

Article

Unsustainable Working Conditions: The Association of Destructive Leadership, Use of Technology, and Workload with Workaholism and Exhaustion

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Abstract: Job demands typical of the current working environments and negative leadership styles may be considered unsustainable factors able to decrease workers well-being. Moreover, contrary to the idea that workaholism is an innate individual characteristic, a recent perspective considers the working context able to foster its insurgence. In order to investigate unsustainable dynamics within organizations, this study aimed at examining whether (1) destructive leadership increases workload and supplemental work supported by technology, (2) the three job demands increases workaholism, and (3) workaholism mediates their relationship with exhaustion. A convenience sample of 432 workers filled in a self-report questionnaire. The structural equation model results showed a positive relationship between destructive leadership and workload, off-work hour Technology-Assisted Job Demand (off-TAJD), and workaholism. Moreover, both workload and off-TAJD partially mediated the relationship between destructive leadership and workaholism. Finally, workaholism was a mediator between the three demands and exhaustion. The study confirmed a positive association between job demands and workaholism, and, in turn, their association with exhaustion, highlighting in particular the role of two under-investigated determinants, namely destructive leadership and off-TAJD, as unsustainable working conditions. Despite limitations, above all the cross-sectional design, this study provided useful indications for research and practice.

Keywords: psychology of sustainability; workaholism; exhaustion; destructive leadership; technology use; job demands–resources model

1. Introduction

Today's organizations are faced with global competition and technology innovations, which are changing the way people and organizations work. As a consequence, workers are exposed to greater instability and insecurity that may threaten their psychological and physical well-being [1]. In the frame of psychology of sustainability, sustainable development has been suggested as a way to promote healthier organizations and to find a balance between ever-changing working conditions and workers' well-being [2]. Particularly, human capital, sustainable leadership, and workplace relational civility have been found to be positive resources associated to well-being [3]. On the contrary, job requirements typical of the current working environments and negative leadership styles may be considered unsustainable factors able to decrease people's well-being. Thus, this paper's aim was to investigate unsustainable dynamics within organizations considering the association between specific job requests and exhaustion through the mediation of workaholism.

Over the past decades, workaholism has received increasing attention from researchers. At the beginning, their attention was focused on workaholism consequences for individuals, families and

organizations and was driven by the predominant perspective that considers workaholism as a stable characteristic or compulsion [4]. Only recently, the question whether workaholism may be provoked by external factors, such as work domain characteristics, emerged. Particularly, the most recent studies have been interested in improving the understanding of antecedents of workaholism in the working context, considering mainly traditional job demands [5–8]. So far, very low attention has been dedicated to specific demands, such as negative leadership style from supervisors and the request to use technological tools during non-work time. Thus, this study aimed at investigating whether destructive leadership in the workplace is related to both workload and the use of technology for work purposes after work, if the three job demands (destructive leadership, workload, and technology use) are antecedents of workaholism, and in turn, whether workaholism mediates their relationship with exhaustion according to the perspective that considers workaholism as a dysfunctional coping strategy to cope with high job demands and expectations.

1.1. Workaholism

Workaholism is a common addiction of modern times, particularly for Western countries [9], where with the expansion of new technologies and Internet availability, people can constantly be connected to their work [10]. For organizations, which try to confront the global competition successfully [11], it is easier to ask employees to be always available and more and more engaged in supplemental job-related activities thanks to the aid of information and telecommunications tools, even when they are at home and away from the conventional workplace [12]. As a consequence, employees work more and harder than before.

Workaholism has been defined as “being overly concerned about work, to be driven by strong and uncontrollable work motivation, and to spend so much energy and effort into work that it impairs private relationships, spare-time activities and/or health” [13] (p. 8). According to this definition, workaholism showed an association with negative outcomes, such as exhaustion [8], reduced health [14], impaired job and life satisfaction [15,16], work–family conflict [17], sleep problems [18], reduced job performance [19], workplace aggressive behaviour [20], presenteeism [21], and sickness absence [22].

As for antecedents of workaholism, there is not an agreed-upon idea in literature. Until recently, the prevalent perspective was that workaholism is a stable individual characteristic [4]. In contrast, recent studies have investigated how workaholism is influenced by the working context, suggesting that job demands may contribute to the genesis of the work addiction [5,6,11,23]. Particularly, in order to face high levels of job requests and intensive work, individuals tend to work harder and to dedicate more time, energy, and effort to work activities. As a consequence, work could increasingly become salient and crucial for some individuals and workaholism may arise as a dysfunctional coping strategy to respond to high job requests and intensive work. Moreover, in some contexts, working hard is perceived by employees as a descriptive norm [5], and hard workers are considered as role models.

Among the working factors that may induce workaholism, research has shown high job-demands, such as workload, work role conflict, emotional demands [8,24], a working culture oriented to devotion and results [16], overwork climate [21], incentives to increase productivity [25], high levels of organizational identification [26], and the example of managers and leaders who work excessively and reward their employees for hard work [23]. The positive association between job demands and workaholism has been studied also in longitudinal research: Andreassen and colleagues [5] found an association between job demands and workaholism measured after about 2–3 years, and in Balducci and colleagues' study [6], higher levels of job requests, particularly mental workload, were positively associated with workaholic tendencies over time, while the reverse was not the case. This present study aimed to improve the understanding of workaholism antecedents with particular attention to a widespread phenomenon within organizations, namely destructive leadership, and a rather new and current demand which is the request to use technology for work-purposes after work.

1.2. Destructive Leadership

Considering the role of managers and supervisors, this study investigated the dark side of leadership and its consequences for followers [27,28]. Although literature has traditionally focused on positive leaders' behaviours and the most popular leadership theories can be considered positive, transformational [29], ethical [30], authentic [31], or sustainable leaderships [32], scholars reported a strong prevalence of leaders' destructive behaviours in organizations and called for a deeper investigation of their characteristics and outcomes.

According to Schyns and Schilling's definition [28], destructive leadership is "a process in which over a longer period of time the activities, experiences and/or relationships of an individual or the members of a group are repeatedly influenced by their supervisor in a way that is perceived as hostile and/or obstructive" (p. 141). Krasikova, Green, and LeBreton [33] defined destructive leadership as a "volitional behaviour by a leader that can harm or intends to harm a leader's organization and/or followers by (a) encouraging followers to pursue goals that contravene the legitimate interests of the organization and/or (b) employing a leadership style that involves the use of harmful methods of influence with followers, regardless of justifications for such behaviour" (p. 1310). In literature, there is a general agreement in considering destructive leadership as a specific form of negative leadership manifested in a repeated and systematic way toward followers and/or the organization itself. As for the intention to cause harm, authors do not totally agree. Some of them did not consider it defining destructive leadership, arguing that destructive behaviours might not be intended to cause harm but undermines followers or the organization as a consequence of negligence, lack of competence, or insensitivity [34]. Others, such as Krasikova and colleagues [33], included volition in their definitions in order to distinguish between destructive and ineffective leadership, underlining that "such harm-doing is not the leader's goal in itself (although could be in some cases), but rather the leader's choice to pursue a goal or enact behavior that is harmful in nature" (p. 1314).

Destructive leaders' followers perceive repetitive and sustained hostile, abusive, and/or obstructive verbal and nonverbal behaviours, excluding physical contact, and experience a supervisor who does not give them credit and appreciation, who attacks them in the presence of their colleagues, who considers their feelings and opinions stupid, and who constantly evokes their past errors [35].

Many outcomes have been investigated in relation to destructive leadership behaviours: job tension and emotional exhaustion [36], resistance behaviour [37], deviant work behaviour [38], reduced family well-being [39], intention to quit, and job satisfaction [35]. Destructive and abusive leaders do not support their followers to experience a positive workplace; on the contrary, they impose a controlling work environment and generate negative emotions such as tension, anxiety, and despondency [40]. Destructive leaders' followers suffer from burnout and emotional exhaustion [35,41–43] and tend to distance themselves from their jobs [44].

In order to avoid negative evaluations and feedbacks from their supervisors who show destructive leadership style, followers work harder to protect themselves [40]. Few scholars have studied the relationship between destructive leadership and workaholism so far and results are not substantial: For example, O'Donoghue and colleagues [40] found a negative association between abusive supervision and both engagement and job satisfaction and a positive association with employees' burnout; nevertheless, they did not find a significant relationship with workaholism.

1.3. Off-work Hours Technology-Assisted Job Demand

New technologies and recent advances in telecommunication are among the factors that mostly have revolutionised work and the ways individuals do their work in recent years. Today's organizations can easily provide employees with technological tools capable of extending normal working hours beyond the typical boundaries, and these practices are sustained by an increasing introduction and promotion of smart working policies. In this context, supervisors show high expectations of employees' availability and responsiveness; as a consequence, employees tend to

always stay connected, to immediately answer to work messages and emails, and to be more and more engaged in supplemental job-related activities when they are not at work [12].

The request, perceived from an employee, to use technological tools to fulfil supplemental work tasks during non-work hours can be considered a current job demand. In literature, this demand has been operationalized as off-work hours Technology-Assisted Job Demand (off-TAJD) [45].

The association between technology use for work purposes and both well-being and work–family balance has received great attention in recent years [45–47]. Although technology has been depicted as a resource able to foster work–life balance strategies and the successful integration of multiple life roles, it has the potential to invade workers' lives to the point of impairing health, wellbeing, and work–life balance [45,48]. Particularly, being always connected to work can impede psychological recover from it [48], resulting in higher levels of burnout and exhaustion [46,49].

To our best knowledge, the relationship between off-TAJD and workaholism has not been investigated to date; nevertheless, results in this field sustain a hypothetical positive relationship. Quinones and colleagues [50], in a longitudinal study aimed at investigating the connection between two compulsive behaviours, found a positive relationship between compulsive Internet use at Time 1 and working compulsively at Time 2. Barber and Santuzzi [51] found a positive correlation between workplace telepressure, which is the combination of obsession and urge to immediately reply to work-related ICT messages, and workaholism.

1.4. Study Hypotheses

This present study's aim was to investigate the antecedents of workaholism and exhaustion considering the health impairment process explained by the Job Demands–Resources (JD–R) Theory [52,53]. According to this theory, job demands are the main predictors of exhaustion and psychosomatic health complaints; they “refer to those physical, psychological, social or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skill and are therefore associated with certain physiological and/or psychological costs” [52] (p. 312). Exhaustion is the main negative consequence considered in studies that applied the JD–R Theory [52,53]; it is considered one of the central components of burnout and can be defined as a consequence of intensive physical, affective, and cognitive strain [41].

Among job demands, the present study investigated the role of destructive leadership, considering its high presence in organizations and potential serious consequences for workers and organizations themselves issues that depict it as a concept worthwhile of deeper investigation [28]. Particularly, we took into consideration leader's harmful behaviours toward followers. Moreover, we considered two other job demands: workload, a common job demand referred to the amount of work that employees perceive to have to do, and off-TAJD, an emerging organizational request previously defined.

According to the idea that the working context may cause the insurgence of workaholism and that high levels of requests coming from the job and supervisor may induce to workaholism as a dysfunctional response to these requests, we could expect a positive relationship between the three job demands and workaholism. Moreover, we hypothesize that the perception of abusive, hostile, and not-supportive behaviours from supervisors may turn into a higher perception of workload and requests to fulfill supplemental work with the aid of technological tools during non-work time. Thus, destructive leadership may be associated with workaholism also through the mediation of both workload and off-TAJD.

Hypothesis 1. *a) Destructive leadership, b) workload, and c) off-TAJD are directly and positively associated to workaholism.*

Hypothesis 2. *Destructive leadership is directly and positively related to a) workload and b) off-TAJD and c) indirectly and positively related to workaholism, through the mediation of workload and off-TAJD.*

Moreover, in line with the JD–R Theory and previous research that identified job requests as the main predictor of work-related exhaustion, we expected that the three considered job demands were positively related to exhaustion.

Hypothesis 3. *a) Destructive leadership, b) workload, and c) off-TAJD are positively related to exhaustion.*

Finally, considering the abovementioned negative outcomes of workaholism, we hypothesized a mediation of workaholism between the three job demands and exhaustion.

Hypothesis 4. *Workaholism is positively related to exhaustion.*

Hypothesis 5. *Workaholism mediates the relationships between a) destructive leadership, b) workload, and c) off-TAJD and exhaustion.*

Figure 1 shows the hypothesized model.

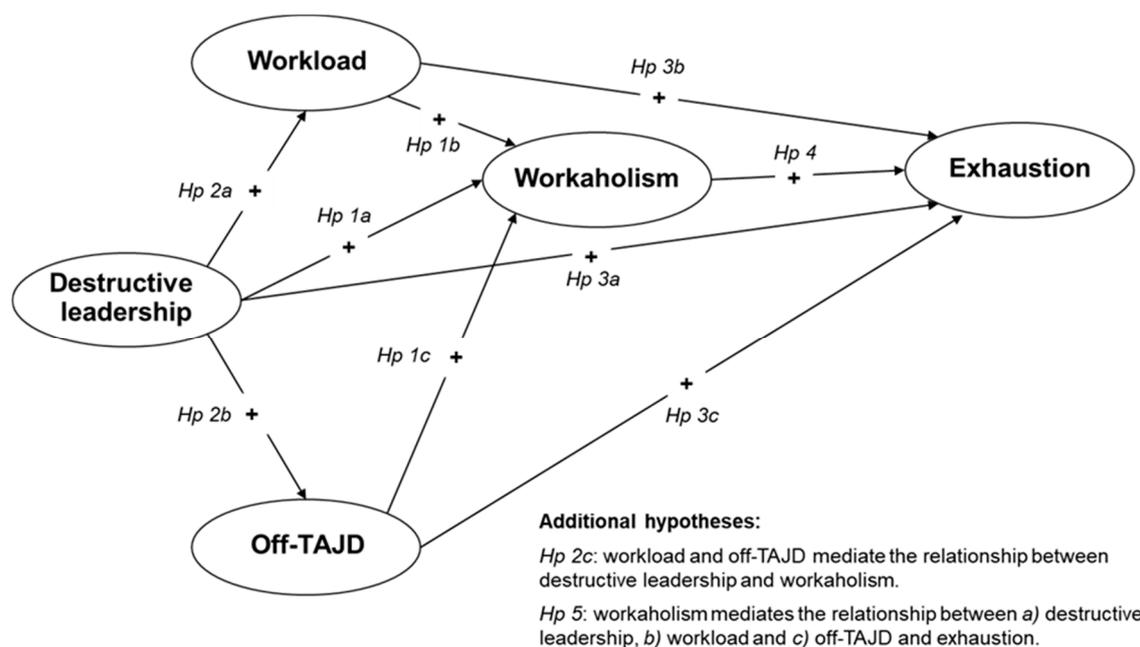


Figure 1. The hypothesized model.

2. Methods

2.1. Participants and Procedures

A convenience sample of 432 Italian workers was involved through the administration of an online self-report questionnaire. The convenience sampling procedure permitted to guarantee participants freedom in answering to questions regarding their supervisor and regarding their perception about company requests to use technology to work during non-work time; this request, generally, is not formalized in employment contracts in Italy. Participation was voluntary and anonymous; the cover letter of the questionnaire explained research aims and guaranteed participants confidentiality. All involved participants gave us the informed consent at the beginning of the online administration procedure, which was conducted in line with the Italian data protection law (Legislative Decree No. 196/2003). The research project has been examined and approved by the Bioethical Committee of the University of Turin (14/7/2016).

Among the participants, 218 were women (51%) and 214 were men (49%). 49% were unmarried, 46% were married or cohabited, and 5% were separated, divorced, or widowed; 66% did not have

children. Among the participants, 5% had finished elementary school, 40% had finished high school, and 55% had a bachelor's or a master's degree or a higher qualification. The mean age was 36.73 years ($SD = 11.98$; min. = 20; and max. = 64). Of the participants, 74% had a permanent contract and 84% had a full-time job: 62% were office workers, 19% were middle managers, 12% were blue-collar workers, and 7% were missing data. Participants worked in various occupational sectors: 27% industry, 23% commerce, 20% private services, 15% public health, and 15% education and research. On average, participants worked 38.86 hours per week ($SD = 9.29$; min. = 7; and max. = 60). Mean seniority on the job was 9.98 years ($SD = 10.76$; min. = 1; and max. = 46).

2.2. Measures

Exhaustion was detected using eight items of the Oldenburg Burnout Inventory (OLBI) [41] used in previous Italian studies [8]. A typical item is "There are days when I feel tired before I arrive at work". All items were scored on a 4-point Likert scale, ranging from 1—strongly disagree—to 4—strongly agree. Cronbach's Alpha in this study was 0.80.

Workaholism was investigated via seven items of the Bergen Work Addiction Scale (BWAS), which showed high content validity in measuring the addiction nature of workaholism [54] (Italian version [55]). A sample item is "How often during last year . . . have you thought of how you could free up more time to work?" (Likert scale from 1—never—to 5—always); Cronbach's Alpha was 0.72.

Workload was detected using four items taken from the study of Bakker and colleagues [56] and used in previous Italian research [57]. An example item is "How often do you have to work extra hard in order to reach a deadline?" (Likert scale from 1—never—to 5—always); Cronbach's Alpha was 0.82.

Off-work hours Technology-Assisted Job Demand (off-TAJD) was measured through a 3-item Italian scale [45]. All items were scored on a 5-point Likert scale and ranged from 1—never—to 5—always. An example item is "How often does your organization require you to answer phone calls and emails during off-hours?"; Cronbach's Alpha was 0.95.

Destructive leadership was measured with four items [58] scored on a 5-point Likert scale; the scale ranged from 1—never—to 5—always. A sample item is "My supervisor invades the privacy of subordinates". To our knowledge, this is the first study that used the Italian version of the scale; confirmatory factor analysis (CFA) on the whole sample ($N = 432$) showed good results: $\chi^2(2) = 1.13$, $p > 0.05$, $RMSEA = 0.02$ (0.00, 0.08), $CFI = 1.00$, $TLI = 0.99$, and $SRMR = 0.01$. The standardized factor loadings ranged between 0.50 and 0.86. Cronbach's Alpha was 0.79.

2.3. Analysis

The software IBM SPSS Statistics 23 was employed to test descriptive data analysis, Pearson correlations was employed in order to examine the relationships among variables, and Cronbach's Alpha coefficient was employed in order to test the reliability of each scale.

Structural equation modeling (SEM) was performed through the Mplus 7 software package [59]. The method of estimation was maximum likelihood. For reasons of parsimony, we applied the item parcelling technique [60] to the two variables with the highest number of items, namely workaholism and exhaustion, in order to create parcels starting from different items of a same construct.

According to the literature [61], the following goodness-of-fit criteria were considered: the χ^2 goodness-of-fit statistic, the Comparative Fit Index (CFI), the Tucker Lewis Index (TLI), the Root Mean Square Error of Approximation (RMSEA), the Standardized Root Mean Square Residual (SRMR), and the Akaike's Information Criterion (AIC). The significance of the indirect effects was tested via the bootstrapping method [62].

The measurement model was tested through a CFA that reported a good fit to the data ($\chi^2(80, N = 432) = 186.21$, $p < 0.001$, $RMSEA = 0.05$ (0.05, 0.07), $CFI = 0.97$, $TLI = 0.96$, and $SRMR = 0.04$). The Harman's single-factor test [63] performed through CFA indicated that one single factor did not account for the variance in the data ($\chi^2(299, N = 432) = 2909.38$, $p < 0.001$, $RMSEA = 0.14$, $CFI = 0.42$, $TLI = 0.37$, and $SRMR = 0.12$); thus, the common method variance was not a major issue.

Considering the heterogeneity of the sample, we controlled for a number of demographic variables: gender (1 = female), age, working hours (1 = full time), type of contract (1 = permanent contract), and mean seniority on the job. Age, working hours, and mean seniority on the job did not show positive correlations with any constructs in this study; therefore, for parsimony reasons, we did not consider them in further analysis.

3. Results

Table 1 shows means and standard deviations for each variable and correlations between them. The results showed positive significant correlations in any cases, except for the correlation between exhaustion and off-TAJD that was not significant and for the correlations between all study variables and both age and mean seniority on the job.

Table 1. Means, standard deviations, Cronbach's Alphas, and correlations among study variables.

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
Exhaustion	2.72	0.72	0.80									
Workaholism	2.33	0.72	0.42 **	0.72								
Workload	3.60	0.84	0.37 **	0.40 **	0.82							
Off-TAJD	2.10	1.21	0.07	0.27 **	0.21 **	0.95						
Destructive leadership	2.43	0.92	0.34 **	0.33 **	0.43 **	0.18 **	0.79					
Gender (1 = female)	-	-	0.14 **	-0.10 *	0.08	0.01	0.07	-				
Age	36.73	11.98	-0.09	-0.09	-0.03	-0.03	0.06	-0.05	-			
Working hours (1 = FT)	-	-	0.01	0.04	0.05	-0.01	0.02	-0.19 **	0.08	-		
Contract (1 = permanent)	-	-	-0.04	-0.13 *	0.02	-0.06	0.11 *	-0.10	0.42 **	0.18 **	-	
Seniority on the job	9.98	10.76	-0.03	-0.02	0.05	-0.06	0.06	-0.03	0.83 **	0.11 **	0.34 **	-

Note. Cronbach's α on the diagonal. ** $p < 0.01$; * $p < 0.05$. Off-TAJD = off-work hours technology-assisted job demand. FT = full-time.

Table 2 presents results of the models. The hypothesized model, in which workload and off-TAJD were partial mediators between destructive leadership and workaholism, and workaholism partially mediated the relationship between destructive leadership, workload, and off-TAJD, on the one hand, and exhaustion, on the other, showed a good fit to the data (M_1 ; Fit: $\chi^2(106) = 246.40$; $p < 0.01$; RMSEA = 0.06 (0.05, 0.06); CFI = 0.96; TLI = 0.95; and SRMR = 0.05). Furthermore, according to the results, M_1 was significantly better than the direct effects model (M_2), in which all direct effects from destructive leadership, workload, off-TAJD, and workaholism to exhaustion were calculated; thus, the presence of mediating effects in the model was confirmed ($\Delta\chi^2 = 7.56$; $p < 0.05$).

Figure 2 represents the final model; the latent variables were well-defined and the factor loadings of the observed variables were all higher than 0.54. The results showed a significant positive association between destructive leadership and workload ($\beta = 0.57$, $p < 0.001$), off-TAJD ($\beta = 0.19$, $p < 0.001$), and workaholism ($\beta = 0.20$, $p < 0.001$). Moreover, both workload ($\beta = 0.35$, $p < 0.001$) and off-TAJD ($\beta = 0.16$, $p < 0.001$) were positively related to workaholism. Finally, only workload ($\beta = 0.18$, $p < 0.05$) and workaholism ($\beta = 0.47$, $p < 0.001$) showed a positive direct relationship with exhaustion. Among the control variables, permanent contract showed a negative relationship with workaholism ($\beta = -0.13$, $p < 0.05$). With regards to the variance explained by the model, it was 32% for workload, 12% for off-TAJD, 32% for workaholism, and 40% for exhaustion.

Table 2. Results of alternative SEMs.

	χ^2	<i>df</i>	<i>p</i>	CFI	TLI	RMSEA	SRMR	AIC	Comparison	$\Delta\chi^2$	<i>p</i>
M_1 .	246.40	106	<0.01	0.96	0.95	0.06 (0.05, 0.06)	0.05	15867.22			
M_2 .	253.96	108	<0.01	0.96	0.94	0.06 (0.05, 0.07)	0.05	15870.78	$M_2 - M_1$	7.56	<0.05

Note. M_1 . Hypothesized model. M_2 . Direct effects model with Wload, off-TAJD, DLd, and Wsm as independent variables and with Exh as a dependent variable, where Wload is workload, Wsm is workaholism, Exh is exhaustion, Off-TAJD is off-work hours technology-assisted job demand, and DLd is destructive leadership.

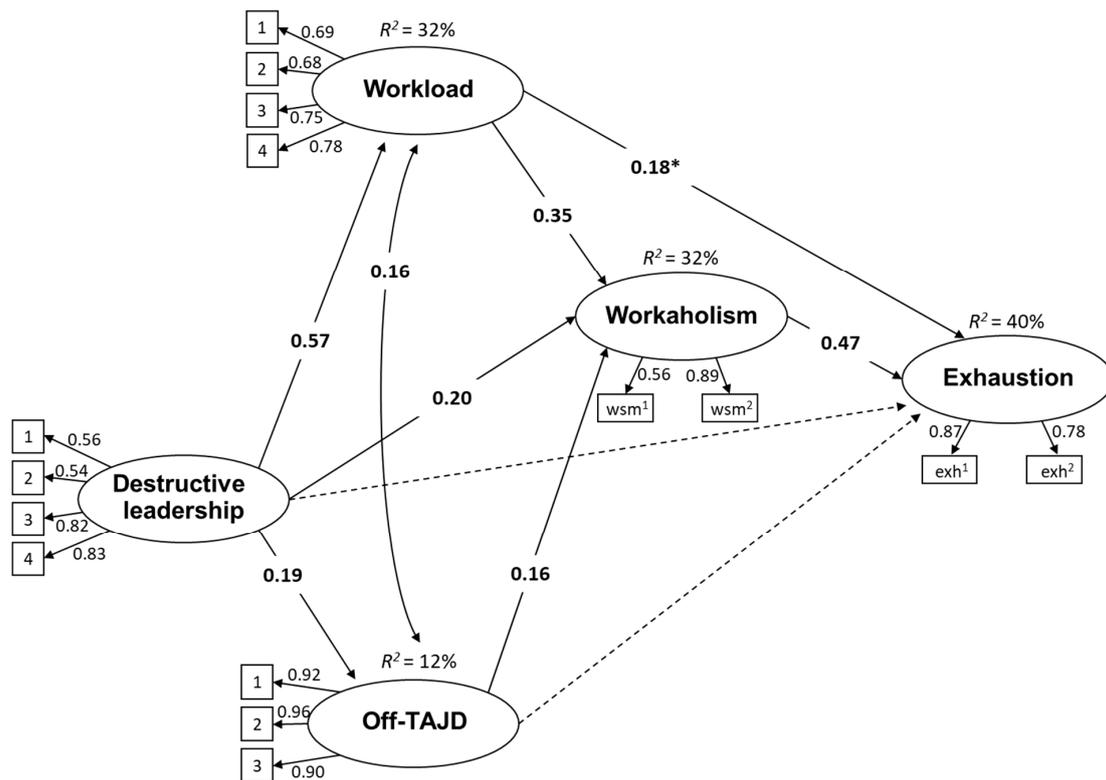


Figure 2. The final model M₁ with standardized path coefficients ($p < 0.001$; * $p < 0.05$). Discontinuous lines mean non-significant relationships.

Finally, bootstrapping procedure tested the indirect effects, extracting 2,000 new samples from the original one [64]. The statistically significant mediated effects are reported in Table 3. Workload ($\beta = 0.20, p < 0.001$) and off-TAJD ($\beta = 0.05, p < 0.05$) partially mediated the relationship between destructive leadership and workaholism. Moreover, workload ($\beta = 0.10, p < 0.05$) fully mediated the relationship between destructive leadership and exhaustion. Workaholism mediated the relationship between destructive leadership (full mediation; $\beta = 0.09, p < 0.05$), workload (partial mediation; $\beta = 0.16, p < 0.01$), and off-TAJD (full mediation; $\beta = 0.08, p < 0.05$), on the one hand, and exhaustion, on the other. The serial mediations between destructive leadership and exhaustion through workload and workaholism ($\beta = 0.09, p < 0.01$) were also significant.

Table 3. Indirect effects tested through bootstrapping (2000 replications).

Indirect effects	Est.	S.E.	<i>p</i>	CI 95%
DLd → Wload → Wsm	0.20	0.05	0.000	(0.07, 0.24)
DLd → off-TAJD → Wsm	0.05	0.02	0.046	(0.01, 0.05)
DLd → Wload → Exh	0.10	0.05	0.043	(0.01, 0.23)
DLd → Wsm → Exh	0.09	0.04	0.013	(0.02, 0.18)
Wload → Wsm → Exh	0.16	0.05	0.003	(0.08, 0.28)
Off-TAJD → Wsm → Exh	0.08	0.04	0.034	(0.01, 0.09)
DLd → Wload → Wsm → Exh	0.09	0.03	0.004	(0.04, 0.19)

Note. Parameter estimates are standardized coefficients. CI = confidence interval. Wload: workload. Wsm: workaholism. Exh: exhaustion. Off-TAJD: off-work hours technology-assisted job demand. DLd: destructive leadership.

4. Discussion

The current working world, characterized by globalization, competition, insecurity, and information technology advances, requires approaches able to deal with the complexity of the current era and to promote organizational well-being. In this light, the psychology of sustainability and sustainable

development has been defined as “an adaptive response to the need to develop well-being in organizations that have to cope with the challenging and unpredictable environments of the 21st century” [1] (p. 4). As a primary prevention approach [1,2], the sustainable development should consist of both reducing personal and contextual risks and supporting positive experiences and resources development in order to promote healthy organizations. The present study contributed to this approach identifying three job demands typical of the current working environments, namely destructive leadership, workload, and the request to use technology for work purposes during non-work hours, as unsustainable working conditions that can threaten workers’ well-being. It can be considered an original contribution to the literature since it investigated for the first time the role of leaders’ destructive behaviours and the use of technology for work purposes after work in relation to workaholism and, in turn, exhaustion.

According to the perspective that considers the working context able to foster the insurgence of workaholism [5,6,8,11,23], the first Hypothesis aimed at investigating whether job demands, namely destructive leadership, workload, and off-TAJD, were positively related to workaholism; Hypothesis 1 was fully confirmed. The perception of control and hostility; the lack of support, appreciation, and respect by supervisors; a high amount of work to do; and the request to work beyond the conventional boundaries supported by technologies are working conditions that may encourage employees’ attempts to work more and harder in order to meet job requests and to please supervisors, developing workaholic tendencies and behaviours. While the relationship between workload and workaholism confirmed evidences from previous studies, to our best knowledge, this is the first study that highlighted a positive relationship between both destructive leadership and the request to use technology for work purposes after work and workaholic tendencies, supporting those literatures which try to understand their potential detrimental effect in employees’ lives and well-being [35,36,39,45–47,50,51].

Hypothesis 2 was also fully confirmed, showing a positive relationship between destructive leadership and both workload and off-TAJD and their mediation in the indirect relationship with workaholism. Findings provided evidences about the risk that leaders’ destructive behaviours may increase perception about the amount of work to be done and about the request to work outside workplace and working-time, thanks to the support of technological tools. We can presume that destructive leaders, who are particularly demanding and controlling [40], cause high expectations about fulfilment at work; moreover, employees may perceive that working hard and always is necessary to satisfy a supervisor with a destructive leadership style.

Hypothesis 3 investigated the relationship between a) destructive leadership, b) workload, and c) off-TAJD, on the one hand, and exhaustion, on the other. As expected, the results confirmed Hypothesis 3b, showing the well-established relationship in the literature between workload and exhaustion [52,53]. Contrary to our expectations, a positive direct relationship between both destructive leadership and off-TAJD and exhaustion was not found in this study; thus, Hypotheses 3a and 3c were rejected.

Finally, the study supported the negative relationship between workaholism and exhaustion, confirming Hypothesis 4. Moreover, Hypothesis 5 postulated a mediation of workaholism between destructive leadership, workload, and off-TAJD on the one hand, and exhaustion on the other. A mediation emerged in all cases; it was full in the cases of destructive leadership and off-TAJD (confirming Hypotheses 4a and 4c) and partial in the case of workload (confirming Hypothesis 4b). Therefore, the study supported the negative relationship between workaholism and individual well-being [14,18,22]; moreover, it provided evidences about workaholism’s ability to turn leader’s destructive behaviours and use of technology after work for work purposes into exhaustion, underlining the risks that such behaviours and practices requested from organizations may represent for employees and sustainable development [1]. In particular, the results related to the role of destructive leadership as the primary determinant of detrimental dynamics support the call of the psychology of sustainability for managerial and leadership styles able to contribute to positive relationships and healthy organizations through the promotion of workers’ empowerment and autonomy [2].

4.1. Study Limitations

The principal limitation of this study is the cross-sectional nature and the impossibility to draw conclusions regarding causality and direction in the findings. Study hypotheses should be better investigated through longitudinal or diary studies. A second limitation is the risk of the common method variance because of the use of self-reported data [65]. Although we investigated this issue and found that the common method variance did not represent a major threat [63], it would be useful to consider also other-reported data (such as supervisors, colleagues, or partners) and objective ratings (such as the number of emails and telephone calls received during non-work hours) in future studies.

A further limitation of the study is the convenience sampling procedure and the heterogeneity of the sample, particularly for the occupational sectors. Although this emphasized the opportunity to collect open and honest answers from participants about their supervisor and regarding company requests, replicating the current study in specific organizations would be necessary also to define more contextualized interventions. More in general, the study's results cannot be generalized to the Italian population.

Future studies, starting from this one, could consider also the buffering role of job and personal resources in the relationship between job demands and both workaholism and exhaustion [8]. Moreover, dispositional characteristics should be considered in the investigation of work addiction [66,67].

4.2. Practical Implications

Linking this study's findings to the psychology of sustainability and sustainable development and adopting a primary prevention perspective, interventions aimed at fostering well-being may be identified at different levels, from individuals to organizations [1]. Promoting awareness about the existence of the often-minimized phenomenon of workaholism should be a primary aim within organizations, explaining its potential causes and viable solutions. At the organizational level, supervisors play an important role: They should be a good example working in a healthy way [11] and avoiding destructive behaviours that could reinforce the insurgence of workaholism. Therefore, interventions should consider both attention to personnel recruitment and selection and to leadership development programs. Particularly, in order to promote healthy organizations, training and development programs should be focused on positive leadership styles, such as ethical, sustainable, or servant leadership, aimed at promoting resources, fostering employees' self-realization, and achieving well-being as part of healthy organizations [2,68]. Research on positive psychology provided several suggestions useful to improve leadership skills of today's managers, focusing on the development of emotional intelligence, empathy, compassion, self-compassion, authenticity, and interpersonal sensitivity [1]. Nevertheless, according to some authors, preventing destructive leadership may be even more important than promoting positive aspects of leadership [34], considering that negative events in social interactions may have stronger effects compared with positive episodes [69]. Training programmes aimed at developing positive leadership skills and preventing destructive leadership styles should be in the form of both classical classroom, in order to foster sustainable development at the group level [1], and individual training, through the use of mentoring and coaching techniques [27].

Furthermore, workers should confront stimulating but not excessive job demands [17]. In particular, this study suggested the importance to address the "always on" approach and the request or expectation that employees are always online and available, typical of many Italian organizations [45]. Supplemental work supported by technological tools should be reduced or avoided if it is not strictly indispensable, since the incapacity to detach from work during off-work hours may influence workaholic behaviours besides interfering with an adequate recovery [48], with potential detrimental effects on well-being [49] and work–family balances [48,57]. Therefore, segmentation practices should be encouraged in organizations [70], particularly aimed at limiting the frequency of technology use to work during leisure time.

Interventions at the individual level are also important. Although work addiction is still not listed in the Diagnostic and Statistical Manual (DSM-IV-TR), it should be recognised as a pathology and workers should be aware of its existence and potential negative effects on their well-being and personal and family life. Psychological counselling and training on personal effectiveness, time management, and stress management [71] can support individuals in order to prevent or deal with work addiction. Moreover, according to the psychology of sustainability, in order to foster awareness and well-being, workers may be supported in the definition of their sustainable work–life project, which promotes persons’ reflexivity in the relationship with their world [1]. The project focuses on the future development, transforming what already exists according to new goals and adapting known solutions to new challenges, in order to promote workers’ and organizations’ growth and well-being [1,2].

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