ARTICLE

Perfectionism and PERMA: The benefits of otheroriented perfectionism

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Abstract: The two-factor theory of perfectionism differentiates between positive and negative forms, yet some researchers still argue that perfectionism, as a whole, is detrimental to wellbeing. To this end, the present study investigated the relationship between the tripartite model of perfectionism and the PERMA model of wellbeing, with specific attention given to the relationship each form of perfectionism had with each element of wellbeing. Ninety-two participants (M age = 24.99) completed online self-report measures of perfectionism (self-oriented, other-oriented, and socially prescribed) and PERMA (positive emotion, engagement, relationships, meaning and accomplishment). Results showed that perfectionism accounted for a substantial amount of variance in all elements of wellbeing. A series of multiple regressions showed that socially prescribed perfectionism negatively predicted all PERMA elements. Self-oriented perfectionism positively predicted positive emotion, engagement, meaning and accomplishment. Otheroriented perfectionism positively predicted meaning and accomplishment. As for overall wellbeing, socially prescribed perfectionism was a negative predictor, whereas self-oriented and other-oriented perfectionism were positive predictors. The findings indicate that self-oriented perfectionism is an adaptive form of perfectionism conducive to flourishing, whereas socially prescribed perfectionism is a maladaptive form which undermines it. As for other-oriented perfectionism, the findings indicate it is an adaptive form and challenge the view that this "dark" form of perfectionism cannot enhance wellbeing.

Keywords: perfectionism, other-oriented perfectionism, flourishing, wellbeing, PERMA

1. Introduction

Perfectionism is a multidimensional personality trait characterised by striving for flawlessness, setting extremely high standards of performance, tendencies to be overly critical of one's own behaviour and concern about negative evaluation by others (Frost, Marten, Lahart & Rosenblate, 1990; Hewitt & Flett, 1991; Stoeber, 2017). This differs from early conceptualisations which portrayed perfectionism as one-dimensional, it being a tendency to hold excessively high standards for oneself (Flett, Hewitt & Dyck, 1989; Pirot, 1986). This negative view was supported by evidence from clinical populations, suggesting perfectionism was concurrent with personality disorders and psychopathologies (Druss & Silverman, 1979; Hewitt & Dyck, 1986; Pirot, 1986). However, such findings are unsurprising, given the measures in use were intended to evaluate perfectionism's maladaptive dimensions (e.g. the Burns Perfectionism scale; Burns, 1980; the Eating Disorders Inventory Perfectionism subscale; Garner, Olmstead & Polivy, 1983). With the development of more comprehensive measures (Frost et al., 1990; Hewitt & Flett, 1991, 2004) and evidence from non-clinical populations (e.g. Gaudreau & Verner-Filion, 2012; Kanten & Yesıltas,





2015; Stoeber & Rambow, 2007; Suh, Gnilka & Rice, 2017), there is now evidence in favour of an adaptive form of perfectionism. That said, the debate continues as to whether perfectionism undermines or supports flourishing (Flett & Hewitt, 2015; Stoeber & Corr, 2016), a term used to describe high levels of subjective wellbeing arising from functioning well across multiple psychosocial domains (Butler & Kern, 2016; Hone, Jarden, Schofield & Duncan, 2014).¹

1.1 The dimensions of perfectionism

The notion of perfectionism having two faces is far from novel, with Hamachek (1978) 40 years ago proposing the existence of "normal" and "neurotic" perfectionism. However, it was not until the 1990s that two groups of researchers introduced the contemporary theory of multidimensional perfectionism, recognising that the construct can comprise both intrapersonal and interpersonal elements (Frost et al., 1990; Hewitt & Flett, 1991). Frost et al. (1990) identified six perfectionism dimensions: excessive concern over making mistakes, high personal standards, perception of high parental expectations, perception of high parental criticism, doubting the quality of one's actions and preference for order and organisation. More concisely, Hewitt and Flett (1991) identified just three forms: self-oriented (SOP), other-oriented (OOP) and socially prescribed perfectionism (SPP). Best distinguished by whom the perfectionistic behaviour is directed at/attributed to, SOP is characterised by perfectionistic behaviour directed towards the self, such as setting high standards for oneself (Hewitt & Flett, 1991, 2004). Other-oriented perfectionism involves the expectations an individual has about the abilities of others, such as setting unrealistic standards for people around them and placing importance on others being perfect (Hewitt & Flett, 1991). Lastly, SPP describes the need to meet expectations imposed by others: the belief that others have high expectations of them and will be satisfied only when perfectionism is obtained (Hewitt & Flett, 1991, 2004).

1.2 Adaptive and maladaptive perfectionism

Although the differences between Frost et al. (1990) and Hewitt and Flett's (1991, 2004) models of perfectionism are apparent, there is evidence they share the same underlying dimensions, with several authors having derived two-factor solutions (Bieling, Israeli & Antony, 2004; Cox, Enns & Clara, 2002; Dunkley, Zuroff & Blankstein, 2003; Frost, Heimberg, Holt, Mattia & Neubauer, 1993; Stoeber & Otto, 2006). According to this two-factor theory, perfectionism can be split into two superordinate dimensions. Concern over mistakes, parental expectations and concerns, doubts over actions and SPP load on to a maladaptive form of perfectionism coined "perfectionistic concerns," whereas personal standards, organisation, SOP and OOP load on to an adaptive form of perfectionism referred to as "perfectionistic strivings" (Stoeber & Otto, 2006). Furthermore, Stoeber and Otto's (2006) seminal review concluded perfectionistic concerns were consistently associated with higher levels of negative affect and depression. perfectionistic strivings were associated with higher levels of extraversion and conscientiousness (traits associated with positive affect and meaning in life; Lightsey et al., 2014; Lucas, Le & Dyrenforth, 2008), higher levels of subjective wellbeing and lower levels of attachment avoidance, anxiety and suicidal ideation (Stoeber & Otto, 2006). As such, the opposing relationships these two superordinate dimensions have with positive and negative characteristics suggest that perfectionistic concerns would contraindicate flourishing, whereas perfectionistic strivings would enhance it.

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¹ The terms "flourishing" and "wellbeing" will be used interchangeably from hereon in.



1.3 Perfectionism and wellbeing

Indeed, the past decade has seen numerous studies reporting perfectionistic strivings to be associated with a multitude of positive attributes such as higher levels of engagement, meaning in life, positive affect, vitality and life satisfaction (Gaudreau & Verner-Filion, 2012; Kanten & Yesiltas, 2015; Stoeber & Rambow, 2007) which theoretically would enhance subjective wellbeing. However, the traditional view that perfectionism in general is wholly detrimental Flett and Hewitt (2015), two of the forefathers of contemporary perfectionism theory, still advocate for the management of perfectionism to promote flourishing, stating that "the cost of perfectionism often outweighs the benefits such that perfectionism is far from synonymous with mental health and wellbeing" (p. 46). Their staunch position presents a challenge for evidence and theory that suggests perfectionism is not always associated with deleterious outcomes (Gaudreau & Verner-Filion, 2012; Kanten & Yesıltas, 2015; Stoeber & Otto, 2006; Stoeber & Rambow, 2007). However, at the time of Flett and Hewitt's (2015) publication, no empirical studies had directly investigated the relationship between perfectionism and As such, whilst there was evidence to support perfectionistic strivings being associated with positive characteristics (e.g. Gaudreau & Verner-Filion, 2012; Stoeber & Otto, 2006; Stoeber & Rambow, 2007), which one could postulate would support flourishing, there was no verifiable published evidence with which to solidly dispute Flett and Hewitt's (2015) claims.

To this end, Stoeber and Corr (2016) published the first empirical paper on perfectionism and flourishing, investigating in a student sample whether perfectionistic concerns and perfectionistic strivings (Stoeber & Otto, 2006) showed different relationships with flourishing. Using SPP and SOP as indicators of perfectionistic concerns and perfectionistic strivings respectively, perfectionism explained a medium-large percentage of the variance in flourishing (17.8%), suggesting it is an important personality trait to consider when accounting for individual differences in wellbeing. Moreover, SPP showed a negative relationship with flourishing, and SOP a positive one, providing further evidence for the two-factor theory. Interestingly, however, OOP did not significantly contribute to their regression model. Although OOP is under researched in comparison to its counterparts (Stoeber, 2014, 2015), a possible explanation for this may lie in OOP's positive relationship with the Dark Triad (Smith et al., 2017; Stoeber, 2014; Stoeber, Sherry & Nealis, 2015), a term used to describe narcissism, Machiavellianism and subclinical psychopathy: three socially aversive, yet non-pathological personality constructs (Paulhus & Williams, 2002). Furthermore, OOP has been reported to have positive associations with reduced interest in prosocial and intimacy goals, uncaring traits and an individualistic orientation (Stoeber, 2014, 2015). As a result, OOP has been coined a "dark" form of perfectionism, with Stoeber (2014) suggesting it should no longer be considered an indicator of perfectionistic strivings, leading several papers to now exclude it from their definitions of adaptive perfectionism (Stoeber & Damian, 2016; Stoeber & Gaudreau, 2017).

1.4 The difficulty of defining wellbeing

Nevertheless, whilst Stoeber and Corr's (2016) findings are salient and provide a starting point for investigation, the study had its limitations. First, the use of the Flourishing Scale (Diener et al., 2010) is problematic. Although reported as having good internal consistency (Cronbach's alpha .87 to .91; Diener et al., 2010; Hone, Jarden & Schofield, 2014), the issue remains that flourishing has different theoretical and conceptual definitions (Hone et al., 2014). As such, each conceptual model may show different relationships with the three forms of perfectionism. Furthermore, it is unclear if these multiple models capture distinct or similar types of wellbeing



(Goodman, Disabato, Kashdan & Kaufmann, 2018). For example, some models focus on hedonic wellbeing (e.g. Bradburn, 1969), defined in terms of pleasure seeking and pain avoidance; others, eudaimonic wellbeing (e.g. Ryff 1989), which focuses on meaning and being fully-engaged in life; and yet others use a blend of the two (Butler & Kern, 2016; Disabato, Goodman, Kashdan, Short & Jarden, 2016; Huppert & So, 2013; Ryan & Deci, 2001).

To illustrate, Ryff's (1989) model of psychological wellbeing has six dimensions (autonomy, environmental mastery, personal growth, positive relations with others, purpose in life and self-acceptance), whereas the conceptualisation of Diener et al. (2010) focuses on psychosocial prosperity and has eight dimensions (purpose/meaning, positive relationships, engagement, social contribution, competence, self-respect, optimism and social relationships). In contrast, Seligman's (2011) PERMA model proposes that wellbeing is comprised of five measurable elements (positive emotion, engagement, relationships, meaning and accomplishment). Conversely, Huppert and So (2013) define flourishing as a combination of feeling good and functioning effectively, with 10 components (positive relationships, engagement, meaning, self-esteem, positive emotion, competence, optimism, emotional stability, vitality and resilience), and Rusk and Waters (2015) have recently introduced a five-factor model (attention and awareness, comprehension and coping, emotions, goals and habits, and virtues and relationships).

Clearly, these models share similar components; however, some elements are unique to specific models such as autonomy and optimism (Diener et al., 2010; Ryff, 1989). This is a problem for researchers, as use of one conceptual model may neglect the contribution of a component that another model claims is a key element of wellbeing. As such, inclusion or exclusion of a component could alter the outcome of findings and lead to equivocal results. It therefore remains a matter for empirical investigation to determine if Stoeber and Corr's (2016) findings remain congruent when using different conceptual models of flourishing. This considered, the problem with Stoeber and Corr's (2016) use of the eight-item Flourishing scale (Diener et al., 2010) becomes clear. With only one item to measure each component of flourishing, the scale's brevity does not allow a comprehensive assessment of each element of flourishing, and, as such, is only suitable for use as a brief indicator of flourishing.

1.5 The PERMA model

Of the conceptualisations discussed, the PERMA model (Seligman, 2011) most closely follows the law of parsimony, providing a definition of flourishing that encompasses elements of other models and has a mix of hedonic and eudaimonic elements. For example, positive emotion is a hedonic element encompassing pleasure, ecstasy, comfort and warmth (Seligman, 2011), also found in the Huppert and So (2013), and Rusk and Waters (2015) models. Engagement focuses largely on flow: complete absorption in an activity where individuals are fully involved in the moment (Nakamura & Csikszentmihalyi, 2014; Seligman, 2011), also found in Diener et al. (2010) and Huppert and So's (2013) models. Relationships is an element found in many models (e.g. Diener et al., 2010; Huppert & So, 2013; Rusk & Waters, 2015; Ryff, 1989) and refers to positive relationships with other people and the belief that the absence of them is detrimental to wellbeing (Seligman, 2011). Meaning is a eudaimonic element best explained as belonging to and serving something bigger than oneself (Seligman, 2011), also found in Diener et al. (2010), Huppert and So (2013) and Ryff's (1989) models. Finally, accomplishment is also found in multiple models (e.g. Diener et al., 2010; Huppert & So, 2013; Rusk & Waters, 2015; Ryff, 1989) and refers to people pursuing success and working towards goals for their own sake (Butler & Kern, 2016; Seligman, 2011). Furthermore, the PERMA model (Seligman, 2011) has a validated corresponding measure: the PERMA-Profiler (Butler & Kern, 2016), which is a 23-item measure with three items per



PERMA element and eight filler items for health, negative emotion, loneliness and overall happiness. Despite its youth, it has demonstrated internal and cross-time consistency, convergent and divergent validity, and internal consistency of .70 to .88 across the subscales (Butler & Kern, 2016; Iasiello, Bartholomaeus, Jarden & Kelly, 2017), indicating it is a reliable measure (Field, 2013). Moreover, Goodman et al. (2018) found a latent correlation of .98 between the PERMA-Profiler (Butler & Kern, 2016) and subjective wellbeing, suggesting that the PERMA elements are an exceptional indicator of subjective wellbeing and that the PERMA model (Seligman, 2011) is not a distinct type of wellbeing, rather a synonymous measure of it.

1.6 The present study

To this end, and given the dearth of studies examining perfectionism and flourishing, this provided a clear rationale for the present study to examine the relationship between perfectionism and flourishing using the PERMA model (Seligman, 2011). As the goal was to test the relationships between variables, a cross-sectional correlational design using enter method multiple regressions was deemed most appropriate. Specifically, the aim was to investigate whether SOP, OOP and SPP have different relationships with each PERMA element. Despite its age, the tripartite model and its corresponding measure (the Multidimensional Perfectionism Scale [MPS]; Hewitt & Flett, 2004) remains one of the most widely used tools in perfectionism research (e.g. Cox & Hill, 2018; Flett, Nepon, Hewitt & Fitzgerald, 2016; Stoeber, Madigan, Damian, Esposito & Lombardo, 2017). With excellent psychometric properties: evidence of test-retest reliability, convergent and discriminant validity and internal consistency ranging from .74 to .90 across the three forms of perfectionism (see Hewitt & Flett, 2004), use of the MPS for the present study was well justified.

Although the present study was the first to examine the relationship between perfectionism and flourishing using the PERMA model (Seligman, 2011), and as such was exploratory in nature, a number of hypotheses could be formed based on previous studies examining the relationship between perfectionism and positive and negative characteristics. In keeping with Stoeber and Corr's findings (2016), and evidence suggesting SOP is an adaptive form of perfectionism and an indicator of perfectionistic strivings (Bieling et al., 2004; Frost et al., 1993; Stoeber & Otto, 2006), SOP was expected to show a positive relationship with all PERMA elements. Conversely, as evidence suggests SPP is a maladaptive form of perfectionism and an indicator of perfectionistic concerns (Bieling et al., 2004; Frost et al., 1993; Stoeber & Corr, 2016; Stoeber & Otto, 2006), it was expected to show a negative relationship with all PERMA elements. As for OOP, given this form of perfectionism is less well researched (Stoeber, 2014, 2015), expectations were less defined. However, as OOP is associated with reduced interest in prosocial and intimacy goals (Stoeber, 2014), OOP was expected to have a negative affinity with the "relationships" element. As for the other PERMA elements, in line with the findings of Stoeber and Corr (2016) and reports that OOP should no longer be considered an indicator of perfectionistic strivings (Stoeber, 2014), OOP was expected to have no significant relationships with the remaining PERMA elements.



2. Method

2.1 Design

A cross-sectional correlational design was used. The predictor variables were the three forms of perfectionism: SOP, OOP and SPP, as assessed by the MPS (Hewitt & Flett, 2004). The outcome variables were the five PERMA elements: positive emotion, engagement, relationships, meaning, accomplishment and overall wellbeing, as measured by the PERMA-Profiler (Butler & Kern, 2016).²

2.2 Participants

Participants were required to be \geq 18 years old (no upper age limit and no other exclusion criteria). First and second-year undergraduate psychology students were recruited through Northumbria University's participation pool, with one SONA reward point granted in return for taking part. (SONA is an online platform where researchers can recruit undergraduate psychology students to participate in studies in return for course credit.) No other incentives, financial or otherwise, were offered or given. Final-year undergraduate psychology students and members of the public were recruited via an email with a link to the survey inviting participation.

Of 102 survey responses, 10 were incomplete, thus excluded from analysis. Of complete responses (N = 92, 12 males, 79 females, one gender fluid), ages ranged from 18 to 67 (M age = 24.99 years, SD = 11.10). Thirty-four participants reported being single, 43 in a romantic relationship (31 not cohabiting, 13 cohabiting), 11 were married, two were widowed, one was in polyamorous relationships. Regarding ethnicity, 81 participants identified as white British and six identified as another white background. Two identified as Chinese and a further two selected multiple categories. One participant could not be categorised. As for work status, 10 reported working full-time, six working part-time, 57 were full-time students, one was a part-time student and two were retired. A further 16 fell into two categories: 13 were full-time students working part-time, one was a full-time student retired from employment, one was working full-time alongside a "bank job," and one was working full-time and a full-time student.

2.3 Materials

The three-part survey was created through the Qualtrics online survey platform. Forced responses were enabled for all questions, bar demographics for scoring purposes. First, participants were asked to provide age, gender, relationship and occupational status and ethnic background. Ethnic background questions were derived from the Office for National Statistics recommended harmonised ethnic group questions for use in surveys in England (Office for National Statistics, 2017). Questions were multiple choice with open-ended questions included to allow elaboration, e.g. "What do you identify your gender as?", options being: "male," "female," "prefer not to say" and "other; please state in the box provided."

Perfectionism. Second, the MPS (Hewitt & Flett, 2004) was used to measure perfectionism. This 45-item scale has 15 questions for each form of perfectionism: SOP, OOP and SPP, e.g. "I seldom feel the need to be perfect," "Others will like me even if I don't excel at everything." Items were rated on a scale from 1 to 7 with the end points labelled (*disagree* to *agree*). Items were presented on a Likert-like scale and participants asked to read each item and decide whether

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² Health, negative emotion, loneliness and happiness items were included, as per Butler and Kern's (2016) recommendations, however, as the focus of the present study was the PERMA elements, these subscales were not included as outcome variables in the subsequent regression analyses.



they agreed/disagreed, and to what extent. Selecting 1 indicated strong disagreement, 7 indicated strong agreement, and feeling neutral/undecided was indicated by selecting 4. High SOP scores evidenced perfectionistic behaviour that relates/is directed to the self (Hewitt & Flett, 2004). Similarly, high OOP scores evidenced perfectionistic behaviour that relates/is directed to others, and high SPP scores indicated a perception that other people have perfectionistic standards/expectations for their behaviour (Hewitt & Flett, 2004). Hewitt and Flett (2004) have reported internal consistency estimates (Cronbach's alpha) ranging from .84 to .90 for SOP, 7.4 to .83 for OOP and .80 to .87 for SPP, demonstrating acceptable to excellent reliability (Field, 2013) with comparable values from clinical and community samples.

Flourishing. Third, the PERMA-Profiler (Butler & Kern, 2016) was used to measure flourishing. This 23-item measure has three items per PERMA element and a further eight filler items: three each for negative emotion and health, and singular items for happiness and loneliness, e.g. "How often do you become absorbed in what you are doing?", "In general, how often do you feel positive?" Overall wellbeing is calculated as the mean of the PERMA elements and happiness items. Items were rated on a scale from 0 to 10 with the end points labelled (e.g. never to always, not at all to completely). Items were presented on a Likert-like scale and participants were asked to read each question and select the point on the scale that they felt best described them. Low scores indicated feeling low levels of an element; the higher the score, the more of the element the participant felt they possessed. The PERMA-Profiler has been reported to have acceptable to excellent reliability, with internal consistency (Cronbach's alpha) levels of .88 for positive emotion, .72 for engagement, .82 for relationships, .90 for meaning, .79 for accomplishment, .71 for negative emotion, .92 for health and .94 for overall wellbeing (Butler & Kern, 2016; Field, 2013).

2.4 Procedure

The study received ethical approval from Northumbria University's Ethics Committee. An information sheet provided participants with a brief background regarding perfectionism, and stated the study's purpose. The information sheet assured participants that all answers would be anonymous, confidential, and stored securely, and provided details on how to withdraw, and rewards for taking part (i.e. SONA points), and the researcher's contact details, should further information be required. It was highlighted that slight discomfort may be experienced when answering questions relating to wellbeing, and if potential participants felt that this may be applicable to them, not to participate, as all questions had to be answered for scoring purposes.

Participants were required to tick a consent box before proceeding, to confirm that:

- 1) they understood the nature of the study,
- 2) they were free to withdraw at any time without reason or prejudice, and
- 3) the data provided would remain confidential.

After giving informed consent, participants entered a unique code word which would identify their data and allow deletion should they wish to withdraw. On completion, participants were thanked and shown a debrief sheet providing a more detailed explanation of the purpose of the project. Contact details were restated, and a reminder given that participants could withdraw any time within a month of completion by contacting the researcher. The total pre- and post-survey procedure took approximately 10 minutes.

3. Results

3.1 Treatment of data



All descriptive and inferential statistics were calculated using SPSS Version 24. As seen in Table 1, descriptive statistics and Cronbach's alpha were calculated for all subscales as a measure of internal consistency.³ All alpha levels were > .70, indicating good reliability (Field, 2013), except for engagement (α = .53, corrected item-total correlations > .30). That said, scores with alphas < .70 remain useful for research purposes (Nunnally & Bernstein, 1994), therefore engagement was retained for further analysis.

Table 1. Descriptive statistics and internal consistency for MPS (Hewitt & Flett, 2004) and PERMA-Profiler (Butler & Kern, 2016) subscales (N = 92)

	M	SD	Min score	Max score	Cronbach's α
Perfectionism					
SOP	73.25	16.52	35.00	105.00	.91
OOP	54.85	11.67	30.00	82.00	.77
SPP	58.29	15.71	22.00	95.00	.89
PERMA					
Positive emotion	5.88	2.24	0.00	9.33	.92
Engagement	6.88	1.64	2.67	10.00	.53
Relationships	6.96	2.26	1.33	10.00	.87
Meaning	6.24	2.26	0.00	10.00	.87
Accomplishment	6.46	1.81	1.00	9.33	.81
Health	5.78	2.42	0.00	10.00	.90
Negative emotion	5.37	1.96	1.33	9.33	.72
Loneliness	4.84	3.27	0.00	10.00	-
Happiness	6.12	2.43	0.00	10.00	-
Overall wellbeing	6.46	1.80	1.25	9.50	.95

3.2 Analytic strategy

To assess the relationships between the three forms of perfectionism and the PERMA elements, including overall wellbeing, two analytic strategies were implemented. First, bivariate correlations were computed between all variables. Second, six enter method multiple regressions were conducted to predict each PERMA element and overall wellbeing using the three forms of perfectionism as predictors.

Data from Hewitt and Flett's (2004) community sample showed men scored significantly higher than women only for the OOP subscale; however, the effect was small, accounting for

³ Cronbach's alpha could not be calculated for the loneliness and happiness subscales, as they are single item measures.



only .7% of the variance. Similarly, age has been reported to affect only SPP (Hewitt & Flett, 2004), with scores decreasing as age increased; however, again this effect was small. As such, given only 13% of the participants identified as male and the majority of participants (75%) fell between the ages of 18-24, neither gender nor age was controlled for in the subsequent analyses.

3.3 Bivariate correlations

Bivariate Pearson's correlations were run between all variables, using an alpha level of .05 (see Table 2 below). As per Cohen's (1992) effect size guidelines and in line with previous findings (Hewitt & Flett, 2004), SOP displayed a medium significant positive correlation with OOP and a large significant positive correlation with SPP; however, contrary to expectations, OOP and SPP were not significantly correlated.

As seen in Table 2, contrary to expectations, SOP was not significantly correlated with any outcome variables. However, given SOP displayed medium/large significant correlations with SPP and OOP, this indicates there was significant overlap between them. In other words, those with higher levels of one form of perfectionism tended to have higher levels of the other forms of perfectionism as well. As such, this may have resulted in some significant relationships being suppressed and others being inflated, as has been previously reported by Hill, Huelsman and Araujo (2010), and Stoeber, Harvey, Almeida and Lyons (2013).

Unexpectedly, OOP displayed medium significant positive correlations with meaning and accomplishment, and a small-medium significant positive correlation with overall wellbeing. Socially prescribed perfectionism, on the other hand, showed medium-large significant positive correlations with negative emotion and loneliness. In line with expectations, SPP also displayed large significant negative correlations with positive emotion, relationships and overall wellbeing, medium-large significant negative correlations with happiness, and medium significant negative correlations with engagement, meaning, accomplishment and health.

3.4 Multiple regression analyses

Next, six enter method multiple regressions were conducted to predict each PERMA element and overall wellbeing from SOP, OOP and SPP (coefficients and 95% confidence intervals for the unstandardised coefficient values are seen in Table 3 below). To satisfy the assumptions of multiple regression, visual inspection of scatterplots confirmed the relationships between the predictors and outcome variables were linear. As variance inflation factor scores were < 10 (Myers, 1990) and tolerance scores were > 0.2 (Menard, 1995) for all models, the assumption of no multi-collinearity was met. The Durbin-Watson statistic showed the values of the residuals were independent, as the values for all models were close to 2 (Field, 2013). Scatterplots of the standardised residuals versus standardised predicted values did not funnel out for any of the models, suggesting the assumption of homoscedasticity had been Probability-plots were approximately linear, suggesting that the met (Field, 2013). assumption of normality of the residuals was met for the positive emotion, engagement, meaning and overall wellbeing models, but may have been violated for the relationships and accomplishment models. However, as only extreme deviations are likely to have a significant impact, the results likely remain valid. Finally, for all models, Cook's Distance values were < 1, suggesting there were no influential cases biasing any of the models (Field, 2013).



3.4.1 Positive emotion

The model, with the three predictors, reached significance and was able to account for 32.7% of the variance in positive emotion (R^2 = .327, F(3,88) = 14.27, p< .001). As seen in Table 3, SPP (β = -.63; t(88) = -6.39, p< .001) and SOP (β = .26; t(88) = 2.50, p = .014) both made significant contributions to the regression, meaning positive emotion was predicted by SOP and SPP. Other-oriented perfectionism (β = .11; t(88) = 1.21, p = .230), however, did not make a significant contribution.

3.4.2 Engagement

The model reached significance, accounting for 17.1% of the variance in engagement ($R^2 = .171$, F(3,88) = 6.04, p = .001). Socially prescribed perfectionism ($\beta = .43$; t(88) = .389, p < .001) and SOP ($\beta = .33$; t(88) = 2.89, p = .005) both made significant contributions to the regression, meaning engagement was predicted by SOP and SPP. Again, OOP ($\beta = .06$; t(88) = .60, p = .549) did not make a significant contribution to the regression.

3.4.3 Relationships

The model reached significance, accounting for 36% of the variance in relationships (R^2 = .360, F(3,88) = 16.52, p< .001). Socially prescribed perfectionism (β = -.65; t(88) = -6.69, p< .001) was the only predictor to make a significant contribution to the regression, meaning positive relationships were negatively predicted by SPP. Neither SOP (β = .15; t(88) = 1.49, p = .14) nor OOP (β = .14; t(88) = 1.60, p = .113) made significant contributions.

3.4.4 Meaning

The model reached significance, accounting for 22.5% of the variance in meaning (R² = .225, F(3,88) = 8.52, p < .001). All three forms of perfectionism made significant contributions to the regression: SPP ($\beta = -.45$; t(88) = -4.25, p < .001), SOP ($\beta = .25$; t(88) = 2.20, p = .030), OOP ($\beta = .23$; t(88) = 2.34, p = .022), indicating that meaning was predicted by SPP, SOP and OOP.

3.4.5 Accomplishment

The model reached significance, accounting for 29.3% of the variance in accomplishment (R^2 = .293, F(3,88) = 12.14, p<. 001). Again, all three forms of perfectionism made significant contributions to the regression: SPP (β = -.50; t(88) = -4.95, p<. 001), OOP (β = .29; t(88) = 3.00, p = .004), SOP (β = .27; t(88) = 2.51, p = .014), meaning that accomplishment was predicted by SPP, OOP and SOP.



Table 2. Bivariate Pearson's correlations for MPS (Hewitt & Flett, 2004) and PERMA-Profiler (Butler & Kern, 2016) subscales

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
Perfectionism													
1. SOP	-												
2. OOP	.33**	-											
3. SPP	.47***	.13	-										
PERMA													
4. Positive emotion	001	.12	50***	-									
5. Engagement	.15	.12	26*	.66***	-								
6. Relationships	11	.11	56***	.80***	.53***	-							
7. Meaning	.11	.26*	31**	.79***	.63***	.70***	-						
8. Accomplishment	.13	.31**	34**	.73**	.55***	.66***	.81***	-					
9. Health	.00	.06	36***	.61***	.42***	.50***	.61***	.56***	-				
10. Negative	.06	05	.43***	64***	36**	47***	43***	39***	49***	-			
emotion													
11. Loneliness	.08	.006	.39***	64***	29**	64***	50***	41***	38***	.56***	-		
12. Happiness	.09	.19	41***	.93***	.63***	.76***	.80***	.75***	.66***	60***	66***	-	
13. Overall wellbeing	.06	.21*	46***	.93***	.75***	.86***	.91***	.86***	.64***	54***	60***	.92***	-

Note: N = 92, *p<.05, **p<.01, **p<.001.



Table 3. Summary of enter method multiple regression analyses for SOP, OOP and SPP predicting PERMA elements and overall wellbeing

		Unstandardised Coefficients		Standardised Coefficient	95% Confidence Interval for B	
Model	Predictor	В	SE	β	Lower Bound	Upper Bound
Positive emotion	SOP	0.04	0.01	.26*	0.007	0.06
	OOP	0.02	0.02	.11	-0.01	0.06
	SPP	-0.09	0.01	63***	-0.12	-0.06
Engagement	SOP	0.03	0.01	.33**	0.01	0.06
	OOP	0.009	0.01	.06	-0.02	0.04
	SPP	-0.05	0.01	43***	-0.07	-0.02
Relationships	SOP	0.02	0.01	.15	-0.007	0.05
	OOP	0.03	0.02	.14	-0.007	0.06
	SPP	-0.09	0.01	65***	-0.12	-0.07
Meaning	SOP	0.03	0.02	.25*	0.003	0.06
	OOP	0.05	0.02	.23*	0.007	0.08
	SPP	-0.07	0.02	45***	-0.10	-0.04
Accomplishment	SOP	0.03	0.01	.27*	0.006	0.05
	OOP	0.04	0.02	.29**	0.02	0.07
	SPP	-0.06	0.01	50***	-0.08	-0.04
Overall wellbeing	SOP	0.03	0.01	.29**	0.009	0.05
<u> </u>	OOP	0.03	0.01	.19*	0.002	0.06
	SPP	-0.07	0.01	62***	-0.09	-0.05

Note: N = 92, SE = Standard Error, *p<.05, **p<.01, **p<.001.

3.4.6 Overall wellbeing

The model reached significance, accounting for 34.3% of the variance in overall wellbeing (R^2 = .343, F(3.88) = 15.31, p< .001). Again, all three forms of perfectionism made significant contributions to the regression: SPP (β = -.62; t(88) = -6.34, p< .001), SOP (β = .29; t(88) = 2.79, p = .006), OOP (β = .19; t(88) = 2.10, p = .039), indicating that overall wellbeing was predicted by SPP, SOP and OOP.

In summary, the results showed that perfectionism explained a substantial amount of variance in all PERMA elements and overall wellbeing. All models reached significance at the .05 alpha level. Socially prescribed perfectionism was a significant negative contributor to all models. In contrast, SOP significantly positively contributed to all models, bar the relationships model, and OOP significantly positively contributed to the meaning, accomplishment and overall wellbeing models.

4. Discussion

4.1 The present findings

The aim of the present study was to investigate the relationship between the tripartite model of perfectionism (Hewitt & Flett, 1991, 2004) and the PERMA model of flourishing (Seligman, 2011), specifically, whether the three forms of perfectionism showed different relationships with each



PERMA element. Self-oriented perfectionism was expected to show a positive relationship with all PERMA elements, SPP a negative relationship with all PERMA elements and OOP to show a negative affinity with the "relationships" element but otherwise have no significant relationships with the remaining PERMA elements.

As expected, results showed perfectionism accounted for a large portion of variance in all PERMA elements, confirming perfectionism is a salient personality trait to consider when explaining individual differences in wellbeing. Supporting the hypotheses, those with higher levels of SPP reported lower levels of all PERMA elements. Additionally, SPP was the only predictor to significantly contribute to all models, suggesting it has the strongest influence on flourishing of the forms of perfectionism measured. Expectations were partially met for SOP, with it being a positive predictor of positive emotion, engagement, meaning, accomplishment and overall wellbeing, although, contrary to expectations, it was not a significant predictor of positive relationships. Self-oriented perfectionism was also the second largest contributor to all models (bar relationships), suggesting it influences flourishing, albeit to a lesser extent than SPP. However, contrary to expectations, participants with higher levels of OOP reported higher levels of meaning, accomplishment and overall wellbeing. Other-oriented perfectionism was the smallest contributor to these models, indicating that out of the three forms of perfectionism, it has the least (although still significant) influence on flourishing.

4.2 Confirming two-factor theory

With regards to SOP and SPP, the present results replicate Stoeber and Corr's (2016) findings and are consistent with research identifying SPP and SOP as maladaptive and adaptive forms of perfectionism respectively, confirming their place as indicators of perfectionistic concerns and perfectionistic strivings (Bieling et al., 2004; Frost et al., 1993; Stoeber & Otto, 2006). The findings partially confirm Flett and Hewitt's (2015) assertion that perfectionism can undermine flourishing; however, crucially, neither Stoeber and Corr (2016), nor the present study, claimed that all forms of perfectionism would be/are beneficial. Rather, both emphasised that different forms of perfectionism would have different (i.e. positive or negative) relationships with flourishing and the PERMA elements that comprise it. As such, whilst the present findings do support the idea that perfectionism can undermine wellbeing, they show that only SPP impedes flourishing and that SOP enhances it, challenging Flett and Hewitt's (2015) view that perfectionism, in general, undermines flourishing. Importantly, however, the present findings explain almost double the amount of variance in overall flourishing compared to Stoeber and Corr's (2016) results. This confirms the present study's earlier contention that using different conceptual models of flourishing would likely lead to different findings. Moreover, this emphasises the importance of looking at the relationship each individual element of flourishing has with each form of perfectionism.

4.3 Adaptive perfectionism and PERMA

That said, the results with regards to SOP must be interpreted with caution. Although SOP was a positive predictor of four out of five PERMA elements, this is inconsistent with the non-significant correlations between SOP and these PERMA elements. This raises the possibility that SOP may have acted as a suppressor variable (a variable that increased the predictive validity of another variable[s] in the regression, through suppression of irrelevant variance in them; Conger, 1974; Tabachnick & Fidell, 2014). Similar findings have been reported by Hill et al. (2010) and Stoeber et al. (2013), who consequently conducted multiple regression analyses controlling for overlap between the different forms of perfectionism. However, this approach was not



warranted here, given the exploratory nature of the work, and, on balance, such methods are discouraged, indeed, the most notable critique being that the construct the predictor variable represents can change once the shared variance with other predictor variables is removed (Hill, 2014, 2017; Lynam, Hoyle & Newman, 2006). That said, some perfectionism researchers remain highly vocal about the need for overlap between the forms of perfectionism to be controlled for. Both Stoeber and Otto (2006) and Stoeber and Gaudreau (2017) have reported that perfectionistic strivings (represented by SOP in the current study) have stronger relationships with positive attributes when the overlap with perfectionistic concerns (represented by SPP) is controlled for. As such, not controlling for overlap may not only explain why SOP had no significant positive correlations with the PERMA elements, it could also explain why SOP did not make a significant contribution the relationships model.

Additionally, not statistically controlling for overlap may explain why OOP was not a significant negative predictor of positive relationships. However, perhaps this result should not be entirely surprising, as the literature regarding OOP and relationships is equivocal. For example, Haring, Hewitt and Flett (2003) reported that whilst OOP in wives was associated with marital problems, the same association was not found for husbands. Similarly, Hewitt, Flett and Mikail (1995) found spouses' reports of marital adjustment and OOP was only related in some cases, dependant on the role the spouse had in the relationship. This suggests that OOP's effect on interpersonal relationships is dependent on numerous factors, and, as such, simply measuring OOP on its own may not be enough of a reliable indicator to predict feelings of satisfaction in interpersonal relationships.

4.4 OOP and PERMA

That discussed, the most notable finding was that OOP was a significant positive predictor of overall wellbeing. This differs from Stoeber and Corr's (2016) results, who found no significant relationship between OOP and flourishing. Furthermore, the findings are the antithesis of Stoeber's (2014) claim that OOP should be removed as an indicator of perfectionistic strivings, an adaptive form of perfectionism. An explanation for the findings may lie in examining the personality traits associated with OOP. For example, conscientiousness (the ability to control impulses, be goal directed and plan and delay gratification; Roberts, Jackson, Fayard, Edmonds & Meints, 2009) is positively correlated with OOP (Hewitt & Flett, 2004) and has been reported to have a moderating effect on OOP, bringing out its "bright side" through encouraging engagement in greater interpersonal citizenship behaviours (Shoss, Callison & Witt, 2015). Therefore, OOP being adaptive or maladaptive may depend on how it interacts in combination with other personality traits within an individual. To this end, although not measured in the present study, the current sample may have had other personality traits at levels to exert a modifying effect, offering an explanation for the present findings.

4.5 OOP, narcissism and wellbeing

Additionally, OOP's positive relationship with the Dark Triad, particularly narcissism (Smith et al., 2017; Stoeber, 2014; Stoeber et al., 2015), may explicate OOP's positive relationship with overall wellbeing. For example, narcissism is a construct comprised of grandiosity, entitlement, dominance and superiority (Paulhus & Williams, 2002), which previous studies have reported as being beneficial to subjective wellbeing. Rose (2002) reported that overt narcissists (a grandiose sense of self, ignorance of others' needs and demanding of attention; Wink, 1991) had higher self-esteem, happiness and life satisfaction compared to covert narcissists (characterised by feelings of inferiority, hypersensitivity and dissatisfaction; Wink, 1991). Furthermore, Sedikides, Rudich,



Gregg, Kumashiro and Rusbult (2004) found that high scores on the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988) were inversely related to dispositional depression and sadness and positively related to subjective wellbeing. Additionally, Ackerman et al. (2011) found a three-factor solution for the NPI (Raskin & Terry, 1988): leadership/authority, grandiose exhibitionism and entitlement/exploitativeness. Leadership/authority was linked to adaptive outcomes, whereas the other factors were linked to maladaptive outcomes. This indicates that narcissism, being maladaptive, is likely dependent on which are the dominant facets. A further consideration is that narcissism has been reported to be more positively correlated with life satisfaction in emerging adults (\leq 25 years old; Hill & Roberts, 2012). As such, given the mean age of participants in the current study was 25, the present sample may have been more likely to experience positive outcomes from any narcissistic traits than would have been found in an older sample.

Furthermore, this positive association with narcissism (Smith et al., 2017; Stoeber, 2014; Stoeber et al., 2015) may also explain OOP being a significant positive predictor of meaning. Several authors have identified narcissism as playing a part in inner emptiness, a state of low positive affect and feeling a lack of purpose or substance (Zerach, 2016). This can be conceptualised as the opposite of meaning: defined as belonging to and serving something bigger than oneself (Seligman, 2011; Zondag, 2005). However, it is again important to consider the different types of narcissism, as covert narcissists are more likely to report experiencing a sense of meaningless in life and the negative affect of emptiness than overt narcissists (Wink & Donahue, 1997; Zerach, 2016; Zondag, Van Halen & Wojtkowiak, 2009). This is consistent with the idea that overt and covert narcissism are at opposite ends of an adjustment continuum – overt narcissism as adaptive and covert narcissism as maladaptive (Watson, Hickman & Morris, 1996; Zondag, 2013). As such, although not measured in the present study, the current sample may have had higher levels of overt narcissism, which could account for those high in OOP reporting feeling that their lives had more meaning.

4.6 OOP, Machiavellianism, and wellbeing

Additionally, OOP's positive relationship with the Dark Triad (Smith et al., 2017; Stoeber, 2014; Stoeber et al., 2015) may also account for OOP being a significant positive predictor of accomplishment, as Dark Triad traits have been reported to coincide with success in the For example, Zettler and Solga (2013) reported that Machiavellianism (a workplace. manipulative personality trait; Paulhaus & Williams, 2002) was related to job performance in an inverted U-shaped manner, there being an optimal amount of Machiavellianism for succeeding, but too much Machiavellianism being detrimental. Similarly, Spurk, Keller and Hirschi (2016) found that narcissism was positively related to job salary, and Machiavellianism to leadership positions and career satisfaction. This suggests that Dark Triad traits are indicators of career success, with Hirschi and Jaensch (2015) proposing those high in these traits have a more active and confident approach, which may account for their success. Indeed, this suggestion fits with other personality correlates of OOP such as self/personal control, self-efficacy and assertiveness (Hewitt & Flett, 2004), all of which have been reported to boost career success (Ames, 2009; Duckwork & Gross, 2014; Lisbona, Palaci, Salanova & Frese, 2018). As such, it seems likely those high in OOP may have other personality traits that lend to them being high achievers, therefore accounting for them reporting a greater sense of accomplishment. In respect to this, future researchers may wish to consider conducting a series of moderation analyses, with overt and covert narcissism as dichotomous moderators, to predict accomplishment, meaning and wellbeing from OOP. To the best of current knowledge, this has not yet been investigated, and



would explore whether the relationships between OOP and these outcome variables do indeed differ, depending on narcissism subtype.

4.7 The Pygmalion effect

However, another possible explanation for OOP predicting accomplishment may be the Pygmalion effect, a type of self-fulfilling prophecy where a person (perceiver) raises their expectations of those around them (targets), which results in the targets' performance being boosted (Collins, 2011; Duffy, Field & Shirley, 2011; Eden, 1992). First described in an educational context (Rosenthal & Jacobson, 1968) the effect has also been reported in occupational settings (Duan, Li, Xu & Wu, 2017; Eden, 1992), suggesting it is a universal phenomenon. Furthermore, as leadership/authority is thought to be a dimension of narcissism (Ackerman., 2011), it may be that those high in OOP tend to take on authoritative roles in their social circle, akin to a teacher or manager, where the Pygmalion effect is typically reported (Duan et al., 2017; Eden, 1992). Consequently, those around the individual high in OOP may improve their performance, in line with the expectations of the person high in OOP. Indeed, a similar effect has been reported in a sporting context, with OOP (team-oriented perfectionism) positively predicting team performance, the idea being that putting perfectionistic standards on other team members drives the group to better performance (Hill, Stoeber, Brown & Appleton, 2014). Theoretically, this could elicit feelings of accomplishment in the individual high in OOP, especially if they feel part of a successful group, which would enhance any narcissistic need for grandiosity, dominance and superiority (Paulhus & Williams, 2002). Alternatively, if those high in OOP feel they have influenced/improved another's performance, they may feel responsible for the target's success and consequently feel a sense of accomplishment.

4.8 Limitations

The present study had its limitations; firstly, the sample was predominantly female (86%), and, as such, results may not be representative across genders. Secondly, a large portion of the sample were university students (72%). Although a convenient sampling methodology, to fully understand the relationship between perfectionism and flourishing, it will be important for future studies to examine this in a sample from the general population. It is also worth considering the survey layout and the impact of having demographic and MPS (Hewitt & Flett, 2004) questions prior to the PERMA-Profiler (Butler & Kern, 2016). According to the Organisation for Economic Co-operation and Development's (OECD) guidelines on measuring subjective wellbeing (2013), wellbeing items should come immediately after questions that establish eligibility to participate, to reduce question order effects and ensure any contextual effects are consistent across surveys. As such, it is possible that individual differences highlighted by the preceding questionnaires may have influenced participant responses on the PERMA-Profiler (Butler & Kern, 2016). Future studies may wish to place wellbeing items at the start of surveys to manage this effect.

The study also used a correlational cross-sectional study design; therefore, whilst perfectionism was predictive of flourishing, this should not be interpreted as causation and cannot address directionality. As such, the next step for future researchers will be to investigate whether perfectionism predicts longitudinal changes in flourishing. A further consideration is that the PERMA model of wellbeing (Seligman, 2011) may not be appropriate for other cultures and backgrounds. Typically, Western countries such as the United Kingdom (where the present study was conducted) favour hedonism as a way of pursuing happiness, whereas Eastern countries favour eudaimonism (Joshanloo, 2014). Furthermore, the importance of wellbeing



indicators such as happiness varies across cultures, with Western cultures viewing happiness as paramount and positive, and Eastern cultures viewing happiness as transient, with uncertainty regarding whether it is good (Oshi & Gilbert, 2016). As such, the present findings may not be applicable to Eastern cultures, and it will be important for wellbeing researchers in their respective countries to investigate how applicable the PERMA model (Seligman, 2011) is as a measure of how their citizens flourish. Finally, in respect to SOP possibly having acted as a suppressor variable, future studies will need to replicate the findings before firm conclusions can be drawn regarding the relationship between SOP and wellbeing. Despite the practice of partialling out variance being criticised (Hill, 2014, 2017; Lynam et al., 2006), it would be wise for future researchers to control for any overlap between forms of perfectionism when conducting correlations and multiple regressions. Present findings considered, such practices will likely be necessary to accurately show the relationships between the different forms of perfectionism and any outcome variables.

Lastly, it would be remiss not to comment on the poor Cronbach's alpha for the engagement subscale, which was considerably lower than the generally accepted cut-off (<.70; Field, 2013). This is not the first time this subscale has been found to have poor internal consistency. Indeed, closer inspection of Butler and Kern's (2016) original paper reveals several samples used to test the internal consistency of the PERMA-Profiler fell below .70 for this domain, the only subscale to do so. Iasiello et al. (2017) have also commented on its low internal consistency, and, comparable to the present study's findings, Goodman et al. (2018) found the engagement subscale to have an alpha level of .58. All considered, this suggests that the subscale may not reliably measure engagement, a point for future researchers to consider before choosing this scale and when interpreting the current results.

Future studies may wish to build on the present findings by investigating the relationship between flourishing and other models of perfectionism, such as the 2x2 model (Gaudreau & Thompson, 2010), which, rather than focusing on perfectionistic strivings and perfectionistic concerns, addresses different within-person combinations of each subtype. Additionally, researchers should consider using different indicators of perfectionistic strivings and perfectionistic concerns (Stoeber & Otto, 2006), such as items from the Perfectionism Inventory (Hill et al., 2004), the Almost Perfect Scale-Revised (Slaney, Rice, Mobley, Trippi & Ashby, 2001) or the Big Three Perfectionism Scale (Smith, Saklofske, Stoeber & Sherry, 2016), to see if the present findings are concordant when using alternative measures.

4.9 Conclusions

To conclude, the present findings make a significant contribution to the extant literature on perfectionism and flourishing, being the first to investigate the relationship between perfectionism and the PERMA model of wellbeing (Seligman, 2011). The findings extend the literature by indicating that all three forms of perfectionism are significant predictors of flourishing, explaining a large amount of variance, with SOP and OOP being conducive to flourishing and SPP undermining it. Furthermore, the present findings highlight the importance of examining the relationships each element of flourishing has with each form of perfectionism. Moreover, the results challenge the view that perfectionism in general undermines flourishing, and emphasises the importance of looking at perfectionism as a multidimensional trait. The findings support the notion that OOP represents a form of perfectionistic strivings (Bieling et al., 2004; Frost et al., 1993; Stoeber & Otto, 2006), supportive of meaning, accomplishment and overall wellbeing, and counter Stoeber's (2014) position that it embodies a "dark" form of perfectionism. As previously stated, OOP is commonly ignored in terms of its clinical relevance (Stoeber, 2015;



Stoeber & Otto, 2006). However, the present findings clearly indicate that OOP warrants increased research attention to challenge the view that this "dark" form of perfectionism (Stoeber, 2014, 2015) has no effect on flourishing.

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References

- Ackerman, R. A., Witt, E. A., Donnellan, M. B., Trzesniewski, K. H., Robins, R. W., & Kashy, D. A. (2011). What does the narcissistic personality inventory really measure? *Assessment*, 18(1), 67-87. https://doi.org/10.1177/1073191110382845
- Ames, D. (2009). Pushing up to a point: Assertiveness and effectiveness in leadership and interpersonal dynamics. *Research in Organizational Behavior*, 29, 111-133. https://doi.org/10.1016/j.riob.2009.06.010
- Bieling, P. J., Israeli, A. L., & Antony, M. M. (2004). Is perfectionism good, bad, or both? Examining models of the perfectionism construct. *Personality and Individual Differences*, *36*(6), 1373-1385. https://doi.org/10.1016/S0191-8869(03)00235-6
- Bradburn, N. M. (1969). The structure of psychological wellbeing. Oxford, England: Aldine.
- Burns, D. D. (1980). The perfectionist's script for self-defeat. Psychology Today, 14(6), 34-52.
- Butler, J., & Kern, M. L. (2016). The PERMA-Profiler: A brief multidimensional measure of flourishing. *International Journal of Wellbeing*, 6(3), 1-48. https://doi.org/10.5502/ijw.v6i3.526
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155-159. https://doi.org/10.1037/0033-2909.112.1.155
- Collins, K. C. (2011). Pygmalion Effect. In S. Goldstein & J.A. Naglieri (Eds), *Encyclopedia of child behavior and development* (p. 1206). Boston, MA: Springer. https://doi.org/10.1007/978-0-387-79061-9 2327
- Conger, A. J. (1974). A revised definition for suppressor variables: A guide to their identification and interpretation. *Educational and Psychological Measurement*, 34(1), 35-46. https://doi.org/10.1177/001316447403400105
- Cox, B. J., Enns, M. W., & Clara, I. P. (2002). The multidimensional structure of perfectionism in clinically distressed and college student samples. *Psychological Assessment*, 14(3), 365-373. https://doi.org/10.1037/1040-3590.14.3.365
- Cox, N. C., & Hill, A. P. (2018). Trait perfectionism and attitudes towards people with disabilities. *Personality and Individual Differences*, 122, 184-189. https://doi.org/10.1016/j.paid.2017.10.028
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143-156. https://doi.org/10.1007/s11205-009-9493-v
- Disabato, D. J., Goodman, F. R., Kashdan, T. B., Short, J. L., & Jarden, A. (2016). Different types of well-being? A cross-cultural examination of hedonic and eudaimonic well-being. *Psychological Assessment*, 28(5), 471-482. https://doi.org/10.1037/pas0000209



- Druss, R. G., & Silverman, J. A. (1979). Body image and perfectionism of ballerinas: Comparison and contrast with anorexia nervosa. *General Hospital Psychiatry*, 1(2), 115-121. https://doi.org/10.1016/0163-8343(79)90056-2
- Duan, J., Li, C., Xu, Y., & Wu, C. H. (2017). Transformational leadership and employee voice behavior: A Pygmalion mechanism. *Journal of Organizational Behavior*, 38(5), 650-670. https://doi.org/10.1002/job.2157
- Duckworth, A., & Gross, J. J. (2014). Self-control and grit: Related but separable determinants of success. *Current Directions in Psychological Science*, 23(5), 319-325. https://doi.org/10.1177/0963721414541462
- Duffy, J., Field, R., & Shirley, M. (2011). Engaging law students to promote psychological health. *Alternative Law Journal*, 36(4), 250-254. https://doi.org/10.1177/1037969X1103600407
- Dunkley, D. M., Zuroff, D. C., & Blankstein, K. R. (2003). Self-critical perfectionism and daily affect: Dispositional and situational influences on stress and coping. *Journal of Personality and Social Psychology*, 84(1), 234-252. https://doi.org/10.1037/0022-3514.84.1.234
- Eden, D. (1992). Leadership and expectations: Pygmalion effects and other self-fulfilling prophecies in organizations. *The Leadership Quarterly*, 3(4), 271-305. https://doi.org/10.1016/1048-9843(92)90018-B
- Field, A. (2013). Discovering statistics using IBM SPSS Statistics. Thousand Oaks, CA: Sage.
- Flett, G. L., & Hewitt, P. L. (2015). Managing perfectionism and the excessive striving that undermines flourishing: Implications for leading the perfect life. In R. J. Burke, K. M. Page, & C. L. Cooper (Eds.), Flourishing in life, work and careers: :Individual wellbeing and career experiences, 45-66. Cheltenham, England: Elgar. https://doi.org/10.4337/9781783474103.00011
- Flett, G. L., Hewitt, P. L., & Dyck, D. G. (1989). Self-oriented perfectionism, neuroticism and anxiety. *Personality and Individual Differences*, 10(7), 731-735. https://doi.org/10.1016/0191-8869(89)90119-0
- Flett, G. L., Nepon, T., Hewitt, P. L., & Fitzgerald, K. (2016). Perfectionism, components of stress reactivity, and depressive symptoms. *Journal of Psychopathology and Behavioral Assessment*, 38(4), 645-654. https://doi.org/10.1007/s10862-016-9554-x
- Frost, R. O., Heimberg, R. G., Holt, C. S., Mattia, J. I., & Neubauer, A. L. (1993). A comparison of two measures of perfectionism. *Personality and Individual Differences*, 14(1), 119-126. https://doi.org/10.1016/0191-8869(93)90181-2
- Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, 14(5), 449-468. https://doi.org/10.1007/BF01172967
- Garner, D. M., Olmstead, M. P., & Polivy, J. (1983). Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia. *International Journal of Eating Disorders*, 2(2), 15-34. https://doi.org/10.1002/1098-108X(198321)2:2<15::AID-EAT2260020203>3.0.CO;2-6
- Gaudreau, P., & Thompson, A. (2010). Testing a 2×2 model of dispositional perfectionism. *Personality and Individual Differences*, 48(5), 532-537. https://doi.org/10.1016/j.paid.2009.11.031
- Gaudreau, P., & Verner-Filion, J. (2012). Dispositional perfectionism and wellbeing: A test of the 2× 2 model of perfectionism in the sport domain. *Sport, Exercise, and Performance Psychology, 1*(1), 29-43. https://doi.org/10.1037/a0025747
- Goodman, F. R., Disabato, D. J., Kashdan, T. B., & Kauffman, S. B. (2018). Measuring wellbeing: A comparison of subjective wellbeing and PERMA. *The Journal of Positive Psychology*, 13(4), 1-12. https://doi.org/10.1080/17439760.2017.1388434
- Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology: A Journal of Human Behavior*, 15(1), 27-33.
- Haring, M., Hewitt, P. L., & Flett, G. L. (2003). Perfectionism, coping, and quality of intimate relationships. *Journal of Marriage and Family*, 65(1), 143-158. https://doi.org/10.1111/j.1741-3737.2003.00143.x
- Hewitt, P. L., & Dyck, D. G. (1986). Perfectionism, stress, and vulnerability to depression. *Cognitive Therapy and Research*, 10(1), 137-142. https://doi.org/10.1007/BF01173389
- Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology*, 60(3), 456-470. https://doi.org/10.1037//0022-3514.60.3.456



- Hewitt, P. L., & Flett, G. L. (2004). *Multidimensional perfectionism scale (MPS): Technical manual.* Toronto, Canada: Multi-Health Systems.
- Hewitt, P. L., Flett, G. L., & Mikail, S. F. (1995). Perfectionism and relationship adjustment in pain patients and their spouses. *Journal of Family Psychology*, *9*(3), 335-347. https://doi.org/10.1037/0893-3200.9.3.335
- Hill, A. P. (2014). Perfectionistic strivings and the perils of partialling. *International Journal of Sport and Exercise Psychology*, 12(4), 302-315. https://doi.org/10.1080/1612197X.2014.919602
- Hill, A. P. (2017). Real and imagined perils: A reply to Stoeber and Gaudreau (2017). *Personality and Individual Differences*, 108, 220-224. https://doi.org/10.1016/j.paid.2016.12.026
- Hill, A. P., Stoeber, J., Brown, A., & Appleton, P. R. (2014). Team perfectionism and team performance: A prospective study. *Journal of Sport and Exercise Psychology*, 36(3), 303-315. https://doi.org/10.1123/jsep.2013-0206
- Hill, P. L., & Roberts, B. W. (2012). Narcissism, well-being, and observer-rated personality across the lifespan. *Social Psychological and Personality Science*, *3*(2), 216-223. https://doi.org/10.1177/1948550611415867
- Hill, R. W., Huelsman, T. J., & Araujo, G. (2010). Perfectionistic concerns suppress associations between perfectionistic strivings and positive life outcomes. *Personality and Individual Differences*, 48(5), 584-589. https://doi.org/10.1016/j.paid.2009.12.011
- Hill, R. W., Huelsman, T. J., Furr, R. M., Kibler, J., Vicente, B. B., & Kennedy, C. (2004). A new measure of perfectionism: The Perfectionism Inventory. *Journal of Personality Assessment*, 82(1), 80-91. https://doi.org/10.1207/s15327752jpa8201_13
- Hirschi, A., & Jaensch, V. K. (2015). Narcissism and career success: Occupational self-efficacy and career engagement as mediators. *Personality and Individual Differences*, 77, 205-208. https://doi.org/10.1016/j.paid.2015.01.002
- Hone, L., Jarden, A., & Schofield, G. (2014). Psychometric properties of the Flourishing Scale in a New Zealand sample. *Social Indicators Research*, 119(2), 1031-1045. https://doi.org/10.1007/s11205-013-0501-x
- Hone, L. C., Jarden, A., Schofield, G. M., & Duncan, S. (2014). Measuring flourishing: The impact of operational definitions on the prevalence of high levels of wellbeing. *International Journal of Wellbeing*, 4(1). https://doi.org/10.5502/ijw.v4i1.4
- Huppert, F. A., & So, T. T. (2013). Flourishing across Europe: Application of a new conceptual framework for defining well-being. *Social Indicators Research*, 110(3), 837-861. https://doi.org/10.1007/s11205-011-9966-7
- Iasiello, M., Bartholomaeus, J., Jarden, A., & Kelly, G. (2017). Measuring PERMA+ in South Australia, the State of Wellbeing: A comparison with national and international norms. *Journal of Positive Psychology and Wellbeing*, 1(2), 53-72.
- Joshanloo, M. (2014). Eastern conceptualizations of happiness: Fundamental differences with Western views. *Journal of Happiness Studies*, 15(2), 475-493. https://doi.org/10.1007/s10902-013-9431-1
- Kanten, P., & Yesıltas, M. (2015). The effects of positive and negative perfectionism on work engagement, psychological well-being and emotional exhaustion. *Procedia Economics and Finance*, 23, 1367-1375. https://doi.org/10.1016/S2212-5671(15)00522-5
- Lightsey, O. R., Jr., Boyraz, G., Ervin, A., Rarey, E. B., Gharibian Gharghani, G., & Maxwell, D. (2014). Generalized self-efficacy, positive cognitions, and negative cognitions as mediators of the relationship between conscientiousness and meaning in life. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 46(3), 436-445. https://doi.org/10.1037/a0034022
- Lisbona, A., Palaci, F., Salanova, M., & Frese, M. (2018). The effects of work engagement and self-efficacy on personal initiative and performance. *Psicothema*, 30(1), 89-96. https://doi.org/10.7334/psicothema2016.245
- Lucas, R. E., Le, K., & Dyrenforth, P. S. (2008). Explaining the extraversion/positive affect relation: Sociability cannot account for extraverts' greater happiness. *Journal of Personality*, 76(3), 385-414. https://doi.org/10.1111/j.1467-6494.2008.00490.x



- Lynam, D. R., Hoyle, R. H., & Newman, J. P. (2006). The perils of partialling: Cautionary tales from aggression and psychopathy. *Assessment*, 13(3), 328-341. https://doi.org/10.1177/1073191106290562
- Menard, S. (1995). *Applied Logistic Regression Analysis*: Sage University Series on Quantitative Applications in the Social Sciences, 07-106. Thousand Oaks, CA: Sage.
- Myers, R. (1990). Classical and modern regression with applications (2nd ed.). Boston, MA: Duxbury.
- Nakamura, J., & Csikszentmihalyi, M. (2014). The concept of flow. In M. Csikszentmihalyi (Ed.), *Flow and the foundations of positive psychology* (pp. 239-263). Dordrecht: Springer Netherlands. https://doi.org/10.1007/978-94-017-9088-8 16
- Nunnally, J. C., & Bernstein, I. H. (1994). Validity. Psychometric theory, New York, NY: McGraw-Hill.
- OECD (2013). *OECD guidelines on measuring subjective well-being*. Paris, France: OECD Publishing. https://doi.org/10.1787/9789264191655-en
- Office for National Statistics. (2017) Ethnic group, national identity and religion. Ons.gov.uk. https://www.ons.gov.uk/methodology/classificationsandstandards/measuringequality/ethnicgroupn ationalidentityandreligion#ethnic-group
- Oishi, S., & Gilbert, E. A. (2016). Current and future directions in culture and happiness research. *Current Opinion in Psychology*, *8*, 54-58. https://doi.org/10.1016/j.copsyc.2015.10.005
- Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*, 36(6), 556-563. https://doi.org/10.1016/S0092-6566(02)00505-6
- Pirot, M. (1986). The pathological thought and dynamics of the perfectionist. *Individual Psychology: Journal of Adlerian Theory, Research & Practice*, 42(1), 51-58.
- Raskin, R., & Terry, H. (1988). A principal-components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology*, 54(5), 890-902. https://doi.org/10.1037//0022-3514.54.5.890
- Roberts, B. W., Jackson, J. J., Fayard, J. V., Edmonds, G., & Meints, J. (2009). Conscientiousness. In M. R. Leary & R. H. Hoyle (Eds.), *Handbook of individual differences in social behavior* (pp. 369-381). New York, NY: Guilford Press.
- Rose, P. (2002). The happy and unhappy faces of narcissism. *Personality and Individual Differences*, 33(3), 379-391. https://doi.org/10.1016/S0191-8869(01)00162-3
- Rosenthal, R., & Jacobson, L. (1968). Pygmalion in the classroom. *The Urban Review*, 3(1), 16-20. https://doi.org/10.1007/BF02322211
- Rusk, R. D., & Waters, L. (2015). A psycho-social system approach to wellbeing: Empirically deriving the five domains of positive functioning. *The Journal of Positive Psychology*, *10*(2), 141-152. https://doi.org/10.1080/17439760.2014.920409
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic wellbeing. *Annual Review of Psychology*, *52*(1), 141-166. https://doi.org/10.1146/annurev.psych.52.1.141
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, *57*(6), 1069-1081. https://doi.org/10.1037/0022-3514.57.6.1069
- Sedikides, C., Rudich, E. A., Gregg, A. P., Kumashiro, M., & Rusbult, C. (2004). Are normal narcissists psychologically healthy?: Self-esteem matters. *Journal of Personality and Social Psychology*, 87(3), 400-416. https://doi.org/10.1037/0022-3514.87.3.400
- Seligman, M. E. P. (2011). Flourishing: A New Understanding of Happiness and Wellbeing and How to Achieve Them. Boston, MA: Nicholas Brealey.
- Shoss, M. K., Callison, K., & Witt, L. A. (2015). The effects of other-oriented perfectionism and conscientiousness on helping at work. *Applied Psychology*, *64*(1), 233-251. https://doi.org/10.1111/apps.12039
- Slaney, R. B., Rice, K. G., Mobley, M., Trippi, J., & Ashby, J. S. (2001). The revised almost perfect scale. *Measurement and Evaluation in Counseling and Development*, 34(3), 130-145.



- Smith, M. M., Saklofske, D. H., Stoeber, J., & Sherry, S. B. (2016). The big three perfectionism scale: A new measure of perfectionism. *Journal of Psychoeducational Assessment*, 34(7), 670-687. https://doi.org/10.1177/0734282916651539
- Smith, M. M., Speth, T. A., Sherry, S. B., Saklofske, D. H., Stewart, S. H., & Glowacka, M. (2017). Is socially prescribed perfectionism veridical? A new take on the stressfulness of perfectionism. *Personality and Individual Differences*, 110, 115-118. https://doi.org/10.1016/j.paid.2017.01.031
- Spurk, D., Keller, A. C., & Hirschi, A. (2016). Do bad guys get ahead or fall behind? Relationships of the dark triad of personality with objective and subjective career success. *Social Psychological and Personality Science*, 7(2), 113-121. https://doi.org/10.1177/1948550615609735
- Stoeber, J. (2014). How other-oriented perfectionism differs from self-oriented and socially prescribed perfectionism. *Journal of Psychopathology and Behavioral Assessment*, 36(2), 329-338. https://doi.org/10.1007/s10862-013-9397-7
- Stoeber, J. (2015). How other-oriented perfectionism differs from self-oriented and socially prescribed perfectionism: Further findings. *Journal of Psychopathology and Behavioral Assessment*, 37(4), 611-623. https://doi.org/10.1007/s10862-015-9485-y
- Stoeber, J. (Ed.). (2017). *The psychology of perfectionism: Theory, research, applications*. London, United Kingdom: Routledge. https://doi.org/10.4324/9781315536255
- Stoeber, J., & Corr, P. J. (2016). A short empirical note on perfectionism and flourishing. *Personality and Individual Differences*, 90, 50-53. https://doi.org/10.1016/j.paid.2015.10.036
- Stoeber, J., & Damian, L. E. (2016). Perfectionism in employees: Work engagement, workaholism, and burnout. In F. M. Sirois & D. S. Molnar (Eds.), *Perfectionism, health, and wellbeing* (pp. 265-283). Cham: Springer International. https://doi.org/10.1007/978-3-319-18582-8 12
- Stoeber, J., & Gaudreau, P. (2017). The advantages of partialling perfectionistic strivings and perfectionistic concerns: Critical issues and recommendations. *Personality and Individual Differences*, 104, 379-386. https://doi.org/10.1016/j.paid.2016.08.039
- Stoeber, J., Harvey, L. N., Almeida, I., & Lyons, E. (2013). Multidimensional sexual perfectionism. *Archives of Sexual Behavior*, 42(8), 1593-1604. https://doi.org/10.1007/s10508-013-0135-8
- Stoeber, J., Madigan, D. J., Damian, L. E., Esposito, R. M., & Lombardo, C. (2017). Perfectionism and eating disorder symptoms in female university students: The central role of perfectionistic self-presentation. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, 22(4), 641-648. https://doi.org/10.1007/s40519-016-0297-1
- Stoeber, J., & Otto, K. (2006). Positive conceptions of perfectionism: Approaches, evidence, challenges. *Personality and Social Psychology Review*, 10(4), 295-319. https://doi.org/10.1207/s15327957pspr1004_2
- Stoeber, J., & Rambow, A. (2007). Perfectionism in adolescent school students: Relations with motivation, achievement, and well-being. *Personality and Individual Differences*, 42(7), 1379-1389. https://doi.org/10.1016/j.paid.2006.10.015
- Stoeber, J., Sherry, S. B., & Nealis, L. J. (2015). Multidimensional perfectionism and narcissism: Grandiose or vulnerable? *Personality and Individual Differences*, 80, 85-90. https://doi.org/10.1016/j.paid.2015.02.027
- Suh, H., Gnilka, P. B., & Rice, K. G. (2017). Perfectionism and well-being: A positive psychology framework. *Personality and Individual Differences*, 111, 25-30. https://doi.org/10.1016/j.paid.2017.01.041
- Tabachnick, B., & Fidell, L. (2014). *Using multivariate statistics*. Essex, United Kingdom: Pearson Education.
- Watson, P. J., Hickman, S. E., & Morris, R. J. (1996). Self-reported narcissism and shame: Testing the defensive self-esteem and continuum hypotheses. *Personality and Individual Differences*, 21(2), 253-259. https://doi.org/10.1016/0191-8869(96)00063-3
- Wink, P. (1991). Two faces of narcissism. *Journal of Personality and Social Psychology*, *61*(4), 590-597. https://doi.org/10.1037/0022-3514.61.4.590
- Wink, P., & Donahue, K. (1997). The relation between two types of narcissism and boredom. *Journal of Research in Personality*, 31(1), 136-140. https://doi.org/10.1006/jrpe.1997.2176



- Zerach, G. (2016). The mediating role of emptiness and materialism in the association between pathological narcissism and compulsive buying. *International Journal of Mental Health and Addiction*, 14(4), 424-437. https://doi.org/10.1007/s11469-015-9591-9
- Zettler, I., & Solga, M. (2013). Not enough of a 'dark' trait? Linking Machiavellianism to job performance. *European Journal of Personality*, 27(6), 545-554. https://doi.org/10.1002/per.1912
- Zondag, H. (2005). Between imposing one's will and protecting oneself: Narcissism and the meaning of life among Dutch pastors. *Journal of Religion and Health*, 44(4), 413-426. https://doi.org/10.1007/s10943-005-7180-0
- Zondag, H. J. (2013). Narcissism and boredom revisited: An exploration of correlates of overt and covert narcissism among Dutch university students. *Psychological Reports*, 112(2), 563-576. https://doi.org/10.2466/09.02.PR0.112.2.563-576
- Zondag, H. J., Van Halen, C., & Wojtkowiak, J. (2009). Overt and covert narcissism in Poland and the Netherlands. *Psychological Reports*, 104(3), 833-843. https://doi.org/10.2466/PR0.104.3.833-843