

**“THE BEST OR NOTHING”:
THE MEDIATING ROLE OF WORKAHOLISM
IN THE RELATIONSHIP
BETWEEN PERFECTIONISM AND BURNOUT**

ALESSANDRA FALCO
ALESSANDRA PICCIRELLI
DAMIANO GIRARDI
ANNAMARIA DI SIPIO
NICOLA A. DE CARLO
UNIVERSITY OF PADOVA

The study involved 225 workers operating in an Italian public organization. The first aim was to evaluate the psychometric properties of the short version of the Multidimensional Perfectionism Scale in the Italian context. Confirmatory factor analysis supported the 3-factor model of perfectionism and evidenced satisfactory psychometric properties of the scale. The study also aimed to test a theoretical model in which the three dimensions of perfectionism — self-oriented, other-oriented, socially prescribed perfectionism — have both a direct and an indirect effect, through workaholism, on emotional exhaustion and professional inefficacy. Results showed that self-oriented and other-oriented perfectionism were positively associated with workaholism, which, in turn, was positively associated with emotional exhaustion. Furthermore, workaholism mediated the relationship between self-oriented and other-oriented perfectionism and emotional exhaustion. Additionally, self-oriented perfectionism had a negative direct effect on emotional exhaustion, whereas socially prescribed perfectionism showed a positive direct effect on both emotional exhaustion and professional inefficacy. Possible implications are discussed for managers and human resources professionals.

Key words: Perfectionism; Burnout; Workaholism; Employees; Mediating effect.

Correspondence concerning this article should be addressed to Alessandra Falco, Università di Padova, Dipartimento FISPPA — Sezione di Psicologia Applicata, Via Venezia 8, 35131 Padova (PD), Italy. Email: alessandra.falco@unipd.it

Perfectionism is defined as an individual's disposition to consider unacceptable anything that is not perfect (Stoeber, Otto, & Dalbert, 2009). It is characterized by the tendency to set one-self very high, if not unrealistic, standards of performance, and make an excessive effort to reach these standards. Moreover, it determines an over-generalization of failure, a rigid and severe self-evaluation of an all or nothing approach, in which only success or failure are contemplated (Hamachek, 1978; Hewitt & Flett, 1991; Pacht, 1984). Perfectionists, moreover, worry about the evaluations of others and feel a strong urge to attain the standards imposed by others (Frost, Marten, Lahart, & Rosenblate, 1990; Hewitt & Flett, 1991).

Perfectionism has a long history in the field of clinical and personality research. In the first models it was considered a unidimensional construct (Burns, 1983) referring to unrealistic expectations of the individual and the consequences in a maladaptive sense. The unidimensional approach has been outdated over the years in that it is limited to the clinical context and focused

on the negative aspects of perfectionism (Lynd-Stevenson & Hearne, 1999). More recently, studies have highlighted and confirmed the complex and multidimensional nature of the construct and its relation with different outcomes both adaptive and maladaptive (Enns & Cox, 2002). This dichotomy has been revealed in various studies and been defined, on each occasion, as normal or neurotic perfectionism (Hamachek, 1978), positive or negative perfectionism (Terry-Short, Owens, Slade, & Dewey, 1995), adaptive or maladaptive perfectionism (Cox, Enns, & Clara, 2002), healthy or unhealthy perfectionism (Stumpf & Parker, 2000).

In general, the positive and functional aspect of perfectionism refers to the tendency to set oneself challenging objectives, to strive to reach them maintaining a certain flexibility and self-satisfaction. On the contrary, the negative/dysfunctional aspect of perfectionism refers to the tendency to set oneself rigid objectives and high standards, to be extremely self-critical, to be concerned about making mistakes and to be incapable of feeling satisfied (Enns & Cox, 2002).

This latter aspect (i.e., negative/dysfunctional) has been investigated more frequently in literature in relation to psychopathological disorders and the perfectionist's greater liability to distress (Antony, Purdon, Huta, & Swinson, 1998; Hewitt & Flett, 1993; Hewitt, Flett, & Ediger, 1996; Hewitt, Flett, Turnbull-Donovan, & Mikail, 1991).

The scales most often used, although sharing the same name, the Multidimensional Perfectionism Scale, were constructed by two different research teams and are made up of different dimensions (FMPS by Frost et al., 1990; HMPS by Hewitt & Flett, 1991).

The FMPS by Frost and colleagues (1990) is composed of 35 items which reveal perfectionist tendencies through six dimensions. The most important dimension of the model is "concern over mistakes" and is associated most strongly with forms of distress (Enns & Cox, 1999; Taris, van Beek, & Schaufeli, 2010). This includes setting oneself high standards of personal performance together with the fear of being criticized for one's mistakes (Frost et al., 1990). The other dimensions are "personal standards" (setting high standards for one's performance), "doubts about action" (doubting the quality of one's performance), "organization" (placing emphasis on order and organization). The two remaining dimensions, "parental expectations" and "parental criticism," refer to the perceptions of the expectations which family members may have of the person.

However, these two subscales do not reflect actual levels of perfectionism in the individual. On the contrary, they are retrospective measures, and, as pointed out by Rhéaume et al. (2000), "the fact that certain subscales represent ... developmental aspects of perfectionism makes it difficult to interpret results and understand perfectionism itself" (p. 120). Additionally, whereas Frost's MPS scale emphasizes the intra-personal aspects of perfectionism, the HMPS scale by Hewitt and Flett highlights the inter-personal aspects of perfectionism (Parker & Adkins, 1995). Therefore, in addition to determining perfectionism as a self-focalized construct, these two authors conceptualize perfectionism as also having interpersonal components. Since the work context represents a social context characterized by relations and connections with others, it is important to acknowledge the interpersonal component of perfectionism.

The HMPS scale by Hewitt and Flett (1991) comprises three dimensions of perfectionism based on both intra and interpersonal aspects: self-oriented perfectionism (SOP), other-oriented perfectionism (OOP) and socially prescribed perfectionism (SPP). It is made up of 45 items then reduced to 15. Hewitt and Flett's 3-factor model found wide support by Cox and colleagues (2002). It evidenced moreover a better fit for the reduced 15-item version. This version presents a dual advantage. On the one hand it allows the underlying factor structure to be better defined by

focusing on the more salient and marker-type items. On the other hand, participants invest less time and effort in compiling the scale. Thus, for the present study, we decided to use the reduced version of Hewitt and Flett's HMPS scale.

Since, to the authors' knowledge, there is no Italian validation of this scale, the present study proposes as its first objective to evaluate the metric properties of the short version of the HMPS.

According to the theoretical model proposed by Hewitt and Flett (1991), SOP is characterized by the inclination to set oneself extremely high standards and the conviction that it is important to be perfect and to strive to be perfect. It is characterized by having a "perfectionistic motivation" for oneself. Vice versa, OOP concerns beliefs and expectations of high standards in others and is characterized by imposing one's own standards of perfection on others. Finally, SPP refers to beliefs according to which others have high expectations of the person and he/she will be accepted by others only by reaching these standards and by not making mistakes; it is characterized by the perception that perfectionist standards are imposed by others.

Perfectionists, in fact, perceive a strong pressure to excel as they feel that they have to live up to not only their own high standards, but also to those of other people, which they have no control over. Moreover, they may tend to impose their own standards of performance on people around them, thus contributing to the creation of situations of conflict and hostility. This, according to Flett, Hewitt, Blankstein, and Mosher (1995) makes them more exposed to stress and to the possibility of developing disorders and psychophysical symptoms over time (Chang, 2000; Dunkley, Zuroff, & Blankstein, 2003; Molnar, Sadava, Flett, & Colautti, 2012).

For some authors this can be explained with reference to "conditional acceptance," namely the belief that people can be loved and appreciated by others as long as they are perfect in what they do (Campbell & Di Paula, 2002; Flett & Hewitt, 2002; Flett, Besser, Davis, & Hewitt, 2003; Lundh, 2004). Perfectionists, therefore, have difficulty in accepting themselves and accepting others unconditionally and invest a lot of energy in attempts to be approved of and in avoiding the disapproval of others. This relation was confirmed in the study carried out by Flett and colleagues (2003) in which the three dimensions of perfectionism (measured with HMPS; Hewitt & Flett, 1991) are negatively correlated with unconditional acceptance (measured with Unconditional Self-Acceptance Questionnaire; Chamberlain & Haaga, 2001).

PERFECTIONISM IN THE WORKPLACE

The present study aims to focus on perfectionism in the workplace. Although the number of studies in the work environment is limited, an association has been noted between perfectionism and higher levels of stress and negative outcomes for the person and the organization, such as workaholism and burnout (Chang, 2000; Childs & Stoeber, 2010, 2012; Kung & Chan, 2014).

Perfectionism, in that it is associated with maladaptive cognitions (rumination, repetitive negative thinking, worry, ...) and with vulnerability when faced with failure, can be considered a possible antecedent of compulsive and dependent behaviors in result-oriented contexts like the working environment. Aspiring to perfection and to success together with the fear of failing to reach self- and other-imposed standards may lead the person to work more, to continuously check jobs so as to avoid mistakes, to continuously think about working activities and how to improve and do more. Consequently, it is reasonable to consider perfectionism as an important correlate of

workaholism on work, as highlighted in a very recent meta-analysis on workaholism (Clark, Michel, Zhdanova, Pui, & Baltes, 2014).

Workaholism represents a behavior of addiction to work. Basing themselves on the shared areas of the various definitions present in literature, Clark and colleagues (2014) define the characteristics of a workaholic. Workaholics act under a sort of internal compulsive urge to work, turn their thoughts continually to work even when they are not at work, and work excessively beyond what could reasonably be expected of them, without taking into consideration the negative consequences for themselves. In the present study we used the model by Schaufeli, Taris, and Bakker (2008) who identified two central dimensions of workaholism: working excessively (WE) and working compulsively (WC). Workaholism is characterized by the simultaneous presence of high levels in the two dimensions; the outcome is a high involvement in work by workaholic individuals. While WE drives people to carry out a considerable amount of work (overwork), WC leads to an obsessive commitment to work, requiring a strong mental and emotional effort.

Like the tendency to perfectionism, workaholism also can contribute to stress and to forms of psychophysical strain and malaise, including burnout (Burke, 2000; Taris, Schaufeli, & Verhoeven, 2005).

Burnout is traditionally defined as a psychological syndrome which manifests itself in workers with high scores of emotional exhaustion (sensation of draining of emotional resources) and disaffection (negative and detached attitude toward work) and low scores of professional efficacy (sensation of incompetence at work and poor capacity to respond to work demands) (Maslach, Schaufeli, & Leiter, 2001).

The onset of burnout can have a negative impact on workers but also on the organization in general and on the consumers. In fact, it has been associated with symptoms of psychophysical malaise, absenteeism, anxious and depressive disorders, sleep disturbance, turnover, family and marital problems and to low levels of work performance and quality (see Maudgalya, Wallace, Daraiseh, & Salem, 2006; Schaufeli, Leiter, Maslach, & Jackson, 1996; Taris, 2006, for reviews).

Research on this topic has evidenced a relevant number of organizational factors which can contribute to burnout, among which high demands and low work resources, workload, role conflicts, relationship with colleagues and supervisor, and social support (Bakker, Le Blanc, & Schaufeli, 2005; Dal Corso, Floretta, Falco, Benevene, & De Carlo, 2013; De Lange, Taris, Kompier, Houtman, & Bongers, 2003; Jenkins & Elliott, 2004; Poghosyan, Aiken, & Sloane, 2009). Less attention has been paid to the factors linked to the individual and his/her personality characteristics.

For this reason we propose to study more deeply the relations between burnout and perfectionism and workaholism, two variables linked to the individual whose contribution to malaise in the workplace has up to now still been insufficiently investigated in the literature (Childs & Stoeber, 2010, 2012; Stoeber, Davis, & Townley, 2013; Taris et al., 2010). Therefore, the second aim of this study consists in testing a theoretical model in which the three dimensions of perfectionism (SOP, OOP, SPP) have both a direct and indirect effect, through workaholism, on the dimensions of exhaustion and inefficacy of burnout.

PERFECTIONISM AND WORKAHOLISM

The tendency of the perfectionist to attain his/her own personal standards of performance, as well as attempting to satisfy the perceived high expectations of others, can manifest itself

in a more incisive and excessive investment in work. This also occurs in order to be accepted and approved of by the work group, by colleagues and by superiors. A person with a high level of perfectionism will tend to show concern over details at work, to examine and check work several times in order to limit errors, to have difficulty in delegating tasks to colleagues fearing that they will not be carried out adequately, or to expect excellent performances from colleagues. Thus, setting high standards for ourselves, setting them for those around us, and believing that others judge us on the basis of these standards, can be associated with a strong urge to dedicate time and effort to work excessively and compulsively (workaholism). Bovornusvakool, Vodanovich, Ariyabuddhiphongs, and Ngamake (2012) identify perfectionism as a key factor in the development of workaholic type behavioral patterns. According to these authors workaholism can, in some cases, represent a socially acceptable means to express one's own perfectionist inclinations. In fact, especially in the current world of work, workers, who aspire to perfection and who invest all their energy and attention in work, are often rewarded with prizes and praise.

Perfectionism therefore appears to be an important correlate of workaholism on work (Clark et al., 2014). The few studies present in literature evidence the presence of a positive relation between perfectionism and workaholism (Burke, Davis, & Flett, 2008; Clark, Lelchhook, & Taylor, 2010; Stoeber et al., 2013; Taris et al., 2010). In particular positive associations are highlighted between workaholism and the SPP dimension (Burke et al., 2008; Taris et al., 2010) and the SOP dimension (Stoeber et al., 2013). In the study by Burke et al., all three dimensions of perfectionism show significant and positive associations with work addiction (high work involvement, high drive to work, low work enjoyment), according to the typology of Spence and Robbins (1992).

It is important to underline that in these studies both workaholism and perfectionism are revealed using very different measurement instruments. In particular, few studies use the DU-WAS scale (Schaufeli et al., 2008) to reveal workaholism and the reduced HMPS scale (Hewitt & Flett, 1991) to measure perfectionism. This study, however, makes use of both these scales.

We hypothesize therefore a positive association between the three forms of perfectionism and workaholism.

H1: perfectionism (SOP, OOP, SPP) will be positively related to workaholism.

WORKAHOLISM AND BURNOUT

One of the fundamental characteristics of the workaholic is that he/she dedicates a considerable amount of personal time to work. This prolonged exposition to work demands leads to a reduced possibility of a complete recovery after work, and in the long run to psychophysical symptoms as well as burnout.

This is explained on the basis of the effort recovery model (Meijman & Mulder, 1998). According to this model working performance requires efforts, which must be followed by an adequate recovery during after-work hours, in terms of both relaxation and psychological detachment. If this does not occur, the worker finds him/herself in a suboptimal situation (i.e., sustained activation) and in order to carry out his/her work performance adequately, he/she will have to resort to compensatory efforts. This manifests itself in the necessity for greater recovery time. This vicious circle, once triggered, if prolonged in time can lead to the exhaustion of physical,

psychological, and emotional resources and, thus, to burnout (Bakker, Demerouti, Oerlemans, & Sonnentag, 2013; Schaufeli, Taris, & Van Rhenen, 2008; Sonnentag, 2001; Taris et al., 2006).

Another characteristic of the workaholic is the continuous and obsessive thinking about work even at times which should be devoted to free time and the family. This prevents both psychological detachment from work and relaxation, both of which are at the basis of the recovery process.

Psychological detachment from work refers to an individual's ability to "switch off" from work. This implies not only being physically away from the workplace but also not dedicating time to activities connected to work when at home (e.g., checking e-mails) and not thinking about work-related matters. Relaxation, that is dedicating oneself to activities which require low physical and intellectual effort (walking, listening to music) favors positive affect and, consequently, the recovery process.

Workers with workaholic characteristics therefore fail in the recovery process, thus determining an increase in fatigue, health complaints, emotional exhaustion, and sleep problems (Sonnentag & Fritz, 2007; Sonnentag, Binnewies, & Mojza, 2010).

The positive relation between workaholism and burnout, in particular for the dimension of emotional exhaustion, has been widely confirmed in various studies (Andreassen, Ursin, & Eriksen, 2007; Burke & Matthiesen, 2004; Kravina, Falco, Girardi, & De Carlo, 2010; Taris et al., 2005, 2010).

Therefore, we expect a positive relation between workaholism and emotional exhaustion and professional inefficacy, two of the three dimensions of burnout.

H2: workaholism will be positively related to emotional exhaustion and professional inefficacy.

PERFECTIONISM AND BURNOUT

As previously stated, individuals with a high tendency to perfectionism are more likely to experience different types of stress and symptoms of malaise such as burnout.

The fear of not being appreciated and accepted as a result of possible mistakes or for failing to reach other people's standards (SPP) may stimulate a behavioral pattern which drains away the mental and emotional resources and energy of the individual (emotional exhaustion). This may further increase the sensation of inadequate professional competence, of not being up to the required work tasks, of not succeeding in obtaining the hoped for successes (professional inefficacy; Childs & Stoeber, 2010; Taris et al., 2010).

Setting oneself very high standards of performance, striving to achieve success and results, being highly motivated to perfection (SOP), can, on the one hand, support the confidence of the worker in his/her own personal abilities and energy devoted to work (Childs & Stoeber, 2010), on the other hand, if carried to the extreme it may contribute to the perception of emotional exhaustion and professional inefficacy.

Imposing on collaborators one's own, at times unrealistic, standards of perfection (OOP), may shift the attention of critical self-evaluation toward others, reducing the individual sensations of exhaustion (Childs & Stoeber, 2010). This could reduce the perceptions of professional inefficacy.

Various studies have investigated the relation between SOP and SPP and burnout in samples of students and athletes/sportspeople. Findings have shown a negative association between SOP and burnout and a positive association between SPP and burnout. The studies did not investigate OOP (Appleton, Hall, & Hill, 2009; Hill, Hall, & Appleton, 2010; Zhang, Gan, & Cham, 2007). Vice versa, research on how the three forms of perfectionism are associated with burnout in adult workers is still limited.

In the work context, studies have evidenced a constant positive association between SPP and burnout in its three dimensions of exhaustion, cynicism and inefficacy (Childs & Stoeber, 2010, 2012; Mitchelson & Burns, 1998; Taris et al., 2010).

Less clear is the relation between SOP and burnout. If in one study it results negatively associated with burnout (cynicism and inefficacy; Childs & Stoeber, 2010), in the studies by Mitchelson and Burns (1998) and by Taris and colleagues (2010) it does not present any significant association.

In relation to OOP, a single negative association is found with emotional exhaustion (Childs & Stober, 2010).

This study focuses on the relations of perfectionism with two of the three dimensions of burnout, emotional exhaustion and professional inefficacy. Emotional exhaustion because it represents the key indicator of the burnout syndrome and has shown on each occasion a significant association with all three forms of perfectionism in different studies (Childs & Stoeber, 2010, 2012; Mitchelson & Burns, 1998; Taris et al., 2010). Professional inefficacy also appears to be associated significantly with both SPP (Childs & Stoeber, 2010, 2012; Taris et al., 2010), and SOP, which, as we have seen, does not always present associations with burnout (Childs & Stoeber, 2010). We think moreover, that the perception of feeling more or less incompetent in performing one's work and not managing to achieve important results, may be more closely linked to the individual's level of perfectionism.

The present study proposes to verify the relations between the three forms of perfectionism and burnout.

H3a: SOP has a negative direct effect on emotional exhaustion and professional inefficacy.

H3b: OOP has a negative direct effect on emotional exhaustion and professional inefficacy.

H3c: SPP has a positive direct effect on emotional exhaustion and professional inefficacy.

PERFECTIONISM, WORKAHOLISM, AND BURNOUT

Moreover, since perfectionism is an important correlate of workaholism (Clark et al., 2014) also strongly associated with the experience of burnout, it is reasonable to assume a mediating effect of workaholism between perfectionism and exhaustion and inefficacy.

Therefore a theoretical model is hypothesized in which perfectionism (SOP, OOP, SPP) has both a direct and indirect effect, through workaholism, on emotional exhaustion and professional inefficacy. In particular it is hypothesized that perfectionism also has an indirect effect on emotional exhaustion and inefficacy, since in literature different mechanisms are described through which personality can influence a person's health (Friedman, 2000).

In general, the theoretical models which link personality and health (Friedman, 2000) suggested that stress and social support represent a pathway capable of linking perfectionism to a

person's physical health. As highlighted in some studies perfectionists are more predisposed to stress and perceive a lower level of social support and this in turn may contribute to poor health and the development over time of psychopathologies (Chang, 2000; Dunkley, Blankstein, Halsall, Williams, & Winkworth, 2000; Molnar et al., 2012). Coping strategies appear to be significant mediators in the relation between perfectionism and burnout, indicating that perfectionism exerts its influence on the wellbeing of the person (burnout) at least partially through coping strategies (Chang, 2012; Li, Hou, Chi, Liu, & Hager, 2014). Again, in the study by Taris et al. (2010) SPP (concern over mistakes) positively influences emotional exhaustion not only directly but also indirectly, increasing the workaholic behavior of the worker.

Moreover we expect the three forms of perfectionism to positively influence burnout through the mediation of workaholism.

H4: perfectionism (SOP, OOP, SPP) has a positive indirect effect on emotional exhaustion and professional inefficacy, through workaholism.

METHOD

Participants and Procedure

The study involved 225 workers operating in an Italian public organization. The sample consisted of 141 women and 78 male (six missing data). The majority of the respondents were aged between 31 and 50 years (51.8%), 45.9% over 50 years, and only 2.3% less than 30 years (five missing data). Regarding the position held, 9.7% were senior managers, 11.5% office managers, 17.5% office workers/technical officers, 34.1% office workers/administrative officers. Finally, 27.2% were blue-collar workers (eight missing data). Participants were asked to fill in a questionnaire after having been informed by the management about their involvement in a research on work-related stress. The questionnaire was administered to groups of workers under the supervision of a work psychologist and anonymity was guaranteed.

Measures

Perfectionism. For perfectionism we used the reduced form of the Multidimensional Perfectionism Scale (HMPS; Hewitt & Flett, 1991; short version: Cox et al., 2002). The scale is composed of 15 items and measures SOP (five items; e.g., "I am perfectionistic in setting my goals"), OOP (five items; e.g., "I have high expectations concerning the people who are important to me"), and SPP (five items; e.g., "People expect nothing less than perfection from me"). Participants are asked to indicate their own degree of agreement/disagreement on a 7-point scale, from 1 (*highly disagree*) to 7 (*highly agree*).

Workaholism. To reveal workaholism we used the Dutch Workaholism Scale (DUWAS; Schaufeli et al., 2008) in the Italian version (Falco et al., 2012; Kravina et al., 2010). In this scale six items measure the dimension of working excessively (e.g., "I seem to be in a hurry and racing against the clock"), four items the dimension of working compulsively (e.g., "I feel obliged to work hard, even when it is not enjoyable"). Participants were asked to indicate their own degree

of agreement/disagreement on a 6-point Likert scale, ranging from 1 (*highly disagree*) to 6 (*highly agree*). Cronbach's alphas were .76 for working excessively, .74 for working compulsively, and .82 for the overall scale of workaholism.

Burnout. To measure burnout, we used the Maslach Burnout Inventory General Survey (MBI-GS; Schaufeli et al., 1996). Emotional exhaustion is measured with five items (e.g., "I feel exhausted at the end of a working day"). Professional efficacy is measured by six items (e.g., "In my work I am sure that I am able to make things work"); these items are reversed to obtain a measure of low professional efficacy, therefore professional inefficacy. Participants were asked to indicate with what frequency they had experienced these feelings on a 6-point scale, from 1 (*very rarely*) to 6 (*very frequently*). Cronbach's alphas were .83 for emotional exhaustion and .71 for professional inefficacy.

Statistical Analyses

The psychometric properties of the HMPS scale were evaluated in terms of factor structure, construct validity, and reliability. Firstly, dimensionality and construct validity (i.e., convergent and discriminant validity) of the scale were examined through a set of confirmatory factor analyses (CFA) using LISREL 8.80 (Jöreskog & Sörbom, 2006). Additionally, the reliability of each sub-scale of the HMPS was assessed using Cronbach's alpha.

To test the hypothesized relationships between perfectionism, workaholism, and job burnout, four structural equation models with observed variables (path analysis) were estimated using LISREL 8.80 (Jöreskog & Sörbom, 2006). Firstly, two different models were evaluated. In Model 1, the three dimensions of perfectionism (i.e., SOP, OOP and SPP) were the independent variables, workaholism was the mediator, and emotional exhaustion was the dependent variable. The same model was also estimated considering professional inefficacy as the dependent variable (Model 2). In order to test the hypothesized relationships, all structural paths (i.e., direct and indirect effects of perfectionism on both workaholism and job burnout) were freely estimated in both Model 1 and Model 2 (just-identified path models; Kline, 2011). Furthermore, in order to obtain a more parsimonious solution for the data, two final models were estimated (Model 1A for emotional exhaustion and Model 2A for professional inefficacy), in which the nonsignificant paths were fixed to zero (model trimming; Kline, 2011).

In order to evaluate the goodness-of-fit of both CFA and path analysis models, the χ^2 test was used. A model shows a good fit to data if χ^2 is nonsignificant. However, since the χ^2 is affected by sample size, three additional fit indices were used: the root mean square error of approximation (RMSEA), the comparative fit index (CFI), and the standardized root mean squared residual (SRMR). For RMSEA and SRMR, values close to or smaller than .08 indicate a good fit. For CFI, values close to or greater than .95 indicate a good fit (Hu & Bentler, 1999).

In order to test the significance of the indirect effect of perfectionism on the two dimension of job burnout (i.e., mediation), we computed 95% asymmetric confidence intervals for the indirect effect based on the distribution of product method (MacKinnon, 2008; MacKinnon, Fritz, Williams, & Lockwood, 2007). The RMediation package was used (Tofighi & MacKinnon, 2011). If the confidence intervals do not contain zero, then a statistically significant mediation is supported (MacKinnon, Cheong, & Pirlott, 2012). Before analyzing data, missing values were

imputed using the Expected Maximization method for multiple imputation powered by LISREL 8.80 (Jöreskog & Sörbom, 2006). The final sample comprised, therefore, 225 workers. The null hypothesis was rejected when $p < .05$.

RESULTS

The first aim of the present study was to evaluate the psychometric properties of the Italian version of the HMPS. Therefore, a first CFA was carried out, in order to test the original 3-factor model proposed by authors (HMPS; Hewitt & Flett, 1991; short version: Cox et al., 2002). The hypothesized model comprised 15 observed variables, namely the scale items, and three latent variables (i.e., the three dimensions of perfectionism). Each item was specified to load on its corresponding factor, and all items' cross-loadings were fixed at zero. The fit indices showed a poor fit of the theoretical model to data: $\chi^2(87, N = 225) = 262.954, p < .001$; RMSEA = .100; CFI = .908; SRMR = .089. Three items showed low factor loading (i.e., completely standardized $\lambda_x < .40$), and were therefore removed from subsequent analysis (Brown, 2006). Those items were SOP102, OOP106, and SPP112. Additionally, inspection of the modification indices revealed substantial cross loadings for item SOP100 (on both OOP and SPP latent factor) and OOP109 (on both SOP and SPP). Thereafter, these two items were removed from subsequent analysis.

Then a new CFA was conducted. The fit indices showed a good fit of the theoretical model to the data: $\chi^2(32, N = 225) = 64.216, p < .001$; RMSEA = .069; CFI = .975; SRMR = .059. The completely standardized factor loadings were all higher than .55 (Table 1).

TABLE 1
Confirmatory factor analysis of the HMPS scale

Item	Factor		
	Self-oriented perfectionism — SOP	Other-oriented perfectionism — OOP	Socially prescribed perfectionism — SPP
SOP101	.617		
SOP103	.618		
SOP104	.862		
OOP105		.602	
OOP107		.668	
OOP108		.580	
SPP110			.553
SPP111			.779
SPP113			.773
SPP114			.666

This provides evidence that the indicators are strongly related to their corresponding latent factor (convergent validity). Correlations between latent factors ranged from .59 (between OOP and SPP) to .79 (between SOP and OOP). Therefore, in order to provide evidence of discriminant

validity, an alternative CFA model was estimated. In this model, the correlations between the three latent factors were fixed at 1.0 (1-factor model). Since this alternative model is hierarchically nested under the 3-factor model, the relative fit of the alternative model was compared to that of the 3-factor model using the chi-square difference test (χ^2_D) for nested models (Wheaton, 1987). The results showed that the 3-factor model of the HMPS had a significantly better fit than the alternative 1-factor model, $\chi^2_D(3, N = 225) = 96.424, p < .001$. Therefore, discriminant validity of the HMPS was supported in the present study. Finally, Cronbach's alphas were .75 for the SOP subscale, .65 for the OOP subscale, and .78 for the SPP subscale.

The second aim of the present study was to test a theoretical model in which the three dimensions of perfectionism (SOP, OOP, SPP) have both a direct and indirect effect, through workaholism, on emotional exhaustion and professional inefficacy, two dimensions of burnout. Means, standard deviations, and reliability of the different scales adopted in the present study are reported in Table 2.

TABLE 2
Means, standard deviations, and reliability of all variables

	<i>M</i>	<i>SD</i>	Alpha
Emotional exhaustion	2.82	1.12	.83
Professional inefficacy	2.34	0.71	.71
Work excessively	3.33	1.05	.76
Work compulsively	3.86	1.07	.74
Self-oriented perfectionism — SOP	4.82	1.28	.75
Other-oriented perfectionism — OOP	4.98	1.12	.65
Socially prescribed perfectionism — SPP	3.71	1.26	.78

In order to test the hypothesized relationships between perfectionism, workaholism, and emotional exhaustion, a structural equation model with observed variables (path analysis) was initially estimated (Model 1). In Model 1, SOP ($\gamma = .25, p < .01$) and OOP ($\gamma = .19, p < .01$) were positively related to workaholism, while SPP was not. Additionally, workaholism was positively related to emotional exhaustion ($\beta = .37, p < .001$). Moreover, SOP was negatively associated with emotional exhaustion ($\gamma = -.29, p < .001$), whereas OOP was not. Finally, SPP was positively associated with emotional exhaustion ($\gamma = .25, p < .001$).

In order to test the significance of the indirect effect (i.e., mediation) of perfectionism on emotional exhaustion, 95% asymmetric confidence intervals for the indirect effect were computed. Both SOP (unstandardized indirect effect = .08, 95% CI = .03, .15) and OOP (unstandardized indirect effect = .07, 95% CI = .02, .14) showed a positive and significant indirect effect on emotional exhaustion, through workaholism. However, the indirect effect of SPP on emotional exhaustion was nonsignificant. Workaholism partially mediated the relationship between SOP and emotional exhaustion (competitive or inconsistent mediation; MacKinnon et al., 2012). Moreover, workaholism completely mediates the relationship between OOP and emotional exhaustion.

Next, in order to obtain a more parsimonious solution for the data, an additional model (Model 1A) was evaluated, in which the nonsignificant paths were fixed to zero. The fit indices

showed a good fit of Model 1A to data: $\chi^2(2, N = 225) = 2.689, p = .261$; RMSEA = .039; CFI = .998; SRMR = .024. Model 1A is represented in Figure 1.

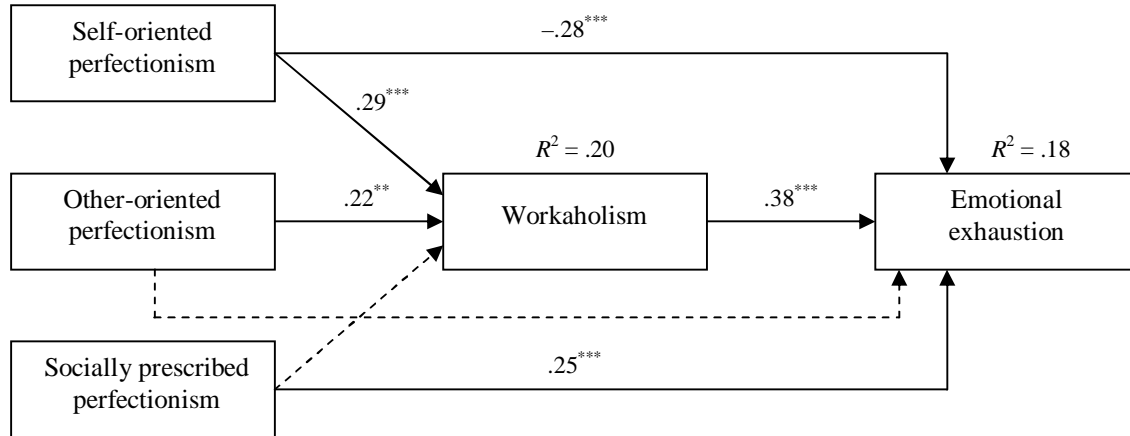
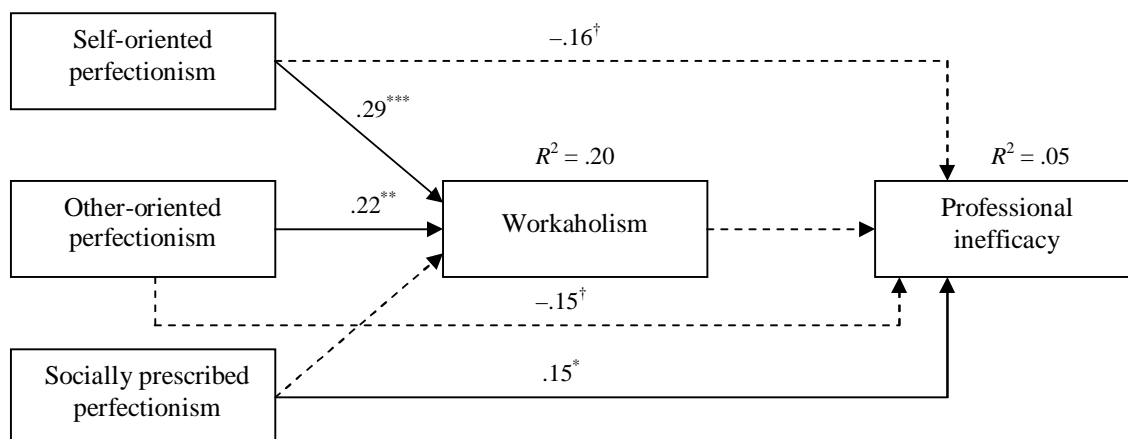


FIGURE 1
Final regression model (Model 1A) for emotional exhaustion.

In order to test the hypothesized relationships between perfectionism, workaholism, and professional inefficacy, Model 2 was estimated. In Model 2, workaholism was not related to professional inefficacy. Consequently, the hypothesized mediating role of workaholism in the relationship between perfectionism and professional inefficacy was not supported in the present study. However, SOP ($\gamma = .25, p < .01$) and OOP ($\gamma = .19, p < .01$) were positively related to workaholism, whereas SPP was not. These results are in line with those obtained in Model 1. Finally, SPP had a direct positive effect on professional inefficacy ($\gamma = .16, p = .04$), while the direct effects of both SOP ($\gamma = -.14, p = .09$) and OOP ($\gamma = -.14, p = .08$) were negative but marginally significant.

Finally, in order to obtain a more parsimonious solution for the data, an additional model (Model 2A) was evaluated, in which the nonsignificant paths were fixed to zero. Since the direct effects of both SOP and OOP on professional inefficacy were quite strong and marginally significant, we decided not to drop these paths. The fit indices showed a good fit of Model 2A to data: $\chi^2(2, N = 225) = 2.986, p = .225$; RMSEA = .047; CFI = .996; SRMR = .022. However, it must be noted that the predictors in Model 2A accounted for only a small proportions of variance in professional inefficacy. Model 2A is represented in Figure 2.

The present study suggests that perfectionism may have negative consequences for the individuals, in terms of both workaholism and job burnout. Indeed, both SOP and OOP were positively associated with workaholism, although SPP was not. Overall, Hypothesis 1 was partially confirmed. Interestingly, workaholism was positively associated with emotional exhaustion, whereas the association between workaholism and professional inefficacy was nonsignificant. Our Hypothesis 2 was therefore partially confirmed.



Note. Dashed lines represent nonsignificant paths.
† $p = .06$. * $p < .05$. ** $p < .01$. *** $p < .001$.

FIGURE 2
Final regression model (Model 2A) for professional inefficacy.

The present study provides initial support for an indirect effect of perfectionism on job burnout through workaholism (i.e., workaholism mediates the relationship between perfectionism and job burnout). Indeed, both SOP and OOP had a significant indirect effect on emotional exhaustion, whereas SPP did not. Additionally, workaholism did not mediate the relationship between perfectionism and professional inefficacy. Overall, Hypothesis 4 was partially confirmed. Moreover, SOP had a negative direct effect on emotional exhaustion controlling for workaholism, whereas the direct effect of SOP on professional inefficacy was negative but marginally significant. Hypothesis 3a was partially confirmed. Therefore, workaholism partially mediates the relationship between SOP and emotional exhaustion. However, when we consider this mediational pathway, two distinct mechanisms emerge: a positive indirect effect of SOP on emotional exhaustion through workaholism, and a negative direct effect of SOP on emotional exhaustion. In the present study, this negative direct effect was stronger than the positive indirect effect. Therefore, in the present study, SOP decreases emotional exhaustion (i.e., the total effect of SOP on emotional exhaustion is negative).

OOP did not show any direct effect on emotional exhaustion, whereas the association between OOP and inefficacy was negative but marginally significant. Overall, these results provide little support for Hypothesis 3b. Therefore, in the present study, workaholism completely mediates the association between OOP and emotional exhaustion. Additionally, OOP decreases professional inefficacy. Finally, SPP had a positive direct effect on both emotional exhaustion and professional inefficacy. Hypothesis 3c was therefore supported.

DISCUSSION

The first aim of the present study consists in evaluating the metrical properties of the reduced version of the Multidimensional Perfectionism Scale (HMPS; Hewitt & Flett, 1991; short version: Cox et al., 2002).

After removing five items, which showed unsatisfactory metric properties (i.e., low factor loadings or cross-loading), the 3-factor structure of the HMPS scale (i.e., SOP, OOP, SPP) was supported. These results are in line with both the original scale by Hewitt and Flett (1991) and the short version by Cox et al. (2002). Overall, the scale showed good metric properties. However, additional validation is needed in different samples and work settings (e.g., private sector).

The second objective of the study consists in testing a theoretical model in which perfectionism (SOP, OOP, SPP) has both a direct and indirect effect, through workaholism, on emotional exhaustion (Model 1) and on professional inefficacy (Model 2), two of the three dimensions of burnout.

Findings on the whole evidence various mechanisms through which the three forms of perfectionism influence emotional exhaustion, directly or indirectly through workaholism.

As expected, SOP and OOP show a positive association with workaholism. On the other hand, the relation of SPP to workaholism is not confirmed. Workers who impose upon themselves or their collaborators high standards of perfectionism show that they dedicate more time and hours to their work and thinking about their work in an almost obsessive way even in moments of detachment and rest (workaholism).

On the contrary, the perception of high expectations by others and the fear of others' evaluations (SPP) does not influence the workaholism of the workers investigated. This result confirms a recent study by Stoeber and colleagues (2013) and hence the idea that workaholism is conditioned mainly by aspects linked to the individual and not by social aspects. Therefore, future research should investigate more deeply and confirm the relation between forms of perfectionism linked to the individual (self- and other-imposed criteria) and tendency to workaholism. Therefore, the role of personality seems to be fundamental in the generation of workaholism, confirming what emerged in other studies (Clark et al., 2014; De Carlo et al., 2014; Falvo, Visintin, Capozza, Falco, & De Carlo, 2013).

In turn, workaholism is positively associated to emotional exhaustion. This is in line with what emerged from some previous studies, according to which workaholism reduces the possibility of recovery. However, a nonsignificant association emerged between workaholism and professional inefficacy.

This finding confirms the positive relation between workaholism and burnout, in particular for the dimension of emotional exhaustion, emerging from earlier studies (Burke & Matthiesen, 2004; Clark et al., 2014; Taris et al., 2005, 2010).

Moreover, the present study provides initial support for an indirect effect (i.e., mediation) of perfectionism on job burnout through workaholism. Both SOP and OOP show an indirect positive relation, through workaholism, with emotional exhaustion. But while for SOP the mediation is partial, for OOP the mediation is total. Indeed, as expected, SOP was negatively associated with emotional exhaustion, whereas OOP does not have a direct effect on emotional exhaustion. These findings underline the central role of workaholism in the relation between SOP, OOP and emotional exhaustion, the key indicator of burnout. Workaholism portrays the perfectionist worker as a manifestation, socially acceptable, if not motivated by organizations, of his/her inclinations to be perfect and to demand perfection from the people around. This is above all valid for OOP. Expecting high standard performances from collaborators and colleagues pushes the individual to make more effort to set an example, to not delegate tasks and responsibilities for fear that the criteria of perfection will not be respected. This increases workaholism and consequently emotional exhaustion. Since

OOP has as its target others (e.g., colleagues, collaborators, subordinates), a possible future development could concern the level of burnout in collaborators namely those who are subjected to the pressure of conforming to standards of perfectionism set by colleagues and/or superiors.

On the contrary, for SPP no mediating effect of workaholism on emotional exhaustion is found. This result differs from that of the study carried out by Taris and colleagues (2010) in which SPP was associated with emotional exhaustion both directly and indirectly through workaholism. This could be due to the different scales used to reveal perfectionism. Taris and colleagues used the dimension of concern over mistakes by Frost and colleagues (1990) overlapping it with SPP by Hewitt and Flett (1991). In our study we used the reduced Italian version of the HMPS by Hewitt and Flett (Cox et al., 2002). Workaholism did not mediate the relationship between the three forms of perfectionism and professional inefficacy, whereas the direct effect of both SOP and OOP on professional inefficacy were negative but marginally significant.

As highlighted by the literature (Childs & Stoeber, 2010, 2012; Mitchelson & Burns, 1998; Taris et al., 2010), the strong positive association is confirmed between SPP and negative outcomes, such as emotional exhaustion and professional inefficacy. In the present study, SPP showed only a positive direct effect on both emotional exhaustion and professional inefficacy. Hence, the fear of not living up to the standards of perfection expected by others increases the possibility of developing emotional exhaustion and a lower perception of professional efficacy.

Moreover the findings permit a clarification of the relation between SOP, OOP and emotional exhaustion. In previous studies SOP did not show any association with burnout (Mitchelson & Burns, 1998; Taris et al., 2010) or a negative association with cynicism and inefficacy (Childs & Stoeber, 2010). In our study a direct as well as indirect effect, through workaholism, on the dimension of emotional exhaustion is confirmed. OOP shows its influence on emotional exhaustion only indirectly, increasing the workaholic tendency of the worker.

Finally, the marginally significant relations emerging between SOP, OOP and perceptions of professional inefficacy are underlined. Both forms of perfectionism show that they contribute to a reduced perception of inefficacy. In this sense, having high standards for ourselves and for those around us protects us from the sensation of not feeling competent and efficient in our work. Future developments could further investigate and verify the goodness of these relations.

The present study is not without limitations. Above all, the results cannot be generalized to all working contexts. Our findings refer to a sample of workers from public administration who cover roles and positions of varying responsibility and commitment. It is therefore possible that perfectionism has a more or less intense role according to the working context (public vs. private sector) and according to the position and responsibilities held. Future research could verify the presence of these relations in different samples of workers.

Second, the cross-sectional design limits the possibilities of interpreting the results. Only through longitudinal studies or experimental designs would it be possible to verify the directionality as well as the causality of the relations between perfectionism, workaholism and burnout.

Finally, given that the measures used in the present study are of a self-report type, the relations observed between the variables could be favored by the common variance method or by the role exerted by negative affectivity (Girardi, Falco, Dal Corso, Kravina, & De Carlo, 2011; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In future it would be useful to use objective type indicators of malaise (such as sickness absences) or hetero-evaluations of workers' health certified by the occupational physician (Falco et al., 2013; O'Connor & O'Connor, 2003).

Despite these limitations, the findings of the present study broaden existing literature concerning the relations between perfectionism, workaholism and burnout in the working context. The study identified a series of mechanisms through which perfectionism in its three forms can influence the worker's emotional exhaustion and professional inefficacy.

As we have seen, SPP increases the risk of burnout in workers, whereas the other two forms of perfectionism (SOP and OOP) can have positive effects in terms of a direct reduction of burnout symptoms, but if they are not limited they can favor an excessive involvement in work activities (workaholism), with consequent negative effects. Knowledge of these mechanisms will help managers and people in charge of human resources to act using interventions capable of reducing the potential risks deriving from a dysfunctional level of perfectionism.

These interventions could be articulated according to three levels: primary (i.e., reducing the risk of perfectionism among workers), secondary (i.e., identification and training of the workers at risk of perfectionism), and tertiary (i.e., minimizing the negative consequences of perfectionism on health).

At a first level possible interventions are proposed to modify the working environment. In this sense the effort consists in promoting organizational cultures which discourage the attainment of perfection at all costs and interpret making a mistake as a learning possibility and not a failure. Managers and superiors should stimulate their collaborators to reach challenging objectives without penalizing or emphasizing failure in such a way as to increase the adaptive component of perfectionism.

Second type interventions suggest identifying the potential workers at risk of perfectionism and implementing adequate training programs. These training programs will be able to increase some individual psychological resources which can help the worker to prevent perfectionism in its disadaptive form. In particular, promoting problem-focused and adaptive type coping styles may contribute to protecting the person from the negative effects of perfectionism (Di Sipio, Falco, Kravina, & De Carlo, 2012; Li et al., 2014).

Also stimulating positive reframing as a coping strategy can be useful to a person with a high level of perfectionism to face potential personal defeats and failures positively by conserving a good level of satisfaction at the end of the day (Stoeber & Janssen, 2011).

At the third level, interventions will be specifically aimed at workers with a high level of perfectionism. The interventions which can be implemented are part of, for instance, the psychodynamic ambit and the cognitive-behavioral approach (Lombardo & Violani, 2011). This psychodynamic approach has, as its aim, the modification of the personality structure which is at the basis of the disadaptive perfectionism of the person. In the cognitive-behavioral approach, interventions aim to modify the maladaptive cognitive processes of the perfectionist, such as the ruminative response style, the tendency to activate automatic, repetitive, negative thoughts, dichotomous thought and irrational beliefs. The aim of these interventions is not the elimination of personal standards of success but rather the modification of these dysfunctional cognitive schemes with the consequent possibility to reframe objectives and evaluations of one's own performance (Macedo, Marques, & Pereira, 2014).

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