

PERFECTIONISM AND WORKAHOLISM IN MANAGERS: THE MODERATING ROLE OF WORKLOAD

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The purpose of this study is to examine the association between workaholism and two possible dispositional and situational antecedents, namely perfectionism, in terms of both self-oriented perfectionism (SOP) and socially prescribed perfectionism (SPP), and workload. Specifically, we hypothesize that both perfectionism and workload are positively associated with workaholism, and that workload may moderate the association between perfectionism and workaholism. Overall, 250 middle and top managers of an Italian service organization completed a self-report questionnaire. The hypothesized relationships were tested using moderated multiple regression. Results showed that SOP, SPP, and workload were positively associated with workaholism. Additionally, workload moderated the association between SOP/SPP and workaholism, which was stronger for workers with high workload. This study suggests that dispositional and situational factors, in terms of perfectionism and workload, may interact in predicting workaholism in managers. Interventions aimed at preventing workaholism could target cognitive elements of perfectionism, such as irrational beliefs about performance demands and failure.

Key words: Workaholism; Self-oriented perfectionism; Socially prescribed perfectionism; Workload; Moderation.

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Workaholism is a widespread phenomenon (Andreassen et al., 2014), which may have negative consequences for both individuals (e.g., physical and mental health; Clark, Michel, Zhdanova, Pui, & Baltes, 2016) and organizations (e.g., absenteeism, reduced job performance; Falco et al., 2013). Therefore, in terms of prevention, it seems important to investigate the antecedents of workaholism in workers (Falvo, Visintin, Capozza, Falco, & De Carlo, 2013), and particularly in managers (Andreassen, Bjorvatn, et al., 2016). Indeed, managers usually report higher levels of workaholism (Andreassen, Griffiths, Sinha, Hetland, & Pallesen, 2016; Kravina, Falco, De Carlo, Andreassen, & Pallesen, 2014), given that they may

have both greater incentives and more opportunities to invest time and effort in their work (Ng, Sorensen, & Feldman, 2007). This may have detrimental consequences for the manager himself, the workers in his team, and, eventually, the whole organization, given that managers may play a central role in creating and maintaining an extended work hours culture (i.e., a set of values, assumptions, and norms that encourages employees to spend more and more time at work), which, in turn, may encourage workaholism in subordinates (Fry & Cohen, 2009). Additionally, recent studies suggest that workaholism of workers in leadership roles may negatively influence followers' well-being, since leaders and followers are part of the same social system (Clark, Stevens, Michel, & Zimmerman, 2016). Previous research has shown that personality dispositions such as perfectionism, as well as situational factors like workload (i.e., a job demand), may lead to the onset of workaholism (for a review, see Loscalzo & Giannini, 2017). Moreover, it is conceivable that situational and dispositional factors may interact in predicting workaholism (Liang & Chu, 2009; McMillan & O'Driscoll, 2008). Quite surprisingly, there are very few studies that examined this pattern of associations (for an exception, see Mazzetti, Schaufeli, & Guglielmi, 2014), and, to the best of the authors' knowledge, no previous empirical research has explored the possible interaction between perfectionism and workload in predicting workaholism. To address this gap in the literature, in the present study we tested the hypothesis that perfectionism and workload may lead to workaholism, and that workload may exacerbate the positive association between perfectionism and workaholism.

PERFECTIONISM AND WORKAHOLISM

Schaufeli, Taris, and Bakker (2008, p. 204) defined workaholism as "the tendency to work excessively hard in a compulsive way," thus identifying two central dimensions of the construct, namely working excessively (WE) and working compulsively (WC). Workaholism is characterized by the simultaneous presence of high levels of both WE and WC (Schaufeli, Bakker, van der Heijden, & Prins, 2009), which represent its behavioral and cognitive dimensions, respectively (Schaufeli, Shimazu, & Taris, 2009). On the one hand, WE refers to the behavioral tendency of workaholics to devote an excessive deal of time to work activities, and work beyond what is reasonably expected of them to comply with organizational or economic requirements. On the other hand, WC implies that workaholics are obsessed with work, and constantly think about work also during after-work hours (Schaufeli, Taris, & Bakker, 2008). Previous studies showed that workaholism is associated with negative outcomes, such as physical and psychological symptoms (Falco et al., 2013; Shimazu, Schaufeli, & Taris, 2010), sickness absences (Falco et al., 2013), sickness presenteeism (Girardi, Falco, Piccirelli, et al., 2015), work-family conflicts (Hakanen & Peeters, 2015), reduced job and life satisfaction (Shimazu, Schaufeli, Kamiyama, & Kawakami, 2015), sleep problems (Kubota et al., 2010; Salanova et al., 2016), and cardiovascular risk (Salanova et al., 2016).

Recently, several studies suggested that two types of heavy work investment may be identified, namely work engagement, defined as "positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli, Salanova, González-Romá, & Bakker, 2002, p.74), and workaholism (Shimazu et al., 2015). Both workaholics and engaged workers devote a large amount of time and effort to their work. However, whereas engaged employees work hard mainly because they are intrinsically motivated (i.e., they consider their work as enjoyable and interesting), workaholics are generally driven by extrinsic motivation, since they perform work activities for their instrumental value (e.g., they work hard to preserve and improve feelings of self-worth and self-esteem, and avoid negative emotions, such as anger and guilt; van Beek, Hu, Schaufeli, Taris, & Schreurs, 2012; van Beek, Taris, Schaufeli, &

Brenninkmeijer, 2013). Additionally, previous studies that considered workaholism and work engagement simultaneously showed that workaholism leads to negative outcomes, such as future increased ill-health and decreased life satisfaction, whereas work engagement is related to future decreased ill-health and to increased life satisfaction and job performance (Shimazu et al., 2015; Shimazu, Schaufeli, Kubota, & Kawakami, 2012). However, it should be noted that previous studies also discussed possible dark sides of work engagement (Bakker, Albrecht, & Leiter, 2011). Drawing on the Conservation of Resources theory, Halbesleben, Harvey, and Bolino (2009) hypothesized that individuals with high levels of work engagement may have fewer resources available to invest in other aspects of their lives. Consistently, they found that work engagement is positively associated with work interference with family over time, and that organizational citizenship behaviors may mediate this association. Bakker et al. (2011) argued that the work engagement dimension of absorption may be a candidate for eliciting unhealthy behaviours, given that workers may come to be so immersed in their work activities to neglect interpersonal relationships and recovery. Schaufeli, Taris, and van Rhenen (2008) performed several confirmatory factor analyses to investigate whether job burnout, workaholism, and work engagement could be distinguished from an empirical point of view. Interestingly, the authors found that absorption loaded also on workaholism, and they concluded that work engagement and workaholism overlap with respect to the feeling of being completely immersed in their work, although the underlying motivation should be different (e.g., intrinsic vs compulsive motivation).

Recent studies suggest that, among others, personality dispositions and situational factors, regarding both the family (Kravina et al., 2014) and the work context (i.e., job demands; Andreassen, Pallesen, & Torsheim, 2018; Balducci, Avanzi, & Fraccaroli, 2018; Molino, Bakker, & Ghislieri, 2016), may contribute to the onset of workaholism (Durand-Moreau, Deun, Lodde, & Dewitte, 2018; Liang & Chu, 2009; Loscalzo & Giannini, 2017; McMillan & O'Driscoll, 2008; Ng et al., 2007). Among personal factors, several studies highlighted the role of perfectionism, a personality disposition that includes striving for flawlessness and setting exceedingly high, usually unrealistic standards of performance, together with an overly critical evaluations of one's own behaviour (Flett & Hewitt, 2002; Frost, Marten, Lahart, & Rosenblate, 1990; Sirois & Molnar, 2016). Most authors conceive perfectionism as a multidimensional construct, characterized by both personal and interpersonal aspects (Frost et al., 1990; Hewitt & Flett, 1991). In accordance with several previous studies on the relationship between different facets of perfectionism and workaholism (Falco, Piccirelli, Girardi, Di Sipio, & De Carlo, 2014; Falco et al., 2017; Stoeber, Davis, & Townley, 2013), in this article we embrace the influential model proposed by Hewitt and Flett (1991), which focuses on three core dimensions of perfectionism. These are self-oriented perfectionism (SOP), socially prescribed perfectionism (SPP), and other-oriented perfectionism (OOP). SOP is characterized by the inclination to set extremely high standards for oneself, whereas SPP concerns the perception of unrealistically high standards that are imposed on the self by significant others. Finally, OOP involves exceedingly high standards for other people (Flett & Hewitt, 2002; Hewitt & Flett, 1991, 1993), and it is therefore considered as a peculiar form of perfectionism, directed at other people, rather than the self (Stoeber, 2014).

Moreover, previous empirical studies, which used both exploratory and confirmatory factor analysis (Bieling, Israeli, & Antony, 2004; Frost, Heimberg, Holt, Mattia, & Neubauer, 1993; Stoeber & Damian, 2016), showed that facets of perfectionism borrowed from several theoretical models (see for example Frost et al., 1990; Slaney, Rice, Mobley, Trippi, & Ashby, 2001) reflect two higher-order underlying factors, namely perfectionistic strivings (PS) and perfectionistic concerns (PC). On the one hand, perfectionistic strivings, which subsume aspects of perfectionism associated with setting excessively high standards of performance and striving for perfection, are typically associated with positive individual characteristics

and outcomes (e.g., conscientiousness, positive affect, satisfaction with life, academic achievement, and work engagement). On the other hand, perfectionistic concerns, which capture facets of perfectionism related to concerns over making mistakes, concerns over evaluation of one's performance by significant others, and the perceived discrepancy between one's elevated standards and actual performance, are usually associated with negative individual characteristics and outcomes (e.g., neuroticism, negative affect, depression, anxiety, and job burnout; Bieling et al., 2004; Chang, Watkins, & Banks, 2004; Cox, Enns, & Clara, 2002; Frost et al., 1993; Hill, Huelsman, & Araujo, 2010; Stoeber & Gaudreau, 2017; Stoeber & Otto, 2006). In this study, PS and PC are reflected by SOP and SPP, respectively (Stoeber & Damian, 2016; Stoeber & Otto, 2006).

According to several authors, perfectionism may play a central role in the development of workaholism (Liang & Chu, 2009; Spence & Robbins, 1992; Stoeber & Damian, 2016). Spence and Robbins (1992) found that perfectionism was strongly correlated with drive to work, and that workaholics (i.e., high work involvement, high drive to work, and low work enjoyment, according to their typology) showed higher score on perfectionism than work enthusiasts (i.e., high work involvement and enjoyment, but low drive to work). Scott, Moore, and Miceli (1997) identified a specific type of workaholic behaviour pattern, namely perfectionist workaholics, who are characterized by rigidity and inflexibility, desire for control, and preoccupation with details. Bovornusvakool, Vodanovich, Ariyabuddhiphongs, and Ngamake (2012) pointed out that perfectionism is a key factor in the development of workaholism, which in turn may represent a socially acceptable opportunity to express one's perfectionistic tendencies, since workers who strive for perfection are usually rewarded in organizations. Falco et al. (2017) found that individuals with high levels of perfectionism tend to endorse several work-related irrational beliefs that reflect performance demands and failure, which, in their turn, may lead to workaholism.

Consistently, in a recent meta-analysis, Clark, Michel, et al. (2016) found a large positive correlation between perfectionism and workaholism. Moreover, studies that examined facets of perfectionism reflecting PS and PC showed that both perfectionistic strivings and concerns should be positively associated with workaholism (Clark, Lelchook, & Taylor, 2010; Falco et al., 2014; Girardi, Falco, Piccirelli, et al., 2015; Mazzetti et al., 2014; Stoeber et al., 2013; Taris, van Beek, & Schaufeli, 2010; Tziner & Tanami, 2013).

Thus, based on these arguments and given the model proposed by Hewitt and Flett (1991), we hypothesized that both SOP (reflecting PS) and SPP (reflecting PC) are positively associated with workaholism. It is possible that perfectionists believe that their actual performance is not adequate, given either their excessively high standards of performance (e.g., SOP) or the perceived social pressure to be perfect (e.g., SPP), and therefore they are inclined to keep on doing their work until they feel they have done enough (Clark, Michel, et al., 2016, van Wijhe, Peeters, & Schaufeli, 2013, 2014). We focused on the two dimensions of SOP and SPP taken from the theoretical model proposed by Hewitt and Flett (1991) for several reasons. First, they clearly reflect the two underlying factors of perfectionistic strivings and concerns, respectively (Stoeber & Damian, 2016; Stoeber & Otto, 2006). Moreover, SOP and SPP may have different motivational and cognitive correlates, which, in their turn, represent two possible mechanisms that may explain the association between perfectionism and workaholism (Falco et al., 2017; Stoeber et al., 2013). Finally, it should be noted that other-oriented perfectionism is not considered as a core dimension of perfectionism, when conceptualizing the two dimensions of PS and PC (Stoeber & Otto, 2006).

H1a: SOP will be positively associated with workaholism;

H1b: SPP will be positively associated with workaholism.

WORKLOAD AND WORKAHOLISM

Previous research suggested that situational factors, both in the familial (Kravina et al., 2014) and the work context (e.g., in terms of job demands; Andreassen et al., 2017, 2018; Balducci et al., 2018; Molino et al., 2016), may contribute to the onset of workaholism, and that workload may play a central role in this process. Balducci et al. (2018) hypothesized that workaholism may be seen as a maladaptive coping style, developed by individuals who chronically face elevated job demands. In their longitudinal study, the authors found that job demands, mainly conceptualized as mental workload, positively influenced workaholism over time. Similarly, Andreassen et al. (2017) proposed that high levels of job demands may be perceived by workers as descriptive norms that show what is the typical thing to do in the organization, that is, to work extremely hard. In their longitudinal study among Norwegian nurses the authors found that the job demand scale taken from the Swedish Demand-Control-Support Questionnaire (Sanne, Torp, Mykletun, & Dahl, 2005) positively predicted workaholism over time. Taken together, these studies suggest that individuals employed in jobs characterized by high workload may work harder and harder and spend more time in work activities to complete their tasks, meet their deadlines, and adhere to perceived social norms in their organization. This, in turn, may lead to workaholism over time. Accordingly, in this study we hypothesize that workload is positively associated with workaholism.

H2: workload will be positively associated with workaholism.

THE INTERACTION BETWEEN PERFECTIONISM AND WORKLOAD

In this study, we propose that a personality disposition (i.e., perfectionism) and a situational factor (i.e., workload, a job demand) may interact in predicting workaholism, that is, workaholism may especially arise when individuals with high perfectionism face high demanding jobs. When confronted with chronically high levels of workload, perfectionists may feel compelled to work even harder than their colleagues, to complete their tasks and, at the same time, meet their exceedingly high (and often unrealistic) standards of performance.

From a theoretical standpoint, previous studies provide theoretical support for the hypothesis that situational and dispositional factors may interact in predicting workaholism. For example, according to McMillan and O'Driscoll (2008), workaholism may stem from a complex interaction of personal predisposition (e.g., personality traits, including perfectionism), emotions, cognitions, behaviours, and social systems (i.e., family and workplace systems). Moreover, in their theoretical article, Liang and Chu (2009) identified three major antecedents of workaholism, that is, personality traits (e.g., perfectionism), personal inducements (e.g., vicarious learning in the family), and organizational inducements (e.g., peer competition at work). Additionally, the authors argue that personality traits and organizational inducements (as well as personal inducements) may interact in predicting workaholism.

Interestingly, several empirical studies found that perfectionism was more strongly associated with the cognitive dimension of workaholism (i.e., being driven to work; Burke, 2001; Kanai, Wakabayashi, & Fling, 1996; Spence & Robbins, 1992), whereas workload was more strongly associated with its behavioral dimension (i.e., working excessively; Schaufeli, Bakker, et al., 2009; Schaufeli, Taris, & van Rhenen, 2008; van Beek et al., 2012). Therefore, given that workaholism may be conceptualized as a syndrome in which WE and WC occur together (Schaufeli, Bakker, et al., 2009), it seems reasonable to hypothesize that workaholism may especially arise when individuals with high perfectionism face high demanding jobs.

To the best of the authors' knowledge, no previous empirical research has explored this possible pattern of relationships. Therefore, to contribute to fill this gap in the literature, in this study we investigate the interaction between perfectionism, in terms of both SOP and SPP, and workload in predicting workaholism. Overall, based on the arguments previously described and given the theoretical models proposed by McMillan and O'Driscoll (2008) and Liang and Chu (2009), we believe that workload may moderate the positive association between perfectionism and workaholism, that is, the association between perfectionism (i.e., SOP/SPP) and workaholism is stronger for individuals with high levels of workload (i.e., exacerbation; Jose, 2013).

H3a: Workload will moderate the positive association between SOP and workaholism;

H3b: Workload will moderate the positive association between SPP and workaholism.

METHOD

Participants and Procedure

The present study was conducted in an Italian service organization as part of a work-related stress risk assessment. Workers were informed beforehand about the aims of the investigation and took part in the study on a voluntary basis. Participants were middle and top managers, who completed a self-report questionnaire aimed at determining perfectionism, workload, and workaholism. The instrument was administered online in 2015, and anonymity was guaranteed. Participants were given a login identification code and a password to access the online questionnaire. Overall, 298 managers were eligible to participate in the present study. Two hundred and seventy-eight online questionnaires were completed, with a response rate of 93.3%. However, twenty-eight participants had missing values in at least one of the variables considered in the study and were therefore excluded from subsequent analyses. Accordingly, the final sample comprised 250 participants. The sample consisted of 41 women and 209 men, with a mean age of 48.4 years ($SD = 6.2$). Most respondent (53.6%) had a university degree, whereas 46.4% had a secondary degree. With respect to work experience, the majority of them (52.4%) had been with the company for more than 20 years.

Measures

To determine the dimensions under investigation, the following self-report measures were administered. For all the scales, the six-point response scale ranged from 1 (*strongly disagree*) to 6 (*strongly agree*).

Workaholism was determined by using the Dutch Workaholism Scale (DUWAS; Schaufeli, Taris, & Bakker, 2008) in the Italian adaptation (Falco et al., 2012; Kravina, Falco, Girardi, & De Carlo, 2010). The scale is composed of ten items, designed to detect the two dimensions of WE (six items; e.g., "I seem to be in a hurry and racing against the clock") and WC (four items; e.g., "I feel that there's something inside me that drives me to work hard"). Since workaholism reflects the tendency to work excessively hard in a compulsive way, an overall workaholism score was used. Cronbach's alpha for the overall scale was .85.

Workload was assessed using four items, reflecting both qualitative and quantitative workload, taken from the Qu-Bo test, an instrument standardized for the Italian context (De Carlo, Falco, & Capozza, 2008). Examples of item are "Your job requires you to do more work than you can do well" and "Your job requires you to constantly solve new problems" for quantitative and qualitative workload, respectively. Cronbach's alpha was .82.

Perfectionism was determined using an Italian adaptation (Falco et al., 2014) of a short version of the Multidimensional Perfectionism Scale (MPS; Hewitt & Flett, 1991). The scale is composed of seven items and measures SOP (three items; e.g., “One of my goals is to be perfect in everything I do”), and SPP (four items; e.g., “My family expects me to be perfect”). Cronbach’s alpha was .83 for SOP and .63 for SPP.

Data Analysis

The hypothesized relationships were tested using moderated multiple regressions analyses (Aiken & West, 1991). Workaholism was the dependent variable, whereas perfectionism (i.e., SOP and SPP) and workload were the independent and the moderating variables, respectively. The scores of both SOP/SPP and workload were centered, and then the cross-products of centered variables were computed. Since previous studies suggest that sociodemographic characteristics may be associated with workaholism and related constructs, such as heavy work investments and working long hours (Clark, Michel, et al., 2016; Girardi, Falco, Piccirelli, et al., 2015; Ng & Feldman, 2008; Snir & Harpaz, 2006, 2012), all the regression models were estimated controlling for the effect of gender, age, and education.

Overall, three different models were estimated. In Model 1 (M1), workaholism was regressed on the centered scores of SOP, SPP, and workload. Model 2 (M2) and Model 3 (M3) were identical to M1, except that the interaction between SOP and workload (M2), as well as the interaction between SPP and workload (M3), were also entered. M1 was estimated to investigate the relationships between workaholism on the one hand, and SOP, SPP, and workload on the other (Hypothesis 1 and 2), and served as a baseline model. In M1, the unique relationships between workaholism and each dimension of perfectionism (i.e., SOP or SPP) were estimated, controlling for the effect of the other one (i.e., SPP or SOP). This is an important point, given that SOP and SPP (as well as other facets of perfectionism reflecting PS or PC) are positively correlated, and they may show different relationships with outcomes, when their shared variance is taken into account (Stoeber & Gaudreau, 2017). Additionally, in M2/M3 the interaction between SOP and workload (M2), as well as the interaction between SPP and workload (M3) were tested, again controlling for the other dimension of perfectionism (i.e., SPP in M2 and SOP in M3; Stoeber & Damian, 2016). If a significant interaction was found, then a simple slope analysis was conducted, to determine whether SOP (M2) or SPP (M3) is associated with workaholism at high (+1SD) and low (−1SD) levels of workload (Aiken & West, 1991). Finally, to interpret the nature of the moderating effect, significant interactions were presented graphically, following the procedure outlined by Aiken and West (1991).

RESULTS

Confirmatory Factor Analysis

Prior to estimating the regression models, a confirmatory factor analysis (CFA) was carried out using the lavaan package (Rosseel, 2012) for R software (R Core Team, 2016), to evaluate the psychometric properties of the instruments adopted in this study. The hypothesized model comprised 21 scale items and five latent factors (i.e., the constructs of interest). Since most of the scale items were not normally distributed, the robust maximum likelihood was used as the estimation method (MLM). To assess model fit, the scaled Satorra-Bentler chi-square test ($SB\chi^2$) was considered, as well as three additional fit indices: the

root mean square error of approximation (RMSEA), the comparative fit index (CFI), and the standardized root mean squared residual (SRMR). A model shows a good fit to data if the $SB\chi^2$ is non-significant. Additionally, values close to or smaller than .08 for RMSEA and SRMR as well as values close to or greater than .90 for CFI indicate an acceptable fit (Brown, 2015).

The fit indices of the measurement model showed a mediocre fit to data: $SB\chi^2(179) = 423.81, p < .001$; RMSEA = .074; CFI = .879; SRMR = .088. The inspection of modification indices revealed a substantial cross loading for the first item of WE scale. Thereafter, this item was removed from subsequent analyses, and a new CFA was performed. The fit indices showed an acceptable fit to data: $SB\chi^2(160) = 336.94, p < .001$; RMSEA = .067; CFI = .907; SRMR = .078. All items loaded substantially on the respective factor, with a mean standardized factor loading of .68. Moreover, correlations between latent factors ranged from .23 to .79, suggesting that the scale items reflect different constructs. Composite reliability was adequate, being .77 for WE, .88 for WC, .84 for workload, .88 for SOP, and .68 for SPP. Finally, the distributional properties of the scales were acceptable (results not shown; Curran, West, & Finch, 1996). Overall, the self-report measures adopted in the present study showed satisfactory construct validity (Conway & Lance, 2010).

Hypotheses Testing

Descriptive statistics and correlations between study variables are reported in Table 1. Interestingly, SOP and SPP showed a large-sized positive correlation ($r_{248} = .46, p < .001$), supporting the idea that facets of perfectionism that reflect PS and PC are positively associated (Stoeber & Damian, 2016). Additionally, workaholism was positively associated with workload ($r_{248} = .52, p < .001$), SOP ($r_{248} = .35, p < .001$), and SPP ($r_{248} = .44, p < .001$).

TABLE 1
 Means, standard deviations, and correlations between study variables ($N = 250$)

| | <i>M</i> | <i>SD</i> | 1 | 2 | 3 | 4 |
|--------------------------------------|----------|-----------|------------|------------|------------|------------|
| 1. Workaholism | 4.35 | 0.77 | .85 | | | |
| 2. Workload | 4.26 | 1.02 | .52*** | .82 | | |
| 3. Self-oriented perfectionism | 4.72 | 0.81 | .35*** | .22*** | .83 | |
| 4. Socially prescribed perfectionism | 3.60 | 0.76 | .44*** | .27*** | .46*** | .63 |

Note. Cronbach's alpha values in bold are displayed in the diagonal of the correlation matrix.
 *** $p < .001$.

The results of the regression analyses (M1-M3) are presented in Table 2. In M1, SOP ($b = .15, p < .01$) and SPP ($b = .25, p < .001$) were positively associated with workaholism, controlling for the effect of sociodemographic characteristics (i.e., gender, age, and education) and workload. Moreover, workload was positively associated with workaholism ($b = .31, p < .001$) in M1, controlling for the effect of both sociodemographic characteristics and SOP/SPP. Together, these predictors accounted for 38.9% of the variance in workaholism, $F(6, 243) = 25.75, p < .001$. Therefore, H1a, H1b, and H2 were supported.

TABLE 2
 Results from moderated multiple regression analyses ($N = 250$)

| | Model 1 | | | Model 2 | | | Model 3 | | |
|------------------------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|
| | <i>B</i> | <i>SE</i> | <i>t</i> | <i>B</i> | <i>SE</i> | <i>t</i> | <i>B</i> | <i>SE</i> | <i>t</i> |
| Gender ^a | -.052 | .105 | -.494 | -.075 | .104 | -.716 | -.050 | .104 | -.482 |
| Age | -.003 | .007 | -.463 | -.004 | .007 | -.540 | -.002 | .007 | -.293 |
| Education ^b | .108 | .083 | 1.313 | .105 | .082 | 1.282 | .110 | .082 | 1.348 |
| Workload | .309*** | .040 | 7.652 | .310*** | .040 | 7.727 | .321*** | .041 | 7.941 |
| SOP | .150** | .056 | 2.696 | .175** | .056 | 3.108 | .155** | .055 | 2.808 |
| SPP | .249*** | .060 | 4.174 | .243*** | .059 | 4.103 | .247*** | .059 | 4.185 |
| Workload × SOP | | | | .094* | .045 | 2.105 | | | |
| Workload × SPP | | | | | | | .099* | .045 | 2.202 |

Note. SOP = self-oriented perfectionism; SPP = socially prescribed perfectionism; SE = standard error.

^a0 = female, 1 = male.

^b0 = secondary degree, 1 = university degree.

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

The interaction between SOP and workload (M2) accounted for an additional 1.1% of the variance in workaholism, $F_{\text{change}}(1, 242) = 4.43, p < .05$, providing support for H3a. The effects of SOP ($b = .18, p < .01$), SPP ($b = .24, p < .001$), and workload ($b = .31, p < .001$) remained significant in M2. The simple slope analysis showed that the relationship between SOP and workaholism was positive and significant when workload was high ($b = .27, p < .001$) but nonsignificant when workload was low. A similar pattern of results was found for M3, in which the interaction between workload and SPP accounted for an additional 1.2% of the variance in workaholism, $F_{\text{change}}(1, 242) = 4.85, p < .05$, providing support for H3b. Again, the effects of SOP ($b = .16, p < .01$), SPP ($b = .25, p < .001$), and workload ($b = .32, p < .001$) remained significant in M3. The simple slope analysis showed that the relationship between SPP and workaholism was positive and significant when workload was high ($b = .35, p < .001$) but nonsignificant when workload was low. These predictors accounted for 40% of the variance in workaholism in M2, $F(7, 242) = 23.02, p < .001$, and 40.1% of the variance in M3, $F(7, 242) = 23.12, p < .001$, both considered a large effect size (Cohen, 1992).

Additionally, to interpret the nature of the moderating effect, these interactions were presented graphically. The association between SOP and workaholism was stronger for individuals with high levels of workload (Figure 1). The same pattern also occurred for SPP (Figure 2). Workload, therefore, exacerbated the positive association between perfectionism and workaholism.

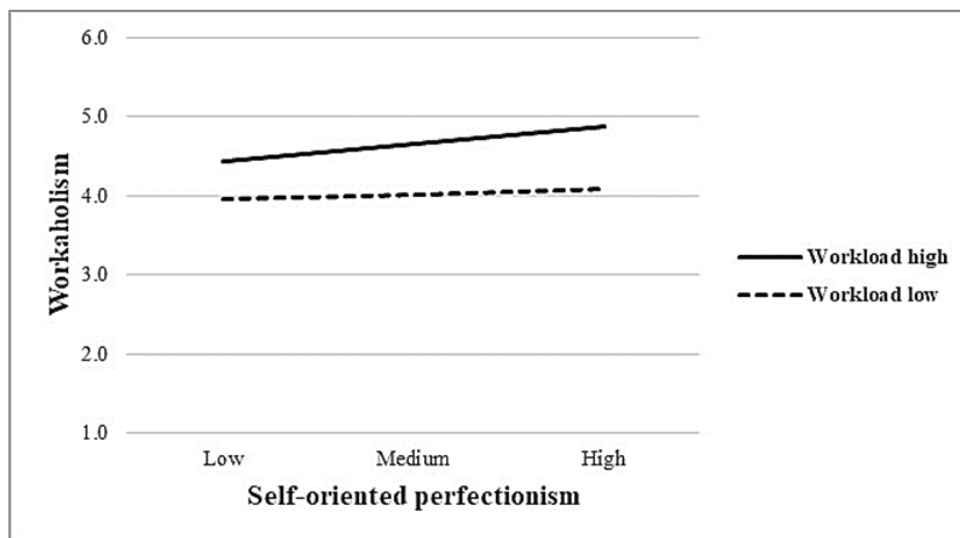


FIGURE 1
Interaction between self-oriented perfectionism and workload on workaholism.

DISCUSSION

This study showed that both perfectionism, in terms of SOP and SPP, and workload (i.e., a job demand) were positively associated with workaholism, lending support to the hypothesis that both dispositional and situational factors may lead to the onset of workaholism. Additionally, results from this study provide initial support for the hypothesis that perfectionism and workload may interact in predicting workaholism. Indeed, the relationship between perfectionism, in terms of SOP and SPP, and workaholism was stronger for individuals with high workload.

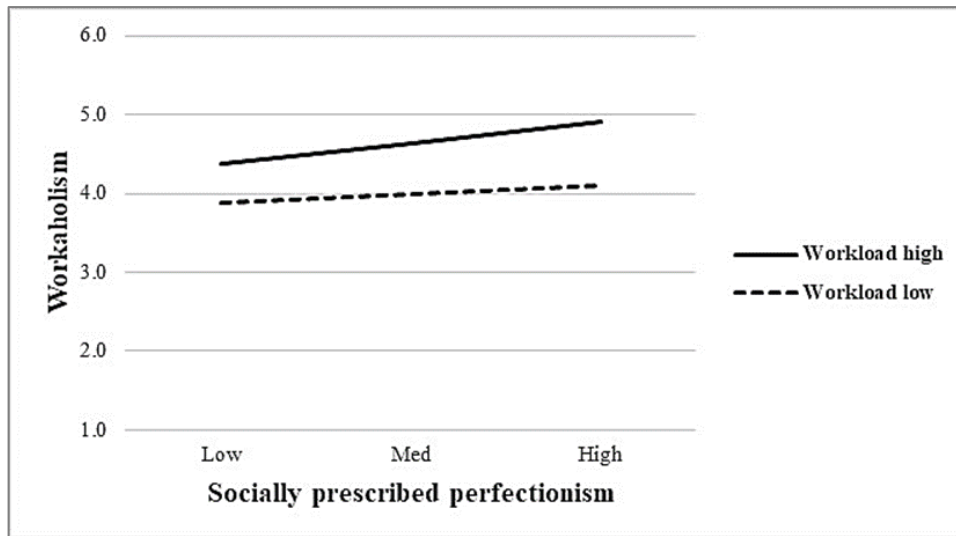


FIGURE 2
Interaction between socially prescribed perfectionism and workload on workaholism.

We believe this article to make several contributions to the literature. First, our study sheds light on the relationship between different facets of perfectionism and workaholism. Results showed that both SOP and SPP, reflecting respectively perfectionistic strivings and concerns, were positively associated with workaholism. Overall, these results are in line with those of previous studies, which suggest that perfectionism is associated with work-related irrational beliefs (i.e., about performance demands and failure; Falco et al., 2017), as well as with specific forms of extrinsic motivation (i.e., identified and introjected regulation; Stoeber et al., 2013) that, in their turn, may lead to workaholism.

Moreover, this study shows that situational work characteristics (i.e., workload) may lead to workaholism in a sample of middle and top managers. From a theoretical standpoint, these results are in line with the propositions of previous studies that acknowledged the role of organizational factors (among others) in the development of workaholism (Durand-Moreau et al., 2018; Liang & Chu, 2009; Loscalzo & Giannini, 2017; McMillan & O'Driscoll, 2008; Ng et al., 2007), although in contrast with other works, which mainly conceptualized workaholism as a stable individual characteristic (McMillan, O'Driscoll, & Burke, 2003; Scott et al., 1997; Spence & Robbins, 1992). However, from an empirical viewpoint, our findings are consistent with the results of recent longitudinal studies, which showed that high demanding job may give rise to workaholism (Andreassen et al., 2017; Balducci et al., 2018).

Finally, the major contribution of this study is to show that perfectionism and workload interact in predicting workaholism. Indeed, workload exacerbated the positive relationship between different facets of perfectionism, in terms of both SOP and SPP, and workaholism, so that the highest levels of workaholism were reported by perfectionists who also experienced higher levels of workload. Interestingly, although the size of the interaction effect was small (Cohen, 1992), workload substantially influenced the relationship between perfectionism and workaholism, which was not significant when workload was low. It is possible that, when confronted with a high demanding job, individuals may perceive chronic workload as a cue that signals what are the norms in their organization (i.e., to work excessively hard; Andreassen et al., 2017). This external standard may be adopted and internalized by perfectionists, who hold irrational beliefs about the need for achievement and the negative consequences of failure (Falco et al., 2017; van Wijhe et al.,

2013). Therefore, these individuals are motivated to work extremely hard to avoid negative emotions (e.g., anger and guilt) and protect self-esteem (i.e., introjected regulation; van Beek et al., 2012, 2013), as well as to be appreciated by the supervisor and colleagues (van Beek et al., 2012). Thus, when confronted with high workload, perfectionists may place additional demands on themselves, which, in the long run, may lead to workaholism (van Wijhe et al., 2013).

Overall, we believe that this study could provide a valuable contribution to the literature. From a theoretical standpoint, our results are in line with the propositions of previous research that acknowledged that situational and dispositional factors may interact in predicting workaholism (Liang & Chu, 2009; McMillan & O'Driscoll, 2008). Moreover, to the best of our knowledge, this is the first study to show an interaction between job demands and different facets of perfectionism (reflecting PS and PC) in predicting workaholism, although Mazzetti et al. (2014) found that overwork climate and perfectionistic strivings interact in predicting workaholism.

Our study has some limitations. Firstly, our research design did not allow for causal inferences, since perfectionism, workload, and workaholism were measured at the same time. Additionally, since all constructs of interest were measured using a self-report questionnaire, the observed relationships could be influenced by common method bias (CMB; Podsakoff, MacKenzie, & Podsakoff, 2012). Finally, our study was carried out within a single Italian service organization and involved a sample of managers. Although this approach seems methodologically appropriate, given that managers report higher levels of workaholism (Andreassen, Griffiths, et al., 2016; Kravina et al., 2010), this may pose problems for the generalization of the results. Therefore, further research is needed, in order to replicate and extend the results of the present study in samples of workers with different occupational status. Moreover, future studies should be conducted within different organizations and cultural contexts, and could use objective measurements (e.g., biomarkers of stress; Falco, Dal Corso, Girardi, De Carlo, & Comar, 2018; Girardi, Falco, De Carlo, et al., 2015) or observer ratings (Falco et al., 2012) to assess workaholism.

Overall, we believe that the results of the present study should encourage organizations to implement interventions aimed at preventing workaholism in managers. First, individuals with high levels of perfectionism could be identified as at risk of workaholism. Then, specific training programs could help perfectionists to set realistic goals at work, reduce perseverative cognitions (Flett, Nepon, & Hewitt, 2016), and increase their personal resources (e.g., self-esteem), to prevent workaholism and promote work engagement. Moreover, cognitive-behavioural interventions could encourage individuals with high levels of perfectionism to identify and challenge those cognitive factors that contribute to maintain perfectionism, such as irrational beliefs (as well as perfectionistic automatic thoughts; Egan & Shafran, 2018; Flett, Newby, Hewitt, & Persaud, 2011) while cognitive-constructivist interventions could shed light on how, globally and individually they attribute meaning to themselves and to others (Dal Corso, Floretta, Falco, Benevene, & De Carlo, 2013). For example, perfectionists could be encouraged to actively restructure their irrational beliefs related to excessive performance demands and the consequences of failure, which may mediate the association between perfectionism and workaholism (Falco et al., 2017). Additionally, since often managers necessarily face high job demands as part of their work, interventions could help them to develop skills to cope with high workload and time pressure (e.g., time management, goal-setting, and biofeedback; Richardson & Rothstein, 2008), which may enhance control and reduce negative emotions at work. Additional interventions could include wellness programs (e.g., mindfulness interventions) as well as stress reduction programs. Overall, this study suggests that both perfectionism and workload can be risk factors for workaholism, which may especially arise when perfectionists face high levels of workload.

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