



# Kent Academic Repository

**Childs, Julian H. and Stoeber, Joachim (2010) *Self-oriented, other-oriented, and socially prescribed perfectionism in employees: Relationships with burnout and engagement*. *Journal of Workplace Behavioral Health*, 25 (4). pp. 269-281.**

## Downloaded from

<https://kar.kent.ac.uk/25291/> The University of Kent's Academic Repository KAR

## The version of record is available from

<https://doi.org/10.1080/15555240.2010.518486>

## This document version

UNSPECIFIED

## DOI for this version

## Licence for this version

UNSPECIFIED

## Additional information

## Versions of research works

### Versions of Record

If this version is the version of record, it is the same as the published version available on the publisher's web site. Cite as the published version.

### Author Accepted Manuscripts

If this document is identified as the Author Accepted Manuscript it is the version after peer review but before type setting, copy editing or publisher branding. Cite as Surname, Initial. (Year) 'Title of article'. To be published in *Title of Journal*, Volume and issue numbers [peer-reviewed accepted version]. Available at: DOI or URL (Accessed: date).

## Enquiries

If you have questions about this document contact [ResearchSupport@kent.ac.uk](mailto:ResearchSupport@kent.ac.uk). Please include the URL of the record in KAR. If you believe that your, or a third party's rights have been compromised through this document please see our [Take Down policy](https://www.kent.ac.uk/guides/kar-the-kent-academic-repository#policies) (available from <https://www.kent.ac.uk/guides/kar-the-kent-academic-repository#policies>).

Childs, J. H., & Stoeber, J. (2010). Self-oriented, other-oriented, and socially prescribed perfectionism in employees: Relationships with burnout and engagement. *Journal of Workplace Behavioral Health*, 25(4), 269-281. DOI: 10.1080/15555240.2010.518486

## **SELF-ORIENTED, OTHER-ORIENTED, AND SOCIALLY PRESCRIBED PERFECTIONISM IN EMPLOYEES: RELATIONSHIPS WITH BURNOUT AND ENGAGEMENT**

Julian H. Childs  
Joachim Stoeber

**SUMMARY.** Burnout and engagement impact employees, organizations, and customers in numerous positive and negative ways. Consequently, it is important to know how individual differences contribute to employees' burnout and engagement. The present study examined how individual differences in self-oriented, other-oriented, and socially prescribed perfectionism were associated with burnout and engagement in a sample of 106 employees. Results of correlation and regression analyses showed that perfectionism explained variance in all facets of burnout (exhaustion, cynicism, reduced efficacy) and engagement (vigor, dedication, absorption). Whereas socially prescribed perfectionism was associated with higher levels of burnout and lower levels of engagement, self-oriented and other-oriented perfectionism were associated with lower levels of burnout and higher levels of engagement. The findings indicate that individual differences in perfectionism may be a contributing factor to burnout and engagement in the workplace.

**KEYWORDS.** perfectionism; stress; burnout; engagement; employees

---

**Contact information:**

**Address correspondence to: Julian H. Childs**, School of Psychology, University of Kent. Phone no: +44-1227-823978. Fax no: +44-1227-827030. E-mail: [jhc6@kent.ac.uk](mailto:jhc6@kent.ac.uk).

**Joachim Stoeber**, School of Psychology, University of Kent, Canterbury, Kent CT2 7NP, United Kingdom

## INTRODUCTION

Stress is a significant occupational hazard that can impair employee's physical health, psychological well-being, and performance (Shirom, 2002). Moreover, it is one of the leading causes of employee absenteeism. In the United Kingdom, for example, stress, depression, and anxiety are estimated to cause 11.4 million lost working days per year costing society £3.7 billion (approximately US \$5.7 billion) in lost productivity (Health and Safety Executive, 1999, 2010).

Chronic and severe stress can lead to burnout, a psychological syndrome comprising exhaustion, cynicism, and reduced efficacy (Schaufeli, Leiter, Maslach, & Jackson, 1996). Exhaustion is characterized by a depletion of one's emotional resources whereas cynicism is characterized by a negative, detached, and depersonalized attitude towards one's work, coworkers, and customers. Reduced efficacy is characterized by feeling incompetent at work and unable to solve problems that arise in one's work (Schaufeli et al., 1996; Schaufeli, Salanova, González-Romá, & Bakker, 2002). Burnout has a negative impact on employees, organizations, and customers. It has been associated with higher levels of negative perceptions of job characteristics, compulsive and excessive working, physical symptoms, absenteeism, turnover, insomnia, depression, alcohol and drug abuse, and marital and family problems. In addition, burnout has been associated with lower levels of objective job performance, work morale, and quality of patient care (see Maudgalya, Wallace, Daraiseh, & Salem, 2006; Schaufeli et al., 1996; Shirom, 2002; and Taris, 2006, for reviews).

In contrast to stress and burnout, employees who perceive that they have many demands and challenges, but also perceive that they have sufficient resources to meet these challenges, can be described as high in engagement. Engagement is said to be “the antipode of job burnout” (Bakker, Schaufeli, Leither, & Taris, 2008, p. 188) and has been described as “a positive, fulfilling work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli et al., 2002, p. 74). Vigor characterizes the energy one invests in work and experiences when working. In comparison, dedication characterizes the meaning and purpose one experiences when working, whereas absorption characterizes the extent to which one is engrossed in work (Schaufeli & Bakker, 2004). Mirroring burnout, engagement has a positive impact on employees, organizations, and customers. Engagement has been associated with higher levels of positive perceptions of job characteristics, psychological well-being, good social relationships, organizational commitment, customer loyalty, and objective job performance as well as lower levels of turnover (Attridge, 2009a, 2009b; Bakker, Demerouti, & Verbeke, 2004; De Lange, De Witte, & Notelaers, 2008; Hakanen, Schaufeli, & Ahola, 2008; Halbesleben & Wheeler, 2008; Salanova, Agut, & Peiro, 2005; Schaufeli & Bakker, 2004; Schaufeli, Taris, & van Rhenen, 2008).

## **PERFECTIONISM, BURNOUT, AND ENGAGEMENT**

Research has shown that, in addition to contextual factors such as job demands and job resources (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), personality characteristics may help predict who has a higher risk of burnout and who has a lower risk (e.g., Bakker,

Van der Zee, Lewig, & Dollard, 2006; Cano-García, Padilla-Muñoz, & Carrasco-Ortiz, 2005).

One personality characteristic that has been associated with burnout is perfectionism. Perfectionism is characterized by striving for flawlessness, setting excessively high standards for performance, and overly critical evaluations of one's behavior (Flett & Hewitt, 2002; Frost, Marten, Lahart, & Rosenblate, 1990). One of the most prevalent and widely researched models of perfectionism is Hewitt and Flett's (1991) model which differentiates between three forms of perfectionism: self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism. Self-oriented perfectionism comprises a person's internal beliefs that striving for perfection and being perfect are important and it is characterized by having a "perfectionistic motivation" for oneself. In contrast, other-oriented perfectionism involves beliefs that it is important for others to meet one's excessively high standards for performance and it is characterized by imposing one's own perfectionistic standards onto others. Finally, socially prescribed perfectionism comprises beliefs that excessively high standards are expected by others and that acceptance by others is conditional on fulfilling these standards; it is characterized by individuals' perceptions that others impose perfectionistic standards onto them (Enns & Cox, 2002; Hewitt & Flett, 1991, 2004).

Research on how the three forms of perfectionism are related to burnout and engagement in working adults is limited. Several studies have investigated how self-oriented and socially prescribed perfectionism are related to burnout in students and athletes (e.g., Appleton, Hall, & Hill, 2009; Hill, Hall, & Appleton, 2009; Hill, Hall, Appleton,

& Kozub, 2008), but only one study has investigated how self-oriented and socially prescribed perfectionism are related to burnout in working adults (Mitchelson & Burns, 1998). Moreover, to the best of our knowledge, no study so far has investigated how the three forms of perfectionism are related to engagement.

Studies investigating athletes have found that self-oriented perfectionism was associated with lower levels of burnout (as indicated by measures of exhaustion, cynicism, reduced efficacy, total burnout) whereas socially prescribed perfectionism was associated with higher levels of burnout (Appleton et al., 2009; Hill et al., 2009; Hill et al., 2008). These differential relationships were particularly pronounced when taking into account and controlling for the overlap between self-oriented and socially prescribed perfectionism. These studies, however, did not assess other-oriented perfectionism. In a separate study investigating all three forms of perfectionism with a small sample of 67 career mothers (women who worked at least 25 hours a week and had a child under nine years of age), socially prescribed perfectionism was associated with higher levels of burnout (exhaustion, cynicism) both at home and at work (Mitchelson & Burns, 1998). However, self-oriented and other-oriented perfectionism were not significantly associated with burnout.

Other studies that investigated the three perfectionism dimensions in employees corroborated the association between socially prescribed perfectionism and negative perceptions. In a sample of teachers, socially prescribed perfectionism was associated with higher levels of professional distress and emotional and physiological manifestations of stress, and with lower levels of job satisfaction (Flett, Hewitt, & Hallett, 1995). Another

study investigated psychologists working in a private practice and found that socially prescribed perfectionism was associated with lower levels of job satisfaction (Wittenberg & Nocross, 2001). Neither of these studies found significant results related to self-oriented and other-oriented perfectionism and work-related outcomes.

### **STUDY DESIGN AND HYPOTHESES**

This research study investigated how the three forms of perfectionism proposed by Hewitt and Flett (1991) - self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism - were associated with burnout (exhaustion, cynicism, reduced efficacy) and engagement (vigor, dedication, absorption) in a sample of employees. Based on previous findings discussed above we expected socially prescribed perfectionism to be associated with higher levels of burnout and self-oriented perfectionism to be associated with lower levels of burnout, particularly when controlling for the overlap between the two forms of perfectionism. Moreover, based on previous findings on perfectionism and intrinsic motivation (e.g., Stoeber, Feast, & Hayward, 2009), we expected self-oriented perfectionism to be associated with higher levels of engagement and socially prescribed perfectionism to be associated with lower levels of engagement. Due to the lack of relevant research investigating other-oriented perfectionism, we did not have specific expectations regarding the associations between other-oriented perfectionism, burnout, and engagement.

### **METHOD**

## **PARTICIPANTS AND PROCEDURE**

Overall, 200 questionnaires were sent out to employees of British companies working in the area of the university (Spring 2008). A total of 107 questionnaires were returned, representing a 54% response rate. One employee was excluded from the dataset (see Preliminary Analyses), resulting in a final sample of  $N=106$  employees (40 male, 66 female). Mean age of employees was 34.1 years ( $SD=10.8$ ; range=18 to 65 years) and mean time employees had been in their current job was 5 years ( $SD=6.6$ ; range=0.1 to 31.3 years). Employees worked in the public sector (40%), a law firm (30%), retail (22%), and 8% were unspecified. Employees' highest level of completed education was middle school (13%), high school (13%), further education (10%), university degree (63%), and 1% were unspecified. In exchange for participation, employees could participate in a raffle for a voucher worth £50 (approximately US \$75). The study was approved by the relevant ethics committee and followed the British Psychological Society's code of conduct and ethical guidelines (British Psychological Society, 2005).

## **MEASURES**

**Perfectionism.** To measure the three forms of perfectionism, we used the 45-item Multidimensional Perfectionism Scale (MPS) (Hewitt & Flett, 1991). The MPS measures self-oriented perfectionism (15 items; e.g., "I demand nothing less than perfection for myself"), other-oriented perfectionism (15 items; e.g., "If I ask someone to do something, I expect it to be done flawlessly"), and socially prescribed perfectionism (15 items; e.g.,



“People expect nothing less than perfection from me”). Employees responded to items on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*). The MPS is a widely used measure of dispositional perfectionism and has demonstrated reliability and validity in numerous studies (see Hewitt & Flett, 2004, for a review).

**Burnout.** To measure burnout, we used the 16-item Maslach Burnout Inventory-General Survey (MBI-GS) (Schaufeli et al., 1996). The MBI-GS measures exhaustion (5 items; e.g., “I feel ‘used up’ at the end of the work day”), cynicism (5 items; e.g., “I doubt the significance of my work”), and reduced efficacy (6 items; e.g., “I can effectively solve the problems that arise in my work” reverse coded). Employees responded to items on a scale from 1 (*never*) to 7 (*always*). The MBI-GS is a widely used measure of burnout across occupational groups and has demonstrated reliability and validity in numerous studies (see Schaufeli et al., 1996, for a review).

**Engagement.** To measure engagement, we used the 17-item Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002). The UWES measures vigor (6 items; e.g., “At my job, I feel strong and vigorous”), dedication (5 items; e.g., “I am enthusiastic about my job”), and absorption (6 items; e.g., “When I am working, I forget everything else around me”). Employees responded to items on a scale from 1 (*never*) to 7 (*always*). The UWES is a recently developed measure of engagement that has demonstrated reliability and validity in a number of studies (see Schaufeli & Salanova, 2007, for a review).

## RESULTS

## PRELIMINARY ANALYSES

**Internal consistency.** Descriptive statistics on all variables are shown in Table 1. All Cronbach's alphas were above the .70 recommended for widely used scales (Nunnally, 1967).

**Outliers.** Because multivariate outliers can significantly distort results of multiple regressions, we inspected the data for multivariate outliers. One employee showed a Mahalanobis distance greater than the critical value of  $\chi^2(9)=27.88$ ,  $p<.001$ , and was excluded from the analyses (see Tabachnick & Fidell, 2007).

**Gender.** To examine whether the variance-covariance matrices were different for male and female employees, we computed a Box's *M* test (see Tabachnick & Fidell, 2007). This test was non-significant, Box's  $M=41.70$ ,  $F(45, 22684)=0.83$ , *ns*. Consequently, data were collapsed across gender.

## ANALYTIC STRATEGY

To examine the relationships between perfectionism, burnout, and engagement, we computed two sets of analyses. First, we computed bivariate correlations between the variables. Second, we analyzed the data to determine the unique relationships between the three forms of perfectionism (after controlling for their overlap) with the facets of burnout and engagement. Consequently, we computed multiple regressions that might predict burnout and engagement, using the three forms of perfectionism simultaneously entered as predictors.

## **CORRELATIONS**

As expected, self-oriented perfectionism showed significant positive correlations with all three facets of engagement (see Table 1). However, against expectations, it did not show significant negative correlations with the facets of burnout. Other-oriented perfectionism showed a significant negative correlation with one facet of burnout: cynicism. It also showed significant positive correlations with all three facets of engagement. Finally, socially prescribed perfectionism showed significant positive correlations with all three facets of burnout. However, it showed a significant negative correlation with only one facet of engagement: vigor.

## **REGRESSION ANALYSES**

Perfectionism explained variance in all three facets of burnout and engagement, accounting for 13 to 17% of the variance in burnout and 14 to 21% of the variance in engagement (see Table 2 for details). Regarding the individual predictor variables, the results were mostly in line with our expectations. Self-oriented perfectionism uniquely predicted two facets of burnout with negative coefficients: cynicism and reduced efficacy. It also uniquely predicted all three facets of engagement with positive coefficients. Other-oriented perfectionism uniquely predicted one facet of burnout with a negative coefficient: exhaustion. It also uniquely predicted one facet of engagement with a positive coefficient: vigor. In contrast, socially prescribed perfectionism uniquely predicted all three facets of

burnout with positive coefficients and it also uniquely predicted two facets of engagement with negative coefficients: vigor and dedication.

## **DISCUSSION**

The aim of the present research was to investigate how self-oriented, other-oriented, and socially prescribed perfectionism were associated with burnout and engagement in employees. Results showed that employees with higher levels of self-oriented perfectionism had lower levels of burnout (cynicism, reduced efficacy) and higher levels of engagement (vigor, dedication, absorption). Employees with higher levels of other-oriented perfectionism had higher levels of engagement (vigor) and lower levels of burnout (exhaustion). Also, employees with higher levels of socially prescribed perfectionism had higher levels of burnout (exhaustion, cynicism, reduced efficacy) and lower levels of engagement (vigor, dedication).

The present findings extend the literature on perfectionism at work by providing the first significant results using indicators of self-oriented and other-oriented perfectionism and by studying the associations between perfectionism and engagement. The present findings replicate evidence from studies of athletes that self-oriented perfectionism is associated with lower levels of burnout (Appleton et al., 2009; Hill et al., 2009; Hill et al., 2008). The present findings also replicate evidence from various studies of athletes and employees that socially prescribed perfectionism is associated with higher levels of burnout (Appleton et al., 2009; Hill et al., 2009; Hill et al., 2008; Mitchelson & Burns,

1998). The present findings are consistent with research on perfectionism and intrinsic motivation, showing that self-oriented perfectionism is associated with higher levels of engagement and socially prescribed perfectionism is associated with lower levels of engagement (e.g., Stoeber et al., 2009).

After the overlap with the other two perfectionism dimensions was controlled for, self-oriented perfectionism was associated with lower levels of burnout. Given that self-oriented perfectionism was also associated with higher levels of engagement (in the bivariate correlations and multiple regressions), self-oriented perfectionism was only associated with positive outcomes in this study. On the one hand, this finding differs from past research that suggests self-oriented perfectionism is an ambivalent dimension and is associated with negative as well as positive outcomes (see Hewitt & Flett, 2004, for a review). On the other hand, this finding is consistent with studies that consider self-oriented perfectionism to be part of the positive side of perfectionism (Frost, Heimberg, Holt, Mattia, & Neubauer, 1993; Stoeber & Otto, 2006). Furthermore, it is possible that the association between self-oriented perfectionism and well-being could be mitigated by other variables, such as negative life events (Hewitt et al., 2002; Flett, Besser, Davis, & Hewitt, 2003). Future research should examine if self-oriented perfectionism is still associated with lower levels of burnout and higher levels of engagement when employees encounter obstacles at work, such as failure, or whether this pattern of outcomes is limited to times of success.

Previous evidence has also shown that other-oriented perfectionism is an ambivalent form of perfectionism associated with both well-being and ill-being (e.g.,

Chang & Sanna, 2001; Enns & Cox, 2002; Hewitt & Flett, 2004). In the present study, however, other-oriented perfectionism was only associated with well-being - lower levels of exhaustion and higher levels of vigor. Employees who held high standards for the performance of coworkers, and were able to impose these standards onto coworkers, perhaps felt more energized because they are able to preserve their own resources by delegating tasks and, in a sense, were able to use coworkers' resources as their own. Notwithstanding, future research should examine the burnout and engagement of employees who are the target of other-oriented perfectionists' high standards. It is unlikely that these employees would feel similarly energized. For instance, a study focused on married couples demonstrated that a spouse's other-oriented perfectionism was not associated with their own perception of marital dysfunction, but was associated with their partner's perception of marital dysfunction (Hewitt, Flett, & Mikail, 1995).

The present study has some significant limitations. First, the sample size was relatively small given the large number of statistical analyses and future studies should investigate larger samples. Second, the design was cross-sectional and did not allow us to examine the temporal and causal pathways between the variables under study. Therefore, future studies should employ longitudinal designs and include other aspects of job demands and job resources in order to more fully explore the impact of perfectionism on burnout and engagement (see Schaufeli & Bakker, 2004). Finally, future studies should include more objective measures, such as absenteeism or supervisor performance ratings, to gain a more comprehensive understanding of the impact of perfectionism in the workplace.

Despite these limitations, the present findings make a significant contribution to the extant research literature on perfectionism, burnout, and engagement. Self-oriented and other-oriented perfectionism were associated with lower levels of burnout and higher levels of engagement in the present study, whereas socially prescribed perfectionism showed the opposite pattern. The results of the present study suggest that promoting some forms of perfectionism at work - specifically self-oriented perfectionism - and decreasing the impact of socially prescribed perfectionism might lower burnout and enhance engagement in employees.

## REFERENCES

- Appleton, P. R., Hall, H. K., & Hill, A. P. (2009). Relations between multidimensional perfectionism and burnout in junior-elite male athletes. *Psychology of Sport and Exercise, 10*, 457-465. doi: 10.1016/j.psychsport.2008.12.006.
- Attridge, M. (2009a). Employee work engagement: Best practices for employers. *Research Works, 1*, 1-12.
- Attridge, M. (2009b). Measuring and managing employee work engagement: A review of the research and business literature. *Journal of Workplace Behavioral Health, 24*, 383-398. doi: 10.1080/15555240903188398.
- Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the Job Demands-Resources model to predict burnout and performance. *Human Resource Management, 43*, 83-104. doi: 10.1002/hrm.20004.
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress, 22*, 187-200. doi: 10.1080/02678370802393649.
- Bakker, A. B., Van der Zee, K. I., Lewig, K. A., & Dollard, M. F. (2006). The relationship between the Big Five personality factors and burnout: A study among volunteer counselors. *Journal of Social Psychology, 146*, 31-50. doi: 10.3200/SOCP.146.1.31-50.
- British Psychological Society (2005). *Code of conduct, ethical principles, and guidelines*. London: British Psychological Society.



- Cano-García, F. J., Padilla-Muñoz, E. M., & Carrasco-Ortiz, M. Á. (2005). Personality and contextual variables in teacher burnout. *Personality and Individual Differences, 38*, 929-940. doi: 10.1016/j.paid.2004.06.018.
- Chang, E. C., & Sanna, L. J. (2001). Negative attributional style as a moderator of the link between perfectionism and depressive symptoms: Preliminary evidence for an integrative model. *Journal of Counseling Psychology, 48*, 490-495. doi: 10.1037/0022-0167.48.4.490.
- De Lange, A. H., De Witte, H., & Notelaers, G. (2008). Should I stay or should I go? Examining longitudinal relations among job resources and work engagement for stayers versus movers. *Work & Stress, 22*, 201-223. doi: 10.1080/02678370802390132.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86*, 499-512. doi: 10.1037/0021-9010.86.3.499.
- Enns, M. W., & Cox, B. J. (2002). The nature and assessment of perfectionism: A critical analysis. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 33-62). Washington, DC: American Psychological Association.
- Flett, G. L., Besser, A., Davis, R. A., & Hewitt, P. L. (2003). Dimensions of perfectionism, unconditional self-acceptance, and depression. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 21*, 119-138. doi: 10.1023/A:1025051431957.

- Flett, G. L., & Hewitt, P. L. (2002). Perfectionism and maladjustment: An overview of theoretical, definitional, and treatment issues. In P. L. Hewitt & G. L. Flett (Eds.), *Perfectionism* (pp. 5-31). Washington, DC: American Psychological Association.
- Flett, G. L., Hewitt, P. L., & Hallett, C. J. (1995). Perfectionism and job stress in teachers. *Canadian Journal of School Psychology, 11*, 32-42.
- 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*, 119-126. doi: 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*, 449-468. doi: 10.1007/BF01172967.
- Hakanen, J. J., Schaufeli, W. B., & Ahola, K. (2008). The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress, 22*, 224-241. doi: 10.1080/02678370802379432.
- Halbesleben, J. R. B., & Wheeler, A. R. (2008). The relative roles of engagement and embeddedness in predicting job performance and intention to leave. *Work & Stress, 22*, 242-256. doi: 10.1080/02678370802383962.
- Health and Safety Executive. (1999). *The costs to Britain of workplace and work-related ill health in 1995/96* (2nd ed.). Norwich, UK: HSE Books.
- Health and Safety Executive. (2010). *Self-reported work-related illness and workplace injuries in 2008/09: Results from the Labour Force Survey*. Retrieved from <http://www.hse.gov.uk/statistics/lfs/lfs0809.pdf>.

Hewitt, P. L., Caelian, C. F., Flett, G. L., Sherry, S. B., Collins, L., & Flynn, C. A. (2002).

Perfectionism in children: associations with depression, anxiety, and anger.

*Personality and Individual Differences*, 32, 1049-1061. doi: 10.1016/S0191-8869(01)00109-X.

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, 456-470. doi: 10.1037/0022-3514.60.3.456.

Hewitt, P. L., & Flett, G. L. (2004). *Multidimensional Perfectionism Scale (MPS)*. 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, 335-347. doi:

10.1037/0893-3200.9.3.335.

Hill A. P., Hall H. K., & Appleton P. R. (2009). Perfectionism and athlete burnout in junior

elite athletes: the mediating role of coping tendencies. *Anxiety, Stress & Coping*. doi:

10.1080/10615800903330966.

Hill A. P., Hall H. K., Appleton P. R., & Kozub, S. A. (2008). Perfectionism and burnout in

junior elite soccer players: The mediating influence of unconditional self-acceptance.

*Psychology of Sport and Exercise*, 9, 630-644. doi:

10.1016/j.psychsport.2007.09.004.

Maudgalya, T., Wallace, S., Daraiseh, N., & Salem, S. (2006). Workplace stress factors and 'burnout' among information technology professionals: a systematic review.

*Theoretical Issues in Ergonomics Science*, 7, 285-297. doi:

10.1080/14639220500090638.

Mitchelson, J. K., & Burns, L. R. (1998). Career mothers and perfectionism: Stress at work and at home. *Personality and Individual Differences*, 25, 477-485. doi:

10.1016/S0191-8869(98)00069-5.

Nunnally, J. C. (1967). *Psychometric theory*. New York: McGraw-Hill.

Salanova, M., Agut, S., & Peiro, J. M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. *Journal of Applied Psychology*, 90, 1217-1227. doi: 10.1037/0021-9010.90.6.1217.

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. *Journal of Organizational Behavior*, 25, 293-351. doi: 10.1002/job.248.

Schaufeli, W. B., Leiter, M. P., Maslach, C., & Jackson, S. E. (1996). The Maslach Burnout Inventory—General Survey. In C. Maslach, S. E. Jackson, & M. P. Leiter (Eds.), *MBI manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.

Schaufeli, W. B., & Salanova, M. (2007). Work engagement: An emerging psychological concept and its implications for organizations. In S. W. Gilliland, D. D. Steiner, & D. P. Skarlicki (Eds.), *Research in Social Issues in Management: Managing Social and Ethical Issues in Organizations* (Vol. 5, pp. 135-177). Greenwich, CT: Information Age Publishers.

- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A confirmative analytic approach. *Journal of Happiness Studies*, 3, 71-92. doi: 10.1023/A:1015630930326.
- Schaufeli, W. B., Taris, T. W., & van Rhenen, W. (2008). Workaholism, burnout, and work engagement: Three of a kind or three or three different kinds of employee well-being? *Applied Psychology: An International Review*, 57, 173-203. doi: 10.1111/j.1464-0597.2007.00285.x.
- Shirom, A. (2002). The MBI-General Survey. In C. Maslach, S. E. Jackson, & M. P. Leiter (Eds.), *Maslach Burnout Inventory Manual* (3rd ed., pp. 19-26). Palo Alto, CA: Consulting Psychologists Press.
- Stoeber, J., Feast, A. R., & Hayward, J. A. (2009). Self-oriented and socially prescribed perfectionism: Differential relationships with intrinsic and extrinsic motivation and test anxiety. *Personality and Individual Differences*, 47, 423-428. doi: 10.1016/j.paid.2009.04.014.
- Stoeber, J., & Otto, K. (2006). Positive conceptions of perfectionism: Approaches, evidence, challenges. *Personality and Social Psychology Review*, 10, 295-319. doi: 10.1207/s15327957pspr1004.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Pearson.
- Taris, T. W. (2006). Is there a relationship between burnout and objective performance? A critical review of 16 studies. *Work & Stress*, 20, 316-334. doi: 10.1080/02678370601065893.

Wittenberg, K. J., & Norcross, J. C. (2001). Practitioner perfectionism: Relationship to ambiguity tolerance and work satisfaction. *Journal of Clinical Psychology, 57*, 1543-1550. doi: 10.1002/jclp.1116.

Table 1  
*Correlations and Descriptive Statistics*

Variable	1	2	3	4	5	6	7	8	9
Perfectionism									
1. Self-oriented perfectionism									
2. Other-oriented perfectionism	.56***								
3. Socially prescribed perfectionism	.49***	.31***							
Burnout									
4. Exhaustion	.00	-.18	.29**						
5. Cynicism	-.17	-.20*	.19*	.47***					
6. Reduced efficacy	-.19	-.11	.18*	.18	.38***				
Engagement									
7. Vigor	.20*	.28**	-.20*	-.33***	-.31***	-.66***			
8. Dedication	.30**	.25**	-.06	-.20*	-.59***	-.55***	.55***		
9. Absorption	.35***	.27*	.09	-.03	-.26**	-.45***	.49***	.60***	
<i>M</i>	70.83	41.69	53.16	16.80	15.07	35.22	30.37	26.22	26.90
<i>SD</i>	15.00	11.42	11.18	6.29	7.57	4.19	5.57	5.36	6.38
Cronbach's alpha	.89	.77	.78	.87	.87	.74	.79	.85	.79

Note.  $N = 106$ . For comparability, means and standards deviations are provided for sum scores.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 2

*Summary of Multiple Regressions: Perfectionism Predicting Burnout and Engagement*

	Burnout			Engagement		
	Exhaustion	Cynicism	Reduced efficacy	Vigor	Dedication	Absorption
Perfectionism	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$
Self-oriented	-.04	-.26*	-.34**	.24*	.36**	.35**
Other-oriented	-.28*	-.17	-.04	.28*	.14	.11
Socially prescribed	.40***	.37***	.36***	-.41***	-.28**	-.12
$R^2$	.166***	.148***	.131**	.208***	.160***	.139**
$R^2$ adjusted	.141***	.123***	.106**	.185***	.135***	.134***

Note.  $N = 106$ .

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .