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Workaholism, Presenteeism, Work-Family Conflicts, and Personal and Work Outcomes: Testing a Moderated Mediation Model

Nicolas Gillet

QualiPsy EE 1901, Université de Tours, Tours, France
Institut Universitaire de France (IUF)

Stéphanie Austin

Département de gestion des ressources humaines, Université du Québec à Trois-Rivières,
Trois-Rivières, Québec, Canada

Claude Fernet

Département de gestion des ressources humaines, Université du Québec à Trois-Rivières,
Trois-Rivières, Québec, Canada

Emilie Sandrin

QualiPsy EE 1901, Université de Tours, Tours, France

Fanny Lorho

QualiPsy EE 1901, Université de Tours, Tours, France

Stéphanie Brault

Département de psychologie, Université de Tours, France

Margaux Becker

Département de psychologie, Université de Tours, France

Julia Aubouin Bonnaventure

QualiPsy EE 1901, Université de Tours, Tours, France

Corresponding author:

Nicolas Gillet,
Université de Tours,
Faculté Arts et Sciences Humaines,
Département de psychologie,
3 rue des Tanneurs, 37041 Tours Cedex 1, France
E-mail: nicolas.gillet@univ-tours.fr

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Abstract

Aims and objectives: While research suggests that nurses who experience work-family conflicts (WFC) are less satisfied and perform less well, these negative outcomes may be more important for some nurses. This study proposes a mediated moderation model wherein the interaction between two individual characteristics, workaholism and presenteeism, relates to family life satisfaction and work performance with WFC mediating these relationships.

Background: Because a limited number of nursing studies have examined the potential outcomes of workaholism and presenteeism, we extend past research to address the question of how workaholism and presenteeism affect nurses' functioning.

Design: We used a cross-sectional questionnaire survey design to test our hypotheses. STROBE guidelines for cross-sectional research were followed in designing and reporting this study.

Methods: A total of 419 nurses completed measures of workaholism, presenteeism, WFC, family life satisfaction, and work performance.

Results: Results revealed that the relationships between workaholism and outcomes (family life satisfaction and work performance) through WFC were stronger among nurses characterized by high levels of presenteeism.

Conclusions: These results revealed that high presenteeism may exacerbate the negative relationships of workaholism to family life satisfaction and work performance through WFC.

Relevance to clinical practice: Healthcare organizations and managers should consider addressing work environment factors in their efforts to reduce the negative outcomes (e.g., low family satisfaction and work performance) of nurses' workaholism, presenteeism, and WFC.

Keywords: Workaholism; presenteeism; mediation; moderation; work-family conflicts; nurses' functioning

What does this paper contribute to the wider global clinical community?

- Workaholism is associated with high levels of work-family conflicts.
- Presenteeism is associated with negative outcomes.
- Presenteeism amplified the link between workaholism and work-family conflicts.

Introduction

Work-family conflicts (WFC) reflect the extent one's job interferes with his or her home life (Allen et al., 2020). In the nursing profession, these pose serious problems (Cheng et al., 2019; Zhang et al., 2017) as prior studies have shown that nurses who experience WFC are less satisfied and perform their job at lower levels (e.g., Chen et al., 2017; Cortese et al., 2010; Ravangard et al., 2015). Indeed, the incompatibility of time and energy needed to meet job demands is perceived as stressful and challenging, thus leading to potential and actual psychological resource loss, and negative outcomes (Hobfoll, 2002; Liao et al., 2019). Past meta-analytic findings also suggested that various individual characteristics such as workaholism (i.e., working compulsively and excessively; Gillet et al., 2017) and presenteeism (i.e., attending work while ill; Ferreira et al., 2019) were related to WFC.

In the present research, we examined the relationships between nurses' workaholism, presenteeism, WFC, family life satisfaction, and work performance. We propose that the interaction between workaholism and presenteeism relates to WFC which in turn hinders family life satisfaction and work performance. In other words, we sought to test a moderated mediation model in which we examined the indirect relationships between workaholism and outcomes via WFC at different levels of presenteeism. A more comprehensive understanding of this issue would shed light on the psychological state of nurses, which is important for them (e.g., well-being and quality of life) and their healthcare organization (e.g., quality of care provided) (Gillet et al., 2018a). Greater insights into the different pathways through which workaholism and presenteeism relate to nurses' outcomes would then help healthcare organizations better achieve their missions while supporting the development and psychological well-being of their staff. However, it is noteworthy that little theorizing has focused on the interaction between workaholism and presenteeism, and how workaholism relates directly to WFC, and indirectly to family life satisfaction and work performance (through WFC), at different levels of presenteeism. In the present study, we address these limitations by relying on self-determination theory (Gillet et al., 2019; Ryan & Deci, 2017) and detail theoretical processes likely to be involved in the interaction between workaholism and presenteeism.

Background

The Negative Outcomes of Workaholism and Presenteeism

Workaholism has received a fair amount of attention in the nursing context (Kwak et al., 2018) due to its various undesirable consequences for both nurses and the organization (e.g., burnout and psychological distress; van Beek et al., 2012). Defined as a negative experience characterized by spending a lot of time and effort on work activities while neglecting other spheres of life, workaholism underlies the compulsion or uncontrollable urge to work which exudes a real obsession with work (Schaufeli et al., 2009). Nurses can experience high levels of workaholism as they have to deal with excessive job demands (Gillet et al., 2020a; Teng et al., 2010) and are highly committed to their profession (Chang et al., 2019, 2021). Huyghebaert et al. (2018a) also showed that workaholics experienced greater WFC. Similar findings have been found by Bayhan Karapinar et al. (2020) as well as Hirschi et al. (2019). Whereas workaholics devote a lot of time, effort, and cognitive energy to work, the resources available to sustain such an intense inner drive over the long term are limited (Hobfoll, 2002), and thus rapidly become unavailable to support other spheres of employees' professional or familial lives. Despite this high level of investment, workaholics still tend to feel restless when not at work, causing them to find it difficult to withdraw from work during off-job time. In failing to properly stop thinking about work, they often end up creating even more work for themselves, which then requires even higher investment, and typically leads to feelings of disappointment and frustration (Gillet et al., 2018c). We thus expect workaholism to be associated with greater WFC (*Hypothesis 1*).

Prior studies have also shown that presenteeism is related to various negative outcomes, including WFC (Ferreira et al., 2019; Miraglia & Johns, 2016). Indeed, the nursing profession, which is strongly associated with loyalty to colleagues and caring for successful teamwork culture (Johns, 2010), may exacerbate the “Supernurse” phenomenon (e.g., no sidekick, cloak of invulnerability; Steege & Rainbow, 2017), although nurses are not in optimal psychological and physical shape to work. Presenteeism is also associated with an extreme competitive culture among nurses (Simpson, 1998) promoting differences between desired and actual working hours, and consequently, a low working time balance (Böckerman & Laukkanen, 2010). Yet, it is well-known that job demands and more precisely overtime hours are associated with higher levels of WFC (Ghislieri et al., 2017) as taking work home, working during breaks and weekends, and more generally, working longer hours reduce time for family and push nurses to use any occasion to be at work (Miraglia & Johns, 2016). In addition, working while not being in optimal psychological and physical shape may preclude nurses from fully recovering after illness and force them to use home time to restore mental and physical resources (Hobfoll, 2002; Huyghebaert et al., 2016), neglecting family responsibilities, and thus, increasing WFC. Therefore, we formulate the following hypothesis: Presenteeism is associated with higher levels of WFC (*Hypothesis 2*).

Contrary to workaholism (Balducci et al., 2020; Gorgievski et al., 2010), presenteeism which is considered to be more transitory and situational (George et al., 2017) has been found to be constantly associated with lower levels of work performance (Gillet et al., 2020b; Miraglia & Johns, 2016), especially in the nursing profession (Li et al., 2019; Rainbow, 2019). This may be explained by higher anxiety (Monzani et al., 2018) or lower psychological health (Li et al., 2019). Moreover, the ill-being that accompanies presenteeism should drain energy and divert attention so that performance ratings declines (Miraglia & Johns, 2016). Indeed, nurses who lack resources are more vulnerable to resource loss and less capable of resource gain (Hobfoll, 2002). For instance, they may fear less supervisor and colleagues support, or other resource loss due to their low performance. Therefore, nurses are more prone to a loss spiral, striving to protect their depleted reservoir of resources to support adaptation (Karanika-Murray & Biron, 2020). *Hypothesis 3* is formulated as follows: Presenteeism is associated with lower levels of work performance.

The Negative Outcomes of Work-Family Conflicts (WFC)

As mentioned above, numerous studies (Allen et al., 2020; Liao et al., 2019) have examined the various personal (e.g., family life satisfaction) and organizational outcomes (e.g., work performance) of WFC, especially in the nursing profession (Chen et al., 2017; Ravangard et al., 2015). For instance, prior research has shown that the link between WFC and work performance was mediated by burnout (Singh et al., 2012), job stress (Netemeyer et al., 2005), and work engagement (De Clercq et al., 2020). Moreover, WFC are considered as stressful and challenging, as they are associated with a threat of or an actual loss of resources (Hobfoll, 2002). More specifically, nurses with greater WFC have insufficient psychological resources to be devoted to their work. As such, they may not be able to fully meet the requirements associated with their jobs, as they seek to save their resources instead of applying them to formal job duties, and thus display lower levels of work performance (De Clercq et al., 2020). Similarly, nurses experiencing WFC display high levels of stress as they may perceive that the resources they need to fulfil family demands are lost because they have depleted their resources in the work domain (Lembrechts et al., 2015). Consequently, they may withdraw either physically or psychologically from their family role, thus resulting in less satisfaction with family life. *Hypothesis 4* is formulated as follows: WFC are associated with lower levels of family life satisfaction and work performance.

In line with the above reasoning, WFC should mediate the relationships of workaholism and presenteeism to outcomes. Indeed, nurses may be characterized by high

levels of workaholism and presenteeism, and then experience WFC, with both experiences related to personal (e.g., family life satisfaction) and professional outcomes (e.g., work performance). Numerous studies confirmed the mediating role of WFC (Gillet et al., 2016; Kayaalp et al., 2020). As mentioned above, we contend that workaholism and presenteeism are positively related to WFC and these links may therefore explain the indirect relationships between individual factors and outcomes. The aforementioned findings led to the following hypothesis: WFC mediate the relationships of workaholism and presenteeism to family life satisfaction and work performance (*Hypothesis 5*).

Interaction between Workaholism and Presenteeism

Workaholism and presenteeism have received, in isolation or combination, a fair amount of scientific attention in the nursing profession (Kwak et al., 2018; Li et al., 2019). Still, little is known about the relationships between this interaction and outcomes such as WFC. The present study thus seeks to contribute to our understanding of the combined effects of workaholism and presenteeism by examining how the interaction between these two constructs relates to WFC that are liable to explain nurses' personal and professional outcomes.

Self-determination theory (Ryan & Deci, 2017) suggests that the interaction between workaholism and presenteeism relate to greater WFC. As for workaholism, nurses with high levels of presenteeism are mainly driven by controlled motivation (Cooper & Lu, 2019; van Beek et al., 2011). More precisely, workaholics are assumed to be stimulated by internal (e.g., feeling negative emotions when not working) and external (e.g., gaining peer admiration and prestige) motivating factors (Spence & Robbins, 1992). This is evidenced by their tendency to invest efforts in activities that are more likely to lead to promotions, raises, or other external forms of recognition (Endriulaitienė & Morkevičiūtė, 2020). Moreover, for nurses with high levels of presenteeism and workaholism, excessive investment in work is also purported to represent a way to decrease their feelings of anxiety, guilt, and shame, and to protect their contingent self-esteem (Porter, 2004; Ryan & Deci, 2017). Yet, controlled motivation (i.e., nurses perceive their behavior as being driven by internal and/or external contingencies; Ryan & Deci, 2017) is associated with negative attitudinal (e.g., turnover intentions, lower engagement and commitment), behavioral (e.g., sickness absence, lower in-role performance), and health-related (e.g., burnout and psychological distress) outcomes (Austin et al., 2020; Fernet et al., 2015, 2017, 2020; Gillet et al., 2020b). In this case, nurses' investment in their job is not in accord with their personal values, their valuable resources decrease, and detrimental outcomes may appear (e.g., increases in WFC; Ryan & Deci, 2017).

These findings lead us to expect that workaholism may translate into greater WFC among nurses displaying high levels of presenteeism. Indeed, workaholics characterized by high levels of presenteeism simply do not appear to feel passionate about their work, rather displaying the typical characteristics of people struggling with an obsession. They devote time and energy to professional activities that they do not enjoy (Spence & Robbins, 1992) at the expense of their personal life and health. This fixation with work is also accompanied by a lack of psychological detachment and work-related ruminations, which make it harder for them to properly recover from work (Huyghebaert et al., 2018a). According to self-determination theory (Ryan & Deci, 2017), nurses with high levels of presenteeism and workaholism should display a purer form of controlled motivation, which has been shown to be associated with a variety of negative outcomes when it is not accompanied by autonomous motivation (i.e., nurses engage in their work with a full sense of choice, willingness, and volition; Fernet et al., 2020; Gillet et al., 2018b).

The combination of high levels of workaholism and presenteeism thus seems more harmful than high levels of workaholism coupled with low levels of presenteeism. In fact, the findings reviewed so far suggest that presenteeism may amplify the negative outcomes of

workaholism, so that nurses characterized by high levels of workaholism and presenteeism would experience greater WFC. In contrast, lower levels of WFC may appear among nurses with high levels of workaholism but low levels of presenteeism. These nurses may be strongly motivated by gaining supervisors' approval, peer admiration, and prestige (Spence & Robbins, 1992) and decreasing their feelings of anxiety, guilt, and shame (Porter, 2004). However, they may also volitionally invest many hours in their jobs because their work is in line with their personal values, needs, and goals, and because they perceive it as being important, interesting, and pleasant (van Beek et al., 2011). In other words, their motivation profile may be characterized by high levels of controlled motivation (as for the nurses with high levels of workaholism and presenteeism) coupled with high levels of autonomous motivation. Yet, numerous studies have shown that this motivation profile was associated with more positive outcomes (e.g., lower levels of WFC) than a motivation profile characterized by high levels of controlled motivation and low levels of autonomous motivation (Fernet et al., 2020; Gillet et al., 2018b) as nurses perceive their job as more agreeable, pleasurable and stimulating (Ryan & Deci, 2017). These results lead to the following hypothesis: Nurses characterized by high levels of workaholism and presenteeism should experience higher levels of WFC than those characterized by high levels of workaholism coupled with low levels of presenteeism (*Hypothesis 6*).

In sum, we investigated the indirect relationships of nurses' workaholism and presenteeism to their family life satisfaction and work performance through WFC. We also examined whether presenteeism could moderate the relationships between workaholism and WFC. Thus, we studied the conditional indirect relationships of workaholism to individual and professional outcomes via WFC, across different levels of presenteeism. Based on the above-presented hypotheses, we put forward the following hypothesis: The indirect negative relationships of workaholism to family life satisfaction and work performance via WFC are stronger when presenteeism is high (*Hypothesis 7*).

Methods

Design

We used a cross-sectional design. STROBE guidelines for cross-sectional research were followed in designing and reporting this study (see Supplementary File 1).

Participants

A convenience sample of 419 nurses ($n = 263$) and assistant nurses ($n = 156$) was recruited independently from various healthcare organizations (i.e., public hospitals: 65.87%; private hospitals: 34.13%) located in France. Participants were mostly women (87.35%) with a mean age of 39.45 years ($SD = 11.66$) and 12.35 years ($SD = 10.91$) of organizational tenure. The majority of participants (89.98%) held a permanent position, of which 84.49% were full-time. Interestingly, the whole population of French nurses has similar characteristics: 86.60% of women and a mean of age of 45.00 years (Staffsanté, 2020).

Data Collection

Data was collected from French nurses and assistant nurses who were approached using social networks. All potential participants received a survey packet including the questionnaire, a cover letter explaining the study's purposes, and a consent form in which the anonymous and voluntary nature of their participation was emphasized. These actions resulted in a heterogeneous convenience sample of nurses. All participants who agreed to participate completed an online questionnaire. Questionnaires required approximately 10 minutes to complete. No incentive was offered to take part in the study. All measures were administered and already validated in French.

Ethical Considerations

According to local regulations, no ethical scrutiny was required for the conduct of this study. However, an information document about the study was handed out to participants who were asked to complete a written informed consent form before answering the questionnaire

survey. Participants were asked to keep their questionnaire anonymous and ensured that information obtained from and about them will not improperly divulged. This implies that the information remains protected from disclosure outside of the research setting or to unauthorized persons. More specifically, protected personally identifiable information were replaced with research identification codes. Names and social security numbers were incorporated into or used for identification codes. Access to identification code lists is limited. These lists are stored separately from the data and will be destroyed when no longer required for the research. Electronic data are stored in password-protected computers or files. Files containing electronic data are closed when computers are left unattended. Consent forms are stored separately from the research data. Finally, research staff are trained to manage and store research data.

Measures

Workaholism. Workaholism was measured with four items ($\alpha = .62^1$; e.g., “I find myself continuing to work after my co-workers have called it quits”) from the Dutch Workaholism Scale (Innanen et al., 2014; Schaufeli et al., 2009; French version by Sandrin & Gillet, 2016). Items were rated on a seven-point scale ranging from 1 (never) to 7 (always).

Presenteeism. Presenteeism was measured with the Stanford Presenteeism Scale (Koopman et al., 2002; French version by Huyghebaert et al., 2018b), which is made of six items ($\alpha = .94$; e.g., “Because of my health problems, the stresses of my job were much harder to handle”). Participants indicated their responses on a five-point Likert-scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Work-family conflicts (WFC). WFC were measured with three items ($\alpha = .84$; e.g., “My work schedule makes it difficult for me to fulfill my domestic obligations?”; Huyghebaert et al., 2018a) rated on a seven-point scale (1- totally disagree to 7- totally agree).

Family life satisfaction. Family life satisfaction was assessed with a one-item measure (Shimazu et al., 2015; French version by Huyghebaert-Zouaghi et al., 2020; i.e., “Are you satisfied with your family life?”). Responses were indicated on a scale ranging from 1 (dissatisfied) to 4 (satisfied).

Work performance. Work performance was assessed with a one-item measure (“How would you rate your overall job performance on the days you worked during the past four weeks”) from the World Health Organization Health and Work Performance Questionnaire (Kessler et al., 2003; French version by Fouquereau et al., 2019) and rated on a scale from 0 (worst performance) to 10 (best performance).

Analyses

Normality of the data was assessed using skewness and kurtosis values. All models were estimated using Mplus 8.4 (Muthén & Muthén, 2019) robust maximum likelihood estimator (MLR) in conjunction with Full Information Maximum Likelihood (FIML; Enders, 2010) procedures to handle the limited amount of missing data present in this study (i.e., 0 to 1.2%). First, we tested a measurement model including workaholism, presenteeism, and WFC. We then specified a Structural Equation Modeling (SEM) predictive model (i.e., hypothesized model) in which presenteeism and workaholism were indirectly related to family life satisfaction and work performance through WFC. As hypothesized, presenteeism was directly related to job performance. We also tested two alternative models. In the first one (i.e., partial mediation model), presenteeism and workaholism were related directly to family life satisfaction and work performance, and indirectly through WFC. In the second one (i.e., full mediation model),

¹ Although the estimate of scale score reliability (α) obtained for this subscale is located at the lower bound of acceptability, it is important to keep in mind that α coefficients are drastically impacted by the number of items included in a subscale (Streiner, 2003). Indeed, in the present study, the Spearman-Brown prophecy formula (Nunnally & Bernstein, 1994) indicates that this α would be of .77 if it was based on eight items equivalent to the four items included in this study. However, this lower level of reliability also highlights the importance of testing a measurement model (see Table 1).

presenteeism and workaholism were indirectly related to family life satisfaction and work performance through WFC. These initial models were used to ascertain the ability of the underlying measurement and predictive models to provide an adequate representation of the data given that goodness-of-fit indices are not available for tests of latent interactions. Goodness-of-fit of this model was assessed using typical interpretation guidelines where values greater than .90 and .95 on the Tucker-Lewis Index (TLI) and the Comparative Fit Index (CFI), and values lower than .08 and .06 on the root mean square error of approximation (RMSEA) are respectively taken to reflect acceptable and excellent levels of fit to the data (Marsh et al., 2005). Tests of latent interactions were then performed using the latent moderated SEM approach (LMS). Properly standardized effects for the LMS approach are directly provided by Mplus (Marsh et al., 2013). Simple slope analyses for significant interactions were conducted using the approach described by Hayes and Preacher (2013), allowing us to assess the outcomes of workaholism at distinct levels of presenteeism.

Results

Skewness values ranged from -1.06 to 1.05, and kurtosis values ranged from -.99 to 2.32. The goodness-of-fit of our measurement model supported its adequacy ($\chi^2 = 116.654$, $df = 62$; CFI = .971; TLI = .963; RMSEA = .046). The parameter estimates from this model are reported in Table 1, and revealed well-defined, inter-related yet differentiated, and reliable constructs. The goodness-of-fit of our hypothesized model also supported its adequacy ($\chi^2 = 155.299$, $df = 85$; CFI = .966; TLI = .958; RMSEA = .044). Although the partial ($\chi^2 = 152.603$, $df = 82$; CFI = .966; TLI = .956; RMSEA = .045) and full ($\chi^2 = 168.980$, $df = 86$; CFI = .960; TLI = .951; RMSEA = .048) mediation models were able to achieve a satisfactory level of model fit, our hypothesized model was the best-fitting model. In addition, in the partial mediation model, workaholism was not significantly related to family life satisfaction ($p = .900$) and work performance ($p = .529$), and presenteeism was not significantly linked to family life satisfaction ($p = .128$). Our hypothesized model was thus retained for further analyses. Correlations between the study variables are reported in Table 2. The parameter estimates from our hypothesized model, as well as those from the subsequent model including latent interactions are reported in Table 3 and Figure 1. These results showed that workaholism was associated with higher levels of WFC ($\beta = .514$, $p < .01$). These findings support Hypothesis 1. In addition, presenteeism was positively associated with WFC ($\beta = .290$, $p < .01$) and negatively associated with work performance ($\beta = -.214$, $p < .01$). These results provide support for Hypotheses 2 and 3. WFC were also negatively associated with family life satisfaction ($\beta = -.209$, $p < .01$) and work performance ($\beta = -.108$, $p < .05$), supporting Hypothesis 4. More generally, by showing that workaholism and presenteeism were associated with higher levels of WFC, which in turn were negatively related to family life satisfaction and work performance, these findings provide support for Hypothesis 5.

The interaction between workaholism and presenteeism was also related to WFC. However, this interaction only resulted in minimal increases in the proportion of explained variance, although this increase was aligned with the explanatory power of interactions typically observed in the social sciences (Marsh et al., 2013). Simple slope analyses are reported in the bottom section of Table 3, and graphically represented in Figure 2. These results revealed that presenteeism amplified the positive link between workaholism and WFC such that the relation was stronger when presenteeism was high rather than low. They support Hypothesis 6. Finally, results revealed that the conditional indirect relationships of workaholism to family life satisfaction (low: $b = -.052$, $p < .01$; and high: $b = -.094$, $p < .001$) and work performance (low: $b = -.116$, $p < .01$; and high: $b = -.210$, $p < .001$) through WFC were stronger in the high presenteeism condition than in the low presenteeism condition. These results support Hypothesis 7.

Discussion

In the present study, we investigated different adjustment pathways through which workaholism and presenteeism act on nurses' functioning. More specifically, we examined how workaholism and presenteeism would have direct and indirect relationships (through WFC) to family life satisfaction and work performance. In addition, we explored the moderating role of presenteeism in the relationship between workaholism and WFC. Our findings add up to the literature by showing that the combination of high levels of workaholism and presenteeism is associated with the highest levels of WFC.

Theoretical Implications

First, in line with past investigations (Ferreira et al., 2019; Huyghebaert et al., 2018a), the present study confirms that workaholism and presenteeism were positively related to WFC. This is particularly interesting as prior research has emphasized the necessity to explore the negative outcomes of workaholism and presenteeism, which are associated with unfavorable job attitudes, health decline, and productivity loss (Balducci et al., 2020; Miraglia & Johns, 2016). This is because of high effort expenditure in one's work and a lack of recovery experiences that are particularly necessary for workaholics (Huyghebaert et al., 2016). Indeed, workaholics' inability to physically and mentally disengage from work results in insufficient opportunities to recover from their efforts and in turn, WFC (Hirschi et al., 2019). Overall, when nurses spend long hours working, experience persistent work-related thoughts, and have difficulty disengaging with work, this spills over into the family domain and impairs the recovery of mental and physical resources that were depleted by high expenditure in one's work (Gillet et al., 2018c). Similarly, the positive relationship between presenteeism and WFC may be explained by a depletion of resources (Hobfoll, 2002) as high levels of presenteeism are likely to make nurses more consumed with work, both mentally and physically, thus having less opportunity to contribute to the family domain (e.g., less likely to participate in family activities and to pay attention to other family members).

Second, WFC were associated with lower levels of work performance and family life satisfaction. Because WFC are positively related to burnout (Singh et al., 2012) and job stress (Netemeyer et al., 2005), nurses are more likely to experience negative outcomes such as low work performance and family life satisfaction. More generally, it is well-known that WFC are associated with many maladaptive personal and organizational outcomes (Allen et al., 2020). In addition, the present results revealed that WFC mediated the relationships of workaholism and presenteeism to work performance and family life satisfaction. These findings corroborate those demonstrating the negative outcomes of workaholism (Gillet et al., 2017; Shimazu et al., 2015) and presenteeism (Johns, 2010; Miraglia & Johns, 2016), and the mediating role of WFC in the relationship between individual factors and outcomes (Gillet et al., 2016; Kayaalp et al., 2020). They add to the literature by revealing that workaholism and presenteeism play a complementary but distinct role in this adjustment pathway among nurses.

Indeed, it is noteworthy that, as in prior research (Gillet et al., 2020b; Rainbow, 2019), presenteeism was associated with lower levels of work performance, especially because presenteeism precludes work attainment and may exacerbate health problems (Miraglia & Johns, 2016). Thus, WFC partially mediated the relationship between presenteeism and work performance. In contrast, WFC fully mediated the relationships between presenteeism and family life satisfaction, and between workaholism and work performance and family life satisfaction. In other words, workaholism did not significantly relate to these outcomes, and presenteeism was not associated with family life satisfaction, when WFC were factored in. More generally, these findings suggest that WFC may explain the personal and professional outcomes of workaholism and presenteeism (Gillet et al., 2016). However, future research should consider additional mediating variables such as recovery experiences (e.g., psychological detachment, relaxation), burnout, occupational commitment or psychological capital (Li et al., 2019; Sandrin et al., 2019).

Third, the interaction between workaholism and presenteeism was also related to WFC. More precisely, the positive relationship between workaholism and WFC was stronger for nurses characterized by high levels of presenteeism. First, we relied on self-determination theory (Ryan & Deci, 2017) to illustrate the theoretical processes likely to be involved in the interaction between workaholism and presenteeism. Then, the present results add up to the literature by showing that the relationships between harmful individual characteristics (e.g., workaholism) and outcomes may be moderated by other variables (e.g., presenteeism). Interestingly, past studies (Fernet et al., 2020; Gillet et al., 2018b) also demonstrated that high levels of controlled motivation coupled with low levels of autonomous motivation, which characterized nurses displaying high levels of workaholism and presenteeism (Cooper & Lu, 2019; van Beek et al., 2011), were associated with detrimental outcomes (e.g., high levels of WFC). Indeed, according to self-determination theory (Ryan & Deci, 2017), nurses' controlled motivation is positively related to a depletion of their resources (Hobfoll, 2002) as the reasons underlying the investment in their job are not aligned with their personal values (e.g., gaining peer admiration, protecting their contingent self-esteem).

Finally, and more generally, the results showed that the indirect negative relationships of workaholism to work performance and family life satisfaction through WFC were stronger for nurses characterized by high levels of presenteeism. These findings emphasize that high presenteeism may be detrimental for nurses since it does not provide them with a beneficial cycle of protective resources to buffer the negative outcomes of workaholism through WFC. Rather, presenteeism adds up to a negative cycle of personal demands to negative outcomes through high WFC. The study's findings thus suggest that managers and supervisors should be particularly attentive to nurses characterized by high levels of presenteeism. Consequently, changes designed to reduce presenteeism might facilitate nurses' functioning, especially if the work environment is a fertile ground for workaholism.

Limitations and Research Perspectives

First, this study capitalized on self-report measures, which may have been influenced by self-report biases and social desirability. Furthermore, it relied on a workaholism measure with a low Cronbach's alpha (.62). Although the items retained from this study present satisfactory psychometric properties in the present study, it would be interesting for future studies to investigate the replicability of our results using alternative measures of workaholism (e.g., Clark et al., 2020). Likewise, upcoming studies should incorporate objective measures (e.g., organization data on work performance), as well as ratings of nurses' functioning obtained from multiple informants (e.g., ratings made by spouses). Second, covariables were treated as either predictors (i.e., workaholism and presenteeism) or outcomes (i.e., work performance and family life satisfaction) of WFC based on theoretical considerations (Miraglia & Johns, 2016; Schaufeli et al., 2009). Yet, the cross-sectional design of the study and the limitations of the current analyses made it impossible to rigorously assess the directionality (e.g., reciprocity, reverse causality) of the relationships between hypothesized determinants, WFC, and individual outcomes. It would therefore be fruitful for future investigations to explore the issue of directionality through longitudinal research. Third, the present study relied on a sample of French nurses and future studies could examine the extent to which these results could be replicated in different cultures and countries. Finally, only individual factors (i.e., workaholism and presenteeism) were considered in the explanation of personal and professional outcomes. Yet, it would be interesting to examine how job demands (e.g., bullying, role overload) and resources (e.g., organizational, supervisor, and colleagues support) relate to WFC, and their interplay with personal characteristics.

Conclusion

The research emphasizes that WFC not only depend on workaholism but also on

presenteeism. Therefore, the strategies that could be deployed to decrease WFC and their beneficial consequences (i.e., higher levels of work performance and family life satisfaction) are twofold. Specifically, the findings highlight the importance of intervening to maximally reduce nurses' workaholism and presenteeism.

Relevance to Clinical Practice

From a practical standpoint, managers and supervisors might be tempted to focus their energy on the "bright side" of workaholism (enjoying working hard and for long), which helps to ensure that nurses feel competent to carry out their tasks effectively and achieve organizational goals. However, it should be important for them to recognize that nurses with tendencies toward workaholism are likely to experience WFC when they work while feeling unwell, which may affect their work performance and family life satisfaction. Accordingly, managers and supervisors should be aware of the warning signs of presenteeism which may trigger a loss spiral (from workaholism to lower job and family functioning through WFC) with potential costs for nurses and the healthcare organization.

Interventions already exist that can be used to reduce nurses' workaholism. For instance, past studies demonstrated that second-generation mindfulness-based interventions may be useful (Shonin et al., 2014ab). More specifically, a meditation awareness training (e.g., walking, working, and guided sitting meditation) is associated with a reduction in the levels of workaholism in comparison to a control group (Van Gordon et al., 2017). Moreover, changes designed to reduce workload and frustration of the needs for autonomy, competence, and relatedness sustainably might decrease workaholism in the long run (Huyghebaert et al., 2018a). Indeed, competence need frustration is associated with lower feelings of self-worth, possibly leading employees to increase their job involvement in order to prove themselves (Spence & Robbins, 1992). Similarly, high levels of autonomy need frustration may lead workers to increase their job involvement to better meet external demands (Ryan & Deci, 2017). Finally, relatedness need frustration may be associated with an increase in nurses' workload as they cannot rely on others' support to cope with job requirements (Gillet et al., 2017).

Presenteeism is also sensitive to interventions and human resources policies (Miraglia & Johns, 2016). For instance, workplace health and wellness programs may be useful to reduce nurses' work-related illness (Villani et al., 2013; Yong et al., 2011), a well-known primary cause of presenteeism (Monzani et al., 2018). In addition, it may be interesting to increase job resources such as social support and constructive leadership behaviors (Hu et al., 2018) as job resources are indirectly related to presenteeism through their positive link with work engagement and satisfaction.

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Table 1*Standardized Factor Loadings (λ) and Uniquenesses (δ) for the Variables*

Items	Workaholism λ	Presenteeism λ	WFC λ	δ
Workaholism				
Item 1	.487			.762
Item 2	.551			.696
Item 3	.601			.638
Item 4	.430			.815
ω	.595			
Presenteeism				
Item 1		.877		.231
Item 2		.832		.307
Item 3		.883		.220
Item 4		.890		.208
Item 5		.882		.223
Item 6		.810		.344
ω		.946		
WFC				
Item 1			.850	.278
Item 2			.720	.481
Item 3			.778	.395
ω			.827	

Note. WFC: Work-family conflicts; λ : Factor loading; δ : Item uniqueness; ω : Omega coefficient of model-based composite reliability; all parameters are significant ($p < .05$).

Table 2*Correlations between Variables*

Variable	1	2	3	4	5
1. Workaholism†	-				
2. Presenteeism†	-.012	-			
3. WFC†	.654**	.303**	-		
4. Family life satisfaction	-.125*	-.129**	-.225**	-	
5. Work performance	-.054	-.282**	-.192**	.236**	-

Note. * $p < .05$, ** $p < .01$; †: Factor scores from the preliminary model with a mean of 0 and standard deviation of 1; WFC: Work-family conflicts.

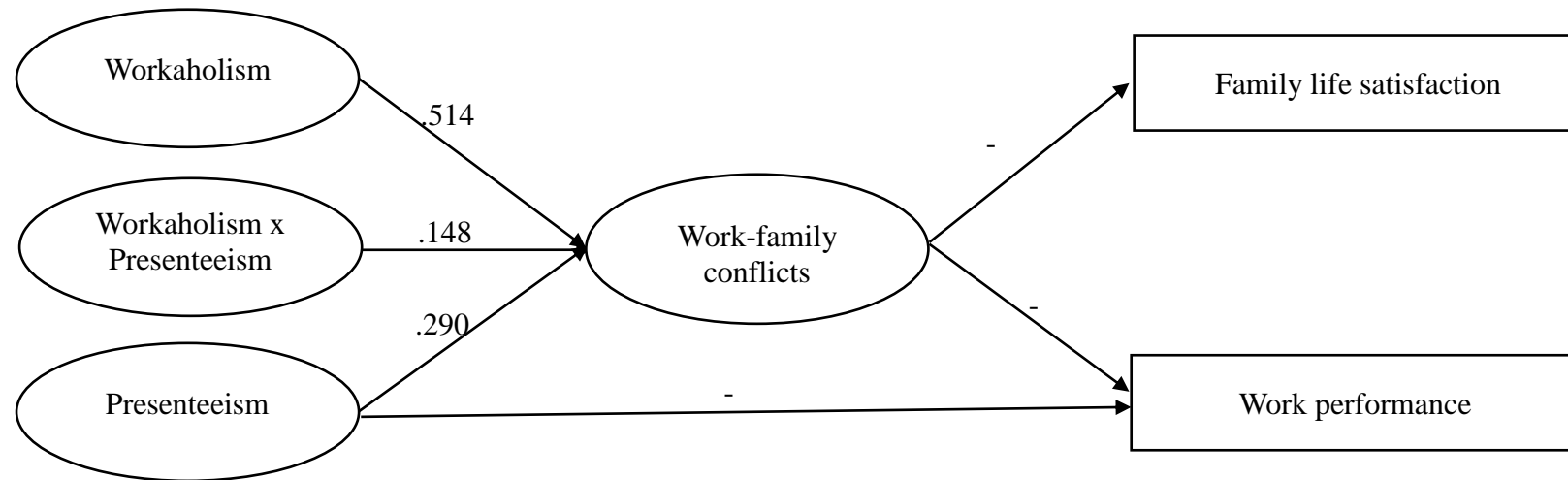
Table 3*Predictive Results*

Predictors	WFC b (s.e.)	β	Family life satisfaction b (s.e.)	β	Work performance b (s.e.)	β
<i>No Interactions</i>						
Workaholism	.802 (.100)**	.532				
Presenteeism	.423 (.081)**	.281				
R^2	.358					
<i>Interactions</i>						
Workaholism	.772 (.098)**	.514				
Presenteeism	.436 (.085)**	.290				
Interaction	.222 (.071)**	.148				
R^2	.365					
Presenteeism					-.362 (.104)**	-.214
WFC			-.091 (.025)**	-.209	-.122 (.063)*	-.108
R^2			.044		.071	
	WFC					
	a	b (s.e.)				
<i>Workaholism: Simple Slopes</i>						
-2SD Presenteeism	-.871	.322 (.191)				
-1SD Presenteeism	-.436	.544 (.134)**				
Mean Presenteeism	0	.766 (.097)**				
1SD Presenteeism	.436	.988 (.104)**				
2SD Presenteeism	.871	1.210 (.149)**				

Note. WFC: Work-family conflicts; R^2 : Squared multiple correlation (reflecting the proportion of explained variance); a: Regression intercept (used in drawing the simple slope graphs); b: Unstandardized regression coefficient; s.e.: Standard error of the coefficient; β : Standardized regression coefficient; * $p = .055$; ** $p < .01$.

Figure 1

Results from the Hypothesized Model



Note. Standardized coefficients are reported. All paths are significant ($p < .05$).

Figure 2

Simple Slope Analysis of the Effects of Workaholism at Different Levels of Presenteeism in the Prediction of Work-Family Conflicts (WFC)

