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Stoeber, J., Davis, C. R., & Townley, J. (2013). Perfectionism and workaholism in employees: The role of work motivation. *Personality and Individual Differences*, 55(7), 733-738. DOI: 10.1016/j.paid.2013.06.001

Perfectionism and Workaholism in Employees:

The Role of Work Motivation

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Abstract

Even though it has been over 20 years since Spence and Robbins (1992) first showed perfectionism and workaholism to be closely related, the relationship between perfectionism and workaholism is still under-researched. In particular, it has remained unclear why perfectionism is linked to workaholism. Using data from 131 employees, this study—examining self-oriented and socially prescribed perfectionism—investigated whether intrinsic-extrinsic work motivation could explain the positive relationship between perfectionism and workaholism. Whereas socially prescribed perfectionism was unrelated to workaholism, self-oriented perfectionism showed a positive correlation with workaholism. Furthermore autonomous (integrated and identified regulation) and controlled (introjected and external regulation) work motivation showed positive correlations. However, when all predictors were entered in a regression analysis, only self-oriented perfectionism, identified regulation, and introjected regulation positively predicted workaholism. In addition, a mediation analysis showed that identified and introjected regulation fully mediated the effect of self-oriented perfectionism on workaholism. The findings suggest that high levels of work motivation explain why many self-oriented perfectionists are workaholic.

Keywords: perfectionism; workaholism; burnout; employees; work; motivation; self-determination theory; multiple mediation

1. Introduction

Workaholism has been described as an uncontrollable need to work incessantly and is characterized by working excessively and compulsively (Schaufeli, Taris, & van Rhenen, 2008). Workaholism is not merely enthusiasm to work, but is a negative characteristic that can have detrimental consequences for an individual's emotional, social, and physical well-being (e.g., Burke, 2000). Previous research has shown that workaholism is linked to individual differences in perfectionism and work motivation. However, no study so far has investigated what role work motivation plays in the perfectionism–workaholism relationship.

1.1 Perfectionism

Perfectionism is a personality disposition characterized by striving for flawlessness and setting exceedingly high standards of performance accompanied by overly critical evaluations of one's behavior and fear of negative evaluations by others (Flett & Hewitt, 2002; Frost, Marten, Lahart, & Rosenblate, 1990). Perfectionism comes in different forms and is best conceptualized

as a multidimensional disposition (Frost et al., 1990; Hewitt & Flett, 1991; Slaney, Rice, Mobley, Trippi, & Ashby, 2001). Regarding multidimensional conceptualizations of perfectionism, one of the most influential and widely researched models is Hewitt and Flett's (1991) model of perfectionism. With the recognition that perfectionism has personal and social aspects, the model differentiates three forms of perfectionism: self-oriented perfectionism, other-oriented, and socially prescribed. Self-oriented perfectionism is characterized by setting exceedingly high standards for oneself and comprises beliefs that striving for perfection and being perfect are important. In contrast, other-oriented perfectionism captures individual differences in holding perfectionistic standards for others. Finally, socially prescribed perfectionism comprises beliefs that others have high standards for oneself and that acceptance by others is conditional on fulfilling these standards (Hewitt & Flett, 1991, 2004). Because other-oriented perfectionism is not regarded a core dimension of perfectionism (Stoeber & Otto, 2006) and we aimed to investigate the role of employees' work motivation for themselves (not for others), other-oriented perfectionism was not further regarded in this study.

1.2 Perfectionism and Workaholism

Perfectionism has long been closely linked to workaholism (e.g., Spence & Robbins, 1992). Yet, there are surprisingly few empirical studies that have examined the perfectionism–workaholism link. Spence and Robbins (1992) examined a large sample of social workers and included perfectionism in their assessment battery of scales aimed to differentiate workaholism (being driven to work) from healthy aspects of work (work involvement, enjoyment of work). They found that perfectionism showed positive correlations with all three aspects of work, but particularly with being driven to work. Whereas the correlations with work involvement and enjoyment of work ranged in the .30s, the correlations with being driven to work ranged in the .60s. Furthermore Clark, Lelchok, and Taylor (2010) examined perfectionism and workaholism in student employees working part-time, and found compulsion to work to show a positive correlation with discrepancy, a dimension of perfectionism capturing perfectionists' feelings that their achievements fall short of their expectations (Slaney et al., 2001). Finally, Taris, van Beek, and Schaufeli (2010) examined perfectionism, workaholism, and burnout in higher-level employees working in retail, and found workaholism to show positive correlations with both perfectionist personal standards and perfectionist concern over mistakes. Moreover, mediation analyses indicated that workaholism mediated the relationship between perfectionism (concern over mistakes) and burnout (exhaustion) suggesting that workaholism is partly responsible for

the relationship between perfectionism and burnout. What may be responsible for the relationship between perfectionism and workaholism, however, has not yet been investigated.

1.3 The Role of Motivation

One potential candidate to explain why perfectionism is positively related to workaholism may be motivation because perfectionists have been shown to be highly motivated, and motivation has been shown to predict workaholism. In this, intrinsic-extrinsic motivation may play an important role, as findings from a recent study investigating work motivation and workaholism show (van Beek, Taris, & Schaufeli, 2011). The study investigated intrinsic-extrinsic work motivation (Gagné & Deci, 2005) following Ryan and Deci's (2000) self-determination theory (SDT). SDT postulates different types of motivation rank-ordered on a continuum from intrinsic to extrinsic motivation. Distinguishing intrinsic motivation and extrinsic motivation from amotivation, SDT further differentiates four regulatory forms of extrinsic motivation of increasing externality (and decreasing internality), namely: integrated regulation (characterized by congruence and awareness of reasons and goals being in synthesis with the self), identified regulation (characterized by personal importance and conscious valuing of reasons for work), introjected regulation (characterized by self-control and ego-involvement and by being motivated by internal rewards and punishments), and external regulation (characterized by compliance and being driven by external rewards and punishments). Furthermore, SDT holds that intrinsic motivation, identified regulation, and integrated regulation constitute types of motivation that represent autonomous motivation, whereas introjected and external regulation represent controlled motivation. Van Beek et al.'s (2011) study found workaholism in employees to show positive correlations with identified, introjected, and external regulation and a negative correlation with intrinsic motivation suggesting that both autonomous (identified) and controlled (introjected, external) work motivation play a role in workaholism.

1.4 This Study

Van Beek et al.'s (2011) findings suggesting that autonomous and controlled motivation may contribute to workaholism are important in this context, because perfectionism has been closely linked to autonomous and controlled motivation. Particularly self-oriented perfectionism has shown positive correlations with all types of motivation postulated by SDT (except for amotivation with which it has shown negative correlations), indicating that self-oriented perfectionists are highly motivated across the autonomous-controlled motivation continuum (Appleton & Hill, 2012; Mills & Blankstein, 2000; Stoeber, Feast, & Hayward, 2009; Van

Yperen, 2006). In contrast, socially prescribed perfectionism has shown positive correlations mainly with controlled motivation (introjected and external regulation) and amotivation, indicating that socially prescribed perfectionists are predominantly motivated by internal and external rewards and punishments, or not motivated at all. So far however no study has investigated what role intrinsic-extrinsic motivation plays in the relationship of perfectionism and workaholism and whether intrinsic-extrinsic work motivation in employees can explain the link between perfectionism and workaholism.

Against this background, the aim of this study was to provide a first investigation of the relationships between perfectionism, work motivation, and workaholism examining self-oriented and socially prescribed perfectionism and the six types of work motivation postulated by SDT. Regarding perfectionism and workaholism, previous studies found workaholism to be related to self-oriented aspects of perfectionism such as personal standards, concern over mistakes, and discrepancy (Clark et al., 2010; Spence & Robbins, 1992; Taris et al., 2010). Moreover, when discussing differences between self-oriented and socially prescribed perfectionism, Hewitt and Flett (2004) described self-oriented perfectionists as “workaholic,” but not socially prescribed perfectionists (see also Flett & Hewitt, 2006). Hence we expected self-oriented perfectionism but not socially prescribed perfectionism to show a positive correlation with workaholism. Moreover, in line with previous findings (e.g., Appleton & Hill, 2012; Stoeber et al., 2009), we expected self-oriented perfectionism to show positive correlations with all types of intrinsic-extrinsic motivation (except amotivation) whereas we expected socially prescribed perfectionism to show positive correlations only with controlled motivation. Moreover, following van Beek et al.’s (2011) findings, we expected identified, introjected, and external regulation to show positive correlations with workaholism. Finally, in line with Appleton and Hill’s (2012) findings that motivation mediated the perfectionism–burnout relationship, we expected work motivation to be a mediator of the perfectionism–workaholism relationship, but had no clear expectations which types of motivation would mediate the relationship. Hence, the respective regression and mediation analyses were mostly exploratory.

2. Method

2.1 Participants and Procedure

Two samples of employees were invited to participate in this study. First, employees from a British company providing professional services for caravan owners were invited through the company’s secretary. Second, students from the University of Kent working part-time were

invited via the School of Psychology's Research Participation Scheme (RPS). Invitees who agreed to participate were directed to the School's secure Qualtrics® website where they completed all measures online. In return for participation, service employees entered a raffle for £50 (~US \$80) and students received RPS credits. The study was approved by the relevant ethics committee and followed the British Psychological Society's (2009) code of ethics and conduct.

Overall, 133 employees completed the questionnaire: 63 service employees (11 male, 52 female) and 70 student employees (11 male, 59 female). To ensure that service employees would not feel they could be identified (e.g., by matching their gender and age against the company's records), all participants indicated their age on a 5-point scale (1 = under 21, 2 = 21 to 30, 3 = 31 to 40, 4 = 41 to 50, 5 = over 50 years). Service employees showed a mean age of 3.3 ($SD = 1.1$; range = 2-5) and student employees one of 1.2 ($SD = 0.6$; range = 1-4). Asked for how long they had worked for the company they were presently employed with, service employees reported an average of 5.7 years ($SD = 5.9$; range = 0-28.1) and student employees 1.4 years ($SD = 1.2$; range = 0-4.5).

2.2 Measures

2.2.1 Perfectionism

To measure the two forms of perfectionism, we used the short version of the Multidimensional Perfectionism Scale (MPS; Hewitt & Flett, 1991; short version: Cox, Enns, & Clara, 2002) capturing self-oriented (5 items; e.g., "I am perfectionistic in setting my goals") and socially prescribed perfectionism (5 items; "People expect nothing less than perfection from me"). The MPS is a widely-used measure of perfectionism and has demonstrated reliability and validity in many studies across various samples (see Hewitt & Flett, 2004, for an overview). We used the short version because it has shown alpha reliabilities comparable to the full version, but better factorial validity (Cox et al., 2002). Instructions told participants that the items captured personal characteristics and traits, and participants responded on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

2.2.2 Work motivation

To measure intrinsic-extrinsic work motivation, we used the Work Extrinsic and Intrinsic Motivation Scale (WEIMS; Tremblay, Blanchard, Taylor, Pelletier, & Villeneuve, 2009) capturing the six types of motivation postulated by SDT: intrinsic motivation (3 items; e.g., "Because I derive much pleasure from learning new things"), integrated regulation (3 items; "Because it has become a fundamental part of who I am"), identified regulation (3 items;

“Because it is the type of work I have chosen to attain certain important objectives”), introjected regulation (3 items; “Because I want to succeed at this job, if not I would be very ashamed of myself”), external regulation (3 items; “For the income it provides me”), and amotivation (3 items; “I don’t know, too much is expected of us”). Instructions told participants that the items captured reasons why they were presently involved in their work, and participants responded on a scale from 1 (*does not correspond at all*) to 7 (*corresponds exactly*). In the development samples, the WEIMS showed satisfactory alpha reliabilities and good factorial validity (Tremblay et al., 2009). Also in the present sample, all alpha reliabilities were satisfactory (Cronbach’s alphas $\geq .70$; Nunnally & Bernstein, 1994) except that of external regulation (alpha = .58). Inspection of the items (regarding alphas if item deleted) showed that, if Item 16 was deleted, alpha would increase from .58 to .74.¹ Hence Item 16 was removed from the calculation of the external regulation scores.

2.2.3 Workaholism

To measure workaholism, we used the short version of the Dutch Work Addiction Scale (DUWAS; Schaufeli, Taris, & Bakker, 2006; short version: Schaufeli, Shimazu, & Taris, 2009). The scale comprises two subscales: Working Excessively (5 items; e.g., “I spend more time working than socializing with friends, on hobbies, or on leisure activities,”) and Working Compulsively (5 items; “I feel obliged to work hard even if it is not enjoyable”). Instructions told participants that the items captured how they felt about work, and participants responded on a scale from 1 (*[almost] never*) to 4 (*[almost] always*). The short version of the DUWAS has demonstrated good alpha reliabilities and validity in various samples (e.g., del Líbano, Llorens, Salanova, & Schaufeli, 2010; Schaufeli, Bakker, van der Heijden, & Prins, 2009). In the present sample however the reliability of the working compulsively scores was unsatisfactory (alpha = .55). Inspection of the items found no item that, if deleted, would increase alpha to $\geq .70$. Consequently—following findings that the *combination* of working excessively and working compulsively represents problematic workaholism (Schaufeli, Bakker, et al., 2009)—the two subscales were combined to a measure of overall workaholism, which showed satisfactory reliability (alpha = .80).

2.3 Preliminary Analyses

Because multivariate outliers severely distort the results of correlation and regression

¹ For the final sample ($N = 131$; see Section 2.3), the alphas were .55 and .70, respectively.

analyses, we first examined the data for multivariate outliers regarding the 11 variables of our analyses (see Table 1). Two participants (one male service employee and one female student employee) showed a Mahalanobis distance larger than the critical value of $\chi^2(11) = 31.26$, $p < .001$ (Tabachnick & Fidell, 2007) and were excluded from further analyses. With this, our final sample comprised 131 participants: 62 service employees (10 male, 52 female) and 69 student employees (11 male, 58 female). Table 1 shows the descriptive statistics and alpha reliabilities for the final sample.

3. Results

3.1 Correlations

First we examined the bivariate correlations between perfectionism, motivation, and workaholism (see Table 1). As expected, self-oriented and socially prescribed perfectionism showed different correlations. Self-oriented perfectionism showed a significant positive correlation with workaholism, but socially prescribed perfectionism did not. Moreover, self-oriented perfectionism showed positive correlations with intrinsic motivation and integrated, identified, and introjected regulation and a negative correlation with amotivation. In contrast, socially prescribed perfectionism showed positive correlations with introjected and external regulation and a positive correlation with amotivation. All types of motivation showed positive correlations with workaholism except amotivation.

3.2 Regression Analysis

To explore the role of perfectionism and work motivation in the prediction of workaholism, we conducted a hierarchical regression analysis with workaholism as criterion. Because gender and subsample showed significant correlations with some predictor variables—female employees showed higher external regulation than male employees; service employees showed higher identified regulation and lower socially prescribed perfectionism, external regulation, and amotivation than student employees (see Table 1)—we entered gender and subsample in Step 1 as control variables. We then entered self-oriented and socially prescribed perfectionism in Step 2, and the six types of work motivation in Step 3 (see Table 2). As expected from the correlations, only self-oriented perfectionism was a significant positive predictor of workaholism, but not socially prescribed perfectionism. Moreover, work motivation explained additional variance in workaholism beyond perfectionism. However, with the overlap between the different types of motivation controlled for, only two types of motivation showed significant positive regression weights: identified regulation and introjected regulation.

Moreover, self-oriented perfectionism ceased to be a significant predictor once work motivation was added to the equation (see Table 2; self-oriented perfectionism in Step 3 vs. Step 2) suggesting the possibility of a mediation effect (Baron & Kenny, 1986) of identified and introjected regulation mediating the effect of self-oriented perfectionism on workaholism.

3.3 Mediation Analysis

To test whether this was the case, we conducted a multiple mediation analysis using Preacher and Hayes's (2008) computational procedures. Results showed that, when the indirect paths were tested using normal theory tests ("Sobel tests"), both paths were significant: self-oriented perfectionism \rightarrow identified regulation \rightarrow workaholism with $z = 2.13$, $p = .033$; and self-oriented perfectionism \rightarrow introjected regulation \rightarrow workaholism with $z = 2.72$, $p = .007$. In addition, the 95% confidence interval from the bootstrap tests (1000 samples) of the paths did not include zero (see Preacher & Hayes, 2008, for details). What is more, self-oriented perfectionism ceased to be a significant predictor once the indirect paths were taken into account, indicating that identified and introjected regulation fully mediated the effect of self-oriented perfectionism on workaholism (see Figure 1).

4. Discussion

The aim of this study was to provide a first investigation of the role that intrinsic-extrinsic work motivation plays in the relationships of self-oriented and socially prescribed perfectionism and workaholism in employees. Whereas socially prescribed perfectionism was unrelated to workaholism, self-oriented perfectionism showed a positive correlation with workaholism. Furthermore integrated, identified, introjected, and external regulation showed positive correlations. However, when all predictors were entered in a regression analysis, only self-oriented perfectionism, identified regulation, and introjected regulation positively predicted workaholism. In addition, a mediation analysis showed that identified and introjected regulation fully mediated the effect of self-oriented perfectionism on workaholism.

The findings expand on previous studies that found self-oriented aspects of perfectionism (personal standards, concern over mistakes, discrepancy) to show positive correlations with workaholism (Clark et al., 2010; Spence & Robbins, 1992; Taris et al., 2010). In addition, they corroborate previous findings that showed integrated, identified, introjected, and external regulation in work motivation to be positively related to workaholism (van Beek et al., 2011). Furthermore, and going beyond previous findings, the present findings suggest that—when all types of intrinsic-extrinsic work motivation are regarded simultaneously and competitively—

only identified and introjected regulation predict unique variance in workaholism. This suggests that employees whose work motivation is characterized by high degrees of congruence and awareness of reasons and goals being in synthesis with the self (identified regulation) and/or by high degrees of self-control and ego-involvement and being motivated by internal rewards and punishments (introjected regulation) are more likely to show elevated levels of workaholism compared to employees whose work motivation displays these characteristics to lower degrees. Finally, and most importantly, the present findings suggest that identified and introjected regulation may explain why employees high in self-oriented perfectionism are more likely to show higher levels of workaholism than employees low in self-oriented perfectionism. Our mediation analysis showed that higher levels of identified and introjected regulation observed in employees high in self-oriented perfectionism fully explained their higher levels of workaholism, suggesting that individual differences in intrinsic-extrinsic work motivation play a central role for understanding the perfectionism–workaholism relationship. In particular, the findings suggest that workaholism in self-oriented perfectionists is driven by those types of extrinsic motivation located midway on the autonomous-controlled motivation continuum in which self and ego are involved (identified regulation: goals in synthesis with the self; introjected regulation: self-control, ego-involvement). In addition, they suggest that internal rewards and punishment, which are characteristic for introjected regulation, play a role for self-oriented perfectionists' tendencies towards workaholism.

Although it has been argued that nonsignificant results are less important than significant results and should not be interpreted (e.g., Sternberg, 2003), this study's finding of no significant relationship between socially prescribed perfectionism and workaholism suggests that workaholism is mainly driven by personal aspects of perfectionism rather than social aspects. This interpretation is in line with Spence and Robbins's (1992) decision to include only items capturing perfectionist personal standards in the perfectionism scale they developed to differentiate workaholism from healthy forms of work engagement. Moreover, this interpretation dovetails with Hewitt and Flett's (2004) observation that self-oriented perfectionists are often "workaholic," but not socially prescribed perfectionists. If so, this interpretation would have important implications for research on perfectionism, workaholism, and burnout because it would suggest that Taris et al.'s (2010) finding of workaholism mediating the relationship between perfectionism and burnout holds only for self-oriented perfectionism, but not socially prescribed perfectionism. Socially prescribed perfectionism has shown close links with burnout

(Childs & Stoeber, 2010, 2012), but if socially prescribed perfectionism is unrelated to workaholism, workaholism cannot explain the perfectionism–burnout link for socially prescribed perfectionism.

This study had a number limitations. First, the sample was predominantly female (84%). Future studies may profit from using employee samples with a greater percentage of male participants to reinvestigate possible gender effects. Second, because of a reliability issue with the subscale measuring working compulsively, this study did not differentiate between the two aspects of workaholism (working excessively vs. compulsively), but combined the aspects and only regarded overall workaholism. Future studies may consider using the original version of the DUWAS (Schaufeli et al., 2006; capturing the two aspects of workaholism with nine and eight items respectively) instead of the short version (Schaufeli, Shimazu, & Taris, 2009; capturing both aspects with five items each) because the original version—measuring each aspect with more items—may avoid the reliability issue we encountered in this study. Finally, this study was cross-sectional. Consequently, we used the term prediction only in the statistical sense and could not make any claims about the temporal or causal quality of the relationships we found in the regression and mediation analyses. Future studies will need to employ longitudinal designs with three measurement points (cf. Cole & Maxwell, 2003) to examine if the mediation model based on our cross-sectional data replicates with longitudinal data.

Despite these limitations, we believe that the study makes a significant contribution to the literature. First, there are only few empirical studies investigating perfectionism and workaholism in employees. Hence, the present findings—confirming that self-oriented perfectionism is positively related to workaholism—make an important addition to the research literature. Second, the findings suggest that the types of extrinsic motivation located midway on the autonomous-controlled motivation continuum (integrated and introjected regulation), rather than intrinsic motivation or the types of extrinsic motivation located at the endpoints of the continuum (identified regulation, external regulation), are most closely related to workaholism. Third, the findings suggest that self-oriented perfectionists' elevated levels of integrated and introjected regulation in work motivation may be a factor contributing to their workaholism. Work is the domain of life in which most people are perfectionistic (Stoeber & Stoeber, 2009). Therefore it is important to understand perfectionism at work and the relationships between perfectionism and unhealthy forms of work engagement such as workaholism. We hope that the present findings will inspire further studies investigating the link between perfectionism and

workaholism and the factors responsible for this link.

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Table 1*Bivariate Correlations, Descriptives, and Alpha Reliabilities*

Variable	1	2	3	4	5	6	7	8	9	10
Perfectionism										
1. Self-oriented perfectionism										
2. Socially prescribed perfectionism	.20*									
Work motivation										
3. Intrinsic motivation	.35***	-.01								
4. Integrated regulation	.22*	.06	.65***							
5. Identified regulation	.28**	.00	.65***	.66***						
6. Introjected regulation	.40***	.19*	.63***	.57***	.61***					
7. External regulation	.16	.19*	-.01	-.03	-.03	.03				
8. Amotivation	-.20*	.29***	-.07	.16	.11	.17*	.00			
9. Workaholism	.27**	.09	.37***	.35***	.47***	.50***	.18*	.15		
10. Gender	-.01	.03	.05	.02	-.08	.05	.22*	.10	.09	
11. Subsample	.06	-.31***	.35***	.11	.27**	.15	-.19*	-.18*	.08	.00
<i>M</i>	5.29	3.76	4.59	3.96	3.60	4.12	5.61	2.15	2.48	—
<i>SD</i>	1.10	1.34	1.60	1.54	1.54	1.51	1.34	1.17	0.53	—
Range	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-4	—
Cronbach's alpha	.88	.85	.87	.75	.75	.76	.70	.75	.80	—

Note. $N = 131$. Gender was coded 1 = female, 0 = male; subsample was coded 1 = service employee, 0 = student employee working part-time. Scores were computed by averaging across items. Range = theoretical range.

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

Table 2*Summary of Multiple Regression Analysis Predicting Workaholism*

Predictor	ΔR^2	β
Step 1	.015	
Gender		.09
Subsample		.08
Step 2	.075**	
Gender		.09
Subsample		.09
Perfectionism		
Self-oriented perfectionism		.25**
Socially prescribed perfectionism		.06
Step 3	.250***	
Gender		.06
Subsample		-.01
Perfectionism		
Self-oriented perfectionism		.09
Socially prescribed perfectionism		-.05
Work motivation		
Intrinsic motivation		-.01
Integrated regulation		-.05
Identified regulation		.30*
Introjected regulation		.30**
External regulation		.16
Amotivation		.10

Note. $N = 131$. See Table 1 for gender and subsample coding.

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

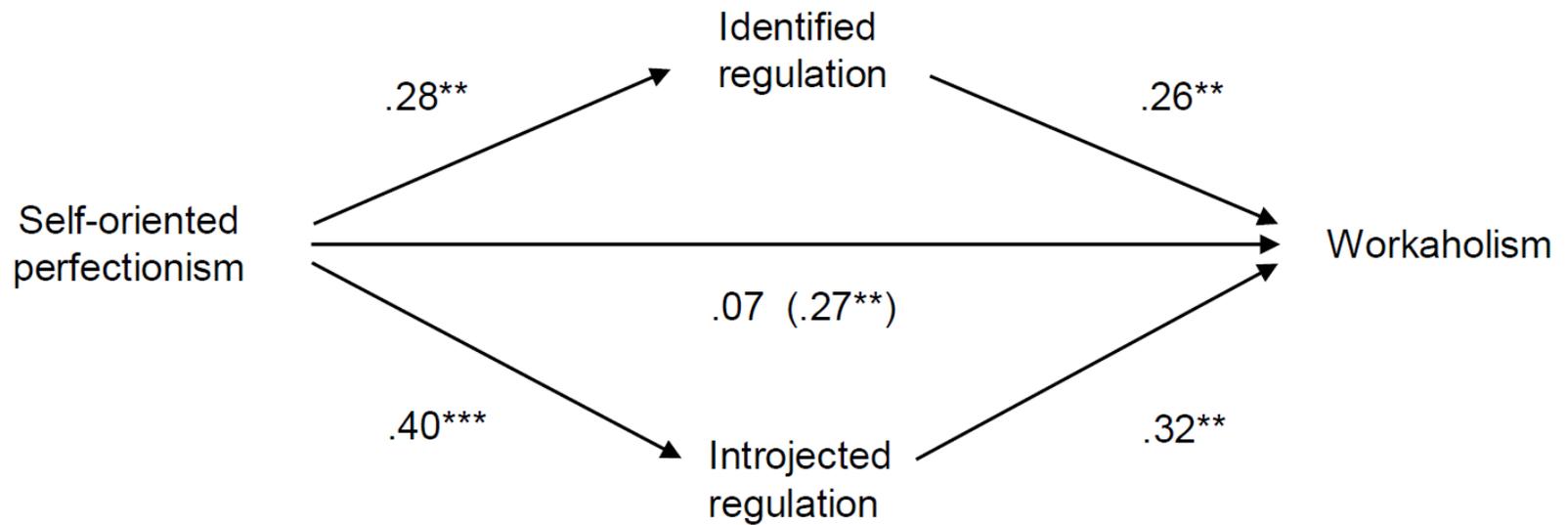


Figure 1. Mediation model of identified regulation and introjected regulation fully mediating the effects of self-oriented perfectionism on workaholism ($**p < .01$, $***p < .001$).