My Boss' Passion Matters as Much as My Own:

The Interpersonal Dynamics of Passion are a Critical Driver of Performance Evaluations

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Abstract

Companies often celebrate employees who successfully pursue their passion. Academic research

suggests that these positive evaluations occur because of the passion percolating inside the

employee. We propose that supervisors are also a key piece of this puzzle: Supervisors who are

more successful in their own pursuit of passion place more value on passion in their performance

evaluations. This produces an interpersonal dynamic whereby employees who are more

successful in pursuing their passion may receive higher performance ratings when their

supervisors are also more successful in pursuing their passion. We provide support for this core

hypothesis across a crowd-sourced study with a heterogeneous sample (N=106 subordinate-

supervisor dyads), a field study with a financial services company (N=321 subordinate-

supervisor dyads), and a laboratory experiment (N=205) that offers both causal and mediating

evidence. Crucially, we demonstrate that this interpersonal dynamic is specific to passion and

does not apply to less observable motivations (intrinsic and extrinsic motivation). These results

demonstrate that supervisors who successfully pursue their passion may overvalue passion

relative to other valuable attributes, leading to potential bias. They also give a new perspective

on managing upwards: Employees may further their own careers by helping their supervisors

pursue their passion.

Keywords: passion, job performance, performance evaluations, motivation

Organizations increasingly emphasize the pursuit of passion for work. Firms shape their hiring practices to attract candidates who wish to pursue their passion, develop procedures to help their employees successfully fulfill their passion, and fire employees who are no longer passionate for their work (Bolles, 2009; Duckworth, 2016; Isaacson, 2011; Wolf, Lee, Sah, & Brooks, 2016). As a result, employees increasingly value the pursuit of passion for work, in part with the hope of attaining higher levels of job performance (O'Keefe et al. 2018). Academic research suggests this emphasis may indeed be beneficial: A recent meta-analysis found evidence for a small but robust relationship between passion and job performance (Pollack, Ho, O'Boyle, & Kirkman, 2020). Hiring and cultivating employees who pursue their passion thus seemingly reflects a productive organizational strategy.

The drivers underlying passion's relationship to performance have been primarily ascribed to the intrapersonal level, i.e., the passion percolating inside an employee. That is, several studies have identified a number of ways that passion can increase performance, including increased engagement (Ho & Astakhova, 2017; Ho, Wong, & Lee, 2011), persistence (Zigarmi, Nimon, Houson, Witt, & Diehl, 2009), and job control (Lavigne, Forest, Fernet, & Crevier-Braud, 2014). However, ample evidence—primarily from the entrepreneurship literature—highlights that there are also important interpersonal effects of passion: Passionate individuals are more likely to receive status and support from others (Jachimowicz, To, Agasi, Côté, & Galinsky, 2019). Similarly, entrepreneurial pitches infused with passion are more likely to garner greater financial resources (Davis, Hmieleski, Webb, & Coombs, 2017), in part because these pitches are viewed as having greater potential (Mitteness, Sudek, & Cardon, 2012).

We propose that there are important effects of passion on performance which are driven by interpersonal dynamics. Consider how performance evaluations are conducted in organizations. Research demonstrates that they are inherently an interpersonal process (Bernadrin & Beatty, 1984; DeNisi & Sonesh, 2011; Ferris, Munyon, Basik, & Buckley, 2008), with characteristics of supervisors combining with characteristics of employees to predict performance evaluations. One of the main sources of this dynamic is the fact that supervisors vary in the value they place on different sources of information (DeNisi & Williams, 1988; Landy & Farr, 1980; Motowidlo, 1986). With regards to passion, some supervisors may be more likely to value passion in their employees more than others.

In the current research, we propose that supervisors who more successfully pursue their passion will place a greater value on passion when evaluating the job performance of their employees (Cardon, Wincent, Singh, & Drnovsek, 2009; McAllister, Harris, Hochwarter, Perrewé, & Ferris, 2017; Perrewé, Hochwarter, Ferris, McAllister, & Harris, 2014). Statistically, we predict that an employee's pursuit of passion will be a stronger predictor of their performance evaluations when their supervisor also more successfully pursues their passion, in contrast to when they less successfully pursue their passion (Calder, 1977; Heilman & Haynes, 2005; Jacquart & Antonakis, 2015; Yun, Takeuchi, & Liu, 2007). Theoretically, we propose that this pattern occurs because supervisors vary in how much value they place on passion. Thus, the current research highlights how one characteristic of supervisors—how successful they are in their pursuit of passion—shifts their emphasis on passion as a criterion in performance evaluations.

The current research makes several contributions. First, we establish an interpersonal dynamic as a key driver of the relationship between passion and performance. We move beyond prior work that has investigated interpersonal predictors of performance evaluations by focusing on the dynamic caused by the similarity between subordinates' and supervisors' successful

pursuit of passion (Antonioni and Park 2001a, Miles 1964, Senger 1971, Turban and Jones 1988). Second, the current research demonstrates that this interpersonal dynamic around passion is distinct from other motivations. To do we, we conceptually distinguish between motivations that are more readily expressed by subordinates and perceived by supervisors (e.g., their passion for work) from motivations which are less readily expressed by subordinates and perceived by supervisors (e.g., their intrinsic and extrinsic motivation). That is, we theorize and show that the interpersonal dynamic arising between a supervisor's motivation and their subordinate's motivation occur only for the more observable passion but not for motivations which are not as readily perceived, i.e., intrinsic and extrinsic motivation.

After developing our theoretical argument, we present three studies that provide empirical support for our hypothesis that the relationship of an employee's pursuit of passion to their performance evaluations depends on their supervisors' pursuit of passion. We first evidence this prediction across a crowd-sourced study with a heterogeneous sample (N=106 subordinate-supervisor dyads) and a field study with a financial services company (N=321 subordinate-supervisor dyads), which measured subordinates' and supervisors' pursuit of passion to predict the supervisor's job performance ratings of their employees. The latter study also measured intrinsic and extrinsic motivation to demonstrate that our proposed interpersonal dynamic is unique to passion. Finally, we present an experimental study (N = 205) to provide both causal and process evidence. We asked participants to rate a subordinate's performance and manipulated whether that subordinate was presented as being successful or unsuccessful in their pursuit of passion; we also measured participants' pursuit of passion and the importance they placed on passion in making their performance evaluations. This experiment casually demonstrates that supervisors rate passionate employees more positively when they are

successful themselves in their pursuit of passion and that this effect occurs because passionate supervisors place a higher premium on passion.

Theoretical Development

Passion has been defined as "a strong feeling toward a personally important value/preference that motivations intentions and behaviors to express that value/preference" (Jachimowicz et al. 2018, p. 9980). Prior research has distinguished passion from several related constructs, including personal interest, intrinsic motivation, and engagement (Birkeland & Buch, 2015; Curran et al., 2015; Ho & Astakhova, 2017; Perrewé et al., 2014; Pollack et al., 2018; Vallerand, 2015). From a theoretical point of view, these constructs are distinct from passion; for example, passion is more strongly internalized into an individual's identity (Birkeland & Buch, 2015; Liu, Chen, & Yao, 2011; Pollack et al., 2018; Vallerand, 2015), with passion predicting whether people integrate their work into their self-concept (Vallerand, Houlfort, & Forest, 2003). From an empirical perspective, passion for work explains variance in several outcomes beyond related constructs (Ho et al., 2011; Liu et al., 2011; Trépanier, Fernet, Austin, Forest, & Vallerand, 2014), including for outcomes such as job satisfaction, emotional exhaustion, and burnout (Birkeland, Richardsen, & Dysvik, 2017; Burke & Fiksenbaum, 2009; Curran et al., 2015; Fernet, Lavigne, Vallerand, & Austin, 2014; Ho & Astakhova, 2017; Pollack et al., 2019; Trépanier et al., 2014; Zigarmi et al., 2009).

In recent years, the pursuit of passion has increasingly become a core characteristic of the exemplary performer. Practitioners emphasize the importance of pursuing one's passion for attaining higher job performance (Anderson, 2004; Bolles, 2009; Isaacson, 2011). Countless company mission statements similarly characterize exemplary employees as being successful in their pursuit of passion. For example, at McKinsey, employees are probed to "[1]earn how you

can pursue your passion" (McKinsey, 2018), whereas at Accenture, employees are asked to "[b]ring your passion" (Accenture, 2018). Zappos specifies that its' core values include to "be passionate" (Zappos, 2018), while Capital One focusses their recruitment on individuals who have "a passion for what they do every day" (Capital One, 2018). Numerous reports strike in a similar vein, emphasizing that by cultivating passion amongst their employees, "organizations can make sustained performance gains" (Hagel, Brown, Ranjan, & Byler, 2014), and that "without that passion, companies won't find sustained performance improvement" (Hagel, Brown, Wooll, & Ranjan, 2017). Indeed, the pursuit of passion has become a widespread goal for both employees and employers alike (Tokumitsu, 2014), with sociological research increasingly portraying the pursuit of passion as a "schema" which echoes through the work environment as a highly-prized quality (Gershon, 2017; Neely, 2020; Reid, 2015; Rivera, 2015; Wolf et al., 2016). Viewed from this perspective, possessing passion reflects what supervisors believe is a core characteristic of exemplary performers.

In the current research, we focus on whether employees and their supervisors are successful in their pursuit of passion, i.e., whether they are able to attain what is an attribute that is widely valued in the workplace (Rao & Tobias Neely, 2019a; Reid, 2015; Sharone, 2013). Note that this "ideal worker" perspective to the pursuit of passion builds on prior research, which has explored how passion is internalized (Vallerand, 2015; Vallerand, Blanchard, et al., 2003), how passion changes over time (Gielnik, Uy, Funken, & Bischoff, 2017; Mageau et al., 2009), how passion is experienced (e.g., see Curran, Hill, Appleton, Vallerand, & Standage, 2015), and how people may vary in what they are passionate about (Cardon, Gregoire, Stevens, & Patel, 2013). Note, however, that this focus of the successful pursuit of passion as an attribute of the ideal worker is primarily preoccupied with whether employees embody this characteristic, i.e.,

whether they successfully pursue their passion. In the subsequent section, we outline how this perspective to the pursuit of passion plays a key role in understanding its interpersonal effects.

An Interpersonal Perspective on the Role of Passion in Performance Evaluations

In the current research, we propose an interpersonal pathway through which passion may produce greater performance. Although passion may motivate and drive an employee to higher performance at work, it is important to recognize that job performance evaluations are inherently an interpersonal process (Bernadrin & Beatty, 1984; DeNisi & Sonesh, 2011; Ferris et al., 2008). Indeed, prior research has emphasized that job performance evaluations are a complex procedure that involve "social, situational, affective, and cognitive elements" (Ferris, Judge, Rowland, & Fitzgibbons, 1994: 101). When making evaluation decisions, characteristics of the evaluator (i.e., the supervisor) are likely to determine what information they attend do, as well as how they value this information (DeNisi & Williams, 1988; Landy & Farr, 1980; Motowidlo, 1986). The idea that supervisor's own perspectives help determine the relationship between an employee's pursuit of passion and their assessed job performance is supported by a recent study which found substantial variation in job performance ratings between supervisors; the authors wrote that "31 % of the variation of in-role performance [...] could be credited to variation in supervisor ratings" (Birkeland & Buch, 2015, p. 401). This finding demonstrates that it is important to explicitly incorporate supervisor attributes when examining the relationship between the pursuit of passion and job performance.

Our interpersonal perspective recognizes that the job performance evaluation equation not only needs to include an employee's pursuit of passion but also their supervisor's pursuit of passion. The core idea of our perspective is that supervisors who are more successful in their pursuit of passion place a greater emphasis on their employees' passion pursuit during

performance evaluations. Because an employee's passion is frequently integrated into their identity (Cardon et al., 2009; McAllister et al., 2017; Perrewé et al., 2014), how successful people are in their pursuit of passion may not only drive how they view themselves but also how they view others. As a result, supervisors more successful in their pursuit of passion may view passion pursuit as a more valued attribute (Higgins, 1987; Korman, 1966) and base their evaluation decisions more on whether their subordinates are successful in their pursuit of passion (Calder, 1977; Heilman & Haynes, 2005; Jacquart & Antonakis, 2015; Yun et al., 2007).

We therefore predict that employees who are more successful in their pursuit of passion will receive more favorable performance evaluations when their supervisors also more successfully pursue their passion. In contrast, supervisors who themselves are less successful in their pursuit of passion may not view it as a less valuable or important criterion (Murnieks, Mosakowski, & Cardon, 2014), such that employees who are successful in their pursuit of passion are likely to receive a smaller performance evaluation boost. Overall, we propose that supervisor passion pursuit will moderate the relationship between employee passion pursuit and supervisor-rated job performance. We suggest that this occurs, in part, because supervisors who are more successful in their passion pursuit will place greater emphasis on passion as a criterion in their evaluation decision (see Figure 1). More formally, we predict:

Hypothesis 1. Supervisor passion pursuit will moderate the relationship between employee passion pursuit and supervisor-rated performance evaluations, such that there will be a stronger link between employee passion pursuit and supervisor-rated performance at higher levels of supervisor passion pursuit.

Hypothesis 2. Supervisor passion pursuit will positively predict the value they place on passion as an evaluation criterion.

Hypothesis 3. The moderation of the relationship between subordinate passion pursuit and job performance ratings by supervisor passion pursuit will be mediated by the value supervisors place on passion as an evaluation criterion.

*** Insert Figure 1 about here ***

Uniquely Passionate: Easily Expressed and Observed

Our prediction that an employee's and their supervisor's passion pursuit interact is specific to passion. One key feature of passion is that it is readily expressed and observed by others. In contrast, other motivational forces—e.g., intrinsic and extrinsic motivation—are not as readily expressed and observed. Indeed, prior studies have documented the unique physical manifestations related to passion's outward expressions, including facial expressions, vocal tone, and body language (Cardon, 2008; Chen et al., 2009; Jachimowicz et al., 2019; Li, Chen, Kotha, & Fisher, 2017; Mitteness, Cardon, & Sudek, 2010). As a result, passion is readily observed by others, and its cues serve as a visible indicator of how passionate the expresser is (Curran et al., 2015; Smilor, 1997). For example, in Jachimowicz et al (2019), five independent coders rated expressions of passion in 177 entrepreneurial pitches along six previously validated indicators of passion (drawing on Chen et al., 2009). The more raters indicated that pitches contained these expressions of passion, the more likely investors were to fund the startup pitch. Similarly, both Galbraith et al. (2014) and Davis et al. (2017) found that displayed passion had a favorable impact on judges' ratings of pitches. As a result, a supervisor is able to observe their subordinate expressing passion for their work on various occasions and draw an inference on how successful they are in their pursuit of passion from these observable cues. This observability is reinforced by the fact that expressions of passion carry high identity relevance, as they denote values that one personally cares about (Fauchart & Gruber, 2011; Jachimowicz, To, Agasi, Côté, & Galinsky, 2019; Murnieks et al., 2014; Vallerand, Blanchard, et al., 2003).

In contrast, neither intrinsic nor extrinsic motivation are as easily observable as they only emerge in the immediate person-task interaction (Abuhamdeh & Csikszentmihalyi, 2009; Ryan

& Deci, 2000). That is, intrinsic and extrinsic motivation more closely describe an individual's experience within a task, and is less identity relevant (Grant, 2008). Even when a correlate of intrinsic motivation is observed—for example, how long a person continues to engage in a task out of interest (Reeve & Nix, 1997)—it may be difficult for a supervisor to accurately infer to what extent this subordinate is intrinsically versus extrinsically motivated (Gagne & Deci, 2005). As a result, supervisors may be less able to draw an inference to their subordinates' underlying motivations (Rawsthorne & Elliot, 1999; Woolley & Fishbach, 2017; Wrzesniewski et al., 2014). Overall, we propose that supervisor passion pursuit will moderate the relationship between employee passion pursuit and supervisor-rated job performance, and that this interaction will not occur for intrinsic or extrinsic motivation.

Empirical Overview

We conducted three studies to provide support for our hypothesis. Study 1 was conducted utilizing a US online survey provider. Here, we initially tested the interactive effect of employee and supervisor passion pursuit on job performance. In Study 2, we conducted a field study with employees at a financial services company. We replicate the interactive effects found in Study 1, and also show that this relationship is unique to passion and does not occur for less observable motivations (i.e., intrinsic nor extrinsic motivation). In Study 3, we conducted an experiment with full-time employees to test whether being more successful in their pursuit of passion shifts what criteria they rely on when conducting performance evaluations. We note that Studies 1 and 2 were exploratory in nature, whereas Study 3 was confirmatory. All code necessary to reproduce our analysis, as well as the data for Studies 1 and 3, are available at our OSF repository: https://osf.io/35hy8/?view_only=2982af79977f461ea951f83af4437947.¹

¹ Note that we are unable to share the underlying data for Study 2, given our agreement with the participating organization.

Study 1: The Interpersonal Dynamics of Passion and Performance Evaluations

Study 1 involved matched pairs of supervisors-employees from a range of organizations in the United States. This study directly tested Hypothesis 1, i.e., that supervisor passion pursuit would moderate the relationship between employee passion pursuit and supervisor-rated performance evaluations. We predicted a stronger link would emerge between employee passion pursuit and performance evaluations when their supervisors were more successful in their pursuit of passion.

Participants and Procedure

We recruited pairs of supervisors and subordinates from ROIRocket, an online survey provider. Eligible participants were professionals located within the United States and working full-time. We first asked focal employees to complete a survey about their pursuit of passion and work experiences, as well as answer several questions about their supervisor at work. At the end of the survey, focal employees were asked to nominate and invite their supervisor, who was then recruited to participate in our study. Supervisors completed questions about the focal employee who nominated them to participate as well as also questions about their own pursuit of passion and work experiences. Overall, we received 529 responses from employees and 164 responses from supervisors (supervisor response rate 31.0%). Both employees and supervisors were paid \$10 each to participate.

We were able to match a total of 164 pairs. In order to confirm that participants were working full-time, we removed supervisors whose salary fell below \$39,000 or who worked fewer than 30 hours per week (N=20). In addition, the research team assessed overlap between employee and supervisor responses on a number of questions, including a brief description of their relationship, the length of their relationship, as well as their industry. Pairs were excluded if

there was a significant discrepancy in employee and supervisor responses (N=10). Finally, after removing participants who failed our attention checks (N=28), our final sample consisted of 106 pairs (response rate: 64.6%) of supervisors and employees (supervisors: Mage = 46.24, SDage = 9.67, 57.5% female, subordinates: Mage = 40.95, SDage = 9.77, 64.2% female). The majority of employees worked in the communication/consulting industry (N = 35, 33.0%), followed by trade/service (N = 22, 20.8%), finance (N = 19, 17.9%), or social/welfare (N = 17, 16.0%) sectors. Ten employees were working in production/manufacturing (9.4%), while two individuals (1.9%) worked in education, and one in research (1.0%).

Measures

All measures were applied in English. Unless stated otherwise, the measures used a 7-point scale ranging from *not at all* to *extremely*.

Employee and Supervisor Passion Pursuit. We measured the extent to which employees and supervisors are successful in their pursuit of passion for their work with a three-item scale. The items were "I am accomplishing my pursuit of passion through my work," "I am following my passion through my job," and "My work activities propel my passion" (see Jachimowicz, Wihler, Bailey, & Galinsky, 2018, for a related version of this scale). Alpha internal consistencies were $\alpha = .85$ for employees and $\alpha = .87$ for supervisors.

Job Performance. Supervisors were asked to rate the performance of their subordinates with the following five items (Welbourne, Johnson, & Erez, 1998): "This employee satisfactorily completes assigned duties," "This employee is an effective performer," "This employee is a good individual contributor," "This employee makes sure his or her work group succeeds," and "This employee responds to the needs of others in his or her work place." The scale ranged from 1 (strongly disagree) to 7 (strongly agree), $\alpha = .85$.

Control Variables. In our analyses, we controlled for employee age, gender, and organizational tenure. We included age because older people often receive worse performance evaluations (Waldman & Avolio, 1986); for gender because research cannot rule out that female employees receive worse performance ratings (Bowen, Swim, & Jacobs, 2000); and for organizational tenure because it has been associated with job performance ratings (Kuncel, Rose, Ejiogu, & Yang, 2014; Ng & Feldman, 2010). Furthermore, we controlled for supervisor tenure and supervisor-employee relationship length, as both have been shown to affect passion and performance (Astakhova & Ho, 2018; Ho et al., 2011; Judge & Ferris, 1993). We included all controls in subsequent steps after first testing our predicted interaction effect separately, following recommendations by Becker (2005) and Becker et al. (2016).

Results

Confirmatory Factor Analysis. Prior to testing our hypothesis, we assessed the distinctiveness of the constructs assessed at both the employee and supervisor-level (i.e., employee and supervisor passion pursuit and job performance ratings) by conducting confirmatory factor analyses using the MLR estimator with robust standard errors. Thus, in the first model, items of each construct loaded onto their respective factor. The fit-indices were good (Schermelleh-Engel, Moosbrugger, & Müller, 2003): $X^2(41) = 50.30$, correction factor = 1.45, RMSEA = .05, CFI = .97, SRMR = .05. Next, we compared this model to a model where we loaded all supervisor-rated items (passion pursuit and performance) on one common factor. This model fit the data worse: $X^2(43) = 133.92$, correction factor = 1.71, RMSEA = .14, CFI = .67, SRMR = .15. Additionally, the fit of the first model was significantly better: $\Delta X^2 = 22.23$, $\Delta df = 2$, p < .001. Next, we tested a model where supervisor-performance and employee-passion-pursuit items loaded on the same factor. Again, this model fit the data worse: $X^2(43) = 136.11$,

correction factor = 1.56, RMSEA = .14, CFI = .67, SRMR = .15. Additionally, the fit of the first model was significantly better: ΔX^2 = 36.89, Δdf = 2, p < .001. Following methodological recommendations (Farrell, 2010; Fornell & Larcker, 1981), we next computed the average variances extracted (AVE) for employee and supervisor passion pursuit. AVE values greater than .50 provide evidence of item-level convergent validity. The passion pursuit AVE values were .65 for employees and .69 for supervisors, thus providing evidence of item-level convergent validity.

Correlation Table. Table 1 presents the means, standard deviations, correlations, and internal consistency reliability estimates for all variables. As shown, employee passion pursuit (r = .16, p < .05 one-tailed) and supervisor passion pursuit (r = .23, p < .05) were positively correlated with job performance, in line with prior research (Astakhova & Porter, 2015; Burke, Astakhova, & Hang, 2015).

*** Insert Table 1 about here ***

Regression Analyses. We used moderated regression analyses to test our hypothesis. Prior to computing and entering the interaction term, we standardized both employee and supervisor passion pursuit. Finally, in the last step, we entered employee gender, age, and organizational tenure, as well as supervisor tenure, and relationship length.

Table 2 shows the results of the moderated regression analyses. Hypothesis 1 stated that the relationship between employee passion pursuit and job performance would be moderated by supervisor passion pursuit. In support of this hypothesis, Model 2 shows that the corresponding interaction effect was statistically significant (B = .16, S.E. = .05, $\beta = .31$, p = .001) and explained an additional 9% variance of job performance (p = .001). We subsequently plotted the form of this interaction in Figure 2 following established guidelines (Dawson, 2014).

*** Insert Table 2 and Figure 2 about here ***

In support of Hypothesis 1, we find that when supervisor passion pursuit was high (1 SD above the mean), employee passion pursuit was positively related to job performance (B = .24, S.E. = .08, p = .003). However, when supervisor passion pursuit was low (1 SD below the mean), the relationship between employee passion pursuit and job performance was not statistically significant (B = -.06, S.E. = .07, p = .375). In addition, we computed regions of significance (Preacher, Curran, & Bauer, 2006) which indicated a statistically significant relationship between employee passion pursuit and job performance for values of supervisor passion pursuit above 6.11 (.15 SD above the mean) and below 3.77 (1.83 SD below the mean). Therefore, higher levels of employee passion pursuit were associated with higher job performance when supervisors were also successful in their pursuit of passion. In contrast, when supervisors were less successful in their pursuit of passion, higher levels of employee passion pursuit were not associated with increased job performance and even lead in extreme cases (almost 2 SD below the mean) to decreases in job performance. Next, we tested whether our results remained statistically significant when adding the control variables (Model 3). As Table 2 shows, the interaction between employee and supervisor passion pursuit on job performance continues to be statistically significant (B = .13, S.E. = .05, p = .009). In sum, these results support Hypothesis 1.

Discussion

Using multisource data from full-time employees and their supervisors, Study 1 provides initial support for Hypothesis 1 that supervisor passion pursuit moderates the relationship between employee passion pursuit and job performance ratings.

Study 2: Distinguishing Passion Dynamics from Intrinsic and Extrinsic Motivation

Although the results of Study 1 supported our theorizing, they do not allow us to establish whether the pattern is specific to passion, or whether it applies to other motivational states like intrinsic or extrinsic motivation. Note that our theory suggests that the interaction between supervisor and employee would occur only for passion pursuit but not intrinsic or extrinsic motivation because passion is more readily expressed and observed. Study 2 was designed to provide a more specific test of our theoretical model by considering the interpersonal dynamics around intrinsic and extrinsic motivations. To generalize beyond the location of Study 1, which used a range of organizations in the U.S., the current study tested our predictions in a single financial services company located in a Spanish-speaking country.

Participants and Procedure

This study was conducted with employees of one financial services company located in a Spanish-speaking country. In this organization, employees work in teams led by a single supervisor who also provides annual evaluations of their subordinates with an organizationally developed measure of job performance. Employees were contacted by an email sent out by the company's Human Resource department, which contained a link to the survey hosted on Qualtrics.com. Prior to this email, the company's Human Resources department informed employees that they would participate in a study. In this communication, employees were also guaranteed that their responses would be kept entirely confidential and that their employer would not have access to any of their responses because the information would be stored on a server that only the first author would have access to. In addition to the employee survey data, the company's Human Resource department provided job performance ratings for each employee. Participants were not paid for their time.

We sent invitation emails to 1,185 employees via the Human Resources department and received partial survey data from 1,059 employees and supervisors. We could match 405 employee-supervisor dyads. After dropping dyads with missing data on our focal variables, implausible data, or where we were unable to identify the corresponding supervisors, our final sample consisted of 321 employees (response rate: 27.09%). This subset of employees did not differ in age, gender, or tenure from partial respondents (all ps > .18). Our sample included 149 female employees (46.4%) with ages ranging from 19 and 50 (M = 31.85 years, SD = 7.82) and an average tenure of 6.63 years (SD = 5.84). Overall, 117 supervisors provided performance ratings with an average of 3 subordinate ratings per supervisor (SD = 2.28).

Measures

Given the company's location, we used the translation procedure outlined by Schaffer and Riordan (2003) to adapt our measures to Spanish. To ensure that these measures adequately captured the constructs of interests, we conducted a measurement equivalence-measurement invariance analyses, which we report in Appendix A. Specifically, we compare the measures of the Spanish scale reported here with the English scale reported in Study 3 and establish crosscultural measurement invariance for the measure of passion pursuit. Unless stated otherwise, the measures used a 7-point scale ranging from *strongly disagree* to *strongly agree*.

Employee and Supervisor Passion Pursuit. We measured the extent to which employees and supervisors are successful in their pursuit of passion for their work with a three-item scale (Jachimowicz, Wihler, Bailey, & Galinsky, 2018). In Study 1, we used a positively worded scale to capture how successful respondents reported their pursuit of passion was. To rule out the possibility that our results are driven by social desirability biases, particularly in the context of an attribute that is widely viewed as important in contemporary workplaces, we

reversed the item wording of the scale used in Study 1. These reversed items read, "I am less passionate for my work than I should be," "I often feel as if I have to be more passionate for my work," and "I frequently feel obliged to be more passionate for my work than I currently am." We reverse-scored the items, such that higher levels corresponded to greater success in the pursuit of passion, $\alpha = .79$ for employees and $\alpha = .85$ for supervisors.

Job Performance. The organization's Human Resources department provided employees' performance ratings which were conducted by their supervisors. The organizationally developed measure used multiple items and was designed such that the score "100" reflects acceptable performance, scores below "100" are considered poor, and scores above "100" reflect good performance. The HR department provided us only with the overall score. In our sample, job performance ranged from 72 to 125, with a mean of 101.31 (SD = 7.97).

Intrinsic and Extrinsic Motivation. To provide a more rigorous test of our hypothesis, and to distinguish passion from less observable motivations, we also measured for employee and supervisor intrinsic (α = .82 and α = .64, respectively; e.g., in response to the prompt, "Why are you motivated to do your work?" participants responded to "because I enjoy it") and extrinsic motivation (α = .84 and α = .84, respectively; e.g., "because I feel I have to do it") using measures from Grant (2008). We both controlled for and compared the cross-level interaction of passion pursuit with those of intrinsic and extrinsic motivation. We included all controls in subsequent steps after first testing our predicted interaction effect separately, following recommendations by Becker (2005) and Becker et al. (2016).

Control Variables. As in Study 1, we controlled for age, gender, and organizational tenure.

Results

Confirmatory Factor Analysis. Prior to testing our hypothesis, we assessed the distinctiveness of the constructs assessed at both the employee and supervisor-level (i.e., employee passion and all motivations) by conducting multilevel confirmatory factor analyses (using the MLR estimator). In the first model, items of each construct loaded onto their respective factor. The fit-indices were good (Schermelleh-Engel et al., 2003; although Dyer, Hanges, and Hall, 2005, cautioned against applying conventional cut-off values in multilevel analyses: CFAs: $X^2(64) = 129.33$, correction factor = .936, RMSEA = .06, CFI = .96, SRMR-within = .06, SRMR-between = .06). Next, we compared this model to a model where we loaded all items from every measure on one common factor for employees and supervisors, respectively. This model fit the data worse: $X^2(70) = 1027.20$, correction factor = 1.043, RMSEA = .21, CFI = .37, SRMR-within = .19, SRMR-between = .18. Additionally, the fit of the first model was significantly better: $\Delta X^2 = 435.06$, $\Delta df = 6$, p < .001.

Following methodological recommendations (Farrell, 2010; Fornell & Larcker, 1981), we next computed the average variances extracted (AVE) for passion pursuit, and intrinsic and extrinsic motivation for both employees and supervisors from the respective item indicators, as well as the shared variance (SV; i.e., the squared correlation) across these factors. AVE values greater than .50 provide evidence of item-level convergent validity. The employee AVE values were .55 for passion pursuit, .64 for intrinsic motivation, and .58 for extrinsic motivation, all above the threshold of .50, thus providing evidence of item-level convergent validity. The supervisor AVE values were .66 for passion pursuit, .58 for intrinsic motivation, and .58 for extrinsic motivation, again all above the threshold of .50. In addition, we tested whether AVE values were greater than the SV values between two constructs to provide evidence of

discriminant validity. The employee SV values were .35 for passion pursuit and intrinsic motivation and .05 for employee passion pursuit and extrinsic motivation. The supervisor SV values were .36 for passion pursuit and intrinsic motivation and .07 for employee passion pursuit and extrinsic motivation. Thus, we can conclude that passion pursuit is a distinct construct compared to intrinsic and extrinsic motivation with sufficient convergent and discriminant validity.

Correlation Table. Table 3 presents the means, standard deviations, correlations, and (where applicable) internal consistency reliability estimates for all variables. As shown, employee passion pursuit (r = .15, p < .01; e.g., Astakhova & Porter, 2015) and employee intrinsic motivation (r = .15, p < .01; e.g., Grant, 2008) were positively correlated with job performance, in line with prior research.

*** Insert Table 3 about here ***

Multilevel Analyses. Because supervisors assessed multiple employees, the data structure is nested. We therefore evaluated the ICC(1) for job performance to examine whether multilevel analyses were warranted. Analysis reveals an ICC(1) of .32, highlighting the need to apply multilevel analyses (Hox, 2010). To estimate the supervisor-influence on employee passion pursuit, we also calculated its ICC(1) which was .00, indicating that there were no systematic supervisor effects on employee passion pursuit. Because our data was nested, our hypothesized relationship was a cross-level interaction. Thus, for our analyses, we group-mean centered all within-level variables and grand-mean centered supervisor variables (Aguinis, Gottfredson, & Culpepper, 2013) used for estimating cross-level interactions and before entering them into the regression model on their respective level.

Table 4 shows the results of the multilevel analyses. As stated in Hypothesis 1, we predicted the relationship between employee passion pursuit and job performance to be moderated by supervisor passion pursuit. Consistent with this hypothesis, Model 6 shows that the interaction effect was statistically significant (*estimate* = .51, S.E. = .17, p = .002). We subsequently plotted the form of this interaction in Figure 3 following established guidelines (Dawson, 2014). We also report the results of the analyses in reverse order in Appendix B, i.e., first entering the control variables, then the main effects of employee and supervisor passion pursuit, and third, the interaction between both (see Table S1).

*** Insert Table 4 and Figure 3 about here ***

In support of Hypothesis 1, we find that when supervisor passion pursuit was high (1 SD above the mean), employee passion pursuit was positively related to job performance (B = 1.34, S.E. = .42, p = .001). However, when supervisor passion pursuit was low (1 SD below the mean), the relationship between employee passion pursuit and job performance was not statistically significant (B = -.31, S.E. = .35, p = .373). In addition, we computed regions of significance (Preacher et al., 2006) that indicated a statistically significant relationship between employee passion pursuit and job performance for values of supervisor passion pursuit above 6.05 (.03 SD above the mean) and below 2.45 (1.89 SD below the mean). Therefore, higher levels of employee passion pursuit were associated with higher performance when supervisors were also successful in their pursuit of passion. In contrast, when supervisors were less successful in their pursuit of passion, higher levels of employee passion pursuit were not associated with increased job performance but lead in the extreme case of almost 2 SD below the mean to decreases in job performance.

Next, we tested whether our results remain statistically significant when adding the control variables. First, we added gender, age, and organizational tenure (Table 4, Model 7). Next, we included intrinsic and extrinsic motivation (Model 8). Finally, we also controlled for the cross-level interactions between both intrinsic and extrinsic motivation and supervisor passion pursuit (Model 9). As Table 4 shows, the interaction between employee and supervisor passion pursuit on job performance remained statistically significant in all models (Model 7: estimate = .50, S.E. = .17, p = .003; Model 8: estimate = .48, S.E. = .17, p = .004; Model 9: estimate = .61, S.E. = .17, p < .001). In addition, no other interaction between employee motivations and supervisor passion pursuit on job performance was statistically significant (all ps > .376). In sum, these results support Hypothesis 1.

Specificity to Passion Pursuit

To test whether the interpersonal effects between subordinate and supervisors on job performance was specific to passion pursuit and did not extend to less visible motivations (i.e., intrinsic and extrinsic motivation), we compared the effects of both employee and supervisor passion pursuit with intrinsic motivation and extrinsic motivation of both employees and supervisors. Results of Model 10 (Table 4) show that only the interaction of employee and supervisor passion pursuit was statistically significant (*estimate* = .52, *S.E.* = .19, p = .006), whereas the interactions of employee and supervisor intrinsic motivation (*estimate* = -.66, *S.E.* = 1.50, p = .661) as well as extrinsic motivation (*estimate* = .32, *S.E.* = .24, p = .185) were not. In line with our theory, these analyses reveal that the interpersonal effects between supervisor and subordinate only arise for passion pursuit, but not for the less observable intrinsic or extrinsic motivation.

Discussion

Matching survey data to company records, Study 2 provides additional support for Hypothesis 1 and rules out the alternative explanation that the interpersonal effects are driven by extrinsic or intrinsic motivation rather than being specific to the pursuit of passion. In addition, these findings provide some evidence against the notion that similarity is driving this effect. First, the pattern of the interaction shows that there is no performance evaluation boost for employees who are less successful in their pursuit of passion when their supervisors also less successfully pursue their passion (i.e., a cross-over interaction pattern). Instead, there is a specific effect of employees with higher passion pursuit being rated more positively only when their supervisors are also more successful in their pursuit of passion. Second, we find no similarity matching for intrinsic and extrinsic motivation.

Study 3: Causal and Mediating Evidence

Study 3 had two main goals. First, we wanted to provide evidence that supervisor passion pursuit is a key moderator of the passion-performance link. Second, we aimed to provide evidence for our proposed mediator that a supervisor's passion pursuit changes the criteria supervisors use when evaluating their employees. To do so, we conducted an experimental study that manipulated the description of a subordinate as being either less or more successful in their pursuit of passion. Before being exposed to the manipulation and evaluating the subordinate, participants reported their own levels of successful passion pursuit as well as how much importance they place on passion as a criterion in performance evaluations. Thus, Study 3 allowed us to test our full hypothesized model, while also accounting for potential confounding factors in Studies 1 and 2 which could have driven the results (e.g., specific organizational context features).

Participants and Procedure

We recruited participants through CloudResearch (formerly known as TurkPrime), which have several checks in place to ensure high quality responses (see Litman, Moss, Rosenzweig, & Robinson, 2021), also known as their "MTurk Toolkit." This includes a duplicate IP block, an exclusion list of "bad actors" (e.g., respondents who provide false information, or attempt to hide their geo location), and several other features. In addition, we closely followed best practices suggested by Aguinis et al. (2021), including an English language check, attention and comprehension checks, and employment verification to ensure only full-time employees participated. Participants were only invited to participate in the study if they passed these verifications. Overall, we recruited 205 full-time employees. 100 Participants (48.8%) were female with an average age of 36 (SD = 10.86) and an average tenure of 5.84 years (SD = 5.94).

We included a mix of strategies to ensure high-quality data. First, as an attention check (see also Abbey & Meloy, 2017), we asked participants to read a short paragraph and answer five right/wrong questions about its content. Second, we included an instructional attention check, whereby participants were told to select a specific response. Participants who failed two or more of these were not allowed to participate further in the study. Overall, this led us to request 234 HITs to end up at 205 completed participants. Furthermore, we specified a specific geographical location, U.S.-only, which was reinforced through the CloudResearch ToolKit (e.g., via duplicate IP checking, geo checking, etc) and participants needed an approval rating of 95% and higher to participate. Participants were compensated with \$1.50.

After consenting to participate and passing these screeners, participants first rated their own pursuit of passion. Next, participants received a description about the scenario. We randomized participants automatically within the survey software to one of two conditions (less versus more successful passion pursuit). The final ratio of participants (due to the exclusion of

participants following attention checks) was 94 participants for the less successful passion pursuit condition (45.9%) and 111 participants for the more successful passion pursuit condition (54.1%). Specifically, participants were asked to imagine that they were a manager of a mid-size company and had to evaluate the job performance of a subordinate. Before being given any information about their subordinate, participants were asked to indicate the extent to which they would rely on passion as a criterion in their performance evaluation. We subsequently gave participants information about the subordinate, where we manipulated whether the subordinate was less or more successful in their pursuit of passion. Finally, participants were asked to rate the subordinate's performance, based on the description they were provided with.

Moderator: Participants' Passion Pursuit. We first measured the extent to which participants are successful in their pursuit of passion with the same three-item scale described in Study 2 (see also Jachimowicz, To, Menges, et al., 2018; Jachimowicz, Wihler, et al., 2018). Again, we reverse-scored the items, such that higher levels corresponded to higher passion pursuit, $\alpha = .89$.

Manipulation of Subordinate Passion Pursuit. In the description of the subordinate, we manipulated whether the subordinate (Mark) was either less or more successful in their pursuit of passion. The description in the *less successful passion pursuit* condition read: "Mark has been on the team for a little over a year working as a software developer. You have the impression that Mark is not as passionate for his work as he would like to be. That is, you think that he is not attaining the levels of passion that he desires." In contrast, the description in the *more successful passion pursuit* condition read "Mark has been on the team for a little over a year working as a software developer. You have the impression that Mark is really attaining his desired levels of passion. That is, you think that he is as passionate for his work as he would like to be."

Mediator: Value Placed on Passion. We next asked participants what characteristics they were looking for when evaluating the subordinate and presented three items adapted from prior research that assess perceptions of passion in others (Chen et al., 2009). The items were preceded by "I would give Mark a higher performance rating if..." and read "... he invests a very high amount of energy in his work", "... he is extremely resilient in overcoming setbacks at work", and "... he approaches work with a lot of vigor." Items were answered on a 7-point scale ranging from *strongly disagree* to *strongly agree*. We combined these items to produce a single passion importance measure, $\alpha = .68$.

Dependent Variable: Performance Evaluation. Finally, participants rated their subordinate's performance. They were provided with information about Mark's work (see Appendix C for exact language) and received the following description: "Recently, your director asked you how you would describe Mark's performance: top 50% or bottom 50%. You would describe Mark's performance as being in the top 50% of employees. Now you need to give Mark an *overall performance rating*. Based on what you know about Mark, what performance rating would you give him?". The scale ranged from 1 (does not meet expectations at all) to 7 (strongly exceeds expectations).

Control Variables. As in Studies 1 and 2, we measured age, gender, and tenure. In addition, we controlled for participant's prior supervisor experience (0 = no; 1 = yes), as there might be systematic variation depending on whether performance has been rated by supervisors or co-workers (Borman et al., 1995).

Results

Correlation Table. Table 5 presents the means, standard deviations, correlations, and (where applicable) internal consistency reliability estimates for all variables. Importantly,

participants' pursuit of passion correlated with the value they placed on passion as a performance evaluation criterion (r = .35, p < .001), such that participants who were more successful in their pursuit of passion were more likely to state that passion is an important criterion in performance evaluation. Additionally, performance evaluations were also correlated with the randomly assigned condition (r = .25, p < .001), such that subordinates who were described as being more successful in their pursuit of passion were more likely to receive higher performance ratings.

*** Insert Table 5 about here ***

Regression Analyses. Our research questions reflect a so-called second-stage and direct effect moderated mediation model (Edwards & Lambert, 2007). Thus, we ran multiple regression analyses and used PROCESS 2.16.1 (Hayes, 2013) with 10,000 bootstrapped samples to estimate the conditional indirect effects. Prior to our analyses all variables were standardized except for the condition and outcome variables.

*** Insert Table 6 and Figure 4 about here ***

Table 6 shows the results of our regressions on performance evaluations (Models 13 to 15). Model 13 shows that the interaction of participants' passion and condition was positively related to overall performance (β = .32, p < .001; see Figure 4). When the subordinate was described as being more successful in their pursuit of passion, participants' own passion pursuit was positively related to performance evaluations (b = .39, p < .001). However, there was no statistically significant relationship between both variables when the subordinate was described as being less successful in their pursuit of passion (b = -.06, p = .450). In sum, these results provide causal evidence for Hypothesis 1 and the results in Study 1, showing that the effect of employee passion pursuit on performance is contingent on supervisors (or evaluators) own pursuit of passion.

Next, we tested the mediating pathway. In support of Hypothesis 2, participant's own pursuit of passion was positively related to the value placed on passion for performance evaluations both without ($\beta = .35$, p < .001) and with control variables ($\beta = .37$, p < .001). That is, participants who were more successful in their pursuit of passion were more likely to state that passion was an important criterion for shaping their performance evaluations.

We then computed the conditional indirect effects for whether the relationship between participant's own pursuit of passion and performance evaluation was mediated by the value placed on passion and moderated by passion pursuit condition, as predicted by Hypothesis 3. When the subordinate was described as being more successful in their pursuit of passion, the value placed on passion mediated the relationship between participant's passion and performance evaluation (*estimate* = .11, *s.e.* = .04, 95% *CI* [.049, .212]), whereas there was no statistically significant mediation effect when the subordiante was described as being less successful in their pursuit of passion (*estimate* = .02, *s.e.* = .03, 95% *CI*[-.030, .082]). In sum, evaluators who were more successful in their pursuit of passion themselves identified passion as a criterion when conducting performance evaluations, which led them to evaluate employees who more successfully pursued their passion more positively.

Discussion

Study 3 provides causal evidence as wells as evidence for our full theoretical model while also accounting for potential confounding factors (e.g., specific organizational context features). We found that supervisors rated a subordinate who more successfully pursued their passion more highly when they were more successful in their pursuit of passion rated. Furthermore, we found that this effect was statistically mediated by an increased value these supervisors placed on passion.

General Discussion

Contemporary organizations increasingly emphasize the pursuit of passion in their workplaces, and prior academic research has commonly located the beneficial effects of passion on performance at the intrapersonal level. The current research extends these ideas by offering a dynamic perspective, arguing that performance evaluations are inherently an interpersonal process that are guided in part by characteristics of the supervisor. In taking this approach, we proposed and found that supervisors who were more successful in their pursuit of passion also placed greater value on passion in their performance evaluation. As a result, supervisors' passion pursuit moderated the relationship between employee passion pursuit and supervisor-rated job performance. Employees who were more successful in their pursuit were more likely to attain higher performance ratings when their supervisors were also successfully in their pursuit of passion.

Beyond establishing causal and mediating evidence for our theoretical model, the current research also established discriminate validity for the unique role of passion in producing this interpersonal dynamic. We reasoned that the interactive effects of supervisor and employee passion pursuit occur because passion is more readily observable. In contrast, we predicted that this interpersonal dynamic would not extend to less observable motivations, i.e., intrinsic and extrinsic motivation. In line with this view, we found that the interactive effects between supervisor and employee motivations was only statistically significant for passion pursuit and not for intrinsic and extrinsic motivation.

Theoretical and Empirical Contributions

The current research helps shed novel insight into the relationship between passion and job performance by proposing an interpersonal understanding of a fundamentally interpersonal

process (i.e., performance evaluations). We found that an important but neglected piece of the performance evaluation puzzle is how successful supervisors are in their pursuit of passion.

Because performance evaluations depend on the perspective of the evaluator, prior research misses a key source of this variance. The current studies reveal that incorporating supervisor passion pursuit into theorizing and measurement can help uncover when an employee's pursuit of passion leads to increased job performance ratings and when it does not.

The current study also extends prior research on predictors of job performance evaluations that focus primarily on the similarity between supervisor and subordinate. That is, several prior studies that have investigated how the relationship between supervisors and their subordinates can influence job performance evaluations have focused on how similarities between the two can systematically influence how ratings are conducted (Antonioni and Park 2001a, Miles 1964, Senger 1971, Turban and Jones 1988). In contrast, the current studies do not provide a consistent pattern regarding similarity: The results of Study 1 indicate negative effects of dissimilarity whereas Study 2 found positive effects of similarity. Furthermore, the interaction pattern across studies suggested an absence of similarity-attraction effects when passion pursuit was less successful. Finally, we did not find similarity-attraction patterns for intrinsic and extrinsic motivations. All in all, the evidence suggests that supervisor passion pursuit moderates the effect of employee passion pursuit on job evaluations and that these effects would not have arisen if they were solely based on similarity. The results of the current study suggest that job performance ratings are frequently conducted with regards to how much value supervisors place on what they view as exemplary (Calder, 1977; Jacquart & Antonakis, 2015),

² We note the potential existence of cultural differences regarding the role of performance evaluations between the US and Latin America (Erez, 2011); in addition, differences across studies might also have arisen due to the nature of performance measures: we used a short, theoretically derived measure (Welbourne et al., 1998) in Study 1, and in Study 2 we relied on the company's internal performance measure.

shifting their evaluation criteria as a result of their own characteristics. We encourage future research to further disentangle the extent to which (dis-)similarities between subordinate and supervisor passion pursuit may contribute to job performance ratings.

Finally, the results of the current research inform the distinction we draw between motivations that are more observable, such as passion, with those that are less observable, such as intrinsic and extrinsic motivation. The expression of passion by subordinates is related to particular behavioral expressions (Chen et al., 2009; Li et al., 2017) and allows supervisors to draw inferences regarding how important work is to their subordinate (Fauchart & Gruber, 2011; Murnieks et al., 2014; Vallerand, Blanchard, et al., 2003). In contrast, because intrinsic motivation emerges only in the immediate person-task interaction (Abuhamdeh & Csikszentmihalyi, 2009), it does not necessarily allow supervisors to draw such inferences (Grant, 2008). Our results that the interpersonal effects between supervisor and subordinates occur only for passion, and not for intrinsic nor extrinsic motivation, thus lay the foundation for future research on the interpersonal effects of work motivations more broadly. Note that this also suggests that future research should explore alternative ways to manipulate and measure perceptions of passion in others beyond the scenario descriptions used in our Study 3, e.g., by asking trained actors to act out different behavioral indicators of passion (for examples, see Cho & Jiang, 2021; Gladstone, Jachimowicz, Greenberg, & Galinsky, 2021).

Practical Implications

The results of the current study have several practical implications. Companies often base their promotion and retention decisions on supervisor ratings of performance (DeNisi & Sonesh, 2011) because they believe that in doing so, they can identify which employees make valuable contributions (Morgeson et al., 2007; Ones, Dilchert, Viswesvaran, & Judge, 2007). However,

the current research highlights that this organizational practice is fraught with difficulties.

Consider that subordinates who were more successful in their pursuit of passion did not receive higher performance ratings when their supervisors were less successful in their pursuit of passion. Companies who rely on performance ratings may under-reward passionate employees and make them feel they are being treated unfairly (Greenberg, 1986; Landy, Barnes-Farrell, & Cleveland, 1980). These employees—who would have received higher performance ratings if their supervisors had themselves been more successful in pursuing passion—are more likely to be dissatisfied with their jobs and may be more likely to leave their employer (Poon, 2004). Although companies increasingly recruit employees who pursue their passion in the hope that they will increase the companies' overall performance (Bolles, 2009; Duckworth, 2016; Isaacson, 2011; Wolf et al., 2016), organizations also need to ensure that supervisors can also successfully pursue their passion. And, from a purely egocentric perspective, employees who successfully pursue their passion may desire to find ways to help their supervisors become more successful in their pursuit of passion.

Note that our theory and results could also be evaluated through the opposite lens, i.e., that passion induces an important bias in supervisors when evaluating their employees. That is, it is possible that supervisors who are themselves more successful in their pursuit of passion may overweight the importance of passion in their subordinates, and place too much value on passion vis-à-vis potentially important other characteristics. Indeed, this notion that the pursuit of passion may supersede other valuable job attributes is widespread in popular acclaim, e.g., as reflected by American businessperson Nolan Bushnell advising leaders to "[h]ire for passion and intensity; there is training for everything else." This raises the question of how objective performance evaluations by supervisors who are more successful in their pursuit of passion really are—

particularly of their subordinates who themselves more successfully pursue their passion—and implies that organizations may need to ensure that performance evaluations of employees who are less successful in their pursuit of passion are conducted adequately and fairly (i.e., consider that not all employees want to pursue their passion for work, but could nonetheless be excellent performers; see DePalma, 2021).

Limitations and Future Directions

The current research contains limitations which provide potential opportunities for future research. First, while passion has been associated with several intermediaries of increased performance (Ho et al., 2011; Vallerand et al., 2007; Zigarmi et al., 2009), it is unclear whether employees who are more successful in their pursuit of passion actually perform better. It is possible that supervisors who more successfully pursue their passion pay more attention to subordinates that are more successful in passion pursuit, and in doing so, are more likely to observe behaviors which reflect higher performance (Antonioni & Park, 2001b). It may also be possible that supervisors who more successfully pursue their passion merely seek out information which confirms their beliefs, affirming their assumptions about the high performance of their subordinates that are more successful in passion pursuit (Kahneman & Frederick, 2002). It is also conceivable that supervisors who are less successful in their pursuit of passion—because they discount the value of passion in performance—may pay less attention to subordinates who are more successful in passion pursuit, and thus fail to notice their potentially higher performance (Brehm & Cohen, 1962; Festinger, 1957). The mechanism we describe in the current research of supervisors shifting how much value they place on passion as a function of their own passion pursuit provides a partial, but ultimately incomplete explanation. Future research is thus required to investigate how employees who are more successful in their pursuit

of passion achieve higher job performance. In addition, subsequent work could also explore how the beliefs that supervisors hold about their subordinates' performance—in particular, how malleable they believe their subordinates' performance is—may influence their ability to do so (Heslin, Latham, & VandeWalle, 2005; Heslin & VandeWalle, 2008, 2011).

Second, we acknowledge that our *less successful passion pursuit* manipulation in Study 3 may downward bias participants' perceptions of that individual, relative to the *more successful passion pursuit* condition (for a similar discussion, Credé, 2018). As a result, this study does not allow us to cleanly disentangle whether our obtained results emerge from the difference between being *less* and *somewhat* successful in one's pursuit of passion, or between being *somewhat* or *more* successful in one's pursuit of passion. Note that our theory predicts a linear effect, i.e., that when supervisors' pursuit of passion is more successful, they will value the passion of their subordinates concordantly—which is also what we find across all three of our studies (note also that we did not find quadratic or moderated quadratic effects). We encourage future research to more aptly disentangle between being less, somewhat, or more successful in one's pursuit of passion, and its interactive effects with supervisors' passion pursuit.

Third, we used Grant's (2008) measure of intrinsic and extrinsic motivation that is based on the measure by Ryan and Connell (1989). However, there exist other measures for these constructs (e.g., the Intrinsic Motivation Inventory, see Ryan, Mims, & Koestner, 1983) that may provide better psychometric properties (see McAuley, Duncan, & Tammen, 1989; also note the low internal consistency for intrinsic motivation in Study 2). Thus, future studies should replicate our findings with other measures of intrinsic and extrinsic motivation. Fourth, note that, in contrast to prior literature (e.g., Ho & Astakhova, 2020; J. Li, Zhang, & Yang, 2017), we do not find a consistent relationship between supervisor and employee passion pursuit (Study 1: r = .16,

p = .097; Study 2: r = .01, p = .799). We encourage future research to further explore contingent factors which moderate the relationship between these two variables, building on prior research which notes that the perceived importance of performance to self-esteem and leader-employee goal content congruence are crucial determinants of this effect to emerge. Fifth, note that all of our data was collected before the onset of the COVID-19 pandemic, i.e., the vast majority of our participants worked in person. We encourage future research to explore whether increases in remote working may alter our effects, given that employees may not be equally able to display their passion and have it recognized by their supervisors. Sixth, we highlight that our samples predominantly originate from knowledge industries, where passion is widely understood to be an important attribute for employees to possess, and where employees have ample opportunities to demonstrate their passion for work (Rao & Tobias Neely, 2019a). It is unclear whether our findings would extend to industries where passion is not widely shared as an important attribute, or where the setting does not afford the expression of passion, e.g., where employees work away from their supervisors, or express their passion only in settings that are not observable by supervisors. Indeed, by moving beyond knowledge industries, future research could also further disentangle between the pursuit of passion (and its associated "schema") and the in-the-moment experience of passion, and whether employees who seek to pursue their passion through a harmonious (vs. obsessive) internalization are more or less likely to benefit from the interpersonal dynamics of passion discussed here (Rao & Tobias Neely, 2019; Vallerand et al., 2007). Seventh, we note that our use of two different scales to measure the pursuit of passion is both a strength and a weakness. On the one hand, it allows us to rule out potential social desirability concerns as a factor driving our analyses results, i.e., that participants respond to higher scale values because the pursuit of passion is a widely valued attribute. On the other hand, the reversal in item wording also introduces additional confounds. We encourage future research to further explore how to measure the success of individual's pursuit of passion.

Finally, when the evaluation of their subordinates' job performance is difficult, supervisors may be more likely to base their evaluation decisions on their beliefs and expectations (Ferris et al., 2008; Tubre & Collins, 2000). Future research could thus also explore whether the precision of job performance evaluations represents one boundary condition for the findings of the current research. When the evaluation of job performance is more ambiguous, supervisors may rely more on their subordinates' passion pursuit. This may particularly be the case given that passion—unlike knowledge, or skills—is readily observable by supervisors (Cardon et al., 2009; Chen et al., 2009). In addition, because performance evaluations are embedded in a rich social context, future research may also investigate how employees respond to performance evaluations (Ferris et al., 1994). That is, employees who receive unexpected performance evaluations may subsequently reduce their dedication to work, and thus perform worse (Greenberg, 1986; Landy et al., 1980). Employees who perceive their performance evaluation to be unfair may consequently seek retribution, engaging in unethical behavior that could harm the organization (Shoss, Eisenberger, Restubog, & Zagenczyk, 2013). Future research could thus examine how employees who are more successful in their pursuit of respond to being evaluated below their expectations.

Conclusion

The pursuit of passion for work is increasingly lauded as a key ingredient of an exemplary high-performing employee. Prior research locates the source of passion's benefits within the employee. In the current research, we found that supervisors play an important role in the performance evaluation equation, whereby supervisors who themselves are more successful

in their pursuit of passion place greater emphasis on passion, boosting the evaluations of more subordinates who more successfully pursue their passion as well. These findings give a new perspective on managing upwards: Employees may be able to further their own careers by helping their bosses pursue their passion.

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TABLE 1
Study 1: Means, Standard Deviations, and Correlations of Study Variables

		M	SD	1	2	3	4	5	6	7	8
1	Empl. Gender	0.64	0.48								
2	Empl. Age	40.95	9.77	12							
3	Empl. Tenure (in years)	7.32	3.36	08	.30**						
4	Sup. Tenure (in years)	8.50	3.06	16	.15	.64**					
5	Relationship Length (in years)	6.32	3.33	05	.21*	.85**	.69**				
6	Empl. Passion Pursuit	5.45	1.41	.13	09	10	18+	11	(.85)		
7	Sup. Passion Pursuit	5.92	1.18	15	03	14	02	12	.30**	(.87)	
8	Empl. Job Performance	6.48	0.61	.23*	.00	.03	.05	.09	.16 ⁺	.23*	(.85)

Note. N = 106, Empl. = Employee; Sup. = Supervisor; Gender (0 = male, 1 = female); p < .05 (one-tailed); p < .05; ** p < .05.

TABLE 2
Study 1: Moderated Regression Analyses of Supervisor-Rated Job Performance

	Job Performance (supervisor rated)								
	Model	1	Model 2		Model 3				
	<i>B</i> (s.e.)	β	B (s.e.)	β	B (s.e.)	β			
Intercept	6.48 (.06)**		6.43 (.06)**		6.06 (.30)**				
Empl. Passion Pursuit (EPA)	.06 (.06)	.10	.10 (.06)	.16	.07 (.06)	.12			
Sup. Passion Pursuit (SPA)	.12 (.06)*	.20	.13 (.06)*	.22	.16 (.06)**	.26			
$EPA \times SPA$.16 (.05)**	.31	.13 (.05)**	.25			
Empl. Gender					.30 (.12)*	.24			
Empl. Age					.00 (.01)	.02			
Empl. Organizational Tenure					01 (.03)	08			
Sup. Organizational Tenure					.01 (.03)	.05			
Relationship Length					.02 (.04)	.13			
R^2	.06*		.15**		.21**				
ΔR^2			.09**		.06				

Note. N = 106, Empl. = Employee; Sup. = Supervisor; standardized values of EPA and SPA have been used for the analyses; +p < .05 (one-tailed); *p < .05; **p < .01.

TABLE 3
Study 2: Means, Standard Deviations, and Correlations of Study Variables

		1.7	CD	1			4			7	0		10
		M	SD	1	2	3	4	5	6	7	8	9	10
Wit	hin level												
1	Empl. Gender	1.47	0.51										
2	Empl. Age	31.85	7.82	01									
3	Empl. Tenure (in years)	6.63	5.84	.03	.58**								
4	Empl. Intrinsic Motivation	5.96	1.09	.05	.10	.15*	(.82)						
5	Empl. Extrinsic Motivation	3.85	1.67	07	.04	.06	.01	(.84)					
6	Empl. Passion Pursuit	5.14	1.57	.07	.05	.06	.46**	22**	(.79)				
7	Empl. Job Performance	101.31	7.97	.01	.14*	.18**	.15**	.01	.15**				
Bet	ween level												
8	Sup. Passion Pursuit	5.52	1.62	.02	.12*	.18**	.03	.06	.01	.09	(.85)		
9	Sup. Intrinsic Motivation	6.31	0.84	13*	.05	.04	.02	.02	00	01	.48**	(.64)	
10	Sup. Extrinsic Motivation	3.36	1.68	.04	11*	06	.04	02	.04	15**	25**	03	(.84)

Note. $N_{employee} = 321$, $N_{supervisor} = 117$; Empl. = Employee; Sup. = Supervisor; correlations between Supervisor constructs and the other constructs are on the within level, based on disaggregated values for Supervisor Passion, Intrinsic, and Extrinsic Motivation; Gender (1 = male, 2 = female); * p < .05; ** p < .01.

TABLE 4
Study 2: Multilevel Regression Analyses of Supervisor-Rated Job Performance

	Job Performance (supervisor rated)								
	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10			
	Est. (s.e.)	Est. (s.e.)	Est. (s.e.)	Est. (s.e.)	Est. (s.e.)	Est. (s.e.)			
Intercept	101.80 (.60)**	101.82 (.60)**	101.82 (.60)**	101.82 (.60)**	101.84 (.60)**	101.84 (.59)**			
Empl. Passion Pursuit (EPA)	.52 (.27)+	.51 (.27)+	.46 (.27)	.31 (.29)	.39 (.70)	.37 (.71)			
Supervisor Passion Pursuit (SPA)	.40 (.36)	.40 (.36)	.40 (.36)	.40 (.36)	.40 (.35)	.54 (.44)			
$EPA \times SPA$.51 (.17)**	.50 (.17)**	.48 (.17)**	.61 (.17)**	.52 (.19)**			
Empl. Age			08 (.07)	08 (.07)	10 (.08)	08 (07)			
Empl. Gender			.31 (1.05)	.27 (1.05)	.40 (.99)	50 (1.07)			
Empl. Organizational Tenure			.16 (.08)*	.15 (.09)+	.17 (.10)+	.13 (.09)			
Empl. Intrinsic Motivation (EIM)				.43 (.52)	.31 (.65)	.46 (.57)			
Empl. Extrinsic Motivation (EEM)				06 (.30)	02 (.30)	06 (.32)			
EIM x SPA					43 (.49)				
EEM x SPA					.02 (.17)				
Supervisor Intrinsic Motivation (SIM)						94 (.80)			
EIM x SIM						66 (1.50)			
Supervisor Extrinsic Motivation (SEM)						43 (.34)			
EEM x SEM						.32 (.24)			
Residual Variance – within	42.13 (5.30)**	40.30 (5.15)**	39.80 (4.98)**	39.67 (4.99)**	35.98 (5.80)**	36.53 (5.78)**			
Residual Variance – between	20.42 (6.65)**	20.94 (6.50)**	21.16 (6.52)**	21.22 (6.52)**	22.66 (7.31)**	21.40 (7.76)**			

Note. $N_{employee} = 321$, $N_{supervisor} = 117$; Empl. = Employee; centered values of all employee variables (group-mean) and SPA, SIM, SEM (grand-mean) have been used for the analyses; +p < .05 (one-tailed); *p < .05; **p < .01.

TABLE 5
Study 3: Means, Standard Deviations, and Correlations of Study Variables

		M	SD	1	2	3	4	5	6	7
1	Gender	0.49	0.50							
2	Age	36.47	10.86	.06						
3	Tenure (in years)	5.48	5.94	.02	.47**					
4	Supervisory experience	.07	.26	01	.06	.16*				
5	Passion Pursuit	5.18	1.35	.12	.09	02	.17*	(.89)		
6	Passion Condition	.54	.50	04	.05	09	.11	.10		
7	Value Placed on Passion	5.92	.81	01	.10	.11	.03	.35**	.09	(.68)
8	Performance Evaluation	5.14	1.02	.02	.05	.14	.14*	.23**	.57**	.25**

Note. N = 205; Gender (1 = male, 2 = female); Supervisory experience (0 = no, 1 = yes); Condition (0 = low passion condition, 1 = high passion condition); * p < .05; ** p < .05.

TABLE 6
Study 3: Regression Analyses of Performance Evaluations

	Pe	Performance Evaluation					
	Model 13	Model 14	Model 15				
	β	β	β				
Participant Passion Pursuit (PPA)	06	08	10				
Condition	.55**	.54**	.54**				
PPA x Condition	.32**	.26**	.26**				
Value Placed on Passion (VP)		.05	.06				
VP x Condition		.17*	.17*				
Participant Gender			.05				
Participant Age			00				
Participant Organizational Tenure			.01				
Participant Supervisory Experience			.06				
R^2	.40**	.44**	.44**				
F	44.51	30.77	17.12				
(df1, df2)	(3, 201)	(5, 199)	(9, 195)				
ΔR^2	.05**	.04**	.01				
ΔF	16.09	6.51	.47				
(df1, df2)	(1, 201)	(2, 199)	(4, 195)				

Note. $N_{\text{employee}} = 205$, Gender (1 = male, 2 = female); Supervisory experience (0 = no, 1 = yes); Condition (0 = low passion condition, 1 = high passion condition); all continuous variables have been standardized prior to the analyses; p < .05; ** p < .01.

Figure 1
Theoretical Model

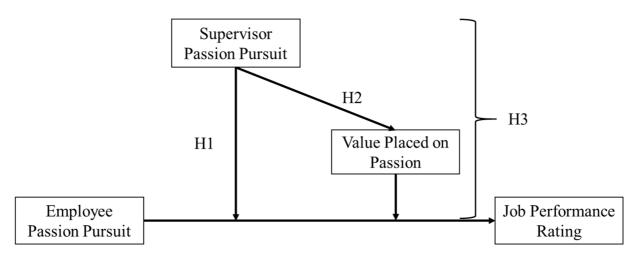


Figure 2
Simple Slopes for Interaction Effect Between Employee and Supervisor Passion Pursuit on Job Performance (Study 1)

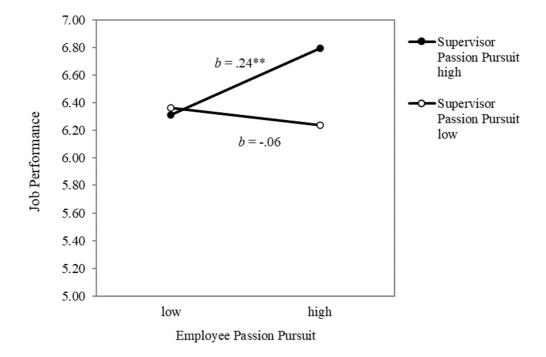


Figure 3
Simple Slopes for Interaction Effect Between Employee and Supervisor Passion Pursuit on Job Performance (Study 2)

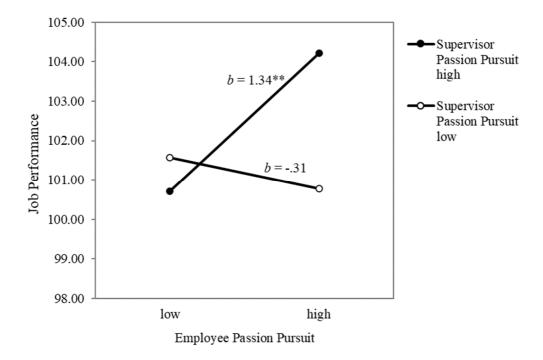
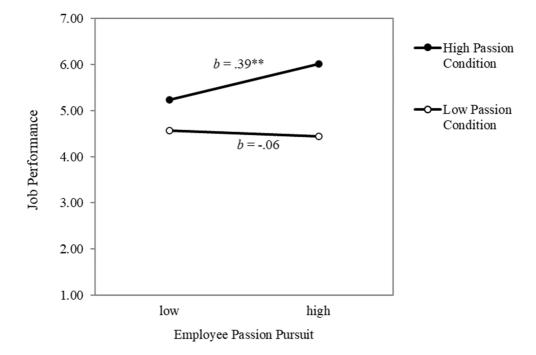


Figure 4
Simple Slopes for Interaction Effect Between Participant Passion Pursuit and Passion
Pursuit Condition on Job Performance (Study 3)



APPENDIX A

Cross-Cultural Measurement Invariance

To assess whether our measure of passion pursuit is applicable across cultures, we compared the measure with both samples of Study 2 and Study 3. Study 2 represents the newly translated Spanish measure, while Study 3 is a replication of the initial validation sample with U.S. employees. We used robust maximum likelihood estimation for all analyses. The Spanish speaking sample served as the reference group. A configural invariance model was initially specified in which single-factor models were estimated simultaneously within each group; factor mean was fixed to 0 and the factor variance was fixed to 1 for identification within each group. Usually, this model serves as baseline model against all subsequent models are tested (Byrne, 2006). However, since our measure only had three items, this model was fully saturated and thus, could not serve as baseline model.

Next, we estimated the metric invariance model (Vandenberg & Lance, 2000). In this model, all factor loadings across groups are set equal. Results in Table S1 show that this model showed an excellent model fit ($X^2 = .03$, scale factor = 1.02, df = 2, p = .986, RMSEA = .000, CFI = .000). Consequently, we compared subsequent models against the metric invariance model.

TABLE S1

Test for Measurement Invariance of Passion Pursuit in Study 2 and 3

	Chi ²	Chi ²	Chi ²	Chi ²	CFI	RMSEA	RMSEA	RMSEA
Model	Value	Scale	DF	<i>p</i> -			lower	higher
		factor		value			CI	CI
1. Configural	0.00	1.00	0		.000	.000	.000	.000
Model ^a								
2. Metric Model	0.03	1.02	2	.986	1.00	.000	.000	.000
3a. Scalar Model	15.02	0.99	4	.005	.967	.102	.051	.160
3b. Partial Scalar	1.09	1.02	3	.779	1.00	.000	.000	.068
Model (no item 2) ^b								
4. Factor Mean	3.12	1.07	5	.682	1.00	.000	.000	.066

Note. N_{Study 1} = 321; N_{Study 2} =205; ^aconfigural model is fully saturated because the measure consists of 3 items; ^bIntercept Study 1: 4.80, Intercept Study 2: 5.22.

In the next step, we estimated the scalar invariance model (Vandenberg & Lance, 2000). In this model, the item intercepts are set equal across groups in addition to the equal factor loadings. Results indicate that the model fit decreased ($X^2 = 15.02$, scale factor = .99, df = 4, p = .005, RMSEA = .102, CFI = .967) and that this model fit the data significantly worse than the metric invariance model (Δ Chi² = 14.99, df = 2, p < .001; Δ CFI = .033; Cheung & Rensvold, 2002). Evaluation of modification indices showed the item intercepts of Item 2 ("I often feel as if I have to be more passionate for my work") were different in both samples (Intercept_{Spanish} = 4.80; Intercept_{US} = 5.22). When allowing the intercepts of Item 2 to be different, the model fit increased (Table S1, Model 3b): $X^2 = 1.09$, scale factor = 1.02, df = 3, p = .779, RMSEA = .000, CFI = .000. However, researchers (Byrne, 2006; Cooke, Kosson, & Michie, 2001) frequently advocate that differences in intercepts are no indicator for the lack of measurement invariance. In fact, it is commonly accepted that translations of measures only show partial invariance (Schmitt & Kuljanin, 2008).

Finally, we estimated the invariance of latent factor means, since this is the most relevant information for cross-cultural measure application (Schmitt & Kuljanin, 2008). Thus, while forcing the intercepts (with the exception of Item 2) and factor loadings to be equal, we also constraint the latent factor means to be equal, by fixing one mean to be zero (Bentler, 2005). As expected, this model (Table S1, Model 4) showed excellent fit ($X^2 = 3.12$, scale factor = 1.07, df = 5, p = .682, RMSEA = .000, CFI = .000).

In sum, our results showed that we can establish cross-cultural measurement invariance for the measure of passion pursuit. This provides additional confidence that our results of Study 2 and Study 3 can be meaningfully compared.

APPENDIX B

We also tested the multi-level regression in reverse order, i.e., first adding controls (Model 1), then the main effects of the main variables (Model 2), and then the interaction effect (Model 3; see Table S1).

Table S1
Study 2: Multilevel Regression Analyses of Supervisor-Rated Job Performance

	Job Performance (supervisor rated)							
	Model 1	Model 2	Model 3					
	Est. (s.e.)	Est. (s.e.)	Est. (s.e.)					
Intercept	101.79 (.61)**	101.81 (.60)**	101.84 (.60)**					
Empl. Age	06 (.06)	07 (.06)	10 (.08)					
Empl. Gender	.14 (1.12)	.15 (1.08)	.40 (.99)					
Empl. Organizational Tenure	.01 (.01)+	.01 (.01)+	.01 (.01)+					
Empl. Intrinsic Motivation (IM)	.75 (.45)+	.56 (.51)	.31 (.65)					
Empl. Extrinsic Motivation (EM)	13 (.30)	05 (.31)	02 (.30)					
IM x SPA		10 (.35)	43 (.49)					
EM x SPA		11 (.18)	.02 (.17)					
Empl. Passion Pursuit (EPA)		.34 (.29)	.39 (.70)					
Supervisor Passion Pursuit (SPA)		.40 (.35)	.40 (.35)					
$EPA \times SPA$.61 (.17)**					
Residual Variance – within	41.69 (5.26)**	39.02 (6.18)**	35.98 (5.80)**					
Residual Variance – between	20.94 (6.79)**	21.38 (6.91)**	22.66 (7.31)**					

Note. $N_{employee} = 321$, $N_{supervisor} = 117$; Empl. = Employee; centered values of EPA (groupmean) and SPA (grand-mean) have been used for the analyses; +p < .05 (one-tailed); *p < .05; **p < .01.

APPENDIX C

Scenario description:

"Imagine that you are a manager at a mid-size company. You have been working at this company for a few years and are generally satisfied with your job. In this scenario, you are going to provide a performance review for one of your reports, named Mark, who has been at the company about half of your tenure. To help you evaluate Mark's performance, you'll first be given a description of Mark and a summary of his day-to-day work."

Description of Mark's work:

"Marks role centers around computer software development. Currently, Mark spends approximately 40% of his time diagnosing problems that users encounter with the software. A good deal of this time is spent understanding how to help users operate the software better. This includes preparing or revising of various design elements, user flow, and other aspects of user experience. He spends about 15% of his workday crafting new tools that users frequently ask for. The remaining part of Mark's time is spent developing new program logic in existing modules, installing and maintaining systems software, and testing all new modules."