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Title

The Costs of Working Too Hard: Relationships Between Workaholism, Job Demands, and
Prosocial Citizenship Behaviors

Abstract

Despite the relatively intuitive link between working hard and achievements at work, results from empirical studies tend to characterize workaholics more often as hard workers rather than smart workers. Indeed, the link between workaholism and job performance is not obvious. In this paper, we investigated the link between workaholism and a core component of contextual performance, namely prosocial organizational citizenship behaviors (OCB). More in detail, we posited a mediational model in which workaholic tendencies negatively predicted prosocial-OCB indirectly, through an increased perception of job demands. This model was tested using longitudinal data from a sample of 85 police officers assessed once every two weeks for three months. Results from Multilevel Structural Equation analyses demonstrated the model's good fit and corroborated the mediated effect. All in all, our results point to an organizational cost of workaholism, represented by its aversive impact on prosocial-OCB.

Keywords: workaholism, job demands, organizational citizenship behaviors, multilevel structural equation modeling, police officers

The Costs of Working Too Hard: Relationships Between Workaholism, Job Demands, and
Prosocial Citizenship Behaviors

Work addiction, or workaholism, is generally seen as a dispositional type of heavy work investment, in which the individual feels compelled to engage in work-related activities because of internal contingencies that control his or her behavior (Oates, 1971; Scott, Moore, & Miceli, 1997). Workaholics have a tendency to work very hard beyond what is reasonably expected or requested of them (Schaufeli, Taris, & van Rhenen, 2008; Snir & Zohar, 2008), as well as display a compulsive and obsessive preoccupation toward work (Ng, Sorensen, & Feldman, 2007).

Despite the relatively intuitive link between working hard and achievements at work (Ng, Eby, Sorensen, & Feldman, 2005), results from empirical studies tend to characterize workaholics as workers who are able to do a lot of work (i.e., "hard workers"), but not generally good work (i.e., "smart workers"; e.g., Spence & Robbins, 1992). Thus, despite some suggestions that workaholism may have positive organizational consequences (see Baruch, 2011; Ng et al., 2007), the link between workaholism and job performance is not obvious (see Clark, Michel, Zhdanova, Pui, & Baltes, 2016).

Also, less investigated is the link between workaholism and other components of job performance, such as Organizational Citizenship Behaviors (henceforth, OCB). According to Organ's (1988) definition, OCB represents an "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and in the aggregate, promotes the efficient and effective functioning of the organization" (p. 4). Since the seminal contribution of Bateman and Organ (1983), the practical importance of OCB has been largely demonstrated with respect to several organizational outcomes, such as managerial evaluations of performance and judgments regarding pay raises, promotions and organizational performance and success (Organ, 2018; Podsakoff, Whiting, Podsakoff, & Blume, 2009).

In this study, drawing on the conservation of resources theory (Hobfoll, 1989), we focused on the relationships between workaholism and a specific class of OCB, namely prosocial-OCB.

Prosocial-OCB are characterized by positive behaviors toward colleagues (such as helping others who have been absent, or taking a personal interest in other employees) that Williams and Anderson (1991) have described as immediately benefiting specific workers, and indirectly impacting their organization. Indeed, prosocial-OCB provide several benefits to the organization, including increased productivity, a broader circulation of resources within the organization and higher organizational flexibility and performance stability (Organ, 2018).

As other class of prosocial interpersonal behaviors, prosocial-OCB rest on worker's self-regulation abilities. Indeed, the ability to master one's own emotions and behaviors tend to be related to the ability to empathize with other people (Alessandri, Caprara, Eisenberg, & Steca, 2009). In this regard, studies conducted in the general population have revealed close links between a broad set of prosocial behaviors and higher resistance to interpersonal distress, namely a self-focused, aversive response to the apprehension of another's need or distress (Batson, 1998; Davis, 1994; Eisenberg, et al., 1994), and stronger abilities to regulate emotions such as anger and despondency (Alessandri, et al., 2009; Eisenberg & Okun, 1996; Okun, Shepard, & Eisenberg, 2000). As such, prosocial-OCB heavily weight on workers' ability to use personal resources for self-regulating. Yet, personal resources are not unlimited and individuals have to carefully choose were to dynamically allocate their resources in accordance with their valued personal goals (Hobfoll, 2001). The more resources individuals invest in the pursuit of ones' specific self-relevant goal, the less they spare to use in the achievement of different goals (Hobfoll, 1989).

Drawing on the above reasoning, in this paper we tested a mediational model linking workaholism to (less) prosocial-OCB trough the mediation of perceived job demands. We use the Conservation of Resources theory (COR; Hobfoll, 1989, 2001) as the overarching framework to develop our hypothesis. The basic idea in our model is that workaholism represents a demanding and resource depleting stable individual disposition that leads individuals to overinvest their personal resources in task related activities thus reducing other investment at work. For this reason,

we focus on dispositional workaholism, namely the tendency to work compulsively, obsessively and hard (Clark et al., 2016).

We believe that our emphasis on the interpersonal cost of workaholism, in terms of reduced prosocial-OCB has the potential to contribute to the literature regarding its complex relationships with workers' organizational behaviors. From one hand, we aim to clarify the mechanism leading workaholics to progressively disinvest from interpersonal relationships, as attested by reduced prosocial-OCB. The idea is that giving the cost associated with prosocial-OCB, to save personal resources, workaholics may simply decide to withdrawn from this area. From the other hand, we aim to point out a possible mechanism impairing the overall contribution of workaholics to organizational performance through their lack of contribution to contextual performance (Borman & Motowidlo, 1997).

Moreover, we use dynamic data that allow us to test our hypotheses at the appropriate level of analysis. We indeed conceptualize workaholism as a trait (i.e., a stable individual disposition) and job demands and prosocial-OCB as partly stable, and partly fluctuating "state-like" variables that may change across time and thus across varying dispositional circumstances. Our aim is to investigate if there are direct (workaholism → job demands, and job demands → prosocial-OCB) and indirect (workaholism → prosocial-OCB trough job demands) relationships among the stable components of those variables. Note that, whereas we expect to find a dynamic relationship between state job demands and state prosocial-OCB, this was not the focal interest of the paper. In sum, distinguishing the between and the within level of analysis and testing our hypotheses at the appropriate ("between-workers") level of analysis is particularly critical in this paper, given our interest on dispositional workaholism and on its effect on workers' dispositional tendency to enact prosocial-OCB.

Below, we present our theoretical framework in detail, and develop the specific hypotheses corroborating our model.

Workaholism and Job Demands

Work addiction or workaholism has been generally described as a dispositional type of heavy work investment, where the individual feels compelled to engage in work-related activities because of internal contingencies that control his or her behavior (Lowman, 1993; Oates, 1971; Scott et al., 1997). Two prototypical dimensions characterize workaholic individuals (Clark et al., 2016). A pervasive preoccupation and compulsion regarding one's work, leading the individual to appear constantly obsessed with work, continuously thinking about work related activities (even when he/she is not at work), and being unable to detach from it (Ng et al., 2007; Robinson, 1999; Spence & Robbins, 1992; Porter, 1996; Schaufeli, Taris, & Bakker, 2008; Scott et al., 1997). A tendency to work very hard, by far in excess when compared to colleagues and collaborators and well beyond what is reasonably expected by the requirements of the job, even in the face of potential negative consequences (Schaufeli et al., 2008; Snir & Zohar, 2008; Ng et al., 2007).

Described in these terms, it is clear that one distinctive feature of workaholism is a heavy resource investment in ones' own work activity (Balducci, Avanzi, Fraccaroli, 2018). Given their inner dispositional drive to work hard, workaholics perceive a high level of job demands, in terms, for example, of workload, and time pressure, which they actively contribute to creating (see Clark et al., 2016). These job demands should not necessarily reflect higher work assignment (workload) or higher pressure on the worker. Instead, they may simply be a consequence of the distinctive personality profile of workaholic individuals. For example, in the study conducted by Schaufeli et al. (2008) workaholics resulted as rigid, not able to delegate, and with a strong tendency to perfectionism that leads them to constantly seek out more job-related tasks, all aspects that may fuel high levels of job demands. In sum, there is a large body of empirical evidence (see Clark et al., 2016) supporting the view of workaholism as a dispositional tendency associated to the perception, if not with the active search, of a high level of job demands.

H1. Workaholism is positively related to job demands at the between (i.e., trait) level of analysis.

Job Demands and Prosocial-OCB

According to COR theory (Hobfoll, 1989) investing more personal resources on a goal, means to remain with fewer resources to invest in other goals. Given the primacy of resource loss over resource gain (Hobfoll, 2001), workaholics are expected to refrain from investing their personal resources in any other "resource demanding activity" perceived as not belonging to their main area of concentration, namely their work task. This way, they strive to preserve their personal resources in order to deal with their demanding work activity. Unfortunately, prosocial-OCB represent resource-depleting behaviors. As reiterated by many theorists and corroborated by several empirical studies, there is a cost in helping others, for example in terms of emotional resources investment to cope with both others' negative emotions, and one's own emotional distress (Batson, 1998).

As stated above, prosocial-OCB are discretionary behaviors carrying a cost for the individual, in terms of personal resource investment (Koopman, Lanaj, & Scott, 2016). Thus, in line with COR theory (Hobfoll, 1989), enacting prosocial-OCB becomes less likely when personal resources are perceived as already low or almost all invested in another important endeavor (Hobfoll, 2001). Therefore, it is likely that the more a worker seeks out a heavy workload or perceive a higher temporal pressure to complete his/her task related activities, the lower the level of resources (e.g., physical energy, time) he/she has to invest in prosocial-OCB. Moreover, there is a large literature connecting lower levels of prosocial-OCB with stress and negative emotions (Cropanzano, Rupp, & Byrne, 2003; Ziegler, Schlett, Casel, & Diehl, 2012), two well-documented outcomes of workaholism (Schaufeli, Bakker, van der Heijden, & Prins, 2009). This reasoning leads us to formulate our second hypothesis:

H2. Job demands predict a lower frequency of prosocial-OCB at both the within (or state) and between (or trait) level of analysis.

Combining *H1* and *H2* leads us to hypothesize an indirect relationship between workaholism and prosocial-OCB. As explained by Kaplan, Bradley, Luchman, and Haynes (2009), the stress associated with unusual high job demands may itself represent the reason why workaholics are less

likely to engage in the various forms of OCB than other workers. Furthermore, we cannot exclude the fact that when faced with the need for keeping up with self-imposed job demands, workaholics may consider prosocial-OCB as a distraction that keeps them from meeting work-related goals. From their point of view, they may perceive prosocial-OCB as "non-essential" discretionary acts, and thus akin to a waste of time and energy.

H3. Job demands mediate the relationship between workaholism and prosocial-OCB.

To strengthen the robustness of the model, we controlled for emotional stability, agreeableness and conscientiousness, three personality traits that have been repeatedly associated with workaholism (see Clark et al., 2016) as well as represent powerful predictors of prosocial-OCB (Chiaburu, Oh, Berry, Li, & Gardner, 2011).

Nature of the research context

We selected police officers given the specific nature of this profession. Indeed, policing is usually identified as a stressful occupation (e.g., Hall, Dollard, Tuckey, Winefield, & Thompson, 2010). In particular, police officers are routinely exposed to acute and chronic occupational stressors (see Webster, 2013, for a review) and are at higher risk for developing stress-related pathologies such as post-traumatic stress disorder, burnout and suicide (Burke, 1993; Liberman et al., 2002; Violanti, 1997). Moreover, police officers are often called to work shifts due to policing being a 24-hour seven-day a week job. This leads police officers to face the cost of forced overtime, but also allows them to volunteer for overtime (e.g., receiving extra payment). The amount of overtime worked and overtime practices differ widely from department to department, and among police officers within the same department. Unfortunately, there is limited public data available regarding this phenomenon (Vila, 2006). Moreover, existing literature documents that police officers have different thoughts when it comes to overtime. Some officers like to work overtime and volunteer for as much overtime as they can get, while others despise it and do everything they can to get out of it (see Vila, 2006). This has led police departments to regulate the maximal amount of overtime

allowed. In sum, the police organizations naturally provide a heavy workload on police officers.

Thus, the stressful nature of the job along with openly incentivizing working hard, makes policing a highly favorable environment for the development and expression of workaholism symptoms.

Previous works suggest that police officers are not exempt from workaholism tendencies given that working hard and assigning centrality to work is considered normative and descriptive of the profession (Taris, van Beek, & Schaufeli, 2012). In light of the above considerations, we considered a police department a potentially interesting setting for testing our theoretical model.

Method

Participants

Approximately 100 Italian State police officers working in a large police station were contacted and invited to take part in this study. Among them, 95 agreed to participate, but only 85 (53% were males) offered data that could be used for the aims of the present study (**we excluded participants who responded at less than four time points; all remaining participants provided complete data**). Mean age was 43.33 (SD = 4.58) years, and mean job tenure was 21.01 (SD = 4.78) years. Most of the participants worked as members of patrols with assigned areas, and their main roles included: Enforce laws and ordinances, regulate traffic, control crowds, prevent crime and arrest violators. According to the police station records, the regular working time amounted to about 7 hours per day with a mean overtime (voluntary and/or requested) of about 3 hours per day.

Procedure

One month before the start of the study (January 2015) participants completed a questionnaire aimed at collecting general socio-demographic data, their personality profile (in terms of the Big Five), and a measure of workaholism. Then, participants completed questionnaires over three consecutive months, once every two weeks on Friday, assessing experienced job demands and prosocial-OCB (for a total of 510 two-week spaced measurements). The spacing of the survey was decided in accordance with internal shift cycles (a complete shift lasted two weeks). Questionnaires were matched using anonymous codes that respondents created at the beginning of the survey from

personal information. All questionnaires were administered online and could be filled-out at work or at home. Participants had 12 hours to fill out all questionnaires (questionnaires were time stamped from 8:00 am to 8:00 pm). Participants were given the opportunity to participate in a lottery where 10 of them had the opportunity to win a token of approximately 50 euros.

Measures

Workaholism (α = .88). Workaholism was measured by using the 10-item version of the Dutch Work Addiction Scale (DUWAS; Schaufeli, Shimazu, & Taris, 2009). Example items included the following: "I feel that there's something inside me that drives me to work hard" and "I stay busy and keep many irons in the fire" and were rated from 1 (never) to 4 (always).

Job demands (α_s ranged from .79 to .81). Every two weeks, job demands were measured by adapting three items from the Job Content Questionnaire (Karasek et al., 1998; item example: "During the last two weeks, I had much to do at work") rated from 1 (strongly disagree) to 5 (strongly agree).

Prosocial-OCB (α_s ranged from .81 to .85.). Every two weeks, prosocial-OCB were measured by adapting four items from the Williams and Anderson's (1991) scale (e.g., "During the last two weeks, I helped others who had been absent") rated from 1 (never) to 5 (very often).

Personality Traits. Agreeableness ($\alpha = .78$), emotional stability ($\alpha = .84$) and conscientiousness ($\alpha = .81$) were measured using a reduced version of the Big Five Questionnaire-2 (BFQ-2; Caprara, Barbaranelli, Borgogni, & Vecchione, 2007). Each trait was assessed by 8 items, thus comprising 24 items in total. Respondents indicated agreement with the extent to which each item described them on a 5-point scale (1 = very false for me; 5 = very true for me).

Data Analysis

The data gathered in this study had a multilevel (or hierarchical) structure with measurements nested within individuals. Thus, in order to estimate our hypotheses, we implemented a multilevel 2-1-1 mediational model. In this model, workaholism and covariates (personality traits) represent individual difference variables that vary between individuals (i.e.,

level-2 variables), whereas job demands and prosocial-OCB represent variables with both within-individual (level 1; i.e. variability across different weeks for the same person), and between-individual (level 2; i.e., variability across different individuals) variation.

Hypotheses were investigated within the framework of Multilevel SEM (ML-SEM; Preacher, Zyphur, & Zhang, 2010), using Mplus 8 (Muthén & Muthén, 1998-2017). In the case of a multilevel mediational model, ML-SEM allows disentangling between and within components of variance, thus reducing bias in the estimation of mediation effects in clustered data (Preacher et al., 2010). Model fit was assessed according to the following criteria: Yuan-Bentler (YB) χ^2 likelihood ratio statistic, Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual for level-1 (SRMR_L1) and for level-2 (SRMR_L2). The model fit the data well according to the following criteria: nonsignificant $YB\chi^2$, CFI > .90, RMSEA and SRMR < .08. The critical values for the upper and lower confidence limits for indirect effects were tested by using the Monte Carlo Method for Assessing Mediation CI method (Hayes & Scharkow, 2013) with 20,000 replications. To compare the fit of the nested models, we used the Satorra-Bentler likelihood ratio test ($\Delta SB\chi^2$).

Power consideration

In multilevel analyses the number of clusters (in cross-sectional studies) or subjects (in dynamic designs, as it is our case) at the between-level plays the more important role in ensuring the asymptotic consistency of parameter estimations, impacting also their statistical significance (Meuleman & Billiet, 2009). To be sure, a simulation study by Meuleman and Billiet (2009) found that, along with between-level sample size, the complexity of the between-level model and the size of the ICCs need to be considered. For example, they found that with a low complexity of the between-level model (i.e., less than 24 parameters to be estimated; see Meuleman & Billiet, 2009, Table 8) and high ICCs (i.e., higher than .50; see Meuleman & Billiet, 2009, Table 7) a between-level sample size of 80 lead to a parameter bias that did not exceed 5% and a standard error bias that did not exceed 10%, as recommended by literature on power analysis (e.g., Boomsma, 2013;

Hoogland & Boomsma, 1998; Muthén & Muthén, 2002). Accordingly, given that our study has (a) a between-level sample size higher than 80, (b) a low complexity of the between-level model (number of free parameters < 24), and (c) high ICCs (> .50), we deemed our design trustworthy for investigating the hypothesized model.

Results

As reported in Table 1, job demands and prosocial-OCB correlated significantly (p < .01) and negatively at both levels of analysis (r = -.35 at level-1; r = -.33 at level-2). At level-2, workaholism was significantly and moderately correlated with job demands (r = .28, p < .01) and prosocial-OCB (r = -.21, p < .05). Table 1 also shows the intra-class correlation (ICC), which assesses the size of level-2 variance compared to total variance (i.e., the sum of level-1 variance and level-2 variance): Results suggested that a substantial (ICC > .10) proportion of variance in job demands and prosocial-OCB lies at level-2.

Results from ML-SEM Analysis

Results from ML-SEM analysis revealed that the hypothesized model fit the data very well, according to a non-significant chi-square [$YB\chi^2(1) = 2.11$, p = .15], and values of all other indices in agreement with the more stringent standards: CFI = .99; RMSEA = .046; SRMR_L1 = .001; SRMR_L2 = .024. At the "between workers" level (Level-2), after fixing the nonsignificant paths to zero (a) from emotional stability and conscientiousness to job demands and prosocial-OCB, and (b) from agreeableness to job demands, the fit of the model did not significantly worsen [$\Delta SB\chi^2(5)$ = 7.25, p = .21]. Likewise, including a direct path from workaholism to prosocial-OCB did not significantly improve the fit of the model [$\Delta SB\chi^2(1) = 2.60$, p = .11]. All in all, results (see Figure 1) supported the above presented theoretical model. Indeed, workaholism was significantly and strongly linked to job demands (HI), and the latter resulted as a significant predictor of prosocial-OCB (H2; $R^2 = .37$). The indirect (-.07; 95%CI = -.10, -.001) effect linking workaholism to prosocial-OCB was also significant (H3). At the within level of analysis (i.e., Level-1), there was a significant prediction of prosocial-OCB from job demands.

Discussion

The present results supported the hypothesis that perceived and, perhaps, actively sought out job demands decreased workaholics' prosocial-OCB, which represent core components of contextual performance, also after controlling for conscientiousness, emotional stability and agreeableness. Thus, our results point to an organizational cost of workaholism, represented by its aversive impact on prosocial-OCB. Our results call into question the notion that the tendency to work hard naturally makes of a workaholic a good performer and align with previous research showing the costs of workaholism (e.g., Balducci et al., 2018). Yet, the indirect and negative link between workaholism and prosocial-OCB suggests a further indirect link between workaholism and overall job performance that deserves attention in future research, as its direction (negative or positive) is not obvious. Indeed, on the one hand, it is likely that workaholic tendencies lead to working hard and thus, to producing more. On the other hand, there is a risk that workaholics' inrole job performance excesses may be canceled out by their lower contextual job performance. At this point, a question arises: "Are workaholics ever a good investment for the organization?". Whereas our data did not allow us to offer an adequate answer to this question, we nonetheless surmise that a potential response is, "it depends on the kind of job". Likely, jobs characterized by high job complexity, the need to express high competences, and jobs where performance depends less on the interdependence between workers may represent an optimal niche for workaholics. The gain may be much less, if not negative, in jobs characterized by a high degree of interdependence among workers. Given that helping coworkers requires individuals to expend both their time and effort (i.e., costs), it is not surprising that increased job demands are the key mechanisms leading workaholics not to invest in prosocial-OCB. Likely, in their heroic attempt to catch up with their work, workaholics do not perceive the possible rewards associated with prosocial-OCB that often comes in the form of additional resources, emotional and instrumental support, and a sense of belonging. As postulated by the social exchange theory (Blau, 1964), it is likely that workaholics are not motivated to enact prosocial-OCB probably because, from their perspective, the rewards

may not outweigh the costs. At the same time, cooperativeness (i.e., agreeableness) is a tendency that is usually unrelated to workaholism (e.g., Clark et al., 2016).

Limitations

This study has several limitations, including a limited level-2 sample size, the reliance on self-report questionnaires, and a research design that precludes any strict conclusion about causality. Furthermore, since the sample size consists of police officers only, findings of this study need to be replicated in samples of workers from different occupations. In this regard, it seems necessary to clarify to what extent the results we obtained were determined by the specific context, or the selected sample. For example, in different settings and populations, other variables such as organizational culture, job role/level, or characteristics of the task may affect the indirect relationship between workaholism and prosocial OCB. Hence, these findings need to be replicated on different and larger samples, including, whenever possible, other-rated measures (e.g., coworkers, supervisors) of OCB. Furthermore, other aspects of contextual performance may be explored, as there may be difference in workaholics' tendency to enact OCB directed toward individuals, compared to OCB directed toward the organization.

Implications and conclusion

Our results have both practical and theoretical implications. From a practical standpoint, they may encourage practitioners to develop interventions that aim to make workers aware (a) that individuals with workaholic tendencies tend to perceive (and maybe contribute to create) high levels of job demands and that (b) this tendency may prevent them from performing OCB, an important component of contextual performance. Specifically, interventions aimed at preventing workaholism should target both the environment and the workaholic (Van Wijhe, Schaufeli, & Peeters, 2010). Programs should target rewarding appropriate behaviors (not excessive work) and supporting a healthy work-life balance. Training programs aiming at improving time management, stress management, assertiveness and personal effectiveness skills may also be useful (Schabracq, 2005; Van Wijhe et al., 2010). Finally, targeting workaholics social skills may promote positive

interactions and social support at work, increasing the probability the workaholics may invest resources in cooperative and prosocial OCB at work (Fligstein, 2001; Van Wijhe et al., 2010).

From a theoretical point of view, our results are in line with the COR framework and contribute to our understanding of the correlates of workaholism, as they shed light on its association with prosocial OCB as indicator of contextual performance. In particular, our study points to two undesirable organizational consequences of workaholism. The first is associated with the tendency of workaholics to save resources when it comes to invest in interpersonal relationships and they perceive to be versing in a stressful work condition. The second is the existence of a possible negative pathway linking workaholism to job performance through the mediation of perceived stress and the consequent disinvestment in a key component of contextual performance, namely prosocial-OCB. Clearly, given the lack in our study of a direct measure of job performance, the existence of this indirect pathway should be more directly tested in future studies. However, given the significant relationship between prosocial-OCB and job performance attested in previous studies (Podsakoff et al., 2009) this seems a likely possibility.

Whereas most studies have investigated the association between workaholism and task performance, the present study focused on extra-role behaviors, for which less evidence is available, thus contributing to gain a more complete picture of the relationship between workaholism and job performance.

Of course, our study also rises some important questions. For example, one may wonder about the mechanisms that may moderate the relationship between workaholic tendencies and job demands. Or, more in general, one may wonder about the optimal levels of job demands: The level maximizing both workers' performance on specific task, while letting them additional resources to invest in extra-role behaviors, such as OCB. These points should be addressed in future studies.

In conclusion, our study sheds light on an important organizational cost of workaholism (in terms of an impaired contextual performance), and we hope it contributes to stimulate future research that aims at helping workers in managing their approach to workload.

References

- Alessandri, G., Caprara, G. V., Eisenberg, N., & Steca, P. (2009). Reciprocal relations among self-efficacy beliefs and prosociality across time. *Journal of Personality*, 77(4), 1229-1259. doi: 10.1111/j.1467-6494.2009.00580.x
- Balducci, C., Avanzi, L., & Fraccaroli, F. (2018). The individual "costs" of workaholism: An analysis based on multisource and prospective data. *Journal of Management*, 44, 2961-2986. doi: 10.1177/0149206316658348
- Baruch, Y. (2011). The positive well-being aspects of workaholism in cross cultural perspective.

 *Career Development International, 16, 572-591. doi:10.1108/13620431111178335
- Bateman, T. S., & Organ, D. W. (1983). Job satisfaction and the good soldier: The relationship between affect and employee "citizenship". *Academy of Management Journal*, 26, 587–595. doi: 10.2307/255908
- Batson, C. D. (1998). Altruism and prosocial behavior. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *Handbook of social psychology* (Vol. 2, pp. 282–316). Boston: McGraw-Hill.
- Blau, P. M. (1964). Exchange and power in social life. New York: Wiley.
- Boomsma, A. (2013). Reporting Monte Carlo studies in structural equation modeling. *Structural Equation Modeling: A Multidisciplinary Journal*, 20(3), 518-540. doi: 10.1080/10705511.2013.797839
- Borman, W. C., & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance*, 10(2), 99-109. doi: 10.1207/s15327043hup1002_3
- Burke, R. J. (1993). Work-family stress, conflict, coping, and burnout among police officers. *Stress Medicine*, 9, 171-180. doi:10.1002/smi.2460090308
- Caprara, G. V., Barbaranelli, C., Borgogni, L., & Vecchione, M. (2007). *Big Five Questionnaire-2: Manuale*. Florence, IT: Organizzazioni Speciali.

- Chiaburu, D. S., Oh, I. S., Berry, C. M., Li, N., & Gardner, R.G. (2011). The five-factor model of personality traits and organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, *96*(6), 1140-1166. doi:10.1037/a0024004.
- Clark, M. A., Michel, J. S., Zhdanova, L., Pui, S.Y., & Baltes, B. B. (2016). All work and no play?

 A meta-analytic examination of the correlates and outcomes of workaholism. *Journal of Management*, 42, 1836-1873. doi:10.1177/0149206314522301
- Cropanzano, R., Rupp, D. E., & Byrne, Z. S. (2003). The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied Psychology*, 88, 160-169. doi: 10.1037/0021-9010.88.1.160
- Davis, M. H. (1994). *Empathy: A social psychological approach*. Madison, WI: Brown & Benchmark.
- Eisenberg, N., Fabes, R. A., Murphy, B., Karbon, M., Maszk, P., Smith, M., . . . Suh, K. (1994).

 The relations of emotionality and regulation to dispositional and situational empathy-related responding. *Journal of Personality and Social Psychology*, 66(4), 776-797. doi: 10.1037/0022-3514.66.4.776
- Eisenberg, N., & Okun, M. A. (1996). The relations of dispositional regulation and emotionality to elders' empathy-related responding and affect while volunteering. *Journal of Personality*, 64(1), 157–183. doi: 10.1111/j.1467-6494.1996.tb00818.x
- Fligstein, N. (2001). Social skill and the theory of fields. *Sociological Theory*, *19*(2), 105-125. doi: 10.1111/0735-2751.00132
- Hall, G. B., Dollard, M. F., Tuckey, M. R., Winefield, A. H., & Thompson, B. M. (2010). Job demands, work-family conflict, and emotional exhaustion in police officers. *Journal of Occupational and Organizational Psychology*, 83, 237-250. doi: 10.1348/096317908X401723

- Hayes, A. F., & Scharkow, M. (2013). The relative trustworthiness of tests of indirect effects in statistical mediation analysis. Does method really matter? *Psychological Science*, 24, 1918–1927. doi: 10.1177/0956797613480187
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress.

 American Psychologist, 44, 513-524. doi: 10.1037/0003-066X.44.3.513
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process:

 Advancing conservation of resources theory. *Applied Psychology: An International Review*,

 50, 337-421. doi:10.1111/1464-0597.00062
- Hoogland, J. J., & Boomsma, A. (1998). Robustness studies in covariance structure modeling: An overview and a meta-analysis. *Sociological Methods & Research*, 26(3), 329-367. doi: 10.1177/0049124198026003003
- Kaplan, S., Bradley, J. C., Luchman, J. N., & Haynes D. (2009). On the role of positive and negative affectivity in job performance: A meta-analytic investigation. *Journal of Applied Psychology*, 94(1), 162-76. doi: 10.1037/a0013115
- Karasek, R., Brisson, C., Kawakami, N., Houtman, I., Bongers, P., & Amick, B. (1998). The Job Content Questionnaire (JCQ): An instrument for internationally comparative assessments of psychosocial job characteristics. *Journal of Occupational Health Psychology*, 3, 322-355. doi:10.1037/1076-8998.3.4.322
- Koopman, J., Lanaj, K., & Scott, B. A. (2016). Integrating the bright and dark sides of OCB: A daily investigation of the benefits and costs of helping others. *Academy of Management Journal*, 59, 414-435. doi: 10.5465/amj.2014.0262
- Liberman, A. M., Best, S. R., Metzler, T. J., Fagan, J. A., Weiss, D. S., & Marmar, C. R. (2002).

 Routine occupational stress and psychological distress in police. *Policing: An International Journal of Police Strategies & Management*, 25, 421-441. doi:10.1108/13639510210429446
- Lowman, R. L. (1993). *Counseling and psychotherapy of work dysfunctions*. Washington, DC: American Psychological Association.

- Meuleman, B., & Billiet, J. (2009). A Monte Carlo sample size study: How many countries are needed for accurate multilevel SEM? *Survey Research Methods*, *3*(1), 45-58. doi: 10.18148/srm/2009.v3i1.666
- Muthén, L. K., & Muthén, B. O. (2002). How to use a Monte Carlo study to decide on sample size and determine power. *Structural Equation Modeling: A Multidisciplinary Journal*, 9(4), 599-620. doi: 10.1207/S15328007SEM0904_8
- Muthén, L. K., & Muthén, B. O. (1998-2017). *Mplus user's guide*. Los Angeles: Muthén & Muthén.
- Ng, T. W. H., Eby, L. T., Sorensen, K. L., & Feldman, D. C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology*, *58*, 367-408. doi: 10.1111/j.1744-6570.2005.00515.x
- Ng, T. W. H., Sorensen, K. L., & Feldman, D. C. (2007). Dimensions, antecedents, and consequences of workaholism: A conceptual integration and extension. *Journal of Organizational Behavior*, 28, 111–136. doi: 10.1002/job.424
- Oates, W. (1971). Confessions of a workaholic: The facts about work addiction. New York: World.
- Okun, M. A., Shepard, S. A., & Eisenberg, N. (2000). The relations of emotionality and regulation to dispositional empathy-related responding among volunteers-in-training. *Personality and Individual Differences*, 28(2), 367-382. doi: 10.1016/S0191-8869(99)00107-5
- Organ, D. W. (1988). Organizational citizenship behavior: The good soldier syndrome. Lexington, MA: Lexington Books.
- Organ, D. W. (2018). Organizational citizenship behavior: Recent trends and developments. *Annual Review of Organizational Psychology and Organizational Behavior*, *5*, 295-306. doi: 10.1146/annurev-orgpsych-032117-104536
- Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Blume, B. D. (2009). Individual- and organizational-level consequences of organizational citizenship behaviors: A meta-analysis.

 **Journal of Applied Psychology, 94, 122-141. doi: 10.1037/a0013079

- Porter, G. (1996). Organizational impact of workaholism: Suggestions for researching the negative outcomes of excessive work. *Journal of Occupational Health Psychology*, 1(1), 70-84. doi: 10.1037/1076-8998.1.1.70
- Preacher, K. J., Zyphur, M. J., & Zhang, Z. (2010). A general multilevel SEM framework for assessing multilevel mediation. *Psychological Methods*, *15*, 209-233. doi: 10.1037/a0020141
- Robinson, B. E. (1999). The Work Addiction Risk Test: Development of a tentative measure of workaholism. *Perceptual and Motor Skills*, 88(1), 199-210. doi: 10.2466/pms.1999.88.1.199
- Schabracq, M. J. (2005). Well-being and health. What HRM can do about it. In R. J. Burke & C. L. Cooper (Eds.), *Reinventing HRM: Challenges and New Directions* (pp. 187-206). London, UK: Routledge.
- Schaufeli, W. B., Bakker, A. B., van der Heijden, F. M. M. A., & Prins, J. T. (2009). Workaholism, burnout, and well-being among junior doctors: The mediating role of role conflict. *Work & Stress*, 23, 155-172. doi:10.1080/02678370902834021
- Schaufeli, W. B., Shimazu, A., & Taris, T. W. (2009). Being driven to work excessively hard: The evaluation of a two-factor measure of workaholism in the Netherlands and Japan. *Cross-Cultural Research*, *43*(4), 320-348. doi: 10.1177/1069397109337239
- Schaufeli, W. B., Taris, T. W., & Bakker, A. B. (2008). It takes two to tango: Workaholism is working excessively and working compulsively. In R. J. Burke & C. L. Cooper (Eds.), *The long work hours culture: Causes, consequences and choices* (pp. 203-225). Bingley, UK: Emerald.
- Schaufeli, W. B., Taris, T. W., & van Rhenen, W. (2008). Workaholism, burnout, and work engagement: Three of a kind or three different kinds of employee well-being? *Applied Psychology: An International Review, 57*, 173-203. doi: 10.1111/j.1464-0597.2007.00285.x

- Scott, K. S., Moore, K. S., & Miceli, M. P. (1997). An exploration of the meaning and consequences of workaholism. *Human Relations*, *50*, 287-314. doi:10.1177/001872679705000304
- Snir, R., & Zohar, D. (2008). Workaholism as discretionary time investment at work: An experience-sampling study. *Applied Psychology: An International Review, 57*, 109-127. doi: 10.1111/j.1464-0597.2006.00270.x
- Spence, J. T., & Robbins, A. S. (1992). Workaholics: Definition, measurement, and preliminary results. *Journal of Personality Assessment*, 58, 160-178. doi:10.1207/s15327752jpa5801_15
- Taris, T. W., van Beek, I., & Schaufeli, W. B. (2012). Demographic and occupational correlates of workaholism. *Psychological Reports*, *110*, 547-554. doi: 10.2466/03.09.17.PR0.110.2.547-554
- Van Wijhe, C., Schaufeli, W. B., & Peeters, M. C. (2010). Understanding and treating workaholism: setting the stage for successful interventions. In: C. L., Cooper & R. J., Burke (Eds). *Psychological and behavioural risks at work* (pp. 107-134). Chichester: Wiley.
- Vila, B. (2006). Impact of long work hours on police officers and the communities they serve.

 *American Journal of Industrial Medicine, 49, 972-980. doi: 10.1002/ajim.20333
- Violanti, J. M. (1997). Suicide and the police role: A psychosocial model. *Policing: An International Journal of Police Strategies & Management*, 20, 698-715. doi: 10.1108/13639519710368107
- Webster, J. H. (2013). Police officer perceptions of occupational stress: The state of the art.

 *Policing: An International Journal of Police Strategies & Management, 36, 636-652. doi: 10.1108/PIJPSM-03-2013-0021
- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17, 601-617. doi: 10.1177/014920639101700305

Ziegler, R., Schlett, C., Casel, K., & Diehl, M. (2012). The role of job satisfaction, job ambivalence, and emotions at work in predicting organizational citizenship behavior. *Journal of Personnel Psychology*, 11, 176-190. doi: 10.1027/1866-5888/a000071

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Table 1. Means.	standard deviations	s. ICC. and zero-orde	er correlations for	variables at levels	1 and 2

	1	2	3	4	5	6	Means	SD	ICC
1. Job demands	1	-	35**	-	-	-	1.71	1.23	.54
2. Workaholism	.28**	1	-	-	-	-	1.87	0.44	-
3. P-OCB	33**	21*	1	_	-	_	3.41	0.93	.61
4. Agreeableness	13 ^{n.s.}	.56**	.22*	1		-	4.01	0.39	-
5. Conscientiousness	09 ^{n.s.}	.28**	.16 ^{n.s.}	.52**	1	_	3.91	0.41	_
6. Emotional stability	11 ^{n.s.}	.30**	14 ^{n.s.}	.20 ^{n.s.}	.26**	1	3.61	0.64	_

Note. ICC = intraclass correlation coefficient; OCB = organizational citizenship behavior; P-OCB = prosocial organizational citizenship behavior. The correlations for job demands and P-OCB at the "within-individual" level (level 1) are reported above the diagonal. Correlations for the "between-individual" level (level 2) are reported below the diagonal. $^{n.s}p > .05$; *p < .05; *p < .05.

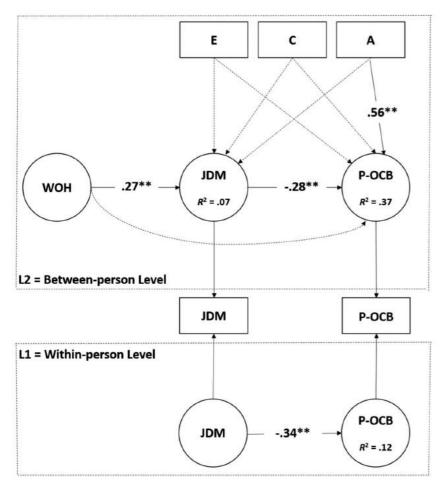


Figure 1. The multilevel 2–1–1 mediation model with standardized estimates. Note. A = agreeableness; C = conscientiousness; E = emotional stability; JDM = job demands; P-OCB = prosocial organizational citizenship behavior; WHO = workaholism. Solid lines represent significant paths. Dotted lines represent nonsignificant paths. Estimation method was robust maximum likelihood (MLR in Mplus). **p < .01.