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The Performance Implication of Obsessive Work Passion: Unpacking the Moderating and Mediating Mechanisms from a Conservation of Resources Perspective

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Abstract

Work passion is an important determinant of work performance. While harmonious work passion (HWP) shows its consistent predictive value, obsessive work passion (OWP) appears to have a mixed relationship with work performance. To address this puzzle, we integrate research on OWP and emotional exhaustion with conservation of resources (COR) theory. Specifically, we argue that OWP determines emotional exhaustion, whose relationship with work performance is attenuated by LMX. By conducting a field study with a sample of 262 U.S. employees, we found supportive evidence, even when controlling for psychological detachment from work. The findings somewhat reconcile the inconsistent results about OWP and work performance in the literature, shed light on research on work passion, LMX, and emotional exhaustion, and provide implications for managerial practice.

Keywords

Work passion, work performance, emotional exhaustion, leader-member exchange

Enabling employees to improve work performance is an ageless managerial quest. Although performing well at work is part of employees' job responsibilities, many employees are not motivated to fulfill their in-role responsibilities. A recent report from Deloitte shows that 88% of American employees do not have passion for their work, thus failing to realize their full potential (Hagel, Brown, Ranjan, & Byler, 2014). Work passion, defined as "a strong inclination toward [work activities] that [employees] like, that they find important, and in which they invest time and energy" (Vallerand et al., 2003, p. 757), is a driver of employees' work performance and has recently emerged in both academic and practitioner literatures (Vallerand, Houliort, & Forest, 2014). However, work passion may not always yield effective work performance; rather, it depends on the type of work passion.

According to Vallerand and colleagues' (2003) dualistic model of passion, work passion can be classified into harmonious and obsessive forms (also see Vallerand, 2010). Employees who have harmonious work passion (HWP) tend to autonomously internalize their work activities into personal identities, such that they engage in their work with a sense of volition and self-endorsement (Vallerand et al., 2014) and "willingly devote themselves to their work for the sheer pleasure of it, with no sense of obligation" (Trépanier, Fernet, Austin, Forest, & Vallerand, 2014, p. 355). As such, HWP has been found to facilitate work performance, while yielding other positive work outcomes such as greater organizational commitment and psychological well-being (e.g., Burke, Astakhova, & Hang, 2015; Forest, Mageau, Sarrazin, & Morin, 2012; Ho, Wong, & Lee, 2011). In contrast, employees with obsessive work passion (OWP) internalize work activities in a controlled manner due to intrapersonal or interpersonal pressures associated with work, such as those stemming from a sense of obligation, avoidance of guilt, or self-esteem maintenance (Vallerand et al., 2003). Consequently, OWP has been consistently associated with

more negative work experiences, including psychological ill-being (Vallerand et al., 2014), depression (Houlihan, Philippe, Vallerand, & Ménard, 2014), psychological distress (Forest et al., 2012), and emotional exhaustion (Donahue, Forest, Vallerand, Lemyre, Crevier-Braud, & Bergeron, 2012; Trépanier et al., 2014; Vallerand, Paquet, Philippe, & Charest, 2010).

However, the link between OWP and work performance is weak, with multiple studies failing to document a significant relationship (e.g. Astakhova & Porter, 2015; Birkeland & Buch, 2015; Burke et al., 2015; Curran, Hill, Appleton, Vallerand, & Standage, 2015; Ho & Pollack, 2014; Ho et al., 2011). In addition, prior studies exploring cognitive mediating factors, such as organizational identification (Astakhova & Porter, 2015) and cognitive engagement (Ho et al., 2011), did not demonstrate significant findings. Thus, it remains unclear if and how OWP can predict work performance, the answers to which are not only theoretically important but also beneficial to management of employees' OWP.

To address this issue, we adopt a conservation of resources (COR) perspective to investigate the performance implication of OWP, thereby integrating research on OWP and Hobfoll's (1989, 2001, 2002, 2011) COR theory. Given that emotional exhaustion is an enduring state of emotional and physical depletion (Cropanzano, Rupp, & Byrne, 2003; Wright & Cropanzano, 1998) that has been consistently linked to OWP (e.g., Donahue et al., 2012; Trépanier et al., 2014; Vallerand et al., 2010), COR theory—a theory closely related to stress and motivation (Hobfoll, 2011)—is a particularly relevant framework for the issue of interest. Within this framework, we conceptualize OWP as a hindrance personal demand, that is, a debilitating demand individuals “impose upon themselves with regard to their work” (Barbier, Hansez, Chmiel, & Demerouti, 2013, p. 751). Previous research that drew upon COR theory has shown that emotional exhaustion leads to ineffective work performance (Wright & Cropanzano, 1998).

Further, as COR theory contends that resources help individuals recover from strains such as emotional exhaustion (Hobfoll, 1989, 2002), we focus on leader-member exchange (LMX; Cropanzano & Mitchell, 2005; Graen & Uhl-Bien, 1995) as a form of social resource (Erdogan & Liden, 2002; Loi, Ngo, Zhang, & Lau, 2011) that can help employees compensate for the depleted personal resources and thus attenuate the negative performance ensuing from emotional exhaustion. Specifically, we expect that when individuals experience low emotional exhaustion, resources may not be necessary, but when individuals experience high emotional exhaustion, resources become critical for coping and performance (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007).

By providing a COR view on the performance implication of OWP and considering emotional exhaustion as a mediating mechanism and LMX as a boundary condition, the current research shows how and when OWP relates to work performance, thereby adding more nuances to our understanding of this issue, and enriching the nomological network of OWP. From a practical standpoint, our research provides suggestions on how managers can mitigate against the negative performance implications that could ensue from having obsessively passionate employees, specifically by developing and maintaining high-quality LMX relationships with these employees in order to manage their performance.

Theory and Hypotheses

The Concept of OWP

Work passion, which captures an individual's enduring inclination toward work, represents a motivational construct that contains both an affective component (strong liking or love for work activities) and a cognitive component (perceived significance and internalization of work activities into personal identity). In particular, OWP is characterized by a controlled or

pressured internalization, where the work is deemed significant and defines one's identity because of certain pressures or contingencies attached to it (e.g., self-esteem, social acceptance), and not because of inherent characteristics of the work itself (Vallerand et al., 2003).

The combination of both affective and cognitive elements that make up OWP distinguishes it from other motivational and attitudinal work concepts. Empirical evidence supports these distinctions by not only establishing the discriminant validity of OWP, but also showing that such passion has additional predictive value even after controlling for these other constructs (e.g., Birkeland & Buch, 2015; Houliort et al., 2014). Recently, Ho and Astakhova (2018) distinguished between work passion and a range of other constructs, including affect, burnout, calling, commitment, entrepreneurial passion, flow, grit, identification, interest, job satisfaction, motivation, personally salient activities, serious play, vital engagement, workaholism, and work involvement (see their online-only data supplement for detailed comparisons). For example, the two forms of extrinsic motivation—external and introjected regulations—do not entail strong liking or love for work or internalization of work into one's personal identity (Houliort et al., 2014), whereas workaholism encompasses high work involvement and drive but low enjoyment or strong liking of work (Spence & Robbins, 1992). OWP has been strongly predictive of various negative outcomes, including ill-being (e.g., depression) and negative attitudes/intentions (e.g., turnover intentions) (Vallerand et al., 2014). These findings suggest that OWP constitutes a hindrance personal demand that incurs psychological and physiological costs to individuals and inhibits their personal well-being, growth, and goal accomplishment. This derives from Barbier et al.'s (2013) conceptualization of personal demands as “the requirements that individuals set for their own performance and behavior that force them to invest effort in their work and are therefore associated with physical

and psychological costs” (p. 751). Like job demands, personal demands can be classified into challenge or hindrance demands, with the former having the potential for promoting individuals’ personal growth and development and the latter having the potential for constraining or inhibiting individuals’ well-being, personal growth, and goal accomplishment (Barbier et al., 2013). We argue that OWP serves as a hindrance personal demand, largely because obsessively passionate workers impose upon themselves unrealistic expectations and standards for work performance that can yield maladaptive outcomes. Notably, these unrealistic expectations and standards are not pressures from supervisors, coworkers, or other external sources, but rather are internalized in a controlled manner by the individuals themselves and become internal pressures (Barbier et al., 2013). The unrealistic expectations and standards for work performance, according to Mackay and Cooper (1987), are likely to “depend upon the values and needs held or required by the individual...which dictate aims and ambitions and may be translated into the willingness and motivation to perform ongoing tasks” (p. 172).

Although OWP leads to a range of negative psychological outcomes, whether OWP leads to negative performance outcomes is less clear. Passion scholars have hypothesized that OWP would be detrimental to work performance, which is consistent with the notion that hindrance demands are negatively associated with work performance (LePine, Podsakoff, & LePine, 2005), but empirical evidence did not render strong support for such a stance. A number of studies found a non-significant relationship between OWP and work performance (e.g., Burke et al. 2015; Ho et al., 2011), and a meta-analytic study of the broader passion literature (within and outside the work context) echoed this null finding (Curran et al., 2015). Together, the extant evidence suggests that (a) OWP may not have a strong *direct* bivariate relationship with work performance; and/or (b) the OWP-performance link may be modified by boundary conditions.

Accordingly, we argue that OWP has an indirect relationship with work performance via emotional exhaustion, and LMX serves as a boundary condition for the relationship between emotional exhaustion and work performance.

OWP-Performance Link via Emotional Exhaustion

COR theory is relevant and important to the present investigation due to its multiple features. First, COR theory posits that individuals are inherently motivated to obtain, retain, and protect their resources in biological, cognitive, and social domains, and they experience stress when encountering resource loss threats (e.g., job demands, personal demands), actual resource loss (e.g., emotional exhaustion), or failure to gain resources after substantive resource investment (Hobfoll, 1989, 2002). In other words, resource loss is central to individuals' stress experience, and resource gain becomes more salient and important in the presence of resource loss (Hobfoll, 1989, 2002). As such, COR theory has been used to explain various stress-related phenomena, including emotional exhaustion and burnout (Halbesleben, 2006; Ito & Brotheridge, 2003). Second, COR theory has a central sociocultural component that differentiates itself from most other resource adaptation theories: specifically, resources are viewed as largely socioculturally framed rather than individualistic; thus, resources are perceived similarly among members who share a cultural niche (Hobfoll, 2002). Third, COR theory emphasizes resource gains, whereas many other resource adaptation theories merely focus on resource loss or negative stress circumstances. Specifically, resource gains, according to COR theory, become particularly important in the face of resource loss, for two reasons: (a) gained resources enable individuals to resolve the problems inherent in stressful circumstances; and (b) the positive emotions associated with resource gains can help individuals recover from the negative emotions triggered by resource loss (Hobfoll, 2002). Finally, COR theory posits that individuals "better endowed with

resources are less negatively affected by the resource drain or loss that occurs in the face of stressful conditions,” which “allows them to substitute resources for those lost or simply absorb the loss with the ability to call on further resource reserves” (Hobfoll, 2002, p. 318).

Multiple studies have demonstrated that OWP is a determinant of emotional exhaustion, largely due to the dysfunctional cognitive processes—rumination, poor recovery, and role conflict—ensuing from OWP (Donahue et al., 2012; Trépanier et al., 2014; Vallerand et al., 2010). These findings are consistent with the notion that hindrance personal demands incur psychological and physiological costs to individuals. First, because work occupies a disproportionately large part of obsessively passionate employees, they ruminate about work even when they are outside of work (Donahue et al., 2012). Such rumination, representing repetitive and unintentional persistent thoughts in the absence of obvious external cues, causes the experience of conflict between work and other aspects of life and results in emotional exhaustion (Vallerand et al., 2010). Second, OWP compromises recovery experience. Defined as “the process during which individual functional systems that have been called upon during a stressful experience return to their pre-stressor levels,” recovery is characterized by psychological detachment, relaxation, mastery experiences, and control during leisure time (Sonnentag & Fritz, 2007, p. 205). Because OWP entails an uncontrollable urge to engage in and think about work, it is antithetical to the elements underpinning recovery (e.g., detachment, relaxation), which in turn increases emotional exhaustion (de Mol, Ho, & Pollack, 2018; Donahue et al., 2012). Third, as Burke et al. (2015) noted, when individuals experience OWP, they feel “constant pressure or an internal compulsion to engage in work” (p. 459). Such loss of control makes them spend a disproportionately large amount of time on work and cause conflict between their work and other aspects of their life (Vallerand et al., 2010), which has negative repercussions on behavioral regulation and work

performance (Tubre & Collins, 2000). Together, these arguments suggest that obsessively passionate employees tend to suffer emotional exhaustion. Notably, according to the definition of obsessive passion, even though obsessively passionate employees may have high-quality LMX and possess abundant resources, they are compelled to invest all these resources in work and thus continue to experience rumination, poor recovery, and role conflict. Therefore, these employees will still suffer emotional exhaustion, and we do not expect LMX to modify the relationship between OWP and emotional exhaustion.

In turn, emotional exhaustion is expected to undermine work performance from a COR standpoint (Wright & Cropanzano, 1998). Specifically, individuals who suffer resource loss not only have reduced resources to invest in their work, but also are motivated to minimize further loss by conserving their remaining resources (Hobfoll, 1989, 2002). One key way to do so is to withdraw their work effort and personal investment in work (Fugate et al., 2008; Leiter, 1991). Insofar as effective work functioning requires employees' investment of effort and personal resources, such withdrawal is likely to result in poor work performance, as supported by numerous studies (e.g., Janssen, Lam, & Huang, 2010; Witt, Andrews, & Carlson, 2004; Wright & Cropanzano, 1998). Taken together, the above arguments lead us to predict that emotional exhaustion mediates the negative relationship between OWP and work performance.

Hypothesis 1: Emotional exhaustion mediates the relationship between OWP and work performance.

LMX as a Moderator for the Link between Emotional Exhaustion and Work Performance

Hackney and colleagues (2017), Kahn (2007), and Rosen and colleagues (2009) deemed a favorable dyadic relationship or high-quality LMX as a valuable source of personal support and protection for employees in face of threat or work strain. From the COR perspective, we propose

that LMX serves as a social resource that mitigates the negative performance implication of emotional exhaustion.

We focus on LMX for three reasons. First, how LMX modifies the implications of emotional exhaustion has received scarce research attention. Yet as LMX is one of the most important dyadic relationships in the workplace, a better understanding of the moderator role of LMX for the implications of emotional exhaustion is theoretically and practically important. In fact, Huang, Chan, Lam, and Nan (2010) specifically contended that “LMX may act as an ‘antidote’ to work-related burnout” (p. 1127). Second, LMX fits Hobfoll’s (2002) definition of resources (i.e., “those entities that either are centrally valued in their own right...or act as a means to obtain centrally valued ends”; p. 307). LMX not only is valuable for reducing employees’ stress and emotional exhaustion (Thomas & Lankau, 2009), but also enables employees to gain access to other resources (e.g., psychological empowerment) that can further alleviate emotional exhaustion (Schermuly & Meyer, 2016). Third, LMX has significant relevance to work performance, as evidenced by a number of meta-analyses (e.g., Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012; Gerstner & Day, 1997; Martin, Guillaume, Thomas, Lee, & Epitropaki, 2016; Rockstuhl, Dulebohn, Ang, & Shore, 2012).

Because of the motivational potential of resources (Bakker & Demerouti, 2007), individuals who have higher-quality LMX relationships are more strongly motivated to exert their work efforts for solving work problems and overcoming obstacles at work, even when they face resource losses. In particular, high-quality LMX relationships may compensate for the resource loss in the form of emotional exhaustion, thereby helping employees regain behavioral regulation for performance (Binnewies, Sonnentag, & Mojza, 2009). As Hobfoll (2002) noted, “[t]hose better endowed with resources are less negatively affected by the resource drain or loss

that occurs in the face of stressful conditions. This allows them to substitute resources for those lost or simply absorb the loss with the ability to call on further resource reserves” (p. 318). In addition, as individuals have higher-quality LMX relationships, they are more likely to take a control and problem-solving approach, instead of an escapist approach, to recover from their emotional exhaustion and managing work performance (Fugate, Kinicki, & Prussia, 2008; Lazarus & Folkman, 1984). Finally, job resources generally can transform into other positive resources for recovery and psychological and behavioral functioning (e.g., self-efficacy, organization-based self-esteem, and optimism; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009). Likewise, high-quality LMX relationships can bring other positive resources for improved psychological and behavioral functioning (e.g., psychological empowerment; Schermuly & Meyer, 2016) that can then mitigate against the performance losses stemming from emotional exhaustion. In sum, we contend that a high-quality LMX relationship, as a social resource, enables emotionally exhausted employees to compensate for and recover from their resource loss. In contrast, low-quality LMX does not allow employees to replenish personal resources or regain behavioral regulation for work performance.

Hypothesis 2: LMX attenuates the negative relationship between emotional exhaustion and work performance.

We present our conceptual model in Figure 1.

Insert Figure 1 about here

Method

Participants and Procedure

We recruited U.S. employees from various organizations via the StudyResponse project (Stanton & Weiss, 2002). To double the sample size, we followed Sherony and Green’s (2002)

definition of a coworker and instructed participants to invite a coworker who worked under the same supervisor and in the same organization. The invited coworker was also given a Participant ID by StudyResponse. We double-checked Participant IDs assigned by StudyResponse to ensure that all participants had different IDs.

Upon consent, each participant completed two anonymous surveys administered about one month apart. Because StudyResponse verified and tracked all participants, participants remained anonymous throughout the study and received no influence from us at all. Out of the 150 coworker dyads matched based on Participant IDs, we eliminated 19 dyads in which (1) one participant had changed the organization or supervisor by the second survey (thus no longer having the same work conditions), or (2) both participants were not working under the same supervisor (thus not meeting the eligibility criterion of working under the same conditions). This left us a total of 131 dyads for analysis. Among the 262 participants, 32% were female and 82% were White/Caucasian. Their average age and organizational tenure were 40.64 years ($SD = 9.75$) and 78.28 months ($SD = 52.86$), respectively. Less than 5% of them had no college education at all. About 8.0% of them had entry-level positions, 29.5% intermediate-level positions, 42.5% middle-management-level positions, 17.0% upper-management-level positions, and the remaining 3.0% executive-level positions.

Measures

Participants reported their harmonious work passion, obsessive work passion, coworker tie strengths, and demographics at Time 1, and reported their LMX, emotional exhaustion, and psychological detachment from the organization at Time 2. In addition, in each coworker dyad, participants evaluated each other's work performance at Time 2. All variables were assessed on a seven-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*) unless indicated otherwise.

We included psychological detachment from the organization, which “signifies that employees are shedding their personal engagement with, or psychologically separating themselves from their involvement in, the organization” and empirically is negatively correlated with LMX (Burris, Detert, & Chiaburu, 2008, p. 914), as a control variable. Our choice was guided by Bernerth and Aguinis’s (2016) best-practice recommendations for control variable usage. One alternative explanation for poor work performance that may pose a threat to our argument is that employees who psychologically detach themselves from their organizations and intend to leave their organizations become “physically uninvolved in tasks, cognitive unvigilant, and emotionally disconnected from others in ways that hide what they think and feel, their creativity, their beliefs and values, and their personal connections with others” (Kahn, 1990, p. 702). Thus, they are less willing to exert work effort (e.g., Hulin, Roznowski, & Hachiya, 1985) and have reduced task performance (Burris et al., 2008, p. 914). In other words, it is possible that psychological detachment, rather than work passion (which pertains to psychological attachment to work and which may be negatively correlated with psychological detachment), explains poor work performance. Thus, in order to rule out this alternative explanation, we included psychological detachment from the organization as a control variable so as to demonstrate the robustness of our findings and alleviate the omitted variable concern.

Additionally, consistent with prior research (e.g., Liu, Chen, & Yao, 2011), we controlled for HWP because this form of passion is correlated with OWP, and thus we sought to partial out the effects from HWP in order to identify that stemming from OWP.

Work passion. Participants responded to seven items measuring HWP ($\alpha = .88$) and seven items measuring OWP ($\alpha = .90$). These items were adapted from Vallerand et al.’s (2003) context-general passion scales. Sample items included: “My work is in harmony with the other

activities in my life” (harmonious work passion) and “I have almost an obsessive feeling for my work” (obsessive work passion).

LMX. Participants indicated their LMX using Bernerth, Armenakis, Field, Giles, and Walker’s (2007) eight-item leader-member social exchange scale ($\alpha = .92$), recommended by Colquitt, Baer, Long, and Halvorsen-Ganepola (2014). Sample items included “My supervisor and I have a two-way exchange relationship” and “My efforts are reciprocated by my supervisor.”

Emotional exhaustion. Participants responded to Maslach and Jackson’s (1981) eight items of emotional exhaustion ($\alpha = .95$) on a seven-point scale from 1 (*never*) to 7 (*always*). A sample item was “I feel emotionally drained from my work.”¹

Psychological detachment from the organization. Similar to Burriss et al. (2008), we measured participants’ psychological detachment from the organization ($\alpha = .71$) using Konovsky and Cropanzano’s (1991) three items (e.g., “I intend to look for another organization to join within the next year”).

Work performance. In each coworker dyad, participants evaluated each other’s work performance using Podsakoff and MacKenzie’s (1989) five items ($\alpha = .78$). Sample items included “This person fulfills all the responsibilities required by his/her job” and “This person often performs high-quality work.”

¹ While there are other scales measuring emotional exhaustion, including the Shirom-Melamed Burnout Measure (Shirom & Melamed, 2006), Pines, Aronson and Kafry’s (1981) Burnout Measure, and the Oldenburg Burnout Inventory (Demerouti & Bakker, 2008), research by Qiao and Schaufeli (2011) found that the emotional exhaustion scale in these measures were strongly correlated to that in the Maslach Burnout Inventory (MBI) used here (with *rs* ranging from .50 to .63). Thus, we chose the more widely used Emotional Exhaustion scale of the MBI so as to allow for comparison with prior studies examining the link between passion and burnout (e.g., Carbonneau, Vallerand, Fernet, & Guay, 2008; de Mol et al., 2018), and expect that the result patterns would be similar if we used the Emotional Exhaustion scale from the other three measures.

Coworker tie strengths. In each coworker dyad, a participant evaluated his/her work and communication ties with the other by responding to two questions (Umphress, Labianca, Brass, Kass, & Scholten, 2003): “To what extent are you required to interact with this coworker to get work done?” (1 = *not at all*; 5 = *a great deal*) and “How often do you communicate with this coworker?” (1 = *never*; 5 = *always*). We averaged the two participants’ ratings in each coworker dyad to create the strengths of the work tie and of the communication tie at the dyad level.

Analysis

Given that participants were nested with coworker dyads, we used hierarchical linear modeling (HLM) to account for the within-dyad interdependence (Hofmann, Griffin, & Gavin, 2000). Our decision to use HLM was also supported by the ICC (.71). We used the software HLM 7.0 (Raudenbush & Bryk, 2002) to perform the analysis. The individual level was Level 1 and the dyad level was Level 2. For an interaction hypothesis at the individual level, the significance of its *t*-test result provided direct support (Hofmann et al., 2000). Given that within-dyad comparison was not of interest, all Level-1 continuous predictors were centered to their respective grand means (Raudenbush & Bryk, 2002). For Level 2, we included the strengths of coworker work and communication ties, which were centered to their respective grand means as well (Raudenbush & Bryk, 2002). To avoid model misspecification and omitted variable problems, we used the HLM results that accounted for both the interactions of LMX and OWP and of emotional exhaustion and LMX to test the hypotheses.

Results

Measurement Model

We performed confirmatory factor analysis (Anderson & Gerbing, 1988) in LISREL 8.80 (Jöreskog & Sörbom, 2006) to distinguish among the six key variables – HWP, OWP, LMX,

emotional exhaustion, work performance, and psychological detachment from the organization. Specifically, we contrasted the six-factor model with the (more parsimonious) five-factor models and the one-factor model. A measurement model typically considered as having a good fit to the data has a comparative fit index (CFI) value of .95 or above and a root mean square error of approximation (RMSEA) value of .08 or less (Browne & Cudeck, 1993; Kline, 2005). The six-factor model ($\chi^2 = 1679.19$, $df = 650$, $CFI = .95$, $RMSEA = .08$) fit the data better than any of the five-factor models ($\Delta\chi^2s \geq 290.03$, $dfs = 5$, $ps < .001$, $\Delta CFIs \geq .01$) and the one-factor model ($\chi^2 = 5677.71$, $df = 665$, $CFI = .76$, $RMSEA = .28$; $\Delta\chi^2 = 3998.52$, $df = 15$, $p < .001$, $\Delta CFI = .19$). Therefore, we concluded that HWP, OWP, LMX, emotional exhaustion, work performance, and psychological detachment from the organization were distinct from one another.

Hypothesis Testing

Table 1 presents the descriptive statistics and correlations among the study variables. We found that the patterns of the key results were the same whether psychological detachment from the organization was included or excluded, which rendered some support for the robustness of our findings. Thus, for the sake of parsimony, we excluded it from the HLM results presented in Table 2. Notably, both work tie strength and communication tie strength were not significantly related to work performance or emotional exhaustion, indicating that coworker relationship quality did not bias participants' ratings of each other's work performance and of their own emotional exhaustion.

Consistent with previous meta-analytic findings, LMX was positively related to work performance (Model 1a: $b = .24$, $SE = .07$, $p < .001$). As expected, OWP was positively related to emotional exhaustion (Model 1b: $b = .28$, $SE = .08$, $p < .001$). We also found a negative, *direct* relationship between OWP and work performance (Model 1a: $b = -.25$, $SE = .05$, $p < .001$). The

magnitude of this relationship (Model 2a: $b = .20$, $SE = .07$, $p < .01$) was reduced by the addition of emotional exhaustion in the equation (Model 2a: $b = -.20$, $SE = .04$, $p < .001$). A supplementary Monte Carlo mediation test (Preacher & Selig, 2012) indicated a significant mediation effect of emotional exhaustion on the relationship between OWP and work performance ($ab = -.06$, 95% confidence interval $[-.10, -.02]$), thereby supporting Hypothesis 1.

 Insert Tables 1 and 2 about here

Also consistent with Hypothesis 2, the interaction of emotional exhaustion and LMX was positively related to work performance (Model 3a: $b = .09$, $SE = .04$, $p < .05$). Figure 2 shows the interactive relationship. A follow-up test indicated that the negative relationship between emotional exhaustion and work performance was stronger when LMX was low ($-1 SD$; simple slope = $-.29$, $SE = .05$, $z = -5.62$, $p < .001$) versus high ($+1 SD$; simple slope = $-.12$, $SE = .05$, $z = -2.67$, $p < .01$).

 Insert Figure 2 about here

Although we did not hypothesize about the role of HWP (given that it was not of focal interest), we nonetheless included it in the analysis for the purpose of completeness. Replicating findings in prior studies, HWP was positively related to work performance (Model 1a: $b = .19$, $SE = .07$, $p < .01$). Yet its interaction with LMX was not significant in predicting work performance (Model 4a: $b = -.09$, $SE = .06$, *n.s.*). HWP was also not significantly related to emotional exhaustion (Model 1b: $b = -.05$, $SE = .12$, *n.s.*).

Supplementary Analysis

We conducted two sets of supplementary analysis to demonstrate the robustness of our model. First, we conducted exploratory analysis and found that the interaction of OWP and LMX was positively related to work performance (Table 2, Model 4a: $b = .13$, $SE = .05$, $p < .05$). However, the interaction of emotional exhaustion and LMX remained positively related to work performance (Model 4a: $b = .08$, $SE = .04$, $p < .05$). Second, in order to rule out the possibility of a first-stage moderation effect of LMX on the relationship between OWP and emotional exhaustion, we added the interaction term of LMX and OWP in Table 2 and found that it was not significantly related to emotional exhaustion (Model 2b: $b = .01$, $SE = .06$, *n.s.*). This non-significant result further supported the second-stage moderation effect of LMX on the relationship between emotional exhaustion and work performance, rather than the first-stage moderation effect of LMX on the relationship between OWP and emotional exhaustion.

Discussion

Despite the noted importance of passion for work performance, the passion literature has documented mixed evidence in regard to the role of OWP. In order to address this issue, we proposed a COR perspective by integrating research on OWP and emotional exhaustion and COR theory. Our field study supported our model, that is, OWP has an indirect relationship with work performance via emotional exhaustion, and LMX attenuates the link between emotional exhaustion and work performance. These findings contribute to the literatures on work passion, LMX, and emotional exhaustion.

Theoretical Implications

Work passion research. The present research makes a multifold contribution to work passion research. Since Vallerand et al. (2003) developed the dualistic model of passion, research on work passion has flourished. Yet the empirical evidence on the performance implication of

OWP is rather inconsistent. While replicating previous research findings about the implications of HWP for emotional exhaustion and work performance, the present research provided supportive evidence for a direct negative relationship between OWP and work performance, even when psychological detachment from work and LMX were accounted for. The difference between our findings and the previous ones could potentially be attributed not only to differences in performance rating sources (i.e., coworker ratings in the present study vs. supervisor rating, self-rating, and objective data in previous studies) but possibly also to cultural tightness versus looseness (Gelfand, Nishii, & Raver, 2006; Gelfand et al., 2011).

First, even though Halbesleben and Wheeler (2008) and Harris and Schaubroeck (1988) found that self-, supervisor-, and peer/coworker-rated job performance ratings were correlated ($r_s \geq .34$), the correlations are not so strong as to suggest that they are one and the same. Second, even though prior studies found no considerable cultural differences in levels of *work motivation*, there could be cultural differences in the relationship between OWP and *work performance*. In particular, countries like China and Singapore, in which researchers did not find a significant relationship between OWP and work performance (Burke et al., 2015; Ho et al., 2011), are considered culturally tight countries, meaning that these countries have strong norms and little tolerance for individual deviance (Gelfand et al., 2006, 2011). In contrast, the U.S., in which we found a significant relationship between OWP and work performance, is considered a loose culture. Individuals' behaviors are strongly regulated by social norms and sanctions in tight cultures, whereas individuals are free to behaviorally express themselves with fewer constraints from social norms or sanctions in loose cultures. Therefore, in tight cultures such as China and Singapore, obsessive passion may not be significantly linked to work performance due to the strong social norms constraining the behavioral manifestation of OWP, whereas in loose cultures

such as the U.S., obsessively passionate employees are free to manifest their OWP, thereby having reduced work performance. Nonetheless, these postulations are speculative and warrant empirical assessment in the future.

More importantly, the present research replicated the previous finding regarding a positive association between OWP and emotional exhaustion, established emotional exhaustion as a mechanism translating OWP into work performance, and identified LMX as a moderator for the link between emotional exhaustion and work performance. Research on work passion has devoted more and more attention to the mediating mechanisms that explain the implications of work passion. We found that OWP had an indirect negative link to work performance via emotional exhaustion, which has received scant attention in work passion research. The present research also revealed that OWP may not necessarily be an unfavorable personal factor, and its negative performance implication could be curbed to the extent that a high-quality LMX relationship could diminish the negative performance implications of emotional exhaustion ensuing from OWP. These findings, together, reconcile the inconsistent results documented in the literature to some extent, and stress the particular need to consider moderating factors in the investigation of the performance implication of OWP.

More broadly speaking, the current findings not only support Vallerand and colleagues' (2014) view of work passion as a critical determinant of work performance but also highlight the complex interplay among work passion, psychological states, and social exchange relationships in driving work performance, shedding light on why OWP may play a modest predictor role. The present research has also laid the theoretical foundation for subsequent research on work passion. Given that the present research, to our knowledge, is among a few that have adopted a COR

perspective in investigating the implications of work passion, it sets the stage for future work to further integrate COR arguments into the work passion literature.

LMX research. The present research demonstrates that the relationship between LMX and work performance is indeed robust; even when psychological detachment from the organization and work passion were accounted for, LMX was still positively related to work performance. However, the moderator role of LMX has not been as extensively examined. While LMX did not serve as a moderator for the link between HWP and work performance in the present research, its resources-providing function was particularly important to mitigating the direct negative performance implications of emotional exhaustion. We encourage researchers to further investigate the moderator role of LMX in the context of work passion.

Emotional exhaustion research. Finally, the current research adds to emotional exhaustion research. While prior research has focused on emotional exhaustion as a negative determinant of work performance, the current understanding of the potential boundary conditions for this linkage is limited to a handful of studies investigating conscientiousness and distributive justice as moderators (Janssen et al., 2010; Witt et al., 2004). Yet almost no research has examined how socio-relational factors can play a moderating role. The present study addresses this deficiency by showing that LMX attenuated the relationship between emotional exhaustion and work performance. Taken together, the current findings are not only consistent with those in previous studies, but also provide a more nuanced perspective on emotional exhaustion in work settings.

Practical Implications

By showing that work passion, LMX, and emotional exhaustion are intricately connected to each other in determining work performance, the present study provides practical implications

on how organizations manage their obsessively passionate employees' work performance. While employees' work passion matters to employee performance and organizational effectiveness, LMX quality also matters. Managers and supervisors need to consider both aspects when deciding on a synergistic approach to maximizing employee performance.

Given that OWP has negative performance implications, one apparent solution is to refrain from hiring obsessively passionate employees. However, this solution may be untenable and overly simplistic, such as in labor market segments where the demand for certain specialized labor outweighs its supply. In these instances, managers and supervisors need to identify ways to mitigate the resource loss ensuing from OWP. The present findings suggest that one way to do so is to nurture high-quality LMX with obsessively passionate employees. It is probably more feasible to improve LMX than to change employees' OWP, which tends to be stable over a period of time.

Limitations and Directions for Future Research

There are several study limitations warranting discussion. First, although LMX was treated as a moderator for the relationship between emotional exhaustion and work performance, LMX and work performance were both measured at Time 2, thereby preventing us from testing the direction of causality between these two constructs and raising the concern about common method bias. Notwithstanding, the most recent meta-analysis of LMX (Martin et al., 2016) showed that, consistent with social exchange theory, LMX was more likely to be a determinant of work performance than vice versa. Thus, this meta-analytic evidence rendered us confident about the causal direction we predicted here. In addition, common method bias was more likely to deflate (vs. inflate) the moderating effect of LMX and thus would make it more difficult for us to detect a significant moderating effect of LMX (cf. Siemsen, Roth, & Oliveira, 2010).

Additionally, we did not ask participants' supervisors to appraise their work performance in order to avoid unnecessarily adding another level to the nested data structure for our multilevel analysis (i.e., individuals nested in coworker dyads which are then nested in supervisors). Nonetheless, we believe that using coworker-rated performance is not inferior to using performance ratings from other sources (e.g., supervisors), in view of the aforementioned empirical and meta-analytic evidence supporting the convergence among performance ratings from different sources such as supervisors, coworkers/peers, and employees themselves. More recently, Martin et al.'s (2016) meta-analysis on LMX found that the relationship between LMX and peer/coworker-rated work performance was almost identical to that between LMX and objectively-rated work performance, and that between LMX and self-rated work performance. Together, the above evidence suggests that the present findings should be replicated with supervisor-rated performance ratings, which we encourage future research to pursue.

We also encourage researchers to continue the inquiry regarding the roles that work passion can play. One interesting finding from our exploratory analysis is that OWP and LMX interacted with one another in predicting work performance. What theory could explain this finding? Given that employees with stronger OWP might be more sensitive to occurrences at work (Lafrenière, St-Louis, Vallerand, & Donahue, 2012), they might be more sensitive to the quality of their LMX relationships, which influences their work performance. Future research may conduct studies to explicitly test our speculation or other viable explanations.

In order to demonstrate the promise of work passion, researchers need to show its value in predicting a range of work outcomes. Besides in-role work performance and organizational citizenship behaviors, can work passion predict creative behaviors, voice behaviors, and counterproductive work behaviors? Additionally, to the extent that the direct relationship

between OWP and work performance remains unclear, researchers should also continue investigating this link, particularly across different cultural, organizational, and social contexts.

Finally, researchers should also consider devoting more attention to the moderator roles of other social resources (e.g., perceived organizational support, social support) not only in the direct relationship between work passion and work behaviors, but also in the relationship between work passion and psychological states that can drive work behaviors. Moving forward, besides resource-related contextual moderators, researchers may examine whether cultural (e.g., societal and organizational cultures) and trait factors (e.g., personality) can moderate the direct and indirect relationships between OWP and critical work outcomes.

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Table 1*Descriptive Statistics and Correlations*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Harmonious work passion (HWP)	5.19	.98										
2. Obsessive work passion (OWP)	4.34	1.34	.62***									
3. Leader-member exchange (LMX)	5.56	.93	.50***	.18**								
4. Emotional exhaustion	3.04	1.57	-.01	.28***	-.32***							
5. Work performance	5.81	1.01	.21***	-.20***	.47***	-.53***						
6. Psychological detachment from the organization	2.89	1.48	-.23***	.12	-.36***	.49***	-.54***					
7. Work tie strength (individual rating)	3.97	.95	.38***	.17**	.41***	-.16**	.35***	-.20***				
8. Communication tie (individual rating)	4.24	.77	.29***	.03	.33***	-.17**	.33***	-.20***	.57***			
9. Age	40.64	9.75	-.10	-.11	.17**	-.25***	.15*	-.20***	.06	.06		
10. Gender	.32	.47	-.14*	-.25***	.01	-.06	.10	-.09	-.04	.03	.16*	
11. Organizational tenure	78.28	52.86	-.08	-.08	.15*	-.14*	.18**	-.21***	.10	.09	.42***	.05

Notes. $N = 262$. Gender: 1 = female, 0 = male. * $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed).

Table 2*HLM Results*

	<u>Work Performance</u>				<u>Emotional Exhaustion</u>	
	Model 1a	Model 2a	Model 3a	Model 4a	Model 1b	Model 2b
	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)
Intercept	5.77 (.07)***	5.77 (.07)***	5.82 (.07)***	5.83 (.07)***	3.04 (.12)***	3.04 (.12)***
<i>Level 1 (individual level)</i>						
Age	-.001 (.01)	-.01 (.01)	-.01 (.01)	-.01 (.01)	-.03 (.01)**	-.03 (.01)**
Gender	.11 (.10)	.12 (.10)	.10 (.10)	.09 (.10)	-.01 (.17)	-.01 (.17)
Organizational tenure	.002 (.001)*	.002 (.001)*	.002 (.001)*	.002 (.001)*	-.0003 (.001)	-.0002 (.001)
Harmonious work passion (HWP)	.19 (.07)**	.19 (.07)**	.18 (.07)*	.19 (.07)**	-.05 (.12)	-.05 (.12)
Obsessive work passion (OWP)	-.25 (.05)***	-.20 (.05)***	-.20 (.05)***	-.21 (.05)***	.28 (.08)***	.28 (.08)***
Leader-member exchange (LMX)	.24 (.07)***	.20 (.07)**	.19 (.07)**	.23 (.07)***	-.26 (.11)*	-.25 (.12)*
Emotional exhaustion		-.20 (.04)***	-.21 (.04)***	-.21 (.04)***		
Emotional exhaustion × LMX			.09 (.04)*	.08 (.04)*		
HWP × LMX				-.09 (.06)		
OWP × LMX				.13 (.05)**		.01 (.06)
<i>Level 2 (dyad level)</i>						
Work tie strength (dyad average)	.18 (.11)	.17 (.10)	.15 (.10)	.13 (.10)	-.08 (.19)	-.08 (.19)
Communication tie strength (dyad average)	.17 (.14)	.10 (.13)	.14 (.13)	.11 (.12)	-.32 (.24)	-.33 (.24)
Deviance	627.61	607.11	603.47	604.10	876.90	882.52

Notes. Level 1 $N = 262$ and Level 2 $N = 131$. Gender: 1 = female, 0 = male. * $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed).

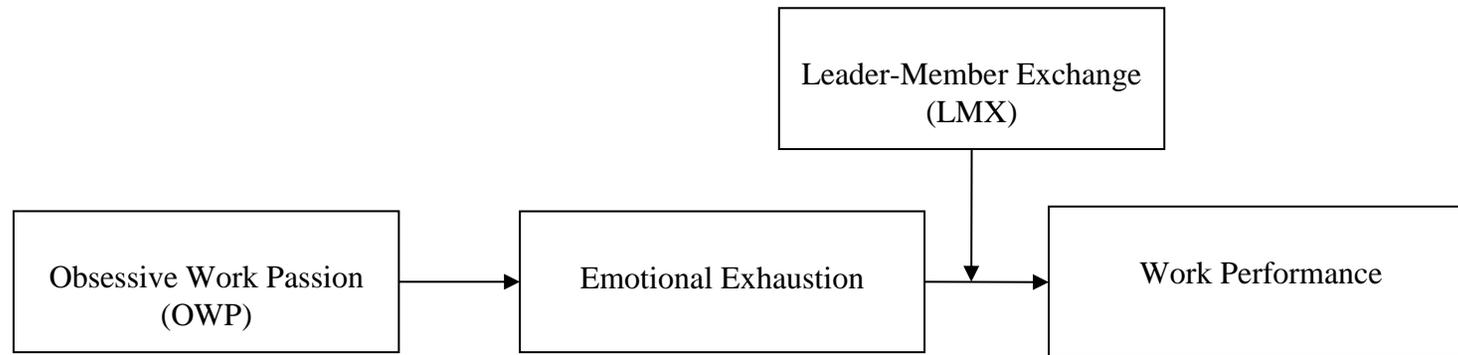


Figure 1. Conceptual model.

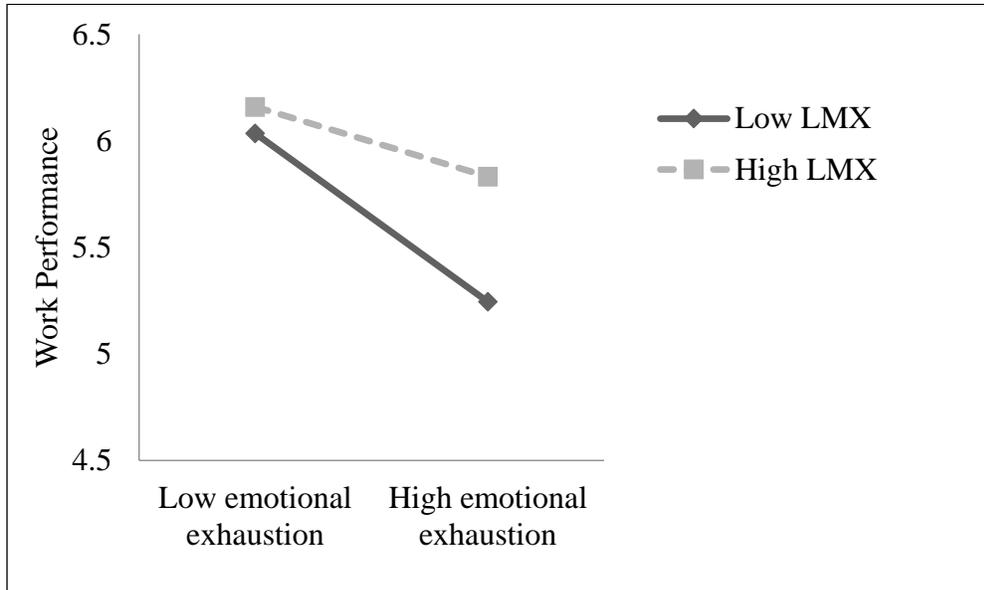


Figure 2. Leader-member exchange (LMX) as a moderator for the relationship between emotional exhaustion and work performance.