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The Cost of Perfection With Apparent Ease: Theoretical Foundations and Development of the Effortless Perfectionism Scale

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Effortless perfection is a term used to describe an intense pressure to be perfect without visible effort (Yee, 2003), and is thought to be linked to several indicators of maladjustment among college-age youth (Ruane, 2012; Yee, 2003). Although effortless perfectionism (EP) is a phenomenon referenced in popular culture, empirical support for this construct is needed. In addition to conceptualizing and discussing the theoretical underpinnings of EP, this paper describes the development of an instrument to assess EP: the 10-item Effortless Perfectionism scale (EPS). The responses of a large sample of students from a Midwestern university ($N = 1,270$) were used to develop a 1-factor measurement model for the EPS. The EPS showed good internal consistency and test-retest reliability, and demonstrated convergent, discriminant, and incremental validity in relation to other perfectionism scales, as a predictor of psychosocial adjustment, and as a mediator of the effects of gender on adjustment. The present study supports the reliability and construct validity of the EPS as a self-report measure of EP, a distinct type of perfectionism that warrants future investigation.

Keywords: effortless perfectionism, measure development, adolescents, college students, psychosocial adjustment

The term *effortless perfection* has been used by popular press, school administrators, and college students to describe a problematic phenomenon prevalent on college campuses (Ruane, 2012; Yee, 2003). Despite considerable media attention, effortless perfection, or an intense pressure to be perfect without visible effort (Yee, 2003), has not been investigated by the research community. The present study aims to provide a thorough and empirically based conceptualization of this new construct by reviewing the theoretical underpinnings of effortless perfectionism (EP), describing the psychometrics of a measure of EP (i.e., the Effortless Perfectionism scale, EPS), and examining links between EP and adjustment outcomes.

The Origin of the Concept of Effortless Perfectionism

The concept of *effortless perfection* was first introduced in 2003 by Duke University's Women's Initiative, which conceptualized EP as, "a social environment described by the expectation that one would be smart, accomplished, fit, beautiful, and popular, and that all this would happen without visible effort" (Wyler, 2003, para.

13). The report proposed that, "undergraduate women at Duke function under the expectation of being perfect and, if you can do hard things without even trying, it makes you look all the better. It's one step up" (Wyler, 2003, para. 15). Members of the Initiative clarified that EP is, "clearly a cultural phenomenon" associated with undue pressure, stress, and general unhappiness (Wyler, 2003, para. 14) and several popular press articles have since discussed the prevalence and detriments of EP (Barlow, 2005; Kobylarz, 2007; Ruane, 2012). These articles describe instances when pressure to be effortlessly perfect resulted in psychological maladjustment and thus call for the dissemination of information about EP and related interventions.

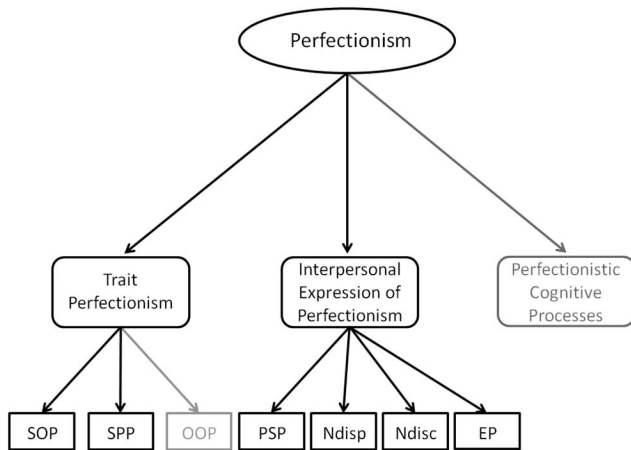## Current Conceptualizations of Perfectionism

Perfectionism was initially defined as an intrapersonal characteristic; however, researchers now support a multidimensional model of perfectionism (Enns & Cox, 2002), including both intrapersonal and interpersonal elements. Expanding this multidimensional model, Hewitt and Flett (2008) identified two important components of perfectionism: (a) the trait dimensions of perfectionism, and (b) the interpersonal expression of perfectionism (Figure 1).[1]

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[1] The present study focuses on the first two components of Hewitt and Flett's (2008) model of perfectionism. For a review of the third component (i.e., cognitive processes that reflect the processing of information with perfectionistic cognitive structures), see Besser, Flett, Guez, and Hewitt (2008); Hewitt and Flett (2008), and Hewitt and Genest (1990).

Figure 1. Conceptualization of effortless perfectionism. The present study focuses on the first two components of Hewitt and Flett's (2008) model of perfectionism and does not examine OOP. Accordingly, these omitted aspects of the conceptual model are presented in gray scale to indicate that they were not examined in this investigation.

The first component of Hewitt and Flett's (2008) model—the trait dimensions of perfectionism—includes three subdomains: *Self-Oriented Perfectionism* (SOP), *Other-Oriented Perfectionism* (OOP), and *Socially Prescribed Perfectionism* (SPP) (Hewitt & Flett, 1991) (see Figure 1). SOP involves unrealistic self-imposed standards, intensive self-scrutiny, and an inability to accept flaws. OOP is self-oriented perfectionism turned outward and involves demanding that others meet one's own exaggerated standards. SPP involves a preoccupation with evaluations by others and the belief that other people hold unrealistic expectations that must be met to win their approval. The Child-Adolescent Perfectionism scale (CAPS; Flett, Hewitt, Boucher, Davidson, & Munro, 2000) differs from the original adult version (MPS: Hewitt, Flett, Turnbull-Donovan, & Mikail, 1991) in that a 2-factor structure (i.e., SOP and SPP) better represented the measure (Flett, Hewitt, & Davidson, 1990). Given this study's focus on adolescent, college-age students, it utilizes the CAPS and omits the OOP subscale from the conceptualization and analyses.

The second component of Hewitt and Flett's (2008) model—the interpersonal expression of perfectionism—consists of perfectionistic self-presentation (Hewitt et al., 2003), defined as the drive to appear perfect to others by promoting one's perfection and/or concealing imperfections (see Figure 1). This domain is composed of three subdomains: *Perfectionistic Self-Promotion* (PSP), *Nondisplay of Imperfection* (Ndisp), and *Nondisclosure of Imperfection* (Ndisc). PSP involves actively promoting one's supposed perfection to others. These individuals frequently attempt to impress others with displays of flawless abilities to gain admiration and respect. Ndisp is characterized by an avoidance of potential displays of imperfection to or around others. It also involves concern over overt demonstrations of imperfection and attempts to prevent others from seeing any behavior that is "less-than-perfect." Ndisc involves evading verbal disclosures of imperfection to others out of fear of interpersonal rejection.

The current study proposes extending Hewitt and colleagues' work by adding EP as a distinct component of perfectionistic self-presentation (see Figure 1). EP is similar to perfectionistic self-presentation in that it reflects a maladaptive form of self-presentation and involves an emphasis on a perfect image, but is unique in the idea that perfection should be accomplished *with apparent ease*. EP also involves both a purposeful display of supposed perfection and a concealment of mistakes/flaws, but accomplishments appear even more impressive in that they seem to require little or no effort to achieve. Thus, given that EP is proposed as a fourth component under the umbrella of perfectionistic self-presentation, it is also hypothesized to be conceptually distinct from the other three facets (i.e., PSP, Ndisc, Ndisp) and to uniquely predict adjustment outcomes (see Figure 1).

Theoretical Foundation and Guiding Principles of the EPS

To further develop the construct of EP and support development of the Effortless Perfectionism scale (EPS) we drew upon the following: (a) social comparison theory (Festinger, 1954), (b) goal orientation theory (Nicholls, 1984), (c) mindset theory (Dweck, 2007), and (d) the emerging concept of "struggle" (Spiegel, 2012).

Social Comparison Theory

Festinger's (1954) social comparison theory describes the tendency to evaluate oneself based on the abilities of others and derive satisfaction from knowing how one compares to one's social group. While most individuals can use *downward social comparison* (i.e., comparing self to others deemed socially "below") (Wheeler, 1966; Wills, 1981) to feel successful, those in high-achieving environments (e.g., competitive college campuses) are forced toward *upward social comparison* (i.e., comparing self to others deemed socially "above") or to find creative ways to engage in downward social comparison (i.e., develop a distinguishing factor that makes them superior to others). Thus we propose that the effortlessness of success (i.e., EP) rather than the success itself (i.e., perfectionism in many contexts) may be the distinguishing factor that individuals believe sets them apart from their peers in high achieving communities.

Goal Orientation Theory

Goal orientation theory suggests that one's motivation for achievement can be characterized as either *task-* or *ego*-oriented. Those who are more task-oriented aim to learn and improve while those who are more ego-oriented strive to be superior to others (Nicholls, 1984). For ego-oriented individuals, success is based on a comparison to the achievements of others. We hypothesize that ego-oriented individuals are also more likely to strive to make achievements appear effortless to set themselves apart from and appear superior to others. Importantly, ego orientation has been linked to several negative outcomes among youth (Roberts, 2001, 2006; Travers, Bohnert, & Randall, 2013).

Mindset Theory

Dweck's (2007) Mindset theory describes a *fixed mindset* (i.e., believing that individual qualities [e.g., intelligence] are innate) and a *growth mindset* (i.e., believing that individual qualities are cultivated through efforts and experiences). Mindset influences beliefs about learning and success, which subsequently affects effort. Individuals with fixed mindsets abide by three rules: (a) look smart at all times and at all costs, (b) intelligence should come without effort, and (c) hide mistakes and conceal deficiencies (Dweck, 2007). We propose that individuals who exhibit EP demonstrate a fixed mindset—they must prove that their innate intellect is superior to others' as evidenced by the effortlessness of their success.

Struggle

While *struggle* (Stigler, 2009) is a proxy of success in many Eastern cultures, in American culture, it is seen as an indication of lower intelligence or ability while mastery with ease indicates natural ability or talent (Spiegel, 2012). Many U.S. students believe that if they have the ability, minimal effort is needed (Blackwell, Trzesniewski, & Dweck, 2007). We hypothesize that when objective measures fail to separate out high-achieving students, those who achieve effortless success are considered more intelligent (Jagacinski & Nicholls, 1984).

Perfectionism and Adjustment

The two established components of perfectionism described above (i.e., trait dimensions and interpersonal expressions) have been differentially linked with psychopathology, including depressive symptoms, anxiety, eating disorders, stress, achievement struggles, and relationship problems (see Flett & Hewitt, 2002 for review). In addition, perfectionism has been linked to lower levels of life satisfaction and perceptions of social support (Ashby, Noble, & Gnilka, 2012; Sherry, Law, Hewitt, Flett, & Besser, 2008).

To date, only anecdotal links between EP and psychosocial adjustment have been discussed by clinicians, students, and school administrators (Barlow, 2005; Kobylarz, 2007; Ruane, 2012; Wyler, 2003; Yee, 2003). Although it is possible that some individuals can achieve an image of perfection while also preserving good psychological health, research clearly indicates that related components of perfectionism (i.e., PSP, Ndisc, Ndisp) are linked to the aforementioned indicators of negative adjustment (Besser, Flett, & Hewitt, 2010; Flett, Coulter, & Hewitt, 2012). In accordance with previous research on maladaptive perfectionism (Soenens et al., 2008), the current study suggests that EP requires sacrifices. We propose that those who demonstrate EP hyper-focus on surpassing their high-achieving peers (i.e., social comparison theory) with ease (i.e., struggle) rather than enjoying the process of learning (i.e., goal orientation theory) to preserve their identity as "intelligent" (i.e., mindset theory); this then is thought to lead to compromised peer relationships and psychological well-being (Duda & Ntoumanis, 2005; Newton & Duda, 1993; Roberts, 2001, 2006; Roberts, Treasure, & Conroy, 2007). Guided by prior research on the links among other the components of perfectionism and psychopathology, the present study similarly examines the associa-

tions between EP and depression, anxiety, stress, life satisfaction, and social support.

Perfectionism and Gender

Given the distinct socialization trajectories for males and females, gender may be a risk factor for the development of EP. Duke University students and administrators conceptualized EP as more relevant to and prevalent among females (Yee, 2003); however, males may not be immune. It is well-documented that patterns of psychopathology vary by gender, which has led researchers to suggest that males and females differ in symptom expression or styles of pathology (Dohrenwend & Dohrenwend, 1976; Horwitz & White, 1987). Thus, we hypothesize that EP applies to both genders, but may be linked to differing indicators of adjustment.

Aims of the Present Study

The present study had four main goals. The first two were to: (a) introduce EP and related and empirically supported theories that informed creation of the EPS, and (b) describe how EP relates to other well-established conceptualizations of perfectionism and provide hypotheses about links between EP and adjustment. Next, we will describe the development of the EPS, and assess its reliability and its convergent, discriminant, and incremental validity in relation to other perfectionism scales. Last, we will provide empirical support that EP is distinct from other forms of perfectionism and uniquely linked to indicators of adjustment in a college-age population.

Method

Participants

Students ($N = 1270$; 76% female) from a midsize Midwestern university participated in this investigation as part of a larger multicohort longitudinal study examining psychosocial adjustment in college students (Conley, Kirsch, Dickson, & Bryant, 2014). Students were 79% White and the average age was 18.50 years ($SD = 0.43$).

Measures

Initial item pool for the Effortless Perfectionism scale (EPS). The first stage of scale development involved exploration of the theoretical construct of EP and generation of a pool of potential items. EP items were evaluated for redundancy and clarity with a total of 13 items selected. Participants rated items on a 5-point Likert scale ranging from 1 (*not at all*) to 5 (*extremely*). The final version of this scale consisted of 10 items (see below).

Child-Adolescent Perfectionism scale (CAPS). The CAPS (Flett et al., 2000) is a 22-item measure of SOP and SPP. Participants rated each item using a 5-point Likert scale. Alpha values were .88 and .90, respectively.

Perfectionistic Self-Presentation Scale (PSPS). The PSPS (Hewitt et al., 2011) is an 18-item measure of PSP, Ndisp, and Ndisc. Participants rated items on a 5-point Likert scale from 1

(*not at all*) to 5 (*extremely*). Alpha values were .93, .81, and .76, respectively.

Depression Anxiety Stress scales (DASS). The DASS (Lovibond & Lovibond, 1995) is a 21-item scale comprised of three subscales (Depression, Anxiety, and Stress). Participants rated each psychological symptom on a 0–3 scale. Alpha values were .91, .86, and .87, respectively.

Satisfaction With Life scale (SWLS). The SWLS (Diener, Emmons, Larsen & Griffin, 1985) is a 5-item measure of life satisfaction. Respondents rated their agreement using a 7-point Likert scale (*strongly disagree* to *strongly agree*). Alpha was .90.

Social Support Appraisals (SSA). The SSA (Vaux et al., 1986) is a 23-item measure that assesses multiple social support networks. Participants rated items on a 4-point scale from *strongly agree* to *strongly disagree*. Alpha for the present study was .94.

Results

Developing a Measurement Model for the EPS

Exploratory factor analysis. Following established psychometric procedures (Brockway, Carlson, Jones, & Bryant, 2002), we began by randomly dividing the total sample in half (stratified by gender), to use one random-half (the *development* sample: 153 males, 482 females; $N = 635$) to develop a measurement model for the EPS and the other random-half (the *confirmation* sample: 152 males, 483 females; $N = 635$) to confirm the cross-sample generalizability of the model. To analyze the underlying structure of the 13 EPS items in the development sample, we used principal axis factor (PAF) analysis with promax rotation, which extracts correlated latent factors that maximize the common variance explained in a set of measured variables (Thompson, 2004). To determine the number of factors underlying the 13 EPS items, we used parallel analysis, "the method of consensus in the literature on empirical methods for deciding how many components/factors to retain" (Dinno, 2009, p. 362). In particular, we used PARAN, a plug-in of the Visual Statistics System (Young, Valero-Mora, & Friendly, 2006), to conduct nonparametric Monte Carlo parallel analysis generating 1,000 random data sets of 13 items each with $N = 635$, based on multivariate permutations of our development sample data. Because only the first factor from the PAF analysis of the development sample had an eigenvalue ($\lambda = 4.43$) that exceeded the upper limit of the 95% confidence interval of its random counterpart ($\lambda = 1.66$), we concluded that only a single factor underlies the 13 EPS items.

As a next step in developing a measurement model for the EPS, we repeated the PAF analysis of the 13 EPS items specifying a 1-factor solution, retaining only items that loaded above .40 on the underlying factor (Field, 2000). Three EPS items had low standardized PAF factor loadings—item 2 ($-.30$), item 11 ($-.28$), and item 13 (.30)—relative to the remaining 10 EPS items (median = .62; range = .42–.70). On this basis, we omitted these three EPS items and retained the remaining 10 items to construct a measurement model for the EPS.

Confirmatory factor analysis. We employed confirmatory factor analysis (CFA) via LISREL 8.8 (Jöreskog & Sörbom, 1993) to test a 1-factor model for the 10 EPS items with the data of the development sample ($N = 635$), using robust maximum-likelihood estimation to correct for distortion in fit indices and standard errors

due to multivariate nonnormality. We computed the Satorra-Bentler scaled maximum-likelihood chi-square (SB-ML χ^2; Bryant & Satorra, 2012; Satorra & Bentler, 1994), to obtain a more accurate assessment of model fit and to compare the fit of nested models. However, we did not use the statistical significance of a model's overall chi-square value as an index of model fit because this statistic tests the hypothesis of perfect fit, which is "too strong to be realistic" (Hu & Bentler, 1998, p. 425) and is not typically used to assess model fit in applied research (Brown, 2006). Instead, based on Hu and Bentler's (1998) recommendations, we assessed model fit using two indices of absolute fit (root mean square error of approximation [RMSEA], standardized root mean square residual [SRMR]) and two indices of relative fit (comparative fit index [CFI], non-normed fit index [NNFI]). In assessing goodness-of-fit, we considered RMSEA < .08 (Browne & Cudeck, 1993), SRMR < .08 (Hu & Bentler, 1998), CFI > .90 and NNFI > .90 (Bentler & Bonett, 1990) as representing acceptable model fit.

The 1-factor CFA model for 10 EPS items fit the data of the development sample reasonably well except for the RMSEA criterion, SB-ML $\chi^2(35, N = 635) = 265.98$, RMSEA = .108, SRMR = .065, CFI = .93, NNFI = .91. We therefore made slight model modifications following recommended procedures for maximizing cross-sample generalizability (MacCallum, Roznowski, & Necowitz, 1992), to optimize the fit of the 1-factor CFA model to the data of the development sample. Specifically, we scrutinized the content of each EPS item in search of pairs of items that might be expected a priori to share variance due to common influences other than perfectionism. We then used the data of the development sample ($N = 635$) to test three hypothesized pairs of correlated measurement errors in the 1-factor CFA model, each of which was statistically significant: (a) based on individual differences in performance-related beliefs that speed and ease of success are a sign of ability (Rosenholtz & Simpson, 1984), we predicted that EPS Item 1 ("I believe that those who try harder are less intelligent than those who succeed with ease") would share error variance with EPS Item 6 ("People who work more quickly are smarter than those who take more time to complete the same task"), which we found to be the case (standardized $\Psi = .19$, $p < .001$); (b) based on individual differences in self-presentational style in social impression management (Leary & Kowalski, 1990), we predicted that EPS Item 2 ("I try to make my achievements seem effortless") would share error variance with EPS Item 4 ("I prefer that people think I get good grades with little effort"), which we found to be the case (standardized $\Psi = 0.18$, $p < .001$); and (c) based on individual differences in the tendency toward social comparison in achievement settings (Ruble & Frey, 1987), we predicted that EPS Item 3 ("I think my classmates try to hide how much time and effort they spend on schoolwork") would share error variance with EPS Item 7 ("It seems like others around me accomplish tasks with little effort"), which we found to be the case (standardized $\Psi = .19$, $p < .001$).

Adding the three correlated error terms to the 1-factor CFA model provided acceptable goodness-of-fit to the data of *the development sample*, SB-ML $\chi^2(32, N = 635) = 157.64$, RMSEA = .079, SRMR = .051, CFI = .97, NNFI = .95. Confirming cross-sample generalizability, the 1-factor model also provided a good fit to the data of *the confirmation sample*, SB-ML $\chi^2(32, N = 635) = 87.99$, RMSEA = .053, SRMR = .040, CFI = .98, NNFI = .98, and the

pooled sample, SB-ML χ^2(32, $N = 1,270$) $= 218.15$, RMSEA $= .068$, SRMR $= .043$, CFI $= .97$, NNFI $= .96$, and all three correlated errors were statistically significant for both samples.[2] Table 1 reports the standardized CFA factor loadings and squared multiple correlations for the 1-factor CFA model of the 10 EPS items for the development, confirmation, and pooled samples.

Descriptive Statistics and Gender Differences for the EPS

To examine descriptive properties of the EPS, we summed responses to the 10 EPS items and computed means and standard deviations, which are presented in Table 2. Assessing configural invariance with respect to gender in the pooled sample, multigroup CFA revealed that the 1-factor model provided a good fit to the data of both males, SB-ML χ^2(32, $N = 305$) $= 81.47$, RMSEA $= .075$, SRMR $= .059$, CFI $= .96$, NNFI $= .95$, and females, SB-ML χ^2(32, $N = 965$) $= 178.67$, RMSEA $= .069$, SRMR $= .043$, CFI $= .97$, NNFI $= .96$. Using a maximum-likelihood scaled difference test (ΔSB-ML; Bryant & Satorra, 2012) to assess metric invariance, we found that the loadings of the 1-factor model were invariant for males and females, ΔSB-ML χ^2(9, $N = 1,270$) $= 7.43$, $p < .60$. This finding suggests that the EPS items have the same meaning for men and women, who appear to use the items in the same ways to describe their levels of effortless perfectionism. Comparing the means of males and females on the EPS scale, we found that males ($M = 27.73$, $SD = 7.22$) reported significantly higher scores than females ($M = 24.35$, $SD = 7.27$), t(1268) $= 4.98$, $p < .0001$, Cohen's $d = 0.33$ (i.e., a small effect size).

Reliability of the EPS

Internal consistency. Reliability analysis of the 10-item scale yielded a Cronbach's alpha of .84 for the pooled sample (males: .83; females: .84), indicating good internal consistency.

Test–retest reliability. To evaluate the test-retest reliability of the EPS, we invited a subset of participants to complete the measure a second time approximately 6 weeks after the initial data collection. Of the 1,270 individuals who participated the first time, 196 completed the EPS a second time, and results suggested good test-retest reliability ($r = .75$).

Assessing the Construct Validity of the EPS

To assess construct validity, we used both first-order and hierarchical CFA to evaluate the EPS's convergent and discriminant validity in relation to the other perfectionism subscales.

First-order CFA. We began by using first-order CFA to compare the goodness-of-fit chi-square value of a baseline 6-factor model that distinguishes six correlated perfectionism scales to the goodness-of-fit chi-square values of five separate, 5-factor models that merge the EPS with each of the other perfectionism scales one at a time. After confirming that a 6-factor model fit responses to the 50 perfectionism items well, SB-ML χ^2(1157, $N = 1,270$) $= 7,322.48$, RMSEA $= .076$, SRMR $= .076$, CFI $= .95$, NNFI $= .95$, whereas a one-factor model did not, SB-ML χ^2(1172, $N = 1,270$) $= 13,755.84$, RMSEA $= .125$, SRMR $= .093$, CFI $= .85$, NNFI $= .85$, we found in each case that distinguishing EPS as a separate factor from the other five

perfectionism factors in the 6-factor baseline CFA model provided a significantly better fit to the data than did merging EPS with: (a) SOP, ΔSB-ML χ^2(5, $N = 1,270$) $= 4,758.59$, $p < .0001$; (b) SPP, ΔSB-ML χ^2(5, $N = 1,270$) $= 2,405.10$, $p < .0001$; (c) PSP, ΔSB-ML χ^2(5, $N = 1,270$) $= 890.61$, $p < .0001$; (d) Ndisp, ΔSB-ML χ^2(5, $N = 1,270$) $= 1,299.50$, $p < .0001$; or (e) Ndisc, ΔSB-ML χ^2(5, $N = 1,270$) $= 473.49$, $p < .0001$. These findings support the discriminant validity of the EPS in relation to each of the other five perfectionism scales.

As another way to assess the convergent and discriminant validity of the EPS in relation to the other five perfectionism scales, we tested the hypothesis that EPS was more strongly correlated with the three scales presumed to reflect Interpersonal Expression of Perfectionism (i.e., PSP, Ndisp, and Ndisc) than with the two scales presumed to reflect Trait Perfectionism (i.e., SOP and SPP). Rather than comparing correlations among computed subscale total scores, we instead compared correlations among factors from the 6-factor CFA solution for the 50 perfectionism items. Because CFA partials out measurement error from each factor, differences in correlations among factors are more clearly interpretable than differences in correlations among total scores, which do not control for differential attenuation in interrelationships due to differences in reliability across scales (Bryant, King, & Smart, 2007). Using Meng, Rosenthal, and Rubin's (1992) analytic method to apply orthogonal contrast weights (i.e., $+2$, $+2$, $+2$, -3, -3) to the factor intercorrelations, we found that EPS correlated more strongly with PSP ($r = .60$), Ndisp ($r = .54$), and Ndisc ($r = .70$) than with SOP ($r = .47$) and SPP ($r = .58$), $Z = 7.22$, $p < .0001$, supporting the convergent and discriminant validity of the EPS.

Hierarchical CFA. We also used higher-order CFA to test a series of multivariate structural models that systematically captured the hypothesized differences in the strength of interrelations among the six perfectionism scales. First, we used CFA at the item level to estimate the second-order measurement model of perfectionism contained in Figure 1—with second-order Trait Perfectionism influencing responses to the first-order factors of SOP and SPP, and second-order Interpersonal Expressive Perfectionism influencing responses to the first-order factors of PSP, Ndisp, Ndisc, and EP.[3] The hierarchical CFA model with two correlated second-order factors provided an acceptable goodness-of-fit to the responses of the pooled sample to the 50 perfectionism items, SB-ML χ^2(1166, $N = 1,270$) $= 7,410.31$, RMSEA $= .076$, SRMR $= .078$, CFI $= .95$, NNFI $= .95$. This result lends strong support to our a priori conceptual framework.

We next compared the fit of the hierarchical CFA model with *two* correlated, second-order factors to the fit of a nested hierarchical model that included only a *single*, global second-order perfectionism factor. The model with only one second-order factor fit the data significantly worse, compared with the

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[2] We included these three correlated measurement errors in all subsequent structural equation models involving the 10 EPS items.

[3] Because only two first-order factors (SOP and SPP) load on the second-order Trait Perfectionism factor, we constrained the second-order loadings of SOP and SPP to be equal in the CFA solution to identify the model (Bentler, 1995, p. 40); to make contrasts of nested models more directly comparable, we used this same equality constraint in all second-order CFA models of perfectionism. To define the variance units of latent variables, we fixed to 1.0 the loading of the first item for each first-order factor, and we standardized the second-order factor.

Table 1
Completely Standardized CFA Factor Loadings and Squared Multiple Correlations for the Items of the Effortless Perfectionism Scale for the Development, Confirmation, and Pooled Samples

Scale item	λ			R^2		
	Dev	Conf	Pool	Dev	Conf	Pool
1. I believe that those who try harder are less intelligent than those who succeed with ease.	.55	.49	.51	.30	.24	.26
2. I try to make my achievements look effortless.	.60	.56	.59	.36	.32	.34
3. I think my friends/classmates try to hide how much time/effort they spend on school work.	.43	.40	.42	.18	.16	.17
4. I prefer that people think I complete my work/get good grades/ accomplish things with little effort.	.70	.63	.67	.49	.40	.45
5. When talking with other people, I downplay how hard I work.	.60	.63	.62	.36	.40	.38
6. People who work more quickly are smarter than those who take more time to complete the same task.	.66	.64	.65	.44	.41	.42
7. It seems like others around me accomplish things with little effort.	.41	.46	.41	.17	.21	.17
8. It is best not to show how much effort one puts into his/her work.	.66	.74	.70	.44	.55	.49
9. Being perfect without even trying is ideal.	.68	.58	.63	.46	.34	.40
10. Perfectionists are smarter than non-perfectionists.	.64	.61	.62	.41	.37	.39

Note. Dev = development sample ($N = 635$); Conf = confirmation sample ($N = 636$); Pool = pooled sample ($N = 1,270$); λ = completely standardized factor loading; R^2 = squared multiple correlation coefficient or the proportion of variance that the CFA model explains in each EPS item.

CFA model with two second-order factors, SB-ML $\Delta\chi^2(1, N = 1,270) = 108.84$, $p < .0001$. This finding further supports our conclusion that the five scales represent two different forms of perfectionism—SOP and SPP reflecting Trait Perfectionism, and PSP, Ndisp, Ndisc, and EP reflecting Interpersonal Expressive Perfectionism.

We also compared the fit of the hierarchical CFA model with *two* correlated, second-order factors to the fit of a hierarchical model with *three* correlated, second-order factors: (a) a second-order Trait Perfectionism factor influencing responses to the first-order factors of SOP and SPP; (b) a second-order Interpersonal Expression Perfectionism factor influencing responses to the first-order factors of PSP, NDISP, and NDISC; and (c) a second-order Effortless Perfectionism factor influencing responses to the first-order EP factor (fixing EP's residual variance to zero, to identify its second-order factor). Specifying EP as a separate form of Perfectionism distinct from, but correlated with Trait and Interpersonal Expressive forms did not significantly improve goodness-of-fit, compared with specifying EP as reflecting Interpersonal Expressive Perfectionism, SB-ML $\Delta\chi^2(1, N = 1,270) = 3.09$, $p < .08$. This finding further supports our a priori conceptual model (see Figure 1) and suggests EP is better conceived as a type of Interpersonal Expressive Perfectionism rather than a separate second-order construct.

In addition, we compared the fit of the CFA model consisting of *three* correlated, second-order factors to the fit of the same model when constraining the Effortless Perfectionism factor to be equally correlated with the Trait Perfectionism and Interpersonal Expressive Perfectionism factors. Confirming our a priori hypotheses, adding this equality constraint to the CFA model with three correlated second-order factors significantly worsened model fit, SB-ML $\Delta\chi^2(1, N = 1,270) = 9.93$, $p < .002$; and inspection of the second-order factor intercorrelations in the baseline model revealed that Effortless Perfectionism was more strongly correlated with Interpersonal Expressive Perfectionism ($r = .72$; i.e., 51.8% shared variance) than with Trait Perfectionism ($r = .65$; i.e., 42.3% shared variance). Considered together, these CFA results support

the convergent and discriminant validity of the EP in relation to the other five perfectionism scales.

To estimate the full measurement model portrayed in Figure 1, we recast the CFA model with two correlated second-order factors as a third-order CFA model in which second-order Trait Perfectionism and Interpersonal Expressive Perfectionism both load on a single third-order Perfectionism factor.[4] The third-order CFA model represents an equivalent model to the second-order CFA solution specifying Trait Perfectionism and Interpersonal Expression of Perfectionism as correlated second-order factors, and thus provides an identically acceptable goodness-of-fit to the responses of the pooled sample to the 50 perfectionism items, SB-ML $\chi^2(1166, N = 1,270) = 7,410.31$, RMSEA = .076, SRMR = .078, CFI = .95, NNFI = .95. Figure 2 presents standardized higher-order factor loadings and residual unexplained variances for this third-order CFA model.

Criterion validity. The EPS showed good criterion validity in relation to psychosocial outcome variables. In particular, EPS total score correlated positively with depression, anxiety, and stress, and negatively with life satisfaction and perceived social support (see Table 2).

Incremental validity. We used first-order latent-variable regression analysis to determine whether the EPS predicted psychosocial adjustment outcomes over and above the CAPS (i.e., SOP and SPP scales) and the PSPS (i.e., PSP, Ndisp, and Ndisc scales). Due to the significant mean difference in EPS for males and females, we included gender as a covariate in the model.[5] As

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[4] To identify the third-order CFA model, we fixed to 1.0 the first item's loading on each first-order factor, fixed to 1.0 the second-order factor loadings of SOP, SPP, and PSP, and constrained the third-order factor loadings of Trait Perfectionism and Interpersonal Expressive Perfectionism to be equal in the unstandardized solution.

[5] Because we expected the adjustment measures to share common influences in addition to the perfectionism and gender predictors, we allowed the residual unexplained variances in the endogenous latent variables to intercorrelate in the latent-variable regression model.

Table 2

Correlations Among All Study Variables (N = 1,270), and Means and Standard Deviations of the Six Perfectionism Scales for Pooled, Male, and Female Samples

	1	2	3	4	5	6	7	8	9	10	11
1. Effortless Perfectionism											
2. Self-Oriented Perfectionism	.36										
3. Socially Prescribed Perfectionism	.52	.55									
4. Perfectionistic Self-Promotion	.55	.51	.54								
5. Nondisplay of Imperfection	.48	.48	.44	.66							
6. Nondisclosure of Imperfection	.56	.43	.47	.62	.63						
7. Depression	.35	.17	.32	.29	.36	.38					
8. Anxiety	.33	.17	.31	.30	.31	.34	.73				
9. Stress	.32	.23	.32	.27	.34	.33	.74	.77			
10. Life Satisfaction	−.29	−.13	−.28	−.18	−.28	−.31	−.56	−.37	−.38		
11. Social Support	−.36	−.10	−.33	−.26	−.30	−.34	−.57	−.46	−.43	−.60	
Total (*N* = 1,270)											
Mean	24.92	39.55	27.67	20.72	19.26	11.75					
SD	7.32	8.42	8.12	7.69	4.76	3.34					
Range	10–50	15–60	10–50	8–40	6–30	4–20					
Males (*n* = 305)											
Mean	26.73	40.27	28.53	22.15	19.58	12.31					
SD	7.22	7.73	7.79	7.51	4.74	3.08					
Range	0–50	20–60	10–49	8–40	6–30	4–20					
Females (*n* = 965)											
Mean	24.35	39.32	27.40	20.27	19.16	11.57					
SD	7.27	8.62	8.20	7.69	4.77	3.41					
Range	10–46	15–60	10–50	8–40	6–30	4–20					

Note. $r = .06$ is significant at two-tailed $p < .05$; $r = .07$ is significant at two-tailed $p < .01$; $r = .09$ is significant at two-tailed $p < .001$.

measured indicators for each latent variable (except gender), we used item parcels formed by combining individual items into composite indices. Using item parcels dramatically reduced the number of estimated parameters in the SEM model (i.e., 18 perfectionism parcels, 15 adjustment parcels, and gender, with a ratio of observations to estimated parameters just above 10:1), compared with using individual items as indicators (i.e., 50 perfectionism items, 48 outcome items, and gender, with a ratio of observations to estimated parameters just below 5:1), thereby increasing power. The latent-variable regression model fit the data well, SB-ML $\chi^2(462, N = 1,270) = 1,975.60$, RMSEA $= .053$, SRMR $= .047$, CFI $= .98$, NNFI $= .98$.

Table 3 presents structural equation modeling (SEM) results regressing the five adjustment outcomes on the six perfectionism factors and gender. Supporting the EPS's incremental and discriminant validity: (a) EP showed a significant unique relationship with each of the five adjustment outcomes (βs = .11–.18), beyond the effects of the other perfectionism factors and gender; and (b) unlike SOP and PSP, EP had *positive* unique relationships with depression, anxiety, and stress, but *negative* unique relationships with life satisfaction and social support (as did SPP, Ndisp, and Ndisc).

However, it is also important to emphasize that the unique effects of EP are small and explain only 1–2% of the variance in psychosocial adjustment. We note descriptively, however, that EP's unique effects on adjustment (median $R^2 = .010$) are comparable in magnitude overall to those of SPP and Ndisp (both median R^2s = .010), PSP (median $R^2 = .001$), SOP (median $R^2 = .006$), Ndisc (median $R^2 = .007$), and gender (median $R^2 = .003$). Thus, EP's small unique associations with adjustment are equivalent in size to those of not only the five well-established perfec-

tionism scales, but also gender, which is considered an important predictor of adjustment.

EP as a Mediator and Moderator of Gender Effects on Psychosocial Adjustment

Mediation. As an additional test of EP's discriminant and incremental validity in relation to other forms of perfectionism, we assessed the EP scale as a unique mediator of the influence of gender (coded 0 = female, 1 = male) on psychosocial adjustment when also including the other perfectionism scales (SOP, SPP, PSP, Ndisp, and Ndisc) as multiple mediators in the same regression model. We used Preacher and Hayes' (2008) SPSS bootstrap program to compute 95% bias-corrected bootstrap confidence intervals (BCIs) for the multiple mediators, considering BCIs that excluded zero as statistically significant at $p < .05$. We also computed pairwise contrasts between the indirect effects of the EP scale and each of the other perfectionism scales, by calculating each difference and dividing it by its standard error to derive a p value from the standard normal distribution.

Table 4 presents the results of these comparative analyses of indirect effects. Supporting discriminant validity EP was: (a) a statistically significant, independent mediator of gender effects on all five outcome measures; (b) a significantly stronger mediator for depression, anxiety, stress, and life satisfaction, compared with SOP and PSP; (c) a significantly weaker mediator of gender effects on social support, compared with SOP and PSP; and (d) a significantly stronger mediator of gender effects on depression, anxiety, and social support than was Ndisp. On the contrary, EP was less distinct from SPP and Ndisc, from which none of its mediating effects significantly differed for any of the
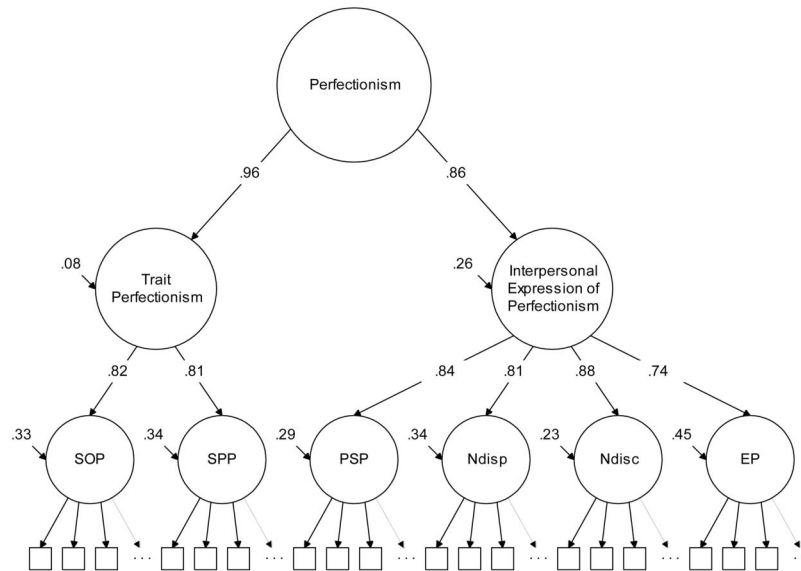
Figure 2. Third-order CFA model of perfectionism. Values are standardized LISREL 8 estimates of second- and third-order factor loadings and residual unexplained variances in first- and second-order latent variables. The hierarchical measurement model included 50 measured variables as indicators of the six first-order perfectionism scales—12 indicators for SOP, 10 for SPP, 8 for PSP, 6 for Ndisp, 4 for Ndisc, 10 for EP—represented in truncated form via ellipses, to streamline presentation. Standardized first-order factor loadings ranged from .26 to .82 for SOP, .42 to .85 for SPP, .65 to .87 for PSP, .23 to .81 for Ndisp, .61 to .79 for Ndisc, and .42 to .65 for EP. The model also included correlated measurement errors for EP Items 1 and 6, Items 2 and 4, and Items 3 and 7. The third-order CFA model provides an acceptable goodness-of-fit to the responses of the pooled sample to the 50 perfectionism items, SB-ML χ^2(1166, N = 1,270) = 7,410.31, RMSEA = .076, SRMR = .078, CFI = .95, NNFI = .95.

five outcome measures. These results demonstrate the unique mediating effects of EP and provide partial support for the discriminant validity of the EP subscale in relation to the other five perfectionism subscales.

Moderation. Regression analyses indicated that there were no significant EPS × Gender interactions for depression (β = .04, p < .71), anxiety (β = .01, p < .99), stress (β = .10, p < .37), life satisfaction (β = .02, p < .89), or social support (β = .03, p < .78). Thus, EPS did not moderate the effects of gender on psychosocial adjustment.

Discussion

Effortless perfectionism (EP) is a term used to describe an intense pressure to be perfect without visible effort (Yee, 2003) and popular press has described it as an emerging and problematic phenomenon on college campuses (Ruane, 2012; Yee, 2003). Despite considerable media attention and hypothesized links to maladjustment, EP has not been investigated by the research community. The present study aimed to provide an empirically-based conceptualization of this new construct by demonstrating the theoretical underpinnings of EP, developing a reliable measure to capture this unique form of perfectionism, and assessing its construct validity in relation to other perfectionism scales as a predictor of adjustment outcomes.

The present conceptualization of EP refines our understanding of perfectionism by clarifying a previously unidentified component of the self-concealment (Larson & Chastain, 1990) underlying interpersonal components of perfectionism.

Whereas prior theorists have conceived of perfectionists as concealing personal mistakes to avoid negative evaluation by others, we have shown alternatively that EP involves hiding not only imperfections, but also the time and effort spent in achieving high-level performance. The self-concealment associated with EP may require greater social isolation than the former, given the difficulty of hiding how hard one works when in the company of peers. Furthermore, because struggle is unacceptable among effortless perfectionists, this further intensifies their social isolation because they are unable to commiserate with or solicit support from peers. Future research should include measures of the quality and quantity of daily social interactions—outcomes that EP might influence more than do traditional forms of perfectionism.

Measure Development

The goal of providing empirical evidence for EP was achieved via measure development. EP can be assessed in a reliable and valid manner among college-age youth via the EPS, which was internally consistent and had adequate test-retest reliability. Additionally, there was good evidence supporting the validity of the measure's score interpretations. Exploratory factor analysis indicated that the EPS items make up a separate factor that is distinct from CAPS and the PSPS subscales. Although the CFA yielded moderate fit in terms of the 5-factor model and the five perfectionism factors were significantly correlated with one another, results indicated that a single higher-order perfectionism factor would be significantly less representative of the data. In other

Table 3

Results of SEM Analyses Using the Six Perfectionism Scales and Gender to Predict the Five Psychosocial Outcome Measures (N = 1,270)

		Psychosocial adjustment measures				
Predictor	Statistic	Depression	Anxiety	Stress	Life satisfaction	Social support
SOP	β	−.14	−.14	−.03	.12	.27
	p	.0006	.001	.50	.007	.001
	ΔR^2	.01	.01	.00	.00	.03
SPP	β	.17	.19	.16	−.20	−.26
	p	.0001	.0001	.0004	.0001	.0001
	ΔR^2	.01	.014	.00	.02	.02
PSP	β	−.17	−.02	−.15	.31	.16
	p	.003	.62	.02	.0001	.004
	ΔR^2	.00	.00	.00	.02	.00
Ndisp	β	.24	.16	.25	−.25	−.29
	p	.0006	.03	.0009	.0008	.0005
	ΔR^2	.01	.00	.01	.01	.01
Ndisc	β	.27	.19	.14	−.27	−.13
	p	.0009	.02	.08	.002	.11
	ΔR^2	.01	.01	.00	.01	.00
EP	β	.14	.14	.16	−.11	−.18
	p	.003	.006	.002	.03	.0002
	ΔR^2	.01	.01	.01	.01	.02
Gender	β	−.02	−.09	−.11	.01	−.02
	p	.43	.001	.0001	.87	.50
	ΔR^2	.00	.01	.00	.00	.01
Full model	R^2	.25	.22	.22	.19	.22

Note. EP = Effortless Perfectionism; SOP = Self-Oriented Perfectionism; SPP = Socially Prescribed Perfectionism; PSP = Perfectionistic Self-Promotion; Ndisp = Nondisplay of Imperfection; Ndisc = Nondisclosure of Imperfection. For gender, 0 = female, 1 = male. β = standardized regression coefficient from SEM analysis. Results are from a latent-variable regression model estimated via LISREL 8, SB-ML χ^2(462, N = 1,270) = 1,975.60, RMSEA = .053, SRMR = .047, CFI = .98, NNFI = .98. Because p values are based on unstandardized regression coefficients, βs of comparable magnitude may be associated with different levels of statistical significance.

words, a model that separates EP from other forms of perfectionism more accurately fits the data than a model that groups all types of perfectionism together.

Our hypothesis that EP would fall under the conceptual umbrella of perfectionistic self-presentation yet also represent a separate factor distinct from the three other subscales of the PSPS was confirmed. Furthermore, the item *I never let others know how hard I work on things* from the Ndisc subscale of the PSPS loaded highly onto the EPS. Given that this item reflects intentionally hiding/not disclosing effort, it reinforces our proposition that EP represents an additional and distinct factor not currently captured by the PSPS.

Table 4

Comparing the Indirect Effects of EPS and the Other Perfectionism Scales as Mediators of the Influence of Gender on Adjustment

		Psychosocial adjustment measures				
Predictor	Result	Depression	Anxiety	Stress	Life satisfaction	Social support
EP	Standardized indirect effect (β)	**.021**[*]	**.020**[*]	**.019**[*]	**−.018**[*]	**−.026**[*]
SOP	Standardized indirect effect (β)	−.005[ns]	−.005[ns]	−.001[ns]	.004[ns]	.010[*]
	Contrast with EP indirect effect	3.44[***]	3.29[**]	3.12[**]	3.14[**]	−3.52[***]
SPP	Standardized indirect effect (β)	.009[ns]	.010[*]	.010[*]	−.011[*]	−.014[*]
	Contrast with EP indirect effect	1.74[ns]	1.39[ns]	1.53[ns]	−0.97[ns]	−1.45[ns]
PSP	Standardized indirect effect (β)	−.008[ns]	.003[ns]	−.007[ns]	.018[*]	.005[ns]
	Contrast with EP indirect effect	3.33[***]	2.24[*]	3.11[**]	3.56[***]	−3.47[***]
Ndisp	Standardized indirect effect (β)	.007[ns]	.004[ns]	.007[ns]	−.007[ns]	−.005[ns]
	Contrast with EP indirect effect	2.02[*]	2.44[*]	1.83[ns]	−1.63[ns]	−3.01[**]
Ndisc	Standardized indirect effect (β)	.018[*]	.014[*]	.011[*]	−.017[*]	−.014[*]
	Contrast with EP indirect effect	0.42[ns]	0.81[ns]	1.07[ns]	−0.373[ns]	−1.55[ns]

Note. EP = Effortless Perfectionism; SOP = Self-Oriented Perfectionism; SPP = Socially Prescribed Perfectionism; PSP = Perfectionistic Self-Promotion; Ndisp = Nondisplay of Imperfection; Ndisc = Nondisclosure of Imperfection. Indirect effects of EP are bolded to facilitate comparison with the indirect effects of the other perfectionism scales.
[ns] p > .05. [*] p < .05. [**] p < .01. [***] p < .001.

EP and Adjustment

Findings demonstrate that the aspect of *apparent ease* captured by EP distinguishes it from the other factors and has unique associations with specific psychosocial outcomes. As expected, EPS was linked with higher levels of depression, anxiety, and stress, and lower levels of life satisfaction and perceived social support, even after controlling for gender, trait perfectionism, and the other types of interpersonal expressions of perfectionism. These findings suggest that there is a distinction between the desire to be perfect (perfectionism traits), to appear perfect to others (perfectionistic self-presentation facets), and to appear perfect without even trying (EP). As such, EP is identified as a relevant and distinct construct.

This finding prompts more in-depth and nuanced investigation of EP. For example, the report released by Duke University's Women's Initiative describes EP as particularly salient for women since it describes a need not only to be smart and accomplished, but also to balance intellectual ability with femininity, which entails being fit, beautiful, and popular, all without visible effort (Yee, 2003). The present study found that males reported higher levels of EP. Importantly, the EPS does not capture the aesthetic aspects of EP (i.e., femininity, beauty, fitness, body image) but rather focuses on the academic domain. Future research should examine the link between EP and other indicators of adjustment (e.g., eating disorder behaviors, body image) while considering gender as a moderator. Depending on findings, EPS might need to include questions addressing EP relative to aesthetics.

Future work should also explore the etiology, influences, and mechanisms of EP. Cultural factors, along with family, school, and peer contexts are of particular interest. It is hypothesized that EP is particularly apparent within the Westernized *culture of affluence* (Luthar, 2003), one that strongly emphasizes achievement and success. Theory and research suggest that unrelenting pressure to compete, succeed, and achieve pervades the culture of affluence (Cashman & Twaite, 2009; Luthar & Sexton, 2004) and may lead to maladjustment. Thus, the pernicious effects of EP may help explain psychological difficulties prevalent among affluent samples (Luthar, 2003).

Additionally, family, school and peer contexts may initiate and/or maintain the development of EP. Research demonstrates that children with perfectionistic parents report higher levels of perfectionism and experience concurrent psychological difficulties (Hewitt & Flett, 1991; Hamilton & Schweitzer, 2000). Additionally, the environment or academic *motivational climate* (Ames, 1992) will likely impact EP. Adolescents who perceive their school climate as more supportive tend to define success as improvement (i.e., vs. beating others) and are better adjusted (Travers, Bohnert, & Randall, 2013), while those who perceive a performance climate report achievement pressures and maladjustment (Bortoli, Bertollo, & Robazza, 2009; Newton, Duda, & Yin, 2000).

The tone of the school climate is largely impacted by peers who both implicitly or explicitly define success (Smith, Smoll, & Cumming, 2009). In the present study, EP was found to be negatively associated with perceived social support. This indicates that those who strive for EP also feel isolated. According to the social disconnection model (SDM; Hewitt, Flett, Sherry, & Caelian, 2006), perfectionistic individuals experience a sense of detachment from others and report impoverished relationships, leading to emotional difficulties. As such, to understand EP's mechanisms of influence, family, school, and peer factors should be considered as predictors, mediators, and moderators of the link between EP and adjustment.

Study Limitations and Future Directions

This study is not without limitations. First, the EPS was validated in a sample of adolescent college students from a midsize Midwestern university, therefore limiting the generalizability of findings. Although the EP concept was developed with college-age students in mind, future research should examine the validity of the EPS in younger populations (e.g., high school students) and clinical samples. Second, the child/adolescent version of PSPS was originally developed with youth ages 8 to 17; thus, future research should examine how EP is associated with the adult version of PSPS.

Furthermore, although EP showed convergent, discriminant, and incremental validity in relation to the other five perfectionism scales, EP uniquely explained only 1–2% of the variance in adjustment measures. However, it is important to note that these effect sizes are comparable to those of the other perfectionism scales and gender. According to Cohen (1992), effects of this size ($d = 0.20$–0.29) are "noticeably smaller than medium but not so small as to be trivial" (p. 156). In other words, even small effects can make a substantial difference in the subjective quality of individuals' lives. For example, the impact of EP on psychosocial adjustment is equivalent to an intervention that would increase IQ scores, for which $SD = 15$, by 3–4 points (i.e., $d = 3/15 = 0.20$; $d = 4/15 = 0.27$).

Additionally, given that frequent small changes in adjustment may have a cumulative impact (Mochon, Norton, & Ariely, 2008; Smith & Bryant, 2012), even small effects may erode adjustment substantially over time. Furthermore, the costs of EP may increase later in life, as higher performance standards require increasing effort in the face of declining abilities. Finally, given the cross-sectional nature of the data, directionality of these findings cannot be determined. Future research should investigate the predictive validity of the EPS by examining links to adjustment using prospective longitudinal data.

Conclusion

The present study sought empirical support for the construct of EP and EPS as a measure of EP. Results indicated that EP is a distinct form of perfectionism, and supported the reliability and validity of the EPS as a unique predictor in relation to other perfectionism scales of both positive and negative adjustment among college youth. Current findings support the proposed theory that EP should serve as a fourth factor of perfectionistic self-presentation within the interpersonal domain of perfectionism. Until now, existing measures have not considered nor captured EP. Future research should examine links between EP and other indicators of adjustment using varied samples and should also explore gender effects. Via longitudinal designs, specific contexts that foster the development and maintenance of EP should also be examined so that interventions can be developed to combat the negative outcomes associated with EP.

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