistic Standards; FMPS = Frost Multidimensional Perfectionism Scale. Correlations marked with differing subscripts are significantly different at $p < .001$.

^a*n* = 366 for APS-R.

[†] $p \leq .06$. * $p < .05$. ** $p < .01$.

Sample 3

Finally, to test if the instructional cue appended to the instructions of the APS-R may have influenced the results found in Sample 1, we administered both versions of the questionnaire to a large third sample (*n* = 371) with the instructional cue removed. This sample completed the same measures from Sample 1 plus measures of state guilt, shame, and pride, as well as suicidal ideation.

Zero-order correlations. Correlations between the measures of standards and the positive and negative outcomes are shown in Table 6. The correlations between original and modified scales were generally similar in magnitude to those in Sample 1, but the correlation between the two FMPS versions was much more robust in this sample (APS-R versions: $r = .61$, $p < .001$; FMPS versions: $r = .88$, $p < .001$); *z* test comparisons confirmed that these correlations were significantly different ($p < .0001$). Results for the APS-R measure, as expected, showed that high standards correlated with positive and negative outcomes very differently from more perfectionistic

Table 7. Regression of Negative Outcomes on High and Perfectionistic Standards for Sample 3.

Scale	DEP		ANX		SUI		Shame		Guilt		NA	
	R ²	β	R ²	β	R ²	β	R ²	β	R ²	β	R ²	β
	.06**		.10**		.01		.11**		.04**		.10**	
HS		-.13*		-.14*		-.03		-.32**		-.17*		-.15*
PS		.31**		.37**		.12†		.41**		.26**		.38**

Note. DEP = Depression Symptoms; ANX = Anxiety Symptoms; SUI = Suicidal Ideation; NA = Negative Affect; HS = High Standards; PS = Perfectionistic Standards; APS-R = Almost Perfect Scale-Revised.

† $p \leq .06$. * $p < .05$. ** $p < .01$.

Table 8. Regression of Positive Outcomes on High and Perfectionistic Standards for Sample 3.

Scale	Pride		LS		SE		PA	
	R ²	β	R ²	β	R ²	β	R ²	β
	.08**		.04**		.07**		.05**	
HS		.35**		.23**		.28**		.28**
PS		-.28**		-.18**		-.32**		-.12†

Note. LS = Life Satisfaction; SE = Self-Esteem; PA = Positive Affect; HS = High Standards; PS = Perfectionistic Standards.

† $p \leq .06$. * $p < .05$. ** $p < .01$.

standards. Whereas high standards showed significant correlations with positive affect, pride, and life satisfaction, perfectionistic standards were only negatively correlated with self-esteem. Conversely, high standards showed no correlation with any of the negative outcomes, whereas perfectionistic standards related to all of them. Furthermore, with the exception of suicidal ideation, all the correlations with high standards were significantly different from the correlations with perfectionistic standards. These findings suggest that when a measure of high standards perfectionism is made more perfectionistic, rather than showing stronger relationships to adaptive outcomes, links with maladaptive outcomes become apparent.

Regression analysis. Regression analyses yielded a general pattern of results comparable with those seen as in Sample 1. Here, we focused only on the APS-R because the FMPS scales seemed to relate similarly to most outcomes at a zero-order level (and most relationships were nonsignificant). It can be seen in Table 7 that the APS-R Perfectionistic Standards scale was positively predictive of depressive and anxious symptoms, overall negative emotionality, and the negative self-conscious emotions of shame and guilt. It was also marginally predictive of suicidal ideation. In contrast, the High Standards scale was negatively predictive of depression and anxiety, negative emotionality, shame, and guilt, and it did not predict suicidal ideation. All regression models were found to be significant except the model predicting suicidal ideation. With regard to positive outcomes (Table 8), the original High Standards scale is positively predictive of trait self-esteem and life satisfaction and state pride and positive affect, while the Perfectionistic Standards scale showed the opposite relationship. All positive outcome regression models were statistically significant. Collectively, these findings suggest there are unique elements to the APS-R High Standards and Perfectionistic Standards scales that have fundamentally different impacts on individual's emotional and cognitive experience.

Discussion

The current research examined whether scale-item wording might explain previous support for what some have called “adaptive perfectionism.” We compared the original versions of two measures of high personal standards with re-worded versions modified to capture perfectionistic standards. Overall, our findings across three samples of participants illustrated that item wording does indeed matter in terms of the types of positive or negative outcomes each measure predicts. This has important implications for the understanding of the construct of perfectionism and how research findings are interpreted.

Clearly, our results varied depending on whether the focus was on the APS-R or FMPS measures. The Perfectionism APS-R scale items formed a factor separate from the original high standards items. In contrast, the original FMPS items clustered together with the modified items, suggesting that the FMPS, relative to the APS-R, is less sensitive to changes in item wording. It seems reasonable to conclude that the Frost measure is already reflective of perfectionism given the stronger correlation found between the two versions of the Frost measure versus the less robust correlations between the APS-R versions. A close examination of the Frost measure’s items supports this observation. For example, several items include the words *everything*, *most*, and *extremely*, whereas none of the items of the APS-R tend to include such absolute or extreme qualifiers. This underscores how even the choice of adjectives in items can be important to consider in scale construction.

Comparisons of the correlations involving these variables and indices of adjustment and maladjustment yielded further evidence indicating that the original and modified APS-R subscales differ substantively and reflect distinct constructs. In our largest sample, setting high standards is adaptive in that it predicted higher levels of positive affect and life satisfaction. In contrast, perfectionism seems maladaptive, given its observed relationships to depression, anxiety, negative affect, shame, guilt, and suicidal ideation. Collectively, these results suggest that there is more than just a fine line between conscientious excellence striving and being driven to attain perfection. The overarching point to emphasize here is that if we had relied solely on the original APS-R measure, certain conclusions drawn from the results shown in Table 6 would have been different; that is, rather than there being positive associations with anxiety and depression, it would have been concluded that high standards are unrelated to anxiety and depression.

The regression results were particularly revealing. Both APS-R measures were significant predictors across most analyses when considered simultaneously, but the obtained associations were in opposite directions. This pattern was particularly evident with the measures of shame and guilt and fits well with theoretical writing that describes shame and guilt as central to perfectionism (Sorotzkin, 1985) and past research linking shame and guilt with perfectionism but not conscientious achievement striving (Fee & Tangney, 2000).

In contrast, although the original and modified Frost Standards scales showed similar trends to the APS-R in Samples 1 and 2, the relationships generally were not statistically significant (except in predicting anxiety). Overall, our findings suggest that the original and modified FMPS scales do not differ enough to contribute unique variance in predicting most outcome variables, suggesting the original Frost measure already captures perfectionism as intended.

It should be noted that our analytic strategy in the current research focused on factor analyses, correlations, and regression results, but much of the past research on adaptive perfectionism has involved group comparisons based on discretely categorizing participants into one of three groups (nonperfectionists, adaptive perfectionists, maladaptive perfectionists) based on their responses to the APS-R High Standards and Discrepancies subscales. Supplementary

examination of our data from Study 3 points to the possibility that emerging adults who are striving for excellence but not perfectionism *per se* are nonperfectionists based on their responses to our modified APS-R measure. However, these same individuals would likely be considered as “adaptive perfectionists,” if we had relied solely on their responses to the original APS-R standards measure. Thus, the possibility exists with past research involving group classifications that perhaps a substantial proportion of people who were deemed to be adaptive perfectionists are not actually perfectionists or they are characterized by a substantially milder version of perfectionism.

Collectively, across the three studies, it is evident that analyses of the data from Sample 2 yielded results that were less in keeping with our overall premise. Sample 2 was the one in which participants received either the original versions of the subscales or the ones that more strongly emphasized perfectionism. There was some evidence in support of our contention; depression had a stronger link with the modified Perfectionism subscale of the APS-R relative to the original measure of high standards. Other results were less clearcut, however, when considered within the context of the results involving the other two samples. It is evident that the clearest differences across samples were the results from Sample 3 involving the two APS-R versions. In general, it was found here in terms of the pattern of correlations that only the modified Perfectionism subscale was associated with the indices of maladjustment and only the original APS-R subscale was associated positively with the indices of positive adjustment and well-being. The results from Sample 3 are particularly relevant given the large sample size that was obtained.

Limitations and Future Directions

Clearly, certain limitations should be considered when interpreting our results. First, we restricted our focus to two of the most commonly used measures said to tap adaptive perfectionism, but other measures of high personal standards do exist (e.g., the Striving for Excellence subscale from the Perfectionism Inventory by Hill et al., 2004 among others). The ability of these scales to measure perfectionism rather than high standards should be also evaluated empirically rather than presumed. Second, our samples were limited to university students, and it is possible that our results do not generalize to younger participants or community populations where the lack of constant evaluation inherent in an academic environment does not place as much emphasis on performance and achievement.

Finally, although not a limitation of our study *per se*, it is worth noting that the APS-R, its developers, and the researchers who use it have made substantial contributions to the perfectionism literature, and the emphasis placed on perfectionism discrepancy is especially noteworthy. Thus, any flaws in the conceptual and operational design of the High Standards scale of the APS-R that are suggested by the current research findings must be weighed against its substantial role in fostering perfectionism research as a burgeoning field of interest. Clearly, with only minor revisions, the APS-R would be a strong measure of perfectionistic behavior. Accordingly, we would encourage future researchers to consider using the alternative items we developed here to tap perfectionism.

The distinction between high standards and perfectionism illustrated in this article underscores the importance of careful item wording when developing personality constructs such as perfectionism. We hope that this will energize researchers to reconsider perfectionism at its basic theoretical roots and perhaps re-think the operationalization and conceptualization of the construct so that it is clearly distinguishable from excellence striving and standards that reflect conscientiousness rather than perfectionism *per se*. With greater confidence that the measurement tools we use are built on a solid foundation of valid items, we can have greater confidence in the conclusions drawn on the basis of their use.

Appendix

Original and Modified Items on FMPS-PS and APS-R Standards Scales.

Original "High Standards" scale	Modified "Perfectionistic" scale
FMPS-PS items	
4. If I do not set high standards for myself, I am likely to end up a second-rate person.	If I do not set a standard of perfection for myself, I am likely to end up a second rate person.
6. It is important to me that I be thoroughly competent in everything I do.	It is important to me that I be perfectly competent in everything I do.
12. I set higher goals than most people.	I set more perfectionistic goals than most people.
16. I am very good at focusing my efforts on attaining a goal.	No change—original item retained
19. I have extremely high goals.	I have perfectionistic goals.
24. Other people seem to accept lower standards for themselves than I do.	No change—original item retained
30. I expect higher performance in my daily tasks than most people do.	I expect perfect performance in my daily tasks more than most people do.
APS-R Items	
1. I have high standards for my performance at work or at school.	I have perfectionistic standards for my performance at work or at school.
5. If you do not expect much out of yourself, you will never succeed.	No change—original item retained
8. I have high expectations for myself.	I have expectations of perfection for myself.
12. I set very high standards for myself.	I set perfectionistic standards for myself.
14. I expect the best from myself.	I expect perfection from myself.
4. I try to do my best at everything I do.	I try to be perfect in everything I do.
22. I have a strong need to strive for excellence.	I have a strong need to strive for perfection.

Note. Item numbers are from the complete original scales. FMPS-PS = Personal Standards subscale of the Frost Multidimensional Perfectionism Scale; APS-R-HS = Almost Perfect Scale—Revised High Standards subscale.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Note

1. While technically possible to use a t-test to detect a significant difference between the means of the modified and original scales, it is our contention that the modified and original scales are measuring different constructs making it difficult to interpret the meaning of statistically significant differences.

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