Understanding Contemporary Forms of Exploitation: Attributions of Passion Serve to Legitimize the Poor Treatment of Workers

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#### Abstract

The pursuit of passion in one's work is touted in contemporary discourse. Although passion may indeed be beneficial in many ways, we suggest that the modern cultural emphasis may also serve to facilitate the legitimization of unfair and demeaning management practices – a phenomenon we term the legitimization of passion exploitation. Across seven studies and a meta-analysis, we show that people do in fact deem poor worker treatment (for example, asking employees to do demeaning tasks that are irrelevant to their job description, asking employees to work extra hours without pay) as more legitimate when workers are presumed to be "passionate" about their work. Of importance, we demonstrate two mediating mechanisms by which this process of legitimization occurs: (i) assumptions that passionate workers would have volunteered for this work if given the chance (Studies 1, 3, 5, 6, and 8) and (ii) beliefs that, for passionate workers, work itself is its own reward (Studies 3, 4, 5, 6, and 8). We also find support for the reverse direction of the legitimization process, in which people attribute passion to an exploited (vs. non-exploited) worker (Study 7). Finally, and consistent with the notion that this process is connected to justice motives, a test of moderated mediation shows this is most pronounced for participants high in belief in a just world (Study 8). Taken together, these studies suggest that although passion may seem like a positive attribute to assume in others, it can also license poor and exploitative worker treatment.

# Understanding Contemporary Forms of Exploitation: Attributions of Passion Serve to Legitimize the Poor Treatment of Workers

Protecting workers from exploitation is a consistent concern of social scientists and policy makers (International Labour Organization, 1998; Martin & Maskus, 2001). Many managerial practices, such as child labor and labor under extremely dangerous working conditions (Crane, 2013; Quirk, 2006), clearly cross the line of what could be considered fair or reasonable treatment (Mayer, 2007; Wertheimer, 1996). Not surprisingly, such blatant exploitation has been the focus of people's attention and concern (e.g., Bartley & Child, 2014; Harrison & Scorse, 2006). However, there are other exploitative managerial practices that are less extreme and are thus more likely to escape our attention, such as pressuring employees to work extra hours for no pay, to sacrifice family time for work, or to engage in undesirable tasks that are irrelevant to their job description. In cases like these, that leave more room for interpretation, psychological processes of justification and legitimation (Jost & Banaji, 1994) may matter in whether people construe the managerial practices as legitimate and fair, or illegitimate and unfair. Drawing on psychological models of responsibility (Alicke, 2000), and theories of just world belief (Lerner, 1980) and complementary justice (Kay & Jost, 2003), we propose that the contemporary socio-cultural movement towards construing work as not just a job, but a passion from which people derive meaning and enjoyment, may ironically lead people to view questionable managerial practices like the above as increasingly fair and legitimate. We call this process the legitimization of passion exploitation.

# **Passion Exploitation**

The pursuit of passion has become deeply romanticized in contemporary discourse (e.g., Bauman, 2005; Coleman, Gulati, & Segovia, 2012). People like Steve Jobs are touted as

achieving success because they love what they do and are lauded for pursuing their passion (Tokumitsu, 2015). Consistent with such images, popular magazines and self-help and self-improvement books highlight passion as a key to success (Anderson, 2013; Bolles, 2009) and a fulfilling life (Robbins, 2007). For instance, bestsellers such as *Do What You Love, The Money Will Follow* argue that following one's passion and accompanying pleasure always results in a happy ending (McGee, 2005; Sinetar, 1989). The CEO of Red Hat, a leading multinational software company, readily attributes his organization's success to cultivating passion within the company (Whitehurst, 2016).

For the most part, research on passion supports the value of these cultural messages, noting passion's many positive downstream consequences (Duckworth, 2016). Passionate people enjoy greater well-being: They report lower stress and depression (Treadgold, 1999; Zigarmi, Nimon, Houson, Witt, & Diehl, 2009) and greater life and work satisfaction (Burke & Fiksenbaum, 2009; Duffy, Allan, Autin, & Bott, 2013; Peterson, Park, Hall, & Seligman, 2009; Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). Passion does not only benefit individuals, it is also in organizations' interest to hire those driven by passion. Passionate workers tend to exhibit higher levels of proactivity (Ho, Wong, & Lee, 2011), engagement (Zigarmi et al., 2009), perseverance (Duckworth, Peterson, Matthews, & Kelly, 2007), and entrepreneurial motivation (Cardon, Wincent, Singh, & Drnovesk, 2009). Employee passion also predicts more frequent interpersonal communication and less group conflict (Wrzesniewski, 2003). Many workers readily answer that they are motivated by passion and report that their work loses meaning when passion fades (Boyatzis, Mckee, & Goleman, 2002). It is not surprising, then, that many organizations list passion as a primary criterion in hiring (Wolf, Lee, Sah, & Brooks, 2016). The long list of benefits of passion offers good justification for the societal and managerial emphasis

on workers' intrinsic motivation (McGregor, 1960) and for attempts at cultivating "pleasure in work" (Donzelot, 1982). Many US companies, ranging from the ones with a long history like The Coca-Cola Company ("Mission, Vision & Value," n.d., para. 5) to young enterprises like The Zappos ("Zappos 10 Core Values," n.d., para. 2), list passion as one of their core values.

Much less research, on the other hand, has focused on the less desirable consequences of passion for work. Some research, focusing on a separate question than the one we try to answer here, has noted that passion can lead to higher burnout and less goal flexibility (Vallerand et al., 2003; Vallerand, Paquet, Philippe, & Charest, 2010). More relevant to the current investigation, a number of sociologists and journalists have noted a trend of increasing maltreatment of workers that uses attributions and assumptions of passion as a justifying tool. In South Korea, disillusioned young workers coined the term passion pay or "passion wages" (Yoon, 2015) to satirically refer to the expectation that they should work for little to no pay because their passion is its own reward (Han, Choi, & Kim, 2011). Similar managerial practices in the US – e.g., a retail chain asking their "enthusiastic" employees to work on weekends for no pay to experience operations first hand (Aghbali, 2015) – have also been noted (e.g., Lam, 2015). Recent op-eds and sociological work illustrate even more vivid examples, such as asking game developers to work overtime because of their passion for making games (Dyer-Witheford & de Peuter, 2006; John, 2016), reporters to "do the work of their laid-off photographers" because they love their work (Tokumitsu, 2014), or hiring low-income volunteers for unpaid community service on justification that they freely volunteered (Maes, 2012) and derive "mental satisfaction" in doing what is meaningful (Maes, 2010).

These accounts suggest a potential dark side to the increasingly strong association of passion with work: While passion may seem like a uniformly positive (or at least harmless)

attribute to assume in others, it may also legitimize and justify potentially exploitative managerial practices. This paper offers a first effort to empirically examine whether, and by what means, people legitimize such practices – i.e., passion exploitation. In addition to exploring the phenomenon and mechanisms of the legitimization of passion exploitation, we also test for the role of motivation; specifically, we measure whether the tendency to engage in passion legitimization is moderated by the belief in a just world (BJW; Lerner, 1980; Lerner & Miller, 1978), a variable strongly associated with the motivation to justify unfair outcomes.

In what follows, we first elaborate on our hypotheses and theory, and then describe a range of experimental and correlational studies designed to: (*i*) test whether people judge identical instances of poor worker treatment (extra work, less pay, inappropriate assignments) as more legitimate when it is directed at a passionate worker, (*ii*) assess the mediating roles of people's expectations about passionate workers, (*iii*) rule out alternative interpretations of the observed effect, and (*iv*) examine whether individual differences in BJW moderate the legitimization of passion exploitation and/or the mechanisms by which it occurs.

# What is Exploitation?

Before diving deeper into our specific predictions and their rationales, we want to first discuss the term exploitation. To some degree, what is and is not exploitative is subjective and relative, and people can debate whether a specific instance of worker treatment is exploitative or not, since they can disagree on what is or is not a fair treatment of individuals (Mayer, 2007; Shelby, 2002). That said, there is a reasonable case to be made, based on the relevant literature from both philosophy and business ethics, that asking passionate workers to do more work (or to do extra demeaning work) is exploitative.

According to fairness-based accounts of exploitation (Snyder, 2010; Zwolinski, 2012), which concern transactions between two or more agents, it is exploitative when management, representing their and the organization's goals and interests, require some workers to work excessively or to engage in unusually demeaning tasks without extra pay or tangible rewards (Wertheimer, 1996). From this perspective, unfairness occurs when workers do not sufficiently benefit from the excess and/or demeaning work they are asked to perform (Zwolinski, 2007) but management does. Given this definition, one might question whether it is truly exploitative to ask passionate workers to perform extra or demeaning tasks that are not asked of others. One could argue, for instance, that the unfairness is lessened because the passionate workers are "asked" to do this work rather than told to, and are therefore choosing this path freely. While this may be true to some degree, it is unlikely employees feel completely free to decline these requests. Because of the substantial power difference between management and subordinate employees (Shelby, 2002; Snyder, 2013), and the simple fact that management controls outcomes vital to workers, like promotions and job security, workers are put in a particularly vulnerable position when asked to volunteer for extra work. Simply put, employees likely believe there to be consequences to saying "no," or declining the extra work, making these requests of passionate workers much closer – at least psychologically – to orders. Alternatively, one might instead question the statement that passionate workers insufficiently benefit from the transaction; after all, passionate workers do enjoy their work. Such an argument usually rests on what is labelled the "non-worseness claim" (Wertheimer, 1996): a comparison of the specific transaction to a no-transaction baseline. But for this to be a reasonable position, it would need to be the case that the only extra work requests made of passionate workers were for tasks they truly find enjoyable, and that these tasks are ones the workers would freely opt to do instead of

whatever else they could be doing with their time. This is likely often not the case. What's more, it is reasonable to assume that passionate workers, if given the choice, would prefer to be rewarded according to their input, or at least equally to non-passionate workers in terms of hours of work, rewards, and types of tasks they undertake. Finally, as many scholars have suggested (Snyder, 2013; Zwolinski, 2007), an instance of exploitation should be compared to an ideal condition (what ought to be the case) or what is considered fair, and not to some worst case scenario (e.g., them having no job at all).

To ensure that our studies capture the aspects of an unfair transaction as discussed above, we make it clear in our stimuli that the passionate workers do not receive any compensation for their extra work, even when they are asked to sacrifice important aspects of their life and undertake demeaning tasks that are largely irrelevant to their job descriptions.

# Mechanisms of the Legitimization of Passion Exploitation

Why might people be inclined to view passion exploitation (e.g., the assignment of extra, unrewarded, or demeaning work to passionate workers) as legitimate? We propose two potential mechanisms. First, a potentially direct psychological mechanism of the legitimization of passion exploitation may be people's expectations about passionate workers' choices and desires. Specifically, given the popular image of passionate workers finding such joy and meaning in their work, people may assume these workers, had they been given the opportunity, would have *freely volunteered* to do whatever extra work they are being asked to take on. Because of this assumption, passionate workers may be held largely responsible for being the targets of passion exploitation. This ascription of responsibility, in turn, would help legitimize unfair treatment of passionate workers.

Various psychological models of responsibility suggest that when people justify negative outcomes, they consider the extent to which these outcomes were intentionally brought upon (Alicke, 2000; Schlenker et al., 1994; Shaver, 1985). For instance, the triangle model of responsibility (Schlenker et al., 1994) and the culpable control model (Alicke, 2000) suggest that an actor is likely to be held responsible for her outcome if it is seen to be causally connected to her (freely chosen) actions. Previous research supports these hypotheses. Studies have demonstrated that people tend to blame cancer suffers (Lerner, 1980) and obese individuals (Crandall, 1994) to a greater degree if they believe the outcomes were caused by the victims' choices (e.g., smoking, lack of exercise). Also, priming the concept of choice, which emphasizes individual responsibility and control, is shown to increase justification of various unfair arrangements, such as wealth inequality (Savani & Rattan, 2012) and gender discrimination (Stephens & Levine, 2011). Given all this, an important mechanism of legitimization of passion exploitation might be people's assumptions or expectations of what passionate workers would freely volunteer or opt to do.

Second, one way to restore a sense of fairness in the face of injustice is to presume that victims of unfairness receive extra, often intangible, benefits compared to others – a process of motivated cognition termed compensatory, or complementary, justice (Kay et al., 2007). This perspective suggests that people are apt to justify unfair treatment or instances of misfortune as fair (or less unfair) because of compensating intangible benefits (Kay & Jost, 2003). Lerner (1980), for instance, theorized that the perception that the victims of misfortune receive "their own compensating rewards" helps maintain BJW. Similarly, according to system justification theory (Jost & Banaji, 1994), complementary stereotypes like "poor but happy" (Lane, 1959) should bolster the view that existing arrangements are fair and legitimate.

Consistent with these theories, research examining the functions of the "poor but happy" and "rich but miserable" complementary stereotypes finds that people tend to see society and the social system as more fair when they think that material disadvantage (e.g., being poor) is offset by increased well-being (e.g., increased happiness; Kay & Jost, 2003). Other research has extended these findings to a broad range of social stereotypes (for reviews, see Czopp, Kay & Cheryan, 2015; Kay et al., 2007). Perhaps, then, people will view questionable managerial practices as more fair when asked of a passionate worker than a non-passionate worker because people believe that *the work, in and of itself, is its own compensating reward*. In particular, given a widely-held belief that the pursuit of passion is enjoyable (Chen, Ellsworth, & Schwarz, 2015), people may view poor treatment of passionate workers as legitimate by presuming that it is offset by the enjoyment these workers derive from their work.

Interestingly, both of these expectation-based mechanisms may sometimes be accurate. That is, theory and research suggest that passionate people are indeed driven to seek out activities they are passionate about (Vallerand et al., 2003) and that engaging in these pursuits is enjoyable and rewarding (Chen et al., 2015). But passion's association with these tendencies does not mean that it is not exploitative or unfair to ask passionate workers (or workers who are *presumed* to be passionate about their jobs) to engage in more work than non-passionate workers without more pay or some form of tangible reward. Passionate workers, and all people, are free to pursue their passions at will and there is nothing ethically wrong with a workplace allowing employees who want to spend more time working on projects to do so. But it becomes problematic when passionate workers are asked by management – the people exercise great influence over the workers' livelihood by controlling promotions and the like – to do more than others on the grounds that they like or enjoy their job more than non-passionate workers.

We hypothesize that those two expectations about passionate workers -i.e., assumptions that these workers would volunteer for extra work if given the chance and that work itself is its own reward – are important mediators in the legitimization of passion exploitation, and we attempt to assess these proposed mechanisms via various tests of mediation in the studies we present. At the same time, via tests of mediation and alterations in our experimental design across studies, we also sought to address and rule out potential alternative explanations and confounds. The alternative explanations include perceived competence of passionate workers, perceived friendliness of passionate workers, liking of passionate workers, and assumptions of tangible benefits that passionate workers might receive. First, given how passion is often associated with success, people may assume that passionate workers are also competent in their work. It may seem rational to give more work to these competent workers. Second, passionate workers' apparent willingness to work may also signal that they are friendly, and thus easier to ask for help at work. Third, people may like passionate workers because passion is a desirable trait. It may be harder to legitimize exploiting those people they like more (note this would work against our hypothesis). Fourth, passionate workers may also be expected to receive tangible rewards, such as promotion. If so, asking passionate workers to work more may be justifiable on the ground that they are materially compensated in the near future.

In the first set of studies we present, we attempt to show that people legitimize passion exploitation, and that this process occurs due to the mechanisms we hypothesize rather than any of the aforementioned confounding variables. We also sought to examine a reverse-pathway of the hypothesized legitimization process. Finally, we turn to tests of the role of justification motives – namely, BJW – in moderating the tendency to engage in the legitimization of passion exploitation.

## The Legitimization of Passion Exploitation and Justification Motives

We have theorized that attributions of passion in workers would lead people to endorse two assumptions about these workers (that they would voluntarily work extra for no compensation and that work itself is its own reward) that then lead people to legitimize treating workers worse. While this process can perhaps unfold simply via cognitive inferences, we think it is especially likely to occur for those inclined to justify and maintain unfair system practices. Indeed, research on just world beliefs (Hafer & Bègue, 2005), system justification (Jost & Hunyady, 2005), and social dominance (Sidanius, Pratto, Van Laar, & Levin, 2004) indicates that people are motivated to use various legitimizing rationales to maintain the status quo and downplay unfairness they experience and see in the world. Consistent with what these research traditions have found, we suggest that people would be similarly motivated to legitimize passion exploitation. Thus, in addition to exploring the phenomenon and mediators of the legitimization of passion exploitation, we tested whether the tendency to engage in passion legitimization is moderated by individual differences shown to be related to processes of justification.

There are two ways in which BJW could moderate the legitimization of passion exploitation. The first is that those higher in BJW may simply be more likely to presume exploited workers are passionate. That is, when learning about a worker who is exploited or treated poorly, perhaps those higher in the motive to believe in a just world attribute more passion to that person as a means to legitimize the poor treatment. We test this possibility in Study 7.

Second, BJW may play a moderating role instead via increasing the degree to which people deem it fair or legitimate to exploit someone they are told is passionate. In other words, rather than leading to the attribution of passion in exploited workers, perhaps BJW makes it more

likely that people will use this information as a means to legitimize their poor treatment. This seems like a feasible hypothesis to us, especially because attributing choice to victims of unfairness is considered a prominent means by which people motivated to believe in a just world satisfy that motive (Lerner, 1980; Lerner & Miller, 1978). Thus, according to this perspective, while all people may assume that passionate workers would be more likely to choose or opt into extra work than non-passionate workers, those high in BJW might be especially prone to connect this assumption about people's choices to their own personal beliefs of how fair or legitimate it is to assign extra or demeaning work to passionate employees. Study 8 tests this path of moderated mediation.

In addition, we also thought it possible (though we were less sure) that BJW might moderate the connection between the other mechanism – that is, the presumption that for people high in passion, the work is its own compensating reward – and legitimacy beliefs. Anderson, Kay, and Fitzsimons (2010) observed that people high in the belief in *ultimate* justice (that is, the belief that justice occurs in the long run, including both the long term future and the after life) were more likely to believe that a victim of tragedy would be eventually rewarded later in life, which is somewhat akin to believing that justice can be achieved through offsetting benefits, like passion. We were unsure about this path of moderation, however, because *ultimate* justice is a very specific form of justice belief, one that is distinct from general BJW (which we measure here), both statistically (Maes, 1998) and conceptually.

## **Overview of Studies**

In summary, we suggest that the legitimization of passion exploitation may be a unique and previously unexamined facilitator of exploitation. It is distinct from more blatant exploitation that clearly violates our cherished values like fairness (Wertheimer, 1996) and basic

workers' rights (International Labour Organization, 1998). Specifically, we suggest passion exploitation capitalizes on positive attributions toward passion (i.e., the expectations that passionate workers would have volunteered to work longer and harder, and that for passionate workers work itself is its own reward) to facilitate the legitimization of taking advantage of passionate workers in unfair or demeaning ways. By examining whether this process is moderated by BJW, we also test whether it may be connected to broad motives of justification.

To empirically test these hypotheses, we conducted the eight studies. In a correlational study (Study 1), we tested for passion exploitation at an occupational level, exploring whether people are more likely to legitimize exploiting workers from professions that are more strongly associated with passion. In the next six studies (Studies 2, 3, 4, 5, 6, and 8), we manipulated levels of a target worker's passion and investigated whether people view exploitative treatment targeted at a strongly (vs. weakly) passionate target as more legitimate. We also explored whether this effect is mediated by the expectations that workers with strong passion would voluntarily work longer and harder and consider work to be its own reward. A meta-analysis of the eight experimental studies (Studies 2, 3, 4, 5, 6, and 8, and two conceptual replications of Study 3 reported in Supplementary Online Materials [SOM]) tested the robustness of the effect of the passion manipulation on legitimization of exploiting the target worker. Across studies, we also controlled for several potential alternative explanations and confounds: Perceived friendliness of the target worker (Studies 3, 5, and 6), perceived competence and liking of the target worker (Studies 3, 5, and 6), and perceived pay, perceived status, and perceived importance to community across a variety of occupations (Study 1). We also examined whether legitimization of passion exploitation extends beyond jobs highly associated with passion (i.e., artist; Studies 2 and 3) to jobs like consulting (Study 5) and other diverse occupations, such as

high school teacher and flight attendant (Study 1). We also test the effect in an actual work setting (Study 6), an academic setting (Study 7), as well as outside of a work setting (Study 4).

In both Studies 7 and 8, we attempt to connect passion exploitation to justice motives more directly. In Study 7 we assess whether people are more likely to presume exploited workers are passionate and whether this will be moderated by BJW. In Study 8, we test (via a model of moderated mediation) whether BJW moderates the tendency to legitimize poor treatment of passionate workers via presuming they would have freely chosen this work.

These studies make several contributions to the literature. They introduce the idea of passion exploitation, and demonstrate its unique legitimizing logic. Our studies also complement research on passion that has largely focused on positive consequences of the pursuit of passion (e.g., Burke & Fiksenbaum, 2009; Duffy et al., 2013; Peterson et al., 2009; Treadgold, 1999; Wrzesniewski et al., 1997) and passionate workers' own attitudes toward their work (e.g., Bunderson & Thompson, 2009; Wrzesniewski et al., 1997). More generally, by demonstrating the unique mechanisms via which people legitimize questionable worker treatment, the present research provides a model that can help understand how contemporary forms of exploitation are legitimized.

# **Methodological Notes**

In all studies, we did not recruit additional participants once data collection was finished. We report how we predetermined our minimum sample size, all data exclusions, all manipulations, and all measures in every study.

## Study 1

Study 1 was a correlation study that explored passion exploitation and our hypothesized mediating variable across 80 professions. By examining passion exploitation at an occupational

level, we were able to test whether on average people are more likely to legitimize exploiting workers from professions that are more strongly associated with passion, and whether this is mediated by one of the hypothesized mechanisms of the legitimization of passion exploitation – expectation that the workers would volunteer for extra work.

#### Method

*Participants*. We conducted two different studies to collect the data for Study 1. For the first study (occupation + passion), we recruited 159 US residents from Amazon Mechanical Turk (MTurk), an online survey platform with demographically diverse participants (see Buhrmester, Kwang, & Gosling, 2011, for further details on analyses confirming the quality of the platform). From this data set, we excluded seven participants who failed the attention check (a reading comprehension task – e.g., Downs, Holbrook, Sheng, & Cranor, 2010), leaving a total 152. The identical attention check, adapted from a short story (Hemingway, 1987), was used in all subsequent studies using online panel samples (Studies 2, 3, 5, 6, 7, and 8; see Appendix A for the text of this attention check). For the second study (occupation + exploitation), we recruited 158 US residents from MTurk. From this data set, we excluded eight participants who failed the attention check, leaving a total 150. Participants received \$0.50 for their participation. <sup>1</sup>

Procedure and Materials. We recruited two different groups of participants who answered two different sets of questions for 80 professions, adapted from the Holland Vocational Preference Inventory (Holland, 1958), a widely used scale for vocational choice (Trapnell, 1989). We conducted two separate studies and merged them later for two reasons. First, we

<sup>&</sup>lt;sup>1</sup> After writing this paper, it was pointed out to us that the rate at which we paid participants, if adjusted to a full hour of time, is below the minimum wage in many places. We had not realized this, and simply paid what we deemed to be roughly the norm within the field. We apologize for this. Apparently even those who spend a lot of time thinking about and studying fair treatment can mindlessly engage in potentially unfair practices. Clearly a policy governing this is needed.

sought to avoid participant attrition by giving them as few questions as possible. Second, by giving one group questions about passion and another group questions about exploitation (and expected likelihood of volunteering for extra work), we obtained independent ratings of each and thus subject our hypothesis to a more stringent and conservative test. Namely, if we find the predicted mediation, then it indicates that passion exploitation can happen even when people are not given opportunities to consciously think about the relationships between passion (associated with professions) and legitimization of exploiting workers from those professions.

Participants in the occupation + passion study were randomly assigned to evaluate one of the five sets of 80 professions (see Appendix B for full list). Each set presented 16 different professions where each profession was accompanied by three items measuring (1 - Not at all, 7)- Extremely) how strongly participants associate passion with the typical person from the profession ("To what extent is the typical person in this profession passionate about his/her work?"; "To what extent does the typical person in this profession enjoy his/her work?"; and "To what extent does the typical person in this profession find his/her job meaningful?"). We selected these items as proxies for perceived passion based on an accepted definition of passion for work, which suggests that passionate people are those driven by passion and consider work intrinsically enjoyable and meaningful (Berg, Grant, & Johnson, 2010; Chen et al., 2015; Wrzesniewski et al., 1997). The three items were averaged to form a composite score for perceived passion ( $\alpha = .97$ ; M = 4.81, SD = 1.04). Participants also answered the following questions: "How well does the typical person in this profession get paid?" (1 - Extremely low, 7 - Extremely high), "To what extent do you believe that this profession is a low- or high-status job?" (1 - Extremely low-status)job, 7 – Extremely high-status job), and "How important is this profession to the community?" (1 - Not at all, 7 - Extremely). Perceived pay (M = 4.28, SD = 1.04), perceived status (M = 4.18, SD = 1.04)

SD = 0.98), and perceived importance (M = 4.39, SD = 0.98) were included as covariates because we expected that each of them would be significantly and positively correlated with expectation about the typical person from a given profession volunteer for extra work and perceived legitimacy of exploiting the person. The results presented below still hold when controlling for these covariates.

Participants in the occupation + exploitation study were randomly assigned to evaluate one of the five sets of 80 professions identical to those in the occupation + passion study. Each set presented 16 different professions where each profession was accompanied by two items, measuring how likely the typical person from the profession would volunteer for extra work ("How likely is it that the typical person in this profession would voluntarily work even on weekends?"; "How likely is it that the typical person in this profession would stay up all night for three days to finish his/her task in time?"), rated on a 7-point scale  $(1 - Not \ at \ all \ likely, 7 -$ Extremely likely). These two items were averaged to form a composite score for perceived likelihood of volunteering for extra work (r = .39, p < .001; M = 4.04, SD = 0.80). Participants also rated, on a 7-point scale  $(1 - Not \ at \ all \ legitimate, 7 - Extremely \ legitimate)$ , three questions about perceived legitimacy of exploiting the typical person from a given profession ("How legitimate is it to ask the typical person in this profession to work extra hours for no extra reward, because the organization/company needs to save money due to an economic recession?"; "Imagine that something important to the organization/company just came up. How legitimate is it to ask the typical person in this profession to leave a day at the park with his/her family early to attend to this matter?"; and "How legitimate is it to ask the typical person in this profession to do a rather uncomfortable task that is not closely related to his/her job, because people responsible for that task are unavailable at the moment?"). We averaged the three items to form a composite score for the legitimization of exploitation of the target profession ( $\alpha$  = .80; M = 3.46, SD = 0.58). After finishing data collection for the two studies, we averaged the ratings participants gave for each profession for each study and merged the two datasets to examine passion exploitation at an occupational level (N = 80).

#### **Results**

Statistical analysis was conducted at the occupational level rather than at the individual level. As explained above, we first collected survey respondents' ratings of the variables of interest, and then averaged these ratings to form composite scores for the respondents' perceptions of each profession. Table 1 reports the correlations among the variables of interest. In support of our hypothesis, perceived passion (associated with professions) was significantly and positively correlated with legitimization of exploiting the target professions.<sup>2</sup>

Next, we tested the hypothesis by exploring whether perceived passion (associated with professions), via perceived likelihood of volunteering for extra work, predicted the legitimization of exploiting workers from given professions. We conducted a mediation model using Hayes's (2013) PROCESS macro (Model 4), with 10,000 biased bootstrap samples. Perceived passion rating was entered as the independent variable, perceived likelihood of volunteering for extra work rating as mediator, and the legitimization of exploitation of the target profession rating as the dependent variable.<sup>3</sup> Perceived likelihood of volunteering for extra work significantly mediated the effect of perceived passion on the legitimization of exploiting the typical person from a given profession, b = 0.19, SE = 0.04, 95% CI = [0.11, 0.28].

<sup>&</sup>lt;sup>2</sup> Although we did not hypothesize a significant Passion  $\times$  Status interaction, we tested for it for exploratory purposes. This interaction was not significant, b = -.09, SE = .05, t(76) = -1.71, p = .090.

<sup>&</sup>lt;sup>3</sup> Because the data are correlational, we conducted five additional mediational analyses with different combinations of independent variable, mediator, and dependent variable, in order to examine whether the mediation model above uniquely explains the data. We found that perceived likelihood of volunteering for extra work significantly mediated the effect of the legitimization of exploiting the typical person from a given profession on the perceived passion, b = 0.59, SE = 0.13, 95% CI = [0.34, 0.89], but the other four combinations produced non-significant indirect effects.

## **Discussion**

In sum, exploitative treatment (e.g., making sacrifices for work, demeaning tasks unrelated to one's job description) was seen as more legitimate in the context of professions that are more strongly associated with passion. As predicted, this relationship was mediated by the expectation that those workers would voluntarily work extra, even when controlling for alternative explanations (i.e., perceived pay, perceived status, perceived importance to community). Thus, Study 1 provides initial evidence for the legitimization of passion exploitation.

## Study 2

Study 1 found that people view it as more legitimate to exploit workers from professions that are more strongly associated with passion. This relationship implies that people may view identical forms of exploitative treatment as more legitimate when it is directed towards a strongly (vs. weakly) passionate worker. To test this causal logic, in Study 2 we manipulated the target's passion for work and measured perceived legitimacy of worker treatment.

## Method

*Participants.* Studies 2, 3, and 4 (the first wave of studies) had been conducted before the clear new standards on power analyses were used to determine sample size. For Study 2, we planned to recruit at least 50 participants per cell before data collection. We increased this to 100 for Studies 3 and 4.<sup>4</sup> Data collection was stopped on the day that the minimum sample was obtained. A sample of 159 US residents participated in the survey through Mturk for \$0.50

<sup>&</sup>lt;sup>4</sup> According to G\*Power 3.1 (Faul, Erdfelder, Buchner, & Lang, 2009), for a two-cell design, a sample size of 188 (or 94 per cell) is required to detect an intermediate effect (f = 0.206) [given the average effect sizes of the manipulation of passion on the legitimization of exploitation in Studies 2, 3, and two conceptual replications of Study 3 reported in SOM] to achieve adequate power (1 - β > 0.80). According to this a posteriori analysis, Study 2 is underpowered.

compensation. Twenty-six participants who failed the attention check were excluded from the data analysis, leaving a total 133 participants (56% female; median age: 35-44).

*Manipulation of Target Worker's Passion*. Participants were randomly assigned to one of two conditions (target's passion for work: weak vs. strong). In the weak passion condition (N = 69), participants read a scenario describing an artist named John who works for an organization and loves his job. In the strong passion condition (N = 64), participants read an identical scenario with additional sentences attached at the end, which emphasized passion as the target worker's primary motive for working:

John is from a large Northeast city, is married and has two children. He is an artist and currently works for an organization that offers various artworks. John is a talented artist: He has won several awards for his paintings that vary in their style. Needless to say, he has loved arts since he was very young. When asked what he's working on these days, John showed his friends several beautiful, high-quality illustrations commissioned by one of his company's customers. He had invested a great deal of effort into producing those illustrations – not surprising given that he always works hard. [John did the work because he has a very strong passion for art. Indeed, his passion for art is the most powerful driving force behind his work at the organization.]

An artist was selected as a target of evaluation because artists readily fit the prototypical passionate workers or the concept of "artist-workers" (McGee, 2005) expected to work mainly for the love of their work. We do not suggest that only those who have art-related jobs (e.g., illustrators, architects, cartoonists) can and do love their work; rather, we suggest that people

may find it relatively easy to associate passion with occupations that have features such as creativity, a characteristic commonly attributed to artists (e.g., Dobrow, 2013). If so, an artist working for an organization is an ideal target in our exploration of the legitimization of passion exploitation in the work setting. In our later studies, we broadened the target of exploitation to a consultant (Study 5), research participants (Study 4), actual employees from various industries (Study 6), a PhD student (Study 7), and US workers (Study 8). In both conditions, the target was described to be talented, always work hard, and produce high-quality illustrations because passion for work could be associated with these qualities. By including these three qualities — i.e., ability, effort, and work outcome — across conditions, we sought to only manipulate perceived level of work passion.

Legitimization of Exploitation Measure. Participants then answered five items measuring the legitimacy of the management's exploitation of the target worker (see Appendix C for details). The first item asked participants to "imagine that John's organization is tight on staff right now" and rate how legitimate it is for the management to ask John to work extra hours for no extra reward (1 – Not at all legitimate, 7 – Extremely legitimate). For the second and third items, participants were asked to "imagine that John's organization is tight on budget right now due to the economic recession" and that "the organization needs to save money wherever they can." Participants then answered how legitimate it is that John's responsibility increases next year and how legitimate it is that he does not get an increase in his paid vacation leave next year (1 – Not at all legitimate, 7 – Extremely legitimate). The fourth item measured the legitimacy of the management asking John to fill in for a manager for no compensation (1 – Not at all

<sup>&</sup>lt;sup>5</sup> Note that it is unclear from these two practices whether compensation for John, the target worker, will increase the next year or not. If this compensation is believed to increase, then the practices may not be considered exploitative. Therefore, to better capture exploitation in the next study, we specified that John's salary and the benefits he gets from the organization will not change in the following year.

legitimate, 7 - Extremely legitimate). For the fifth question, participants answered how legitimate it is for the target's organization to hire an unpaid intern like John (1 - Not at all legitimate, 7 - Extremely legitimate). Although the contents of the requests were different from each other, they reflect managerial practices that could be considered exploitative in that the management is asking the worker to work (or work more) for no monetary compensation. Ratings of all five items were averaged to form a composite score for the legitimization of the management's exploitation of the target worker ( $\alpha = .65$ ; M = 4.21, SD = 1.08).

## **Results and Discussion**

We hypothesized that people would view managerial practices as more legitimate in the context of a strongly passionate worker compared to a weakly passionate worker. Consistent with this hypothesis, we found that the legitimization of exploitation ratings were significantly higher in the strong passion condition (M = 4.44, SD = 1.04) than in the weak passion condition (M = 4.01, SD = 1.08), F(1, 131) = 5.30, p = .023,  $\eta_p^2 = 0.039$  (see Figure 1). Thus, Study 2 provides experimental evidence that legitimization of passion exploitation occurs: People were more likely to legitimize exploiting a strongly (vs. weakly) passionate worker.

# Study 3

Study 2 supported our prediction that people legitimize exploitative practices to a greater extent when those are directed toward a strongly (vs. weakly) passionate worker. Study 3 examined the two proposed underlying mechanisms of this phenomenon – expectations that passionate workers (*i*) would have freely volunteered to work longer and harder, and (*ii*) find work to be its own reward. Beyond providing evidence for the mechanisms, Study 3 was also designed to address alternative explanations for the effect observed in Study 2.

Study 3 sought to conceptually replicate Study 2 with the addition of a mediator capturing the belief that passionate workers would volunteer for extra, non-rewarded work.

Study 1 observed correlationally that this belief mediates perceived passion and perceived legitimacy of exploitation. Study 3 sought to experimentally test this relationship. As an additional mediator, we also measured mediation via the belief that passionate workers find work to be its own reward. We expected that these mediators would be significant even after potential confounds, that we thought our manipulation might also affect, were included as parallel mediators.

These alternative mediators (or confounds) were perceived friendliness of the target worker and perceived competence and liking of the target worker. We reasoned that our manipulation may not only increase perceived passion but also perceived friendliness, perceived competence, and liking of the target in such ways that the first two might be positively associated with legitimization of exploitation (e.g., people may find it easy to ask a friendly worker to do more work, people may give more work to a competent worker), whereas the last one might be negatively associated with legitimization of exploitation (e.g., people may be reluctant to legitimize exploiting a worker they like).

Study 3 also sought to rule out yet another alternative explanation for the findings of Study 2: That people judge these exploitative requests as increasingly legitimate when asked of a passionate worker because such workers are expected to ultimately receive tangible benefits (e.g., promotion) for these displays of passion. Although this expectation is not necessarily in conflict with the two mediators we have examined (e.g., passionate workers may be expected to be rewarded both by their enjoyment of their work and tangible compensations in the future), we controlled for the expectation of future rewards by altering our manipulation so that the target

worker ("John") is 60 years old and is retiring within a month. Thus, participants receiving this manipulation would be unlikely to expect that the target would receive additional future rewards for displaying passion for his work.

## Method

**Participants.** We set the minimum sample size at 100 participants per cell. Data collection was stopped on the day that the minimum sample was obtained. A sample of 222 US residents participated in the survey through MTurk for \$0.50 compensation. For data analysis, we excluded 13 participants who failed the attention check, leaving a total 209 participants (44% female;  $M_{age} = 34.32$ , SD = 11.13).

*Manipulation of Target Worker's Passion.* Participants were randomly assigned to one of two conditions (a target's passion for work: weak vs. strong). In the weak passion condition (N = 107), participants read a scenario about an artist named John who works for an organization and considers art as a means to an end. John in this condition would thus be expected to have relatively weak passion for his work. To make sure that participants did not assume John would eventually receive tangible rewards (e.g., promotion) for his display of passion, we described John as 60 years old, voluntarily retiring next month. In the strong passion condition (N = 102), participants read an identical scenario differing in one aspect: The target was described as possessing a strong passion for his work. The wording of the vignettes was as follows:

John is an artist and currently works for an organization that offers various artworks. He does not love art, though he does not hate it either. For John, art is a means to an end. [He has loved art since he was very young and his passion for art is the most powerful driving force behind his work at the organization.] John is a fairly talented artist and works hard,

and he usually produces high-quality illustrations for his company clients. He earns about \$45,000 per year, which is very close to the national average wage. John is 60 years old and will voluntarily retire next month.

As in Study 2, we sought to keep talent, effort, and the quality of work (i.e., ability, effort, work outcome) constant across conditions. Also, we included information about the target's wage and kept it constant across conditions, because people may associate high passion with high pay (i.e., assume that the passionate target earns more) and thus believe that it is more legitimate for the management to request the passionate (i.e., higher paid) target work more.

Perceived Likelihood of Volunteering for Extra Work Measure. Participants then completed three questions assessing the degree to which they believed the target worker was likely to voluntarily work longer and harder. The items were: "How likely is it that John would voluntarily decide to move closer to his company in order to save time and use that extra time to work more? Note that he would have to move to a lower-quality house and neighborhood to live close to his workplace" (1 – Not at all likely, 7 – Extremely likely); "How likely is it that John would voluntarily go to work even on weekends to work on projects he is involved in?" (1 – Not at all likely, 7 – Extremely likely); and "Imagine that John joined a project that is extremely important for the organization. The management has a very high expectation for the project and asked all employees to put their best efforts into it. The project should be finished in three days, as requested by the client. How likely is it that John would voluntarily stay up all night for three days to finish the project in time?" (1 – Not at all likely, 7 – Extremely likely). Each item thus assessed the extent to which John, the target, is expected to volunteer for extra work. Ratings of

the three items were averaged to form a composite score for perceived likelihood of volunteering for extra work ( $\alpha = .58$ ; M = 3.59, SD = 1.19).

The Belief that Work is its Own Reward Measure. Participants completed two questions assessing the degree to which they believed the target worker finds work to be its own reward. The items were: "John's work at the organization is compensated handsomely by his enjoyment of his work" (1 - Strongly disagree, 7 - Strongly agree) and "John's organization is providing him opportunities to enjoy his work" (1 - Strongly disagree, 7 - Strongly agree). Each item thus assessed the extent to which John, the target, is expected to see his work as its own reward. Ratings of the two items were averaged to form a composite score for the belief that work is its own reward (r = .60, p < .001; M = 3.95, SD = 1.37).

Legitimization of Exploitation Measure. Participants completed six items measuring the extent to which they viewed various exploitative actions as legitimate (see Appendix D for details). Two of these items were identical to those used in Study 2 (the only difference was that we added the statement, "John's salary and the benefit he gets from the organization will not change", to the item assessing the legitimacy of John's increased responsibility for next year, to make it clear that his increased responsibility will not be compensated).

We also added four items that we considered relatively extreme and inappropriate requests – e.g., "Imagine that a very important client suddenly set up a Sunday meeting (the only time the client is free). How legitimate is it for the management to ask John to voluntarily leave a day at the park with his family early to meet the client?" and "Imagine that the cleaning staff at John's organization is not available because they are on strike. How legitimate is it for the management to ask John to voluntarily clean the office bathroom." These new additions were designed to test the boundary conditions of passion exploitation. We reasoned that the new

dependent variable captures a broader range of exploitation that might happen in the workplaces. All the eleven items were rated on a 7-point scale (1 - Not at all legitimate, 7 - Extremely legitimate) and were averaged to form a composite score for the legitimization of the management's exploitation of the target worker ( $\alpha = .66$ ; M = 2.96, SD = 0.94).

Finally, to rule out alternative explanations, we measured the target's perceived friendliness ("In your opinion, how friendly is John?"; 1 - Not at all friendly, 7 - Extremelyfriendly; M = 5.31, SD = 1.18), perceived competence ("To what extent do you think John is competent in his work?"; I - Not at all competent, 7 - Extremely competent; M = 5.97, SD =0.98) and how much participants liked him ("How much do you like John?"; 1 - I do not like him at all, 7 - I like him extremely; M = 5.22, SD = 1.10). We assessed the target's perceived friendliness to address the alternative explanation that people legitimize the management's exploitation of passionate workers mainly because these workers are perceived to be friendly and so easy to ask for help. We included competence to control for the possibility that the effect of passion on legitimacy is driven by assumptions that passionate employees are simply more competent and it is more reasonable to assign more work to more competent employees. We included liking for exploratory purposes, reasoning that perhaps liking of the passionate employee would lead participants to want the worker to be treated better and suppress the effect somewhat. As a manipulation check, participants evaluated the target worker's passion ("In your opinion, how passionate is John?") on a 7-point scale (I - Not at all passionate, 7 - Extremelypassionate; M = 4.65, SD = 1.96).

## **Results**

*Manipulation Check.* The manipulation was successful. Participants saw the strongly passionate worker (M = 6.18, SD = 0.88) as more passionate compared to the weakly passionate worker (M = 3.18, SD = 1.54), F(1, 207) = 291.39, p < .001,  $\eta_p^2 = 0.58$ .

*Perceived Likelihood of Volunteering for Extra Work.* As predicted, the target worker was perceived as more likely to voluntarily work longer and harder in the strong passion condition (M = 4.09, SD = 1.15) than in the weak passion condition (M = 3.11, SD = 1.03), F(1, 207) = 42.26, p < .001,  $\eta_p^2 = 0.17$ .

The Belief that Work is its Own Reward. As predicted, the target worker was also perceived to be rewarded by his work to a greater extent in the strong passion condition (M = 4.59, SD = 1.20) than in the weak passion condition (M = 3.34, SD = 1.23), F(1, 207) = 55.12, p < .001,  $\eta_p^2 = 0.21$ .

The Legitimization of Exploitation. As predicted, participants legitimized exploiting the target worker more when he has strong (M = 3.10, SD = 0.82) rather than weak (M = 2.83, SD = 1.02) passion for his work, F(1, 207) = 4.41, p = .037,  $\eta_p^2 = 0.021$ .

Tests of Indirect Effect and Alternative Explanations. Next, we tested our hypothesis by exploring whether the manipulation of passion, via perceived likelihood of volunteering for extra work and belief that work is its own reward, predicted the legitimization of the management's exploitation of the target worker, even when controlling for other potential mediators (see SOM for the main effects on the control variables). Using Hayes's (2013) PROCESS macro (Model 4), with 10,000 bootstrap samples (95% bias-corrected bootstrap confidence interval), we first conducted the following mediation analysis: Condition (weak passion = 0, strong passion = 1) was entered as the independent variable, perceived likelihood of volunteering for extra work,

belief that work is its own reward, and the legitimization of exploitation rating was entered as the dependent variable.

As shown in Figure 2, we found a significant indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via perceived likelihood of volunteering for work, b = .22, SE = 0.07, 95% CI = [0.097, 0.39], and the belief that work is its own reward, b = .22, SE = 0.07, 95% CI = [0.087, 0.40]. We then conducted the same analysis but additionally including perceived friendliness, perceived competence, and liking as parallel mediators. We still observed a significant indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via perceived likelihood of volunteering for extra work, b = 0.24, SE = 0.07, 95% CI = [0.12, 0.42], and the belief that work is its own reward, b = 0.26, SE = 0.08, 95% CI = [0.12, 0.45], even when all of the parallel mediators were included in the model (see SOM for details on these mediators).

## **Discussion**

In sum, these results conceptually replicate and extend Study 2. A strongly passionate worker ("John") was expected to be more likely than a weakly passionate worker to volunteer for extra work and were rewarded by his work, which in turn predicted increased legitimization of the management's exploitation of that worker. These results were obtained even in the context of relatively extreme and inappropriate requests, when controlling for three alternative mediators (i.e., perceived friendliness, perceived competence, and liking), and when making it explicit that the target worker is just about to retire and unlikely to receive additional future rewards for displaying passion for his work. We also conducted two other conceptual replications of Study 3

with a few alterations to the design to test for robustness of the effect,<sup>6</sup> and found the same main effects and indirect effects (the research materials and results are provided in full in SOM).

## Study 4

Study 4 examined passion exploitation in a hypothetical psychological research setting. In contrast to Studies 2 and 3, the target of evaluation in Study 4 was not an employee, but was instead students we – the researchers – were presumably going to recruit for a future on campus experiment. These students would be asked to engage in an uncompensated extra work (staying longer) and a mildly painful task (putting their hand in ice water while completing an experimental task). We predicted that the survey respondents evaluating the target participants would believe that the targets would enjoy the experimental task more when it is related to an activity the target is passionate about than when it is not, which would predict increased beliefs in the legitimacy of subjecting the participant to mildly painful stimuli.

## Method

**Participants.** The minimum sample size was set at 100 participants per cell. We recruited a total 204 participants from the university campus (47.8% female;  $M_{age} = 20.50$ , SD = 3.92) who received a small token of appreciation (candy) for their participation. Data collection was stopped on the day that the minimum sample was obtained.

*Manipulation of Target's Passion.* Survey respondents were randomly assigned to one of two conditions (target's passion for work: weak vs. strong). First, all survey respondents read three paragraphs describing research as an integral part of the university, the purpose of the

<sup>&</sup>lt;sup>6</sup> The first conceptual replication of Study 3 (#2 in SOM) differed from Study 3 in a few ways, including that (1) it examined only one of the two mediators (perceived likelihood of volunteering for extra work) and (2) although the target was an artist, he was not retiring next month. The second conceptual replication (#3 in SOM) differed from Study 3 in a few ways, including (1) describing the target as a consultant rather than an artist, and (2) testing for moderation by the state of the economy. In both studies, the hypothesized main effect and pattern of mediation was observed. The economic moderator exerted no effect. These results are included in the meta-analysis. See SOM for details.

survey (i.e., collecting opinions about research practice in order to "polish research materials for an experiment" to be conducted next month), and the design of the proposed experiment. The first paragraph was designed to make the survey relevant to respondents and motivate them to pay close attention to the research materials. We expected that the second paragraph would make the survey more realistic and important because, according to the descriptions, respondents have a say in designing an experiment that was to be conducted next month. The third paragraph explained the design and objective of the proposed experiment to be conducted next month, which was ostensibly about "individual differences in learning" in which recruited participants would "solve math problems (i.e., like those in SAT) individually." We also explained that the experiment would take 30 min, and recruited participants would be paid according to 30 min of time.

The fourth paragraph described the characteristics of participants who would be recruited for the future experiment. Survey respondents in the weak passion condition (N=104) read that undergrads from various majors will participate in the experiment. In the strong passion condition (N=100), survey respondents read that undergrads from a math club will be participating in the experiment. These participants are from various majors as in the other condition, but according to the descriptions, they share a common interest in math (i.e., "they love math") and "regularly meet and do a variety of activities about math." We reasoned that undergrads from the math club, because they love (or are passionate for) math, would be expected to enjoy and like the experiment more than their counterparts (see Appendix E for the text of the scenario and manipulation).

Perceived Enjoyment of Task Measure. After reading the four paragraphs, survey respondents answered two items asking how much target participants would enjoy and like the

experimental tasks (i.e., "In your opinion, how much would participants like doing the experimental tasks?", "How much would participants enjoy the experiment?") on a 7-point scale  $(I-not\ at\ all,\ 7-extremely)$ . These ratings were averaged to form a composite score for perceived enjoyment of the task  $(r=.76,\ p<.001;\ M=4.29,\ SD=1.23)$ . We did not measure perceived likelihood of volunteering for extra work in this study because it did not apply to this non-workplace context.

Legitimization of Exploitation Measure. Respondents then answered two non-Likert questions asking, given the general information about the future experiment respondents previously read, how much "longer could the experimenter ask the participants to stay for no extra compensation" (participants were asked to provide an exact amount of time) and how much "pay is appropriate for this kind of experiment if it runs 30 min as scheduled" (participants were asked to provide an exact dollar amount). Perhaps because the measures were so unconstrained and open-ended, the manipulation had no significant effects on either of them.<sup>7</sup>

Respondents also answered two items that were more consistent with the legitimization measures of the previous studies (a 7-point scale, I-not at all legitimate, 7-extremely legitimate) asking – given what they read about the future experiment – how legitimate it is for "the experimenter to ask the participant to stay *longer* than scheduled to finish the experiment" when the "30 min study needs to run overtime by extra 15 min for it to be fully complete" and for the experimenter to ask the participant to "submerge their hands in ice water while solving the math problems" assuming that "the participants were *not* told about this mildly uncomfortable task when they signed up" for the experiment. We reasoned that the first item

<sup>&</sup>lt;sup>7</sup> The manipulation of passion had no significant effect on an open-ended item about an uncompensated extra work (i.e., how much "longer could the experimenter ask the participants to stay for no extra compensation?"),  $F(1, 199) = .301, p > .250, η_p^2 = 0.002$ , or another open-ended item about an appropriate amount of pay (i.e., how much "pay is appropriate for this kind of experiment if it runs 30 min as scheduled?"),  $F(1, 199) = 1.86, p = .174, η_p^2 = 0.009$ .

would be comparable to requesting workers to work extra hours for no pay, and the second item to requesting the workers to do uncomfortable tasks that they were not signed up to do. These two ratings were averaged to form a composite score for the legitimization of the experimenter's exploitation of the target participants (r = .41, p < .001; M = 3.11, SD = 1.23).

#### **Results**

**Perceived Enjoyment of Task.** As predicted, the target was presumed to enjoy the task more in the strong passion condition (M = 4.93, SD = 1.00) than in the weak passion condition (M = 3.69, SD = 1.13), F(1, 202) = 67.65, p < .001,  $\eta_p^2 = 0.25$ .

The Legitimization of Exploitation. In contrast to our prediction, the manipulation had no significant direct effect on the 7-point scale measuring legitimization of the experimenter's exploitation of the target participants (strong passion condition: M = 3.13, SD = 1.17; weak passion condition: M = 3.10, SD = 1.30), F(1, 202) = 0.019, p > .250,  $\eta_p^2 = 0.00009$ .

Tests of Indirect Effect and Alternative Explanations. Though there was no direct effect on the legitimization measure, our theoretical model involves a mediational chain in which manipulation of passion is presumed to increase perceived enjoyment, which should in turn increase perceived legitimacy. Because a direct effect is not necessary for tests of causal chain mediation (e.g., MacKinnon, Krull, & Lockwood, 2000; Rucker, Preacher, Tormala, & Petty, 2011), we next tested whether an indirect effect still exists. That is, we tested our hypothesis by exploring whether the manipulation of passion, via perceived enjoyment of task, indirectly predicted the legitimization of exploitation of the target participants. Using Hayes's (2013) PROCESS macro (Model 4), with 10,000 bootstrap samples (95% bias-corrected bootstrap confidence interval), we conducted the following mediation analysis: Condition (weak passion = 0, strong passion = 1) was entered as the independent variable, perceived enjoyment of task was

entered as mediator, and the legitimization of exploitation rating was entered as the dependent variable. As shown in Figure 3, we found a significant indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via perceived enjoyment of task, b = 0.25, SE = 0.11, 95% CI = [0.048, 0.47].

#### **Discussion**

Thus, while this study did not yield results that were as consistent with our hypotheses as Studies 2 and 3 – that is, we did not in this instance observe a direct effect of the manipulation on the legitimization measures<sup>8</sup> – it did once again capture the (statistically significant) indirect effect by which attributions of passion can affect perceived enjoyment, further predicting perceived legitimacy of poor treatment.

# Study 5

Study 5 aimed to replicate the indirect effect of the weak passion (vs. strong passion) manipulation on the legitimization of exploitation via perceptions of volunteering for extra work and the belief that work itself is its own reward. Of importance, Study 5 sought to address two potential limitations of our previous studies. First, our experimental studies (Studies 2, 3, and 4) cannot make clear the direction of the effects. That is, because these studies only compared a weakly passionate worker to a strongly passionate worker, it is not clear whether participants were *delegitimizing* the exploitation of non-passionate workers or *legitimizing* the exploitation of passionate workers. To address this issue, in Study 5, we included a neutral passion condition that did not mention the level of a target worker's passion, and compared that condition to a weak passion condition and a strong passion condition. We predicted that, compared to the neutral passion condition, participants in the strong passion condition would increasingly believe

<sup>&</sup>lt;sup>8</sup> Some unexplored mediators may be suppressing the manipulation effect on the legitimization of exploitation (e.g., MacKinnon et al, 2000; Rucker et al, 2011). Future studies should explore potential suppressing mediators.

that a target worker is likely to volunteer for extra work and find work to be its own reward, which in turn would predict increased legitimization of exploiting the worker. We did not have an a priori prediction about the weak (vs. neutral) passion comparison. On one hand, a weakly passionate worker and a neutrally passionate worker might be seen as equally non-passionate compared to a strongly passionate worker. On the other hand, a weakly passionate worker might be viewed less passionate than a neutrally passionate worker whose level of passion is unknown. Second, the findings of Studies 2 and 3 may be specific to a target worker with a job that is highly correlated with passion (i.e., artist). To address this alternative explanation, we used as a target a worker employed at a consulting service.

#### Method

*Participants*. We predetermined a sample size required to detect an intermediate effect (f = 0.15) to achieve adequate power (1 - β > 0.80) [given the effect size of the manipulation of passion on the legitimization of exploitation in the second conceptual replication of Study 3 reported in SOM, which has the same setting and a similar manipulation]. This analysis indicated that we needed at least 432 participants for a three-cell design study. 9 Data collection was stopped on the day that the minimum sample was obtained. A sample of 631 US residents participated in the survey through MTurk for \$0.50 compensation. For data analysis, we excluded 47 participants who failed the attention check, leaving a total 584 participants (64.9% female;  $M_{age} = 36.65$ , SD = 11.43).

**Procedure and Materials.** Participants were randomly assigned to one of three conditions (a target's passion for work: neutral vs. weak vs. strong). The manipulation was adapted from the

<sup>&</sup>lt;sup>9</sup> The second wave of studies (Studies 5, 6, 7, and 8) were conducted after the first round of reviews. Instead of predetermining a sample size that we thought was big enough without using a power analysis of prior results (as in Studies 2 and 3), we conducted an a priori power analysis for Studies 5, 7, and 8 to determine our sample size.

conceptual replication of Study 3 reported in SOM. In the neutral passion condition (N = 192), participants read a scenario about an employee at a medium-sized consulting firm in the US, which does not mention the worker's passion:

John is a full-time employee at a medium-sized consulting firm in the US, which is known for its high-quality consulting service. John is a fairly talented employee and works hard, and he usually performs his work well. He earns about \$45,000 a year, which is close to the national average wage.

In the weak passion condition (N = 196) and strong passion condition (N = 196), participants read a scenario describing a weakly passionate employee and a strongly passionate employee, respectively. The wording of the vignettes was as follows:

John is a full-time employee at a medium-sized consulting firm in the US, which is known for its high-quality consulting service. John does not love his job, though he does not hate it either. For John, his job is a means to an end. In other words, he is largely indifferent towards his work. [John loves his job, and his passion for his job is the most powerful driving force behind his work at the organization. In other words, he is very passionate about his work.] John is a fairly talented employee and works hard, and he usually performs his work well. He earns about \$45,000 a year, which is close to the national average wage.

As in Study 3, we sought to keep salary, talent, effort, and the quality of work constant across the conditions. Unlike in Studies 2 and 3, we did not mention that the worker in the strong passion condition has loved his job since childhood ("He has loved art since he was young..."), so as to avoid the interpretation that the worker perseveres more than the worker in weak passion condition. The materials and procedure were identical to those in Study 3 (a 2-item measure of belief that work is its own reward, r = .62, p < .001; M = 3.62, SD = 1.39, a 6-item measure of legitimization of exploitation,  $\alpha = .73$ ; M = 3.33, SD = 1.04), except in two ways. First, the phrase "in the arts" was dropped from one of the items measuring legitimization of exploitation, because the target worker in this study was a consultant, not an artist. Second, for the two items of perceived likelihood of volunteering for extra work, we clarified that the target's voluntary work is not compensated (i.e., "How likely is it that John would voluntarily go to work even on weekends to work on projects he is involved in, for no extra compensation?", "Imagine that John joined a project...How likely is it that John would voluntarily stay up all night for three days to finish the project in time (for no extra compensation)?";  $\alpha = .71$ ; M = 3.74, SD = 1.44). Finally, as in Study 3, we measured target's perceived passion (M = 4.78, SD = 1.73), perceived friendliness (M = 5.27, SD = 1.06), and perceived competence (M = 5.85, SD = .98), and liking of the target (M = 5.22, SD = 1.05).

## **Results**

*Manipulation Check.* The manipulation of the target's passion was successful. A one-way Analysis of Variance (ANOVA) indicated that condition significantly affected perceived passion of the target worker, F(2, 581) = 350.78, p < .001,  $\eta_p^2 = 0.547$ . Post-hoc tests, using Bonferroni's correction, revealed that participants in the strong passion condition perceived that the target worker was more passionate (M = 6.17, SD = 0.99) than did participants in the weak

passion condition (M = 3.09, SD = 1.38), or the neutral passion condition (M = 5.09, SD = 1.09) (ps < .001). Participants in the neutral passion condition perceived that the target worker was more passionate than did participants in the weak passion condition (p < .001).

*Perceived Likelihood of Volunteering for Work.* As predicted, a one-way Analysis of Variance (ANOVA) indicated that condition significantly affected perceived likelihood of the target worker volunteering for extra work, F(2, 581) = 69.77, p < .001,  $\eta_p^2 = 0.194$ . Post-hoc tests, using Bonferroni's correction, revealed that the target worker was perceived as more likely to voluntarily work longer and harder in the strong passion condition (M = 4.47, SD = 1.26) than in the weak passion condition (M = 2.92, SD = 1.32), or the neutral passion condition (M = 3.82, SD = 1.32) (ps < .001). The target worker was also perceived as more likely to voluntarily work longer and harder in the neutral condition than in the weak passion condition (p < .001).

The Belief that Work is its Own Reward. As predicted, a one-way Analysis of Variance (ANOVA) indicated that condition significantly affected the belief that work is its own reward, F(2, 581) = 78.91, p < .001,  $\eta_p^2 = 0.214$ . Post-hoc tests, using Bonferroni's correction, revealed that the target worker was perceived to be rewarded by his work to a greater extent in the strong passion condition (M = 4.42, SD = 1.25) than in the weak passion condition (M = 2.85, SD = 1.17), or the neutral passion condition (M = 3.60, SD = 1.27) (PS < .001). The target worker was also perceived to be rewarded by his work to a greater extent in the neutral passion condition than in the weak passion condition (PS < .001).

The Legitimization of Exploitation. As predicted, a one-way Analysis of Variance (ANOVA) indicated that condition significantly affected the legitimization of exploitation, F(2, 581) = 5.60, p = .004,  $\eta_p^2 = 0.019$  (see Figure 4). Post-hoc tests, using Bonferroni's correction, revealed that participants legitimized exploiting the target worker more when he has strong (M = 0.004).

3.51, SD = 1.02) rather than weak (M = 3.16, SD = 1.04) passion for his work (p = .003). The strong passion condition and the neutral condition did not differ on the legitimization of exploitation (p = .212). The neutral passion condition and the weak passion condition also did not differ on the legitimization of exploitation (p > .250).

Tests of Relative Indirect Effect and Alternative Explanations. We next tested whether the manipulation of passion, via perceived likelihood of volunteering for extra work and belief that work is its own reward, predicted the legitimization of the management's exploitation of the target worker, even when controlling for the other potential alternative explanations (see SOM for the main effects on the control variables). Because of the additional neutral condition in this study, this required three separate sets of mediation tests. One set for the weak versus neutral comparison, one set for the strong versus neutral comparison, and one set for the weak versus strong comparison.

To this end, we used regression for testing a mediation with a multi-categorical independent variable. We used the indicator coding approach (PROCESS Model 4; Hayes & Preacher, 2014) and created two dummy variables (one for each condition: dummy code = 1 if a case is in the group and dummy code = 0 otherwise), first using the neutral condition as the reference group (see Table 2 for details on indicator coding). We then estimated the relative indirect effects of each condition (weak passion and strong passion) compared to the neutral condition, using 95% bias-corrected bootstrap confidence intervals (with 10,000 bootstrap samples).

Tests of indirect for weak passion condition versus neutral condition. As shown in Figure 5, the mediation analysis revealed a significant relative indirect effect of the weak passion (vs. neutral) condition on the legitimization of exploitation via perceived likelihood of volunteering

for work, b = -.23, SE = 0.04, 95% CI = [-0.33, -0.15] and the belief that work is its own reward, b = -.17, SE = 0.03, 95% CI = [-0.26, -0.11]. We then conducted the same analysis but additionally including perceived friendliness, perceived competence, and liking as parallel mediators. We still observed a significant indirect effect of the weak passion (vs. neutral) condition on the legitimization of exploitation via perceived likelihood of volunteering for work, b = -.24, SE = 0.04, 95% CI = [-0.34, -0.16], and the belief that work is its own reward, b = -.19, SE = 0.04, 95% CI = [-0.28, -0.12], even when all of the parallel mediators were included in the model (see SOM for details on these mediators).

Tests of indirect effect for strong passion condition versus neutral condition. As shown in Figure 5, we also found a significant relative indirect effect of the strong passion (vs. neutral) condition on the legitimization of exploitation via perceived likelihood of volunteering for work, b = .16, SE = 0.04, 95% CI = [0.09, 0.26] and the belief that work is its own reward, b = .19, SE = 0.04, 95% CI = [0.12, 0.29]. We then conducted the same analysis but additionally including perceived friendliness, perceived competence, and liking as parallel mediators. We still observed a significant indirect effect of the strong passion (vs. neutral) condition on the legitimization of exploitation via perceived likelihood of volunteering for work, b = .17, SE = 0.04, 95% CI = [0.09, 0.27], and the belief that work is its own reward, b = .21, SE = 0.04, 95% CI = [0.13, 0.30], even when all of the parallel mediators were included in the model (see SOM for details on these mediators).

Finally, we conducted the same mediation analysis, this time using the weak passion condition as the reference group (see Table 2 for details on indicator coding). The patterns of results (a relative indirect effect of strong passion vs. weak passion) were consistent with the hypotheses and what we found in our previous studies (see SOM for details).

#### **Discussion**

Study 5 replicated and extended our previous findings with an additional neutral passion condition (a target worker whose passion is not mentioned). Replicating Study 3 (and its second conceptual replication reported in SOM), we found that, compared to a weakly passionate worker, a strongly passionate worker is viewed as more likely to volunteer for extra work and find work to be rewarding, which in turn predict increased legitimization of the management's exploitation of the target worker. Of importance, we additionally found that these two assumptions predict increased legitimization of exploiting a strongly passionate worker (vs. a neutrally passionate worker), even when controlling for several alternative accounts.

# Study 6

Study 6 examined whether the effects shown in our previous experimental studies (Studies 2, 3, 4, and 5) can be generalized to a sample of actual managers and their reports about how they would treat their actual employees. To examine this, we recruited managers from various industries (e.g., non-profit, construction, legal services), asked them to think of either a passionate or non-passionate subordinate, and then assessed beliefs that this employee would freely volunteer for extra work, derives extra benefits from their work, and how legitimate it is to ask this employee to work harder for no extra money or treat the employee poorly. To provide evidence that goes beyond hypothetical situations, we also examined actual frequency or reported exploitation by the managers. We again predicted an effect of condition on legitimacy beliefs via the mediator variables. Because we did not observe a direct effect on legitimacy beliefs in Study 4, but only an indirect effect via the presumptions about the passionate worker, we were unsure if we would observe a direct effect here or again only an indirect effect.

#### Method

**Participants.** Because managers are much harder to recruit, we decided a priori to recruit as many qualified participants as possible in three days of data collection. A sample of 205 US residents participated in the survey through a panel administered by the company Prolific Academic. Only "full-time" workers with "leadership/position of power/supervisory duty" who supervise seven or more subordinates at work were recruited by the survey company (516 of 35,734 total participant in their database met this strict criteria). For data analysis, we excluded 14 participants who failed the attention check, leaving a total 191 participants (34.0% female;  $M_{age} = 37.29$ , SD = 9.64).

**Procedure and Materials.** Participants were randomly assigned to one of two conditions (a target's passion for work: weak vs. strong). In the weak passion condition (N = 94), participants were asked to think about an employee under their supervision who is weakly passionate about his or her work:

Please take time to think about an employee under your supervision (at your workplace) who is largely indifferent towards his or her work. This person does not love his or her job, though he or she does not hate it either. In other words, the job is a means to an end for him or her. This person should also be fairly talented and work hard, and usually performs his or her work well. *If you cannot think of an exact match, please think of a person who most closely matches the descriptions*.

In the strong passion condition (N = 97), participants were also asked to think about an employee under their supervision but this time a worker who is strongly passionate about his or her work:

Please take time to think about an employee under your supervision (at your workplace) who is very passionate about his or her work. This person loves his or her job, and his or her passion for job is the most powerful driving force behind his or her work at the organization. In other words, he or she is very passionate about his or her work. This person should also be fairly talented and work hard, and usually performs his or her work well. If you cannot think of an exact match, please think of a person who most closely matches the descriptions.

Next, participants were asked to "write down this person's first name" and "explain how this person fits the descriptions." In the following section, participants completed the main variables of interest, adapted from Study 5 (the name each participant provided was piped into these measures). Participants completed a 2-item measure of the perceived likelihood of volunteering for extra work (r = .88, p < .001, M = 4.14, SD = 2.04), rated on a 7-point scale ( $I - not \ at \ all \ likely$ ,  $T - extremely \ likely$ ): "How likely is it that [the subordinate's name] would voluntarily spend more time working (for no extra compensation)?" and "How likely is it that [the subordinate's name] would voluntarily make sacrifices for his or her work (for no extra compensation?" Participants also completed a 2-item measure of the belief that work is its own reward (r = .72, p < .001, M = 4.14, SD = 1.86), rated on a 7-point scale ( $I - strongly \ disagree$ ,  $T - strongly \ agree$ ): "work itself is its own reward for [the subordinate's name]" and "Work is more rewarding for [the subordinate's name] than for the average employee."

Participants also completed a 2-item measure of the legitimization of exploitation, a 2item measure of the frequency of exploitation, and two filler questions. For the measure of the legitimization of exploitation, participants were first asked to "suppose that – due to the economic recession, etc." their "organization was tight on staff and/or budget and needed to save money wherever it can." Participants then answered two items, rated on a 7-point scale (I - not at all legitimate, 7 - extremely legitimate): "In times like these, how legitimate do you think it would be for you to ask [the subordinate's name] to work extra hours for no extra reward? If you cannot think of an exact match, please think of requests that closely match the description" and "In times like these, how legitimate do you think it would be for you to treat [the subordinate's name] (relatively) poorly?" (r = .43, p < .001, M = 2.77, SD = 1.59).

For the measure of the frequency of exploitation, participants were first asked to "think of times when – due to the economic recession, etc." their "organization was tight on staff and/or budget and needed to save money wherever it can." Participants then answered two items, rated on a 7-point scale (0 - never, 1 - once in a while, 2 - sometimes, 3 - fairly many times, 4 - often, 5 - constantly, 6 - always): "In times like these, how frequently have you asked [the subordinate's name] to work extra hours for no extra reward? If you cannot think of an exact match, please think of requests that closely match the description" and "In times like these, how frequently have you treated [the subordinate's name] (relatively) poorly?" (r = .57, p < .001, M = 1.33, SD = 1.52).

The two filler items (Y/N) asked whether the subordinate expressed concerns about the organization's business strategy ("In times like these, did [the subordinate's name] ever express concerns about the organization's business strategy (e.g., marketing)? *If you cannot think of an exact match, please think of requests that closely match the description*") and whether the subordinate was not able to pay adequate attention to his or her colleagues at work ("In times like these, have you ever felt that [the subordinate's name] was not able to pay adequate attention

to his or her colleagues at work? If you cannot think of an exact match, please think of requests that closely match the description").

As a manipulation check and to examine alternative explanations, we also measured perceived passion ("How passionate is [the subordinate's name] for his or her work?"; M = 4.87, SD = 2.00), perceived friendliness ("How friendly is [the subordinate's name] in the workplace?"; M = 5.64, SD = 1.31), perceived competence ("How competent is [the subordinate's name] in his or her work?"; M = 5.85, SD = 1.27), and liking ("How much do you like [the subordinate's name]?"; M = 5.60, SD = 1.28) of the subordinate.

Finally, as covariates, participants were asked to report what industry they work in, the subordinate's gender,  $^{10}$  how long the subordinate has worked for participant, the number of employees in the organization ( $I-fewer\ than\ 10,\ 2-10-15,\ 3-51-200,\ 4-201-500,\ 5-501-1,000,\ 6-more\ than\ 1,000$ ), participant's job level ( $I-low\ level,\ 4-mid-level,\ 7-high-level$ ), the subordinate's job level ( $I-low\ level,\ 4-mid-level,\ 7-high-level$ ), and the number of employees working under participant. The type of industry was coded based on the Global Industry Classification Standard, developed by Morgan Stanley Capital International (MSCI) and Standard and Poor's (MSCI, 2016). According to this classification, for instance, "engineering" would be coded as "industrials" and "banking" as "financials." We coded the reported industries into ten categories ( $I-all\ others,\ 2-materials,\ 3-industrials,\ 4-consumer\ discretionary,\ 5-consumer\ staples,\ 6-health\ care,\ 7-financials,\ 8-information\ technology,\ 9-telecommunication\ services,\ 10-real\ estate$ ).

## **Results**

<sup>&</sup>lt;sup>10</sup> The target's gender did not significantly moderate the effect of manipulation on our variables of interest.

*Manipulation Check.* The manipulation of the subordinate's passion was successful. Participants saw the strongly passionate subordinate worker (M = 6.27, SD = 0.92) as more passionate compared to the weakly passionate subordinate worker (M = 3.43, SD = 1.78), F(1, 189) = 193.53, p < .001,  $\eta_p^2 = 0.506$ .

Perceived Likelihood of Volunteering for Extra Work. As predicted, the target subordinate worker was perceived as more likely to voluntarily work longer and harder in the strong passion condition (M = 5.18, SD = 1.59) than in the weak passion condition (M = 3.06, SD = 1.90), F(1, 189) = 69.35, p < .001,  $\eta_p^2 = 0.268$ . These effects held when controlling for the seven covariates (the type of industry participants work in, the subordinate's gender, how long the subordinate has worked for participant, the number of employees in the organization, participant's job level, the subordinate's job level, and the number of employees working under participant), F(1, 181) = 73.28, p < .001,  $\eta_p^2 = 0.288$ .

The Belief that Work is its Own Reward. As predicted, the target subordinate worker was perceived to be rewarded by his or her work to a greater extent in the strong passion condition (M = 5.27, SD = 1.24) than in the weak passion condition (M = 2.97, SD = 1.66), F(1, 189) = 117.48, p < .001,  $\eta_p^2 = 0.383$ . Again, these effects held when controlling for the same seven covariates, F(1, 181) = 114.59, p < .001,  $\eta_p^2 = 0.388$ .

The Legitimization and Frequency of Exploitation. The manipulation had no significant direct effect on the legitimization of exploiting the target subordinate worker (strong passion condition: M = 2.67, SD = 1.63; weak passion condition: M = 2.88, SD = 1.54), F(1, 189) = 0.89, p = .345,  $\eta_p^2 = 0.005$ , or the actual frequency of exploiting the subordinate (strong passion condition: M = 1.33, SD = 1.50; weak passion condition: M = 1.34, SD = 1.54), F(1, 189) = 0.001, p = .981,  $\eta_p^2 = 0.000003$ . The same effects held when controlling for the identical seven

covariates, F(1, 181) = 0.82, p > .250,  $\eta_p^2 = 0.005$ , and, F(1, 181) = 0.033, p > .250,  $\eta_p^2 = 0.0001$ , respectively.

Tests of Indirect Effect and Alternative Explanations. We tested our hypothesis by exploring whether the manipulation of passion, via perceived likelihood of volunteering for extra work and belief that work is its own reward, predicted the legitimization of the management's exploitation of the target worker, even when controlling for other potential mediators (see SOM for the main effects on the control variables). Using Hayes's (2013) PROCESS macro (Model 4), with 10,000 bootstrap samples (95% bias-corrected bootstrap confidence interval), we first conducted the following mediation analysis: Condition (weak passion = 0, strong passion = 1) was entered as the independent variable, perceived likelihood of volunteering for work and belief that work is its own reward as parallel mediators, and the legitimization of exploitation rating was entered as the dependent variable.

Tests of indirect effect on legitimization of exploitation. As shown in Figure 6, the mediation analysis revealed a significant indirect effect on the legitimization of exploitation via perceived likelihood of volunteering for work, b = .78, SE = 0.19, 95% CI = [0.44, 1.55]. The indirect effect via the belief that work is its own reward was not significant, b = .34, SE = 0.20, 95% CI = [-0.036, 0.77]. We then conducted the same analysis but additionally including perceived friendliness, perceived competence, and liking as parallel mediators. We still observed a significant indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via perceived likelihood of volunteering for work, b = .82, SE = 0.18, 95% CI = [0.50, 1.23], and the belief that work is its own reward, b = .41, SE = 0.20, 95% CI = [0.05, 0.84], even when all of the parallel mediators were included in the model (see SOM

for details on these mediators). The pattern largely held<sup>11</sup> when additionally controlling for the seven demographic covariates – i.e., the type of industry participants work in, the subordinate's gender, how long the subordinate has worked for participant, the number of employees in the organization, participant's job level, the subordinate's job level, and the number of employees working under participant (see SOM for details).

Tests of indirect effect on frequency of exploitation. Next, we conducted the same set of mediation analyses, this time using actual frequency of exploitation as the dependent variable. As shown in Figure 7, we found a significant indirect effect of the strong passion (vs. weak passion) condition on the frequency of exploitation via perceived likelihood of volunteering for work, b = .62, SE = 0.15, 95% CI = [0.35, 0.98], and the belief that work is its own reward, b = .71, SE = 0.19, 95% CI = [0.36, 1.12]. We then conducted the same analysis but additionally including perceived friendliness, perceived competence, and liking as parallel mediators. We still observed a significant indirect effect of the strong passion (vs. weak passion) condition on the frequency of exploitation via perceived likelihood of volunteering for work, b = .65, SE = 0.15, 95% CI = [0.39, 1.008], and the belief that work is its own reward, b = .79, SE = 0.18, 95% CI = [0.47, 1.20], even when all of the parallel mediators were included in the model (see SOM for details on these mediators). The pattern was identical when additionally controlling for the seven demographic covariates (see SOM for details).

## **Discussion**

In sum, we again observed patterns of mediation that are consistent with our predictions. Specifically, managers from various industries perceived that their strongly (vs. weakly) passionate subordinate would be more likely to volunteer for extra work (for no extra

<sup>&</sup>lt;sup>11</sup> Of importance, an indirect effect via the belief that work is its own reward was no longer significant.

compensation) and be rewarded by work, and this in turn predicted increased legitimization of exploiting the target subordinate. Of importance, this effect extended beyond hypothetical situations to an actual (recalled) frequency of exploitation: Managers' attributions of passion in their subordinates increased endorsement of the two sets of rationale, which in turn predicted greater frequency of exploitation. All these patterns largely held when controlling for covariates. Taken together, Study 6 provides evidence for exploitation of passionate workers and the legitimization of such practices in actual workplaces.

Before moving to our final studies, we would like to briefly discuss the fact that Study 4 and the present study found an indirect effect, but not a direct effect of the manipulation on the legitimization measures, whereas Studies 2, 3, and 5 found the both effects. What might have led to these different results? We speculate that the legitimization of passion exploitation might operate differently when participants evaluate abstract others (Studies 2, 3, and 5) versus when they evaluate specific, self-relevant instances (Studies 4 and 6). It might be relatively hard for participants to directly legitimize passion exploitation or report to have engaged in such activities when there is a chance they will interact with or know the target (other students from the same university in Study 4) or actually interact with the target on a daily basis (a worker under participants' supervision in Study 6). Perhaps, in these cases, the increased individuation makes them less likely to treat people unfairly, or perhaps social desirability concerns make participants reluctant to report doing so (Crowne & Marlowe, 1960). Regardless, it is important to note that both classes of this justification process – that is, legitimizing the poor treatment of abstract others and legitimizing the poor treatment of specific, more self-relevant targets – are important to investigate. In fact, many of the most pressing and widely discussed cases of injustice involve people's considerations of abstract groups of others they learn about in the news or via media

(e.g., wealth inequality across levels of SES, discrimination of marginalized social groups), and it is often people's reactions to these stories and accounts that shape policy. We return to this issue in the General Discussion.

# Study 7

Study 7 examined a reverse-direction of the legitimization process explored in our experimental studies, and also offered our first attempt at connecting this process to justification motives. That is, instead of testing whether the manipulation of passion affects the legitimization of exploiting the target, Study 7 explored whether the manipulation of exploitation influences the perceived passion of the target. To broaden the scope of our findings, we situated Study 7 in an academic setting, using a graduate student as a target.

In addition to testing for the reverse pathway, we also explored whether BJW (Lerner, 1980), a measure of justice motivations, will interact with our hypothesized effect. We thought that people who strongly hold this motive might be especially likely to want to attribute passion to poorly treated workers.

## Method

**Participants.** Because this is the first test of this design, we assumed a small effect size of  $f^2 = .02$  for the interaction term. This analysis indicated that we needed at least 395 participants to achieve adequate power  $(1 - \beta > 0.80)$ . Data collection was stopped on the day that the minimum sample was obtained. A sample of 456 US residents participated in the survey through Mturk for \$0.50 compensation. For data analysis, we excluded 38 participants who failed the attention check, leaving 418 participants  $(59.8\% \text{ female}; M_{age} = 38.01, SD = 12.56)$ .

*Procedure and Materials.* All participants first completed the attention check. Next, all participants completed the General Belief in a Just World scale (Dalbert, Montada, & Schmitt,

1987). The BJW scale has 6 items, measuring the extent to which people believe that the world is just and fair: "I think basically the world is a just place," "I believe that, by and large, people get what they deserve," "I am confident that justice always prevail over injustice," "I am convinced that in the long run people will be compensated for injustices," "I firmly believe that injustices in all areas of life (e.g., professional, family, politic) are the exception rather than the rule," and "I think people try to be fair when making important decisions." Ratings of these six items were averaged to form a composite score for the BJW ( $\alpha = .85$ ; M = 4.00, SD = 1.19).

In the second section of the study, participants were randomly assigned to one of two conditions (exploitation of target: neutral vs. exploited). In the neutral condition, participants (N = 210) read a scenario describing a psychology PhD student named David. In the exploited condition (N = 208), participants read an identical scenario with additional sentences attached at the end, which suggest that David is exploited (that is, being overworked by his advisor and undertaking tasks irrelevant to his training):

David is 25 years old, single and lives in Madison, Wisconsin. He is a PhD student in the psychology department at the state university, which admitted him after a rigorous application process. The program gives a small fellowship to PhD students, which covers tuition and provides a modest amount for living expenses. David is a slightly above average student and works hard, and he usually does good work. David works with his advisor, an established professor of psychology named Dr. Williams, on several research projects. [Dr. Williams is very hard on David. He often gives unreasonable deadlines,

 $<sup>^{12}</sup>$  Participants also completed the Social Dominance Orientation Short Scale (SDO<sub>7(s)</sub>; Ho et al., 2015). Because SDO did not correlate with our main variable of interest (i.e., perceived passion of the target) and did not interact with the manipulation of exploitation, we did not include it in the next study. We do not describe the null effects involving SDO in the main text, but describe them in detail in SOM.

leading David to often work 15-hour days. Dr. Williams is also hard on David in a number of other ways: he can be verbally abusive at times when he isn't happy with David's work, and often asks David to engage in menial tasks that seem to David as unrelated to his training.]

Next, participants completed a 2-item measure of perceived passion, rated on a 7-point scale (1 - not at all passionate, 5 - very passionate, 9 - extremely passionate): "Given what you read, how passionate do you think David is about psychology?" and "Some people do work just for a living and others seek a career they are passionate about. To what extent is David passionate about a career in psychology?" (r = .82, p < .001, M = 7.24, SD = 1.44).

We also measured target's perceived friendliness ("To what extent do you think David is friendly at work?"; M = 6.27, SD = 1.64) and perceived competence ("To what extent do you think David is a competent PhD student?"; M = 7.09, SD = 1.60), and liking of the target ("How much do you like David?"; M = 6.29, SD = 1.76).

## **Results**

Perceived Passion of the Target. We first examined main effect of the exploitation manipulation. As predicted, the target student was perceived as more passionate in the exploited condition (M = 7.44, SD = 1.37) than in the neutral condition (M = 7.04, SD = 1.48), F(1, 416) = 8.20, p = .004,  $\eta_p^2 = 0.019$ . This effect held when controlling for perceived friendliness, perceived competence, and liking, F(1, 413) = 5.42, p = .020,  $\eta_p^2 = 0.013$  (see SOM for the main effects on the control variables). We also examined whether BJW is related to the perceived passion of the target. BJW was positively and significantly correlated with the perceived passion

of the target, b = .26, SE = .05, t(416) = 4.55, p < .001, indicating that higher BJW was associated with stronger beliefs that workers are passionate.

We next tested for the interaction between BJW and the condition manipulation. To test this moderation effect, we first regressed perceived passion of the target on BJW, experimental condition (dummy-coded: 0 = neutral; 1 = exploited), and a BJW × Condition interaction term. The BJW × Condition interaction was not significant, b = -.06, SE = .11, t(414) = -0.54, p > .250.

## **Discussion**

Study 7 extended our previous findings (Studies 2, 3, and 5), providing evidence for the reverse pathway of the legitimization of passion exploitation. We found that, compared to a nonexploited worker, an exploited worker is viewed as more passionate for his work. Study 7 also explored whether the effect of the manipulation of exploitation would vary as a function of individuals' justice motive. We thought that people motivated to see the world as just might attribute greater passion to an exploited (vs. non-exploited) worker as means to rationalize an act of unfair treatment. The results did not support this idea; rather, the manipulation equally affected people low and high in BJW. Thus, the ascriptions of passion to the exploited workers could have been motivated or could have simply been an inference. In the next study, therefore, we again examined a motivational account of the legitimization process, but shifted our approach. Rather than assessing whether BJW moderates the tendency to attribute passion to an exploited worker, we explored whether BJW moderates the tendency to view poor worker treatment as more legitimate when the worker is presumed to be passionate about one's work. Thus, we returned to the design used in Studies 2, 3, 4, 5, and 6, and examined an alternative way by which BJW might moderate processes of passion exploitation.

## Study 8

In Study 8, we employed an experimental paradigm more akin to that used in our earlier studies. This allowed for a test of moderated mediation, in which BJW moderates not the ascription of passion to exploited workers (which is what we tested in Study 7), but people's tendency to connect presumptions about passionate workers' choices to the legitimacy of exploiting them. Research on BJW (Lerner, 1980; Lerner & Miller, 1978) shows that people high in just world beliefs tend to view unfair or unjust outcomes as less unjust or unfair when they can construe them as resulting from corresponding choice. We sought to apply this mechanism to a previously untested social phenomenon: Passion exploitation involving the US workforce. To the extent that passionate workers are seen to have freely volunteered for whatever extra work they have been assigned, we predict that people high in BJW will be especially likely to use those assumptions as means to justify their treatment. Thus, while we do not expect BJW to moderate the degree to which people presume those higher in passion are more likely to volunteer for extra work, we do predict that those higher in BJW will be especially likely to use this presumption when considering how legitimate it is to ask these employees to do worse or extra work for no compensation. Thus, via a test of moderated mediation, we examine whether BJW moderates processes of passion exploitation specifically via moderating the link from this mediator to the legitimacy dependent measure.

We also thought it possible, though we were more unsure in this case, that BJW might moderate the other mediating mechanism, too – the belief that work itself is its own reward. Some limited research, though using different scales, has observed related effects. For example, one study (Anderson et al., 2010) found that people high in the belief in ultimate justice were more likely to believe that a victim of tragedy (vs. a person who had not experienced a tragedy) would be rewarded later in the victim's life. However, research on BJW (Maes, 1998) suggests

that the belief in ultimate justice – the belief that good (bad) actions will be *ultimately* rewarded (punished) in the long run – is distinct from *general* BJW – the belief that the world is generally just in the here now. In addition, the mediator – the belief that work itself is its own reward – taps into whether a passionate worker is *instantly* (vs. would be *eventually*) rewarded through work. Therefore, we were unsure whether BJW would interact with also interact with this other mediator – the belief that work itself its own reward – to predict legitimacy beliefs.

## Method

**Participants.** Because this is the first test of this model, we assumed a small effect size of  $f^2 = .02$  for the interaction term. This analysis indicated that we needed at least 395 participants to achieve adequate power  $(1 - \beta > 0.80)$ . Data collection was stopped on the day that the minimum sample was obtained. A sample of 431 US residents participated in the survey through Mturk for \$0.50 compensation. For data analysis, we excluded 22 participants who failed the attention check, leaving 409 participants  $(50.4\% \text{ female}; M_{age} = 36.97, SD = 12.04)$ .

**Procedure and Materials.** All participants were told that the survey has three separate sections. In the first section, participants completed the attention check and then the identical BJW scale used in Study 7 ( $\alpha = .89$ ; M = 4.10, SD = 1.27).

In the second section of the study, participants were randomly assigned to one of two conditions (target US workers' passion for work: weak vs. strong). All participants were first told that they are about to read "an excerpt from a news article" that is ostensibly "written by a journalist from a major European media outlet." In the weak passion condition (N = 207), participants read an excerpt describing that US workers are not passionate, compared to workers in many other countries:

These days, many workers in the United States say that they are largely indifferent towards their work...that they do not love their job, though they do not hate it either...It seems that compared with workers in many countries in the world, US workers are much more likely to show these kinds of sentiments about their work. American workers are not necessarily less hardworking or competent; they are just more likely to see their job as a means to an end.

In the strong passion condition (N = 202), participants read an excerpt describing that US workers are passionate, compared to workers in many other countries:

These days, many workers in the United States say that they are motivated by passion for their work...that they love their job...It seems that compared with workers in many countries in the world, US workers are much more likely to show these kinds of sentiments about their work. American workers are not necessarily more hardworking or competent; they are just more likely to be passionate about their work.

In both conditions, the target workers were described to be as hardworking and competent as the comparison group (workers from other countries) because the level of passion might be associated with these qualities. For instance, strongly passionate person may also be expected to be more hardworking and competent. After reading a respective text, all participants were asked to evaluate the text with two filler items unrelated to our hypothesis: "How comprehensible is the paragraph?" (*I – not at all comprehensible*, *7 – extremely comprehensible*) and "How clear is the wording of the paragraph?" (*I – not at all clear*, *7 – extremely clear*).

Next, in the third section of the study, all participants completed the dependent variables, which were general enough to apply to American workers across different occupations. First, participants completed two questions assessing the belief that work itself is its own reward for the target workers: "Work itself is its own reward for US workers" (1 - strongly disagree, 7 - strongly agree) and "Work is more rewarding for US workers than for those from other countries" (1 - strongly disagree, 7 - strongly agree). Ratings of the two items were averaged to form a composite score for the *belief that work is its own reward* (r = .57, p < .001; M = 3.10; SD = 1.48).

Participants also completed two questions assessing the degree to which they believe the target workers were likely to voluntarily work longer and harder. This measure clearly stated that volunteering for extra work would not be compensated. The items for this measure were: "How likely is it that US workers would voluntarily spend more time working (for no extra compensation)?" (1 - not at all likely, 7 - extremely likely) and "How likely is it that US workers would voluntarily make sacrifices for their work (for no extra compensation)?" (1 - not at all likely, 7 - extremely likely). Ratings of the two items were averaged to form a composite score for perceived likelihood of volunteering for extra work (r = .70, p < .001; M = 3.16, SD = 1.44).

We measured legitimization of exploiting the target workers with two items. For this scale, participants first read the following statements designed to aid participants' legitimization of exploitation: "due to economic conditions, many organizations in the U.S. are tight on staff and/or budget, and need to save money wherever they can." Participants then answered the following two questions: "Given these circumstances, how legitimate do you think it is for the organizations to ask their workers to work extra hours for no extra reward?" (*1 – not at all legitimate*, *7 – extremely legitimate*) and "Given these circumstances, how legitimate do you

think it is for the organizations to ask their workers to do rather uncomfortable tasks that are not closely related to their jobs (for no extra compensation)?" (I - not at all legitimate, 7 - extremely legitimate). The two items were averaged to form a composite score for the legitimization of exploitation of the target workers (r = .61, p < .001; M = 2.53, SD = 1.44).

Finally, as a manipulation check, participants evaluated the target workers' passion ("To what extent do you think US workers are passionate about their work?"; I - not at all passionate, 7 - extremely passionate; M = 4.23, SD = 1.38). We also measured the target workers' perceived competence ("To what extent do you think US workers are competent in their work?"; I - not at all competent, T - extremely competent; T - extremely competent.

# **Results**

*Manipulation Check.* The manipulation was successful. Participants saw the strongly passionate US workers (M = 4.71, SD = 1.37) as more passionate compared to the weakly passionate US workers (M = 3.77, SD = 1.23), F(1, 407) = 52.84, p < .001,  $\eta_p^2 = 0.11$ .

*Perceived Likelihood of Volunteering for Extra Work.* As predicted, the target US workers were perceived as more likely to volunteer to work longer and harder in the strong passion condition for no extra compensation (M = 3.46, SD = 1.48) than in the weak passion condition (M = 2.86, SD = 1.33), F(1, 407) = 18.63, p < .001,  $\eta_p^2 = 0.044$ .

The Belief that Work is its Own Reward. As predicted, the target US workers were perceived to be rewarded by their work to a greater extent in the strong passion condition (M = 3.60, SD = 1.46) than in the weak passion condition (M = 2.61, SD = 1.34), F(1, 407) = 50.55, p < .001,  $\eta_p^2 = 0.110$ .

The Legitimization of Exploitation. As predicted, participants legitimized exploiting the target US workers more when they have strong (M = 2.69, SD = 1.50) rather than weak (M = 2.37, SD = 1.36) passion for their work, F(1, 407) = 4.88, p = .028,  $\eta_p^2 = 0.012$ .

Tests of Indirect Effect and Alternative Explanations. We first tested whether Study 8 replicated the mediation effect from our previous studies (Studies 3, 4, 5, and 6). Using Hayes's (2013) PROCESS macro (Model 4), with 10,000 bootstrap samples (95% bias-corrected bootstrap confidence interval), we tested whether the manipulation of passion, via perceived likelihood of volunteering for extra work and belief that work is its own reward, predicted the legitimization of exploiting the target workers, even when controlling for other potential mediator (see SOM for the main effect on the control variable). Condition (weak passion = 0, strong passion = 1) was entered as the independent variable, perceived likelihood of volunteering for extra work and belief that work is its own reward as parallel mediators, and the legitimization of exploitation rating was entered as the dependent variable. As predicted, the mediation analysis revealed a significant indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via perceived likelihood of volunteering for extra work, b = 0.16, SE = 0.05, 95% CI = [0.084, 0.29], and the belief that work is its own reward, b = 0.28, SE =0.06, 95% CI = [0.17, 0.43]. We then conducted the same analysis but additionally including perceived competence as a parallel mediator. We still observed a significant indirect effect on the legitimization of exploitation via perceived likelihood of volunteering for extra work, b = 0.17, SE = 0.05, 95% CI = [0.086, 0.29], and the belief that work is its own reward, b = 0.30, SE =0.06, 95% CI = [0.18, 0.44], even when perceived competence was included as a parallel mediator in the model (see SOM for details on this mediator).

Moderated Mediation Tests. We tested whether BJW moderated the degree to which perceptions that passionate workers would freely volunteer for extra work (i.e., the mediator) predicts the extent to which people legitimize exploiting the target workers. To test this hypothesis, we conducted a moderated mediation bootstrapping procedure, using Hayes's (2013) PROCESS macro (Model 14), 13 with 10,000 biased bootstrap samples (95% bias-corrected bootstrap confidence interval). Condition (weak passion = 0, strong passion = 1) was entered as the independent variable, perceived likelihood of volunteering for extra work as a mediator, BJW as a moderator for the mediator, and the legitimization of exploitation rating was entered as the dependent variable. Thus, we tested whether the indirect effect of the condition on the legitimacy rating through perceived likelihood of volunteering for extra work differs by levels of BJW. As predicted, we found a significant moderated mediation effect, b = .08, SE = .02, 95% CI = [0.037, 0.14]. Specifically, the indirect effect of the condition on the legitimacy rating through perceived likelihood of volunteering for extra work was stronger for people who strongly endorsed BJW (M = 5.38; 1 standard deviation above the mean of BJW), b = .32, SE = .08, 95% CI = [0.17, 0.49], than for people who weakly endorsed BJW (M = 2.82; 1 standard deviation below the mean of BJW), b = .11, SE = .11, 95% CI = [0.041, 0.22].

Next, we conducted the same moderate mediation test, this time using the belief that work itself is its own reward for passionate workers as a mediator. We found that BJW did not significantly moderate the belief that work is its own reward, b = .003, SE = .03, 95% CI = [-0.075, 0.079]. We observed significant indirect effect of the passion manipulation for both

 $<sup>^{13}</sup>$  We also conducted another moderated mediation model (Model 7). Condition (weak passion = 0, strong passion = 1) was entered as the independent variable, BJW as a moderator for the independent variable, perceived likelihood of volunteering for extra work as a mediator, and the legitimization of exploitation rating was entered as the dependent variable. Consistent with our hypothesis, this effect was not significant, b = .01, SE = .04, 95% CI = [-0.077, .108].

participants who weakly endorsed BJW, b = .36, SE = .08, 95% CI = [0.22, 0.55], and strongly endorsed BJW, b = .37, SE = .09, 95% CI = [0.20, 0.58].

## **Discussion**

In addition to replicating the indirect effects of Studies 3, 4, 5, and 6, Study 8 finds support for a motivational account of the legitimization of passion exploitation. Strongly (vs. weakly) passionate workers were perceived to be more likely to freely volunteer for extra work and find work to be rewarding, and the first (but not the second) mechanism was moderated by BJW to predict the legitimization of exploiting the workers. Specifically, compared to those with weak BJW, people with high BJW increased perceptions that workers would volunteer for extra work predicted greater legitimization of exploitation.

## **General Discussion**

A meta-analysis (see SOM), six experimental studies (Studies 2, 3, 4, 5, 6, and 8), and a correlational study (Study 1) provide converging evidence that people may view the identical exploitative treatment as more legitimate when directed towards more passionate workers. Participants legitimized exploiting a strongly (vs. weakly) passionate worker to a greater extent (Studies 2, 3, 5, and 8). The reverse pathway of this effect also held: Participants attributed a greater passion to an exploited (vs. non-exploited) worker (Study 7). Importantly, we found consistent evidence that the legitimization of passion exploitation has two important underlying mechanisms: The expectations that passionate workers would volunteer for extra work (Studies 1, 3, 5, 6, and 8) and find work to be its own intangible reward (Studies 3, 4, 5, 6, and 8). These expectations explain why people might legitimize exploiting workers across different professions (Study 1), from hypothetical (Studies 2, 3, 5, and 8) and actual (Study 6) workplaces, and outside of the work setting (Study 4). We also ruled out alternative, confounding mechanisms, including

perceived competence of passionate workers, perceived friendliness of passionate workers, liking of passionate workers, and assumptions of tangible benefits that passionate workers might receive. In the final two studies (Studies 7 and 8), we explored a motivational account of the legitimization of passion exploitation. The results are mixed but largely consistent with our hypotheses. Study 7 found that individual differences in BJW do not moderate the extent to which people attribute passion to an exploited (vs. non-exploited) worker. However, as expected, Study 8 found that BJW moderates the extent to which the perceptions that passionate workers would volunteer for extra work for no extra compensation) predict the legitimization of exploiting target workers.

Taken together, these results suggest (i) that although passion appears a positive attribute to assume in others, it can license poor treatments of passionate workers, and (ii) this process is in part due to justification motives (specifically those having to do with using presumed choice as a justifying tool).

# **Implications for Theory**

The present research has implications for (a) research on work passion, (b) attribution theory and research on complementary justice, and (c) the psychological study of legitimacy.

First, (a) the current findings extend past research that has focused on investigating passionate workers' work-related preferences and behaviors (e.g., Bunderson & Thompson, 2009; Wrzesniewski et al., 1997) and positive consequences of pursuing passion in work and life (e.g., Duffy et al., 2013; Peterson et al., 2009; Wrzesniewski et al., 1997). The present findings contribute to this literature by exploring how expectations about passionate workers' preferences and behaviors relate to how we treat the very workers.

Second, (b) this work builds on attribution theory and research on complementary justice. Attribution theory has suggested that expectation that the victims made free choices helps justify unfair arrangements (Alicke, 2000; Schlenker et al., 1994; Shaver, 1985). The present findings extend this literature by demonstrating that perceptions that passionate workers would freely volunteer for extra work help legitimize exploitation of the workers. These perceptions may be particularly appealing in this day and age, given that people are perceived to be "formally free" (e.g., workers "freely" sign contracts with organizations, no one is explicitly forcing workers to work) to work or not to work (Young, 2009). Because no one appears to be forcing passionate workers to work extra, people may perceive that they are getting what they asked for. The present work also extends research on complementary justice (Kay & Jost, 2003), which highlights presumption that victims of unfairness received intangible benefits as rationale for justification of the victims' negative outcomes. Our work shows that a similar logic – the belief that, for passionate workers, work itself is its own reward – helps justify poor (unfair) treatments of those workers.

Third, (c) the present set of studies contributes to an understanding of how people legitimize worker exploitation (Roemer, 1985; Marx, 1977; Wertheimer, 1996), a topic that has received little empirical attention in the psychological study of legitimacy (Jost & Major, 2001; Tyler, 2006). Past research has identified a variety of culturally available justifications (Major, 1994; Sidanius & Pratto, 1999) that bolster the view that unfair arrangements are just or legitimate (Crosby, 1984; Jost & Hunyady, 2005; Kay & Jost, 2003; Sidanius & Pratto, 1999). For example, to justify material inequalities and status differences, people often attribute the outcomes to individual differences in merit (Biernat, Vescio, & Theno, 1996; Katz & Hass, 1988; Kinder & Sears, 1981; MacDonald, 1972); subscribe to complementary gender stereotypes

(Glick & Fiske, 2001; Jost & Kay, 2005); and endorse the belief that the world is a just place in which people get what they deserve (Lerner, 1980; Lerner & Miller, 1978). The present work extends the scope of this literature to the study of contemporary forms of worker exploitation. This research not only shows that perceptions of voluntary work help legitimize taking advantage of passionate people, but also shows that people are motivated by BJW to do so. By demonstrating the underlying mechanisms and a motivational account of passion exploitation, we provide a useful model that could help explain passion exploitation as well as other questionable forms of worker treatment that promise (or appear to promise) intangible rewards. We hope that the current research makes a case for the value of empirical study of exploitation, since doing so has the potential to offer many more insights into the psychology of social justice.

## Limitations

We would like to note several limitations of the present research. First, all samples in the current research were collected from the US population. Although passion exploitation may occur in societies where passion is valued, we cannot at this time make any claims beyond an American population. The magnitude of passion exploitation may vary across cultures, not to mention that people outside of the US may have different expectations about passionate workers' attitudes and behaviors (e.g., Henrich, Heine, & Norenzayan, 2010; Markus & Kitayama, 1991). For instance, the emphasis on the pursuit of passion may depend on a level of individualism in a given culture. Perhaps the notions of pursuing one's passion are popular in the US because they are consistent with the dominant cultural emphasis on individual fulfilment (McGee, 2005; Tokumitsu, 2015) and, more broadly, an independent view of the self (Markus & Kitayama, 1991). If so, the pattern of effects, especially the extent to which people legitimize passion

exploitation, may be weaker (stronger) in more interdependent (independent) cultures. Future research should consider the potential cultural variations.

Second, when participants evaluated specific, self-relevant instances (Studies 4 and 6) as opposed to abstract others (Studies 2, 3, 5, and 8), they were more prone to legitimize passion exploitation indirectly (vs. directly). That is, Studies 4 and 6 found an indirect (but not a direct) effect of the passion manipulation on the legitimization measures via the assumptions that passionate workers would freely volunteer for extra work and that they are rewarded by their own work. We speculate that it is harder to legitimize exploiting others one may (or actually) interact with on a daily basis. For instance, in such cases, participants may be reluctant to legitimize passion exploitation or report to have engaged in such activity (Crowne & Marlowe). Although we found indirect effects with the more self-relevant targets, this type of justification process is important to study. How people treat close others or those they know well are important, but so are people's reactions to the treatment of others they do not know. Indeed, it is the latter – and the public moral outrage that can accompany it – that often guides the decisions of policy makers (Robinson & Darley, 1995).

Third, the target worker that participants evaluated in most of our experimental studies (Studies 2, 3, 5, and 7) was male. We did so to control for potential gender effects and focus on illustrating the basic mechanisms of passion exploitation, but future research should explore whether passion exploitation is moderated by the target worker's gender (e.g., Wood & Eagly, 2002). In Study 6, we found that target subordinate's gender does not significantly moderate the effect of passion manipulation on our variables of interest, but significant effects could emerge when evaluating a worker from a hypothetical organization or with a larger sample size. For example, given that passion has been historically framed as a male emotion (Shields, 2007),

people may underestimate female workers' passion even when they are described to have strong passion for their work (or this could lead to a contrast effect in which a female who is passionate for her work is seen as exceptionally passionate). That is, to the extent that passion itself is seen to be associated with agentic (but not so much with communal) traits (e.g., Eagly & Steffen, 1984), people may expect passionate female workers to be much less likely to volunteer for extra work and find work itself to be rewarding, compared to the passionate male counterparts. People may thus have a weaker rationale to legitimize exploiting passionate female workers. If so, the effect of passion exploitation would be dampened when people evaluate female target workers. On the other hand, it is also possible that people do not have strong gender stereotypes about passion (e.g., Wolf et al., 2016) unlike other gendered constructs like creativity (e.g., Proudfoot, Kay, & Koval, 2015). If this is the case, then we should observe a similar process across worker gender.

## **Future Directions**

We would like to note several interesting questions for future research. First, Study 4 suggests that the scope of passion exploitation may extend beyond the organizational setting, and that the phenomenon is driven by the understanding that effort is rewarded by accompanying enjoyment. An interesting future direction might be to test whether variations of passion exploitation (involving the above logic) occur in more everyday settings.

Second, because the present research is the first set of studies to examine the phenomenon, a wider variety of data is needed to further understand the mechanisms of passion exploitation. Study 7 explored whether SDO – a variable strongly associated with maintenance of a group-level inequality – moderates the extent to which people attribute passion to an exploited worker and did not find support for this effect. This study also found that SDO was not

significantly correlated with perceived passion of a target worker. In addition, perceived passion did not significantly interact with perceived status to predict the legitimization of passion exploitation (Study 1). Taken together, the results suggest that, in the legitimization of passion exploitation, a motive to maintain inequality between low and high status groups may not play as a strong role as that to justify exploitation of passionate workers in general. Nonetheless, studies with different specifications may reveal SDO's moderating role in the legitimization of passion exploitation. For instance, SDO may moderate the process if rationales for passion exploitation are framed in the context of intergroup relations (Jost & Major, 2001; Sidanius & Pratto, 1999) rather than an individual pursuit.

Another future direction is to explore the degree to which exploitative treatments targeted at passionate workers are legitimized by the workers themselves. Past work shows that passionate workers are in fact more willing and likely to sacrifice tangible rewards for extra work (e.g., working extra time for no pay; Bunderson & Thompson, 2009; Wrzesniewski et al., 1997). Therefore, compared to non-passionate workers, passionate workers may legitimize exploitative treatments more even when they themselves are the targets of exploitation. Of course, even if this might be true in the short-term, future research should consider the possible long-term effect; that is, passion exploitation may eventually result in negative consequences for both passionate workers and the organizations. For instance, passionate workers who have been subject to prolonged exploitative treatments may eventually be demotivated and dissatisfied, which may in turn increase the workers' turnover rate and hurt organizational productivity.

## **Concluding Remarks**

Our work identifies passion exploitation and suggests that we may be unwittingly partaking in legitimizing such a nuanced and insidious form of exploitation. Certainly, we do not

contend that people should give up pursuing their passion in the workplace (or in life). Abundant research makes it clear passion is often a benefit. Rather, by describing and documenting the legitimization of passion exploitation, as well as the mechanisms by which it can occur, our goal is to inspire increased social and scientific attention to forms of exploitation that may go unnoticed in contemporary society.

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## Appendix A

## Attention Check (Studies 2, 3, 5, 6, 7, and 8)

### Material

(Ebro, Chicago, Barcelona, Argon, or Madrid)

The hills across the valley of the Ebro were long and white. On this side there was no shade and no trees and the station was between two lines of rails in the sun. Close against the side of the station there was the warm shadow of the building and a curtain, made of strings of bamboo beads, hung across the open door into the bar, to keep out flies. It was very hot and the express from Barcelona came and stopped at this junction for two minutes and went on to Madrid.

What was the destination of the express train?

## Appendix B

## A List of 80 Professions Used in Study 1 (adapted from Holland, 1958)

### Material

Electrician, Automotive Service Technician, Telemarketer, Retail Salesperson, Receptionist, Library Assistant, Stock Clerk, Construction Inspector, Long Distance Bus Driver, Restaurant Worker, Cashier, Flight Attendant, Bank Teller, Mail Carrier, Sales Clerk, Probation Agent, Funeral Director, Insurance Clerk, Barber, Bill Collector, Baker, Wild Animal Trainer, Illustrator, Novelist, Singer, Social Worker, Tour Guide, Bartender, Cartoonist, Sculptor/Sculptress, Stunt Person (Movies), Referee (Sporting Events), Youth Camp Director, Cook/Chef, High School Teacher, Elementary School Teacher, Jockey, Composer, Stage Director, Nursery School Teacher, Production Plant Manager, Data Systems Technician, Industrial/Mechanical Engineer, Cost Control Analyst, Accountant, Airplane Mechanic, Restaurant Manager, Financial Analyst, Real Estate Salesperson, Speculator, Lawyer, Budget Reviewer, Marriage Counselor, Hotel Manager, Commodity Trader, Personal Counselor, Quality Control Expert, Sales Manager, X-ray Technician, Dental Hygienist, Market Research Analyst, Sociologist, Music Professor, Commercial Artist, Fashion Designer, Social Events Organizer, Business Management Consultant, Rehabilitation Counselor, Veterinarian, Fitness Trainer, Firefighter, Television Producer, Web Developer, Architect, Physicist, Professional Athlete, Police Officer, Interpreter, Computer Programmer, Psychologist

## Appendix C

## Legitimization of Exploitation Items in Study 2

### Material

(1 – Not at all Legitimate, 7 – Extremely Legitimate)

- 1. Imagine that John's organization is tight on staff right now. How legitimate is it for the management to ask John to work extra hours for no extra reward?
- 2. Imagine that John's organization is tight on budget right now due to the economic recession and the organization needs to save money wherever they can. How legitimate is it that John's responsibility at the organization increases next year?
- 3. Imagine that John's organization is tight on budget right now due to the economic recession and the organization needs to save money wherever they can. How legitimate is it that John won't get an increase in his paid vacation leave next year?
- 4. Imagine that a manager from John's organization needs to go somewhere right now because something just came up. How legitimate is it for the manager to ask John to fill in for him? The job would involve working on some artworks, and John will not be compensated for it.
- 5. Suppose that John's organization is hiring a person (Scott) who has exactly the same qualifications and personality as John. How legitimate is it that Scott is hired as an unpaid intern as opposed to a paid full-time employee? An unpaid intern may get hired later as a full-time employee if the organization decides that it is necessary.

## Appendix D

## **Legitimization of Exploitation Items in Study 3**

#### Material

(1 - Not at all Legitimate, 7 - Extremely Legitimate)

- 1. Imagine that John's organization is tight on staff right now. How legitimate is it for the management to ask John to work extra hours for no extra reward?
- 2. Imagine that John's organization is tight on budget right now due to the economic recession and the organization needs to save money wherever they can. How legitimate is it that John's responsibility at the organization increases next year? John's salary and the benefit he gets from the organization will not change.
- 3. Imagine that a very important client suddenly set up a Sunday meeting (the only time the client is free). How legitimate is it for the management to ask John to leave a day at the park with his family early to meet the client?
- 4. Imagine that John's organization has a community service program. Employees in this program go to various places on weekends to help out people in need. The employees do not get paid for this activity, but the program greatly improves the organization's public image and the employees get to use their talent in the arts. How legitimate is it for the management to ask John to participate in this program?
- 5. Imagine that John's organization is throwing a party that invites the company clients as well as the employees. The company clients are bringing their kids. How legitimate is it for the management to ask John to dress up as a clown to amuse the guests?
- 6. Imagine that the cleaning staff at John's organization is not available because they are on strike. How legitimate is it for the management to ask John to clean the office bathroom?

## Appendix E

### Scenario and Manipulation in Study 4

#### Material

Research is an integral part of X [university's name was masked for the review process]:

Researchers are an integral part of X. Scholars from various disciplines are conducting research at X, making a contribution to our understandings of natural phenomena and human behaviors.

Their research helps X maintain its standing as one of the best research universities in the world, and helps to make the world a better place.

### Your opinions about research practice at X:

In this survey, we are interested in your opinions about research practice at X. Your responses will help us improve X's research programs and policies. Your feedback will also help us polish research materials for an experiment we plan to conduct next month. A summary of this experiment is presented below.

## The proposed experiment:

In this experiment, we are interested in exploring individual differences in learning. In the experiment, participants will solve math problems (i.e., like those in SAT) individually. Some people enjoy this task and some don't. We expect that the experiment will take 30 min, and we will pay them for their 30 min of time.

### Participants, X undergrads [Participants, undergrads from X Math Club]:

X undergrads will be recruited as participants. These students are from various majors [X undergrads from a math club will be recruited as participants. Although these students are from various majors, they share the common interest: they love math. They regularly meet and do a variety of activities about math].

**Table 1.** Correlations among the variables of interest in Study 1

					Perceived
	Job-	Job-	Job-	Job-	Volunteering for
Variable	Passion	Pay	Status	Importance	Extra Work
Job-Pay	.52**	_			
Job-Status	.73**	.91**	_		
Job-Importance	.37**	.24*	.39**	_	
Perceived Volunteering for Extra Work	.61**	.43**	.56**	.22*	_
Legitimization of Exploitation	.28*	.32**	.36**	.42**	.52**

<sup>\*\*</sup> Correlation is significant at the .01 level (2-tailed).
\* Correlation is significant at the .05 level (2-tailed).

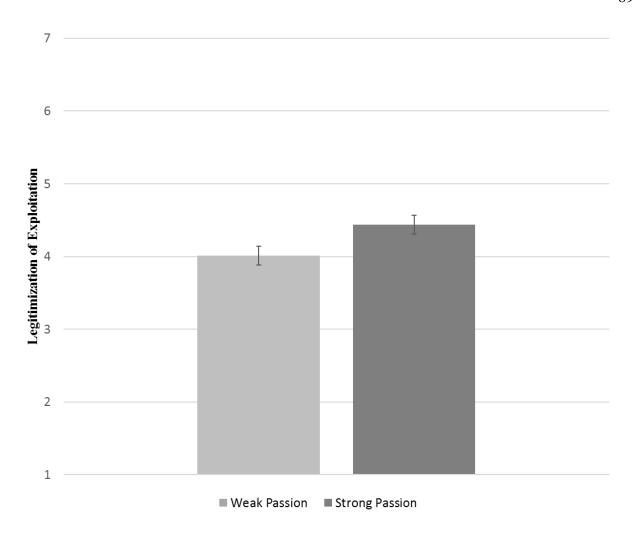
**Table 2.** Indicator coding for Study 5

The reference	group = The neutra	1 condition
	Stoup - The head	i comunici

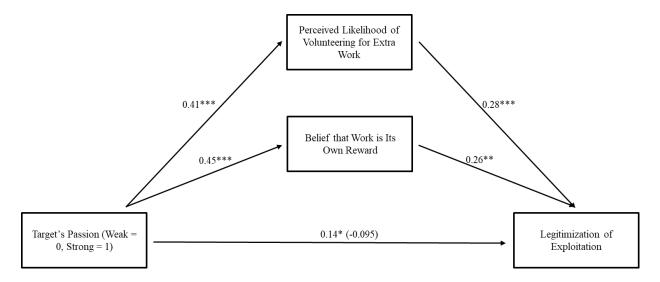
	Neutral	Weak Passion	Strong Passion
$D_1$	0	1	0
$D_2$	0	0	1

The reference group = The weak passion condition

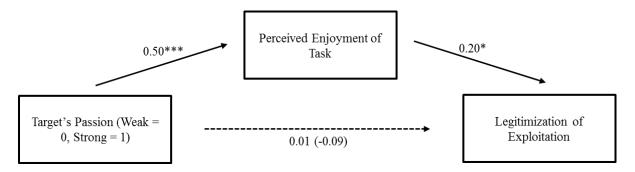
	Weak Passion	Neutral	Strong Passion
$D_1$	0	1	0
$D_2$	0	0	1



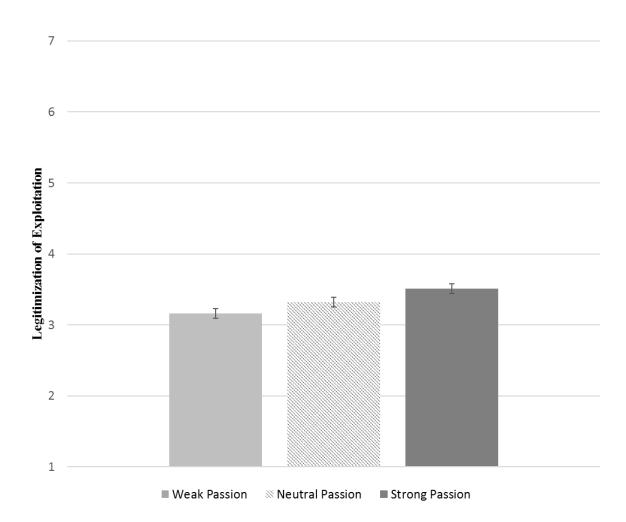
**Figure 1.** Results from Study 2: Effect of the manipulation of the target's passion on legitimization of exploiting the target. Y-axis indicates legitimization of exploitation (1 - Not at all legitimate, 7 - Extremely legitimate). Error bars indicate  $\pm 1$  SEM.



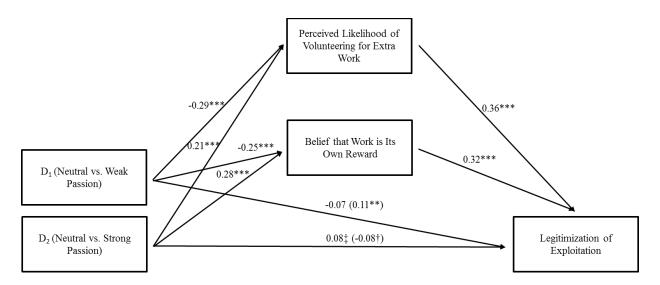
**Figure 2.** Results from Study 3: Mediation model for the passion condition, showing the indirect effect of the manipulation of the target's passion on legitimization of exploiting the target as mediated by perceived likelihood of volunteering for extra work and belief that work is its own reward. Standardized regression coefficients are shown (\*p < .05, \*\*p < .01, \*\*\*p < .001). The value inside parentheses indicates the coefficient when mediators were included in the model.



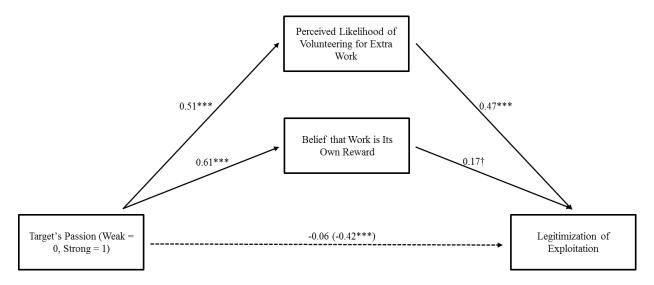
**Figure 3.** Results from Study 4: Mediation model for the passion condition, showing the indirect effect of the manipulation of the target's passion on legitimization of exploiting the target as mediated by perceived enjoyment of task. Standardized regression coefficients are shown (\*p < .05, \*\*\*p < .001). The value inside parentheses indicates the coefficient when mediators were included in the model.



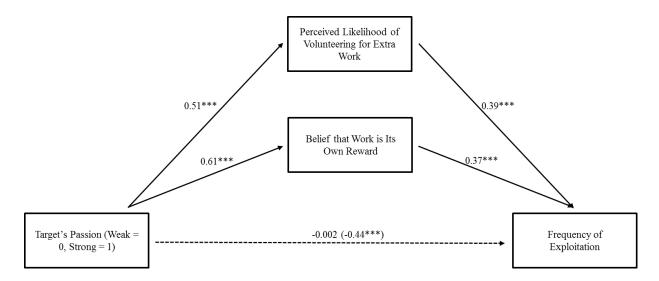
**Figure 4.** Results from Study 5: Effect of the manipulation of the target's passion on legitimization of exploiting the target. Y-axis indicates legitimization of exploitation ( $I - Not \ at$  all legitimate,  $7 - Extremely \ legitimate$ ). Error bars indicate  $\pm 1 \ SEM$ .



**Figure 5.** Results from Study 5: Mediation model for the passion condition, showing the indirect effect of the manipulation of the target's passion on legitimization of exploiting the target as mediated by perceived likelihood of volunteering for extra work and belief that work is its own reward. Standardized regression coefficients are shown (\*p < .05, \*\*p < .01, \*\*\*p < .001, †p = .063, ‡p = .071). The value inside parentheses indicates the coefficient when mediators were included in the model.



**Figure 6.** Results from Study 6: Mediation model for the passion condition, showing the indirect effect of the manipulation of the target's passion on legitimization of exploiting the target as mediated by perceived likelihood of volunteering for extra work and belief that work is its own reward. Standardized regression coefficients are shown (\*p < .05, \*\*p < .01, \*\*\*p < .001, †p = .080). The value inside parentheses indicates the coefficient when mediators were included in the model.



**Figure 7.** Results from Study 6: Mediation model for the passion condition, showing the indirect effect of the manipulation of the target's passion on legitimization of exploiting the target as mediated by perceived likelihood of volunteering for extra work and belief that work is its own reward. Standardized regression coefficients are shown (\*p < .05, \*\*p < .01, \*\*\*p < .001). The value inside parentheses indicates the coefficient when mediators were included in the model.

## **Supplementary Online Materials (SOM)**

This section reports additional analyses that may be of interest to readers. We present all analyses mentioned throughout the text of the manuscript.

### 1. Meta-Analysis

A comparison between the weak passion condition and the strong passion condition did not have a significant effect on the legitimization of exploitation in Study 4 (a research setting) and Study 6 (an actual work setting). Therefore, we performed a meta-analysis of the eight experimental studies using the strong (vs. weak) passion manipulation (Studies 2, 3, 4, 5, 6, and 8, and two conceptual replications of Study 3 reported here) to estimate the overall size of the manipulation effect on the dependent variable. Results of the meta-analysis (McShand & Böckenholt, 2017; https://blakemcshane.shinyapps.io/spmetacase2/) showed reliable effects of the strong (vs. weak) passion manipulation on the legitimization of exploitation, b = 0.29, SE = 0.04, 95% CI = [0.20, 0.38].

# 2. The First Conceptual Replication of Study 3 (Perceived Likelihood of Volunteering for Extra Work as Mediator)

This study was different from Study 3 in a few ways, including that (1) it examined only one of the two mediators (perceived likelihood of volunteering for extra work) and (2) although the target was an artist, he was not retiring next month.

### Method

*Participants.* We set the minimum sample size at 50 participants per cell. Data collection was stopped on the day that the minimum sample was obtained. A sample of 161 US residents participated in the survey through MTurk for \$0.50 compensation. For data analysis, we excluded 23 participants who failed the attention check (see Appendix A in the main text for the

text of this attention check), leaving a total 138 participants (57.2% female;  $M_{age} = 33.12$ , SD = 12.22).

*Manipulation of Target Worker's Passion*. Participants were randomly assigned to one of two conditions (a target's passion for work: weak vs. strong). In the weak passion condition (N = 69), participants read a scenario about an artist named John who works for an organization and considers art as a means to an end. John in this condition would thus be expected to have relatively weak passion for his work. In the strong passion condition (N = 69), participants read an identical scenario differing in one aspect: The target was described as possessing a strong passion for his work. The wording of the vignettes was as follows:

John is an artist and currently works for an organization that offers various artworks. He does not love art, though he does not hate it either. For John, art is a means to an end. [He has loved art since he was very young and his passion for art is the most powerful driving force behind his work at the organization.] John is a fairly talented artist and works hard, and he usually produces high-quality illustrations for his company clients. He earns about \$45,000 per year, which is very close to the national average wage.

As in Study 3, we sought to keep talent, effort, and the quality of work (i.e., ability, effort, work outcome) constant across conditions. We also controlled for the target's wage.

*Perceived Likelihood of Volunteering for Extra Work Measure.* Participants completed three questions (identical to those from Study 3) assessing the degree to which they believed the target worker was likely to voluntarily work longer and harder (1 - Not at all likely, 7 - Not at all likely, 1 - Not at all likely.

Extremely likely). Ratings of the three items were averaged to form a composite score for perceived likelihood of volunteering for extra work ( $\alpha = .68$ ; M = 4.03, SD = 1.24).

Legitimization of Exploitation Measure. Participants completed eleven items measuring the extent to which they viewed various exploitative actions as legitimate (see Appendix S). All the eleven items were rated on a 7-point scale (I - Not at all legitimate, 7 - Extremely legitimate) and were averaged to form a composite score for the legitimization of the management's exploitation of the target worker ( $\alpha = .78$ ; M = 3.72, SD = 0.87).

Finally, as a manipulation check, participants evaluated the target worker's passion ("In your opinion, how passionate is John?") on a 7-point scale (I - Not at all passionate, T - Extremely passionate; M = 4.71, SD = 1.53). We also assessed the target's perceived friendliness ("In your opinion, how friendly is John?") on a 7-point scale (I - Not at all friendly, T - Extremely friendly; M = 4.90, SD = 1.00).

### **Results**

*Manipulation Check and Alternative Explanation.* The manipulation was successful. Participants saw the strongly passionate worker (M = 5.82, SD = 0.85) as more passionate compared to the weakly passionate worker (M = 3.59, SD = 1.21), F(1, 136) = 155.24, p < .001,  $\eta_p^2 = 0.53$ .

A one-way Analysis of Variance (ANOVA) indicated that condition significantly affected perceived friendliness of the target worker. The target was also perceived as more friendly in the strong passion condition (M = 5.36, SD = 0.87) than in the weak passion condition (M = 4.44, SD = 0.91), F(1, 136) = 35.88, p < .001,  $\eta_p^2 = 0.20$ .

Perceived Likelihood of Volunteering for Extra Work. As predicted, the target worker was perceived as more likely to voluntarily work longer and harder in the strong passion

condition (M = 4.57, SD = 0.99) than in the weak passion condition (M = 3.50, SD = 1.24), F(1, 136) = 31.43, p < .001,  $\eta_p^2 = 0.18$ .

The Legitimization of Exploitation. As predicted, participants legitimized exploiting the target worker more when he has strong (M = 3.97, SD = 0.83) rather than weak (M = 3.48, SD = 0.85) passion for his work, F(1, 136) = 11.96, p = .001,  $\eta_p^2 = 0.081$ .

Tests of Indirect Effect and Alternative Explanations. Next, we tested our hypothesis by exploring whether the manipulation of passion, via perceived likelihood of volunteering for extra work, predicted the legitimization of the management's exploitation of the target worker, even when controlling for other potential mediators. Using Hayes's (2013) PROCESS macro (Model 4), with 10,000 bootstrap samples (95% bias-corrected bootstrap confidence interval), we first conducted the following mediation analysis: Condition (weak passion = 0, strong passion = 1) was entered as the independent variable, perceived likelihood of volunteering for extra work, and the legitimization of exploitation rating was entered as the dependent variable. We found a significant indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via perceived likelihood of volunteering for extra work, b = 0.20, SE = 0.07, 95% CI = [0.075, 0.38]. We then conducted the same analysis but including perceived friendliness as a parallel mediator. We did not find a significant indirect effect via perceived friendliness, b =0.06, SE = 0.07, 95% CI = [-0.065, 0.20]. Most importantly, even with this alternative mediator included in the model, we still observed a significant indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via perceived likelihood of volunteering for extra work, b = 0.20, SE = 0.08, 95% CI = [0.066, 0.37].

### **Discussion**

These results suggest that a strongly passionate worker ("John") is expected to be more likely than a weakly passionate worker to volunteer for extra work, and this in turn predicts increased legitimization of the management's exploitation of that worker. These results were obtained even in the context of relatively extreme and inappropriate requests, and when controlling for a potential alternative mediator, perceived friendliness.

# 3. The Second Conceptual Replication of Study 3 (Perceived Likelihood of Volunteering for Extra Work and The Belief that Work is its Own Reward as Parallel Mediators)

This study was different from Study 3 in a few ways, including (1) describing the target as a consultant rather than an artist, and (2) testing for moderation by the state of the economy. In addition to manipulating the target's passion, we also manipulated the US economic condition (i.e., in recession vs. in good shape) so as to examine whether this may alter or interact with our effects. On one hand, people may not readily legitimize management exploiting the target worker when the US economy is in good shape and the company has sufficient budget. That is, in this condition, people may find it unacceptable for management to exploit their employee (e.g., "the management can hire more workers because they have money"). On the other hand, passion exploitation may be so appealing and insidious that it is considered legitimate even when the company does not have any pressing need to save money, cut corners, and rely on passionate workers.

### Method

*Participants.* We set the minimum sample size at 100 participants per cell. Data collection was stopped on the day that the minimum sample was obtained. A sample of 451 US residents participated in the survey through MTurk for \$0.50 compensation. For data analysis,

we excluded 39 participants who failed the identical attention check, leaving a total 412 participants (54.6% female;  $M_{age} = 35.83$ , SD = 11.65).

Procedure and Materials. Participants were randomly assigned to one of four conditions (target's passion for work: weak vs. strong  $\times$  US economic condition: bad vs. good). In the weak passion-bad economy condition (N = 106), participants read a scenario describing a weakly passionate employee at a medium-sized consulting firm in the US, working in the economic recession (and the company is tight on budget). In the weak passion-good economy condition (N = 97), participants read the same scenario with one change: the economy was in good shape (and the company has sufficient budget). For the strong passion-bad economy condition (N = 101), participants read a scenario describing a strongly passionate employee working in the economic recession (and the company is tight on budget). The strong passion-good economy condition (N = 107) described the same passionate worker and that the US economy is in good shape (and the company has sufficient budget). The wording of the vignettes was as follows:

John is a full-time employee at a medium-sized consulting firm in the US, which is known for its high-quality consulting service. John does not love his job, though he does not hate it either. For John, his job is a means to an end. In other words, he is largely indifferent towards his work. [John loves his job, and his passion for his job is the most powerful driving force behind his work at the organization. In other words, he is very passionate about his work.] John is a fairly talented employee and works hard, and he usually performs his work well. He earns about \$45,000 a year, which is close to the national average wage. Because of the economic recession in the US, John's firm is tight on budget to cover operation expense, pay salaries to the employees, etc. The

organization needs to save money wherever they can. [Because the US economy is in good shape, John's firm has sufficient budget to cover operation expense, pay salaries to the employees, etc.]

As in Study 3, we sought to keep salary, talent, effort, and the quality of work (i.e., ability, effort, and work outcome) constant across the conditions. In addition, unlike in Studies 2 and 3, we did not mention that the worker in strong passion condition has loved his job since childhood ("He has loved art since he was young...") to avoid the interpretation that this worker is more persevering than the worker in weak passion condition.

The materials and procedure were identical to those in Study 3 (a 2-item measure of the belief that work is its own reward, r = .63, p < .001; M = 3.71, SD = 1.41; a 3-item measure of perceived likelihood of volunteering for extra work,  $\alpha = .74$ ; M = 4.05, SD = 1.32) except in three ways. First, we included a manipulation check for the economic condition ("The US economy is in...";  $I - Very \ bad \ shape$ ,  $T - Very \ good \ shape$ ; M = 3.78, SD = 1.59). Second, we dropped the references to the poor budget situations (i.e., "imagine that John's organization is tight on staff right now," "imagine that John's organization is tight on budget right now due to the economic recession and the organization needs to save money wherever they can") from the two of six items measuring legitimization of exploitation, because we manipulated tightness of the organization's budget in this study. Third, we dropped the phrase "in the arts" from the one of six items measuring legitimization of exploitation, because the target worker in this study was a consultant, not an artist. Ratings of these six items were averaged to form a composite for the legitimization of the management's exploitation of the target worker ( $\alpha = .70$ ; M = 3.32, SD = 1.01). Finally, as in Study 3, we measured target's perceived passion (M = 4.56, SD = 2.03),

perceived friendliness (M = 5.26, SD = 1.10), perceived competence (M = 5.86, SD = .99), and liking (M = 5.08, SD = 1.12).

#### **Results**

*Manipulation Check.* The manipulation of the target's passion was successful. Participants saw the strongly passionate worker (M = 6.12, SD = 1.06) as more passionate compared to the weakly passionate worker (M = 2.95, SD = 1.43), F(1, 410) = 651.18, p < .001,  $\eta_p^2 = 0.61$ . The manipulation of the economic condition was also successful. Participants who read that the US economy is in good shape believed that the economy is better (M = 4.43, SD = 1.55) than those who read that the US economy is in recession (M = 3.14, SD = 1.35), F(1, 409) = 79.96, p < .001,  $\eta_p^2 = 0.16$ . We do not report further analyses involving the manipulation of the economic condition, because it did not exert main effects on any dependent measures except on the legitimization of exploitation, and did not significantly interact with the manipulation of the target's passion<sup>14</sup>.

Alternative Explanations. A one-way Analysis of Variance (ANOVA) indicated that condition significantly affected perceived friendliness, perceived competence, and liking of the

<sup>&</sup>lt;sup>14</sup> Participants in the bad economy condition legitimized exploitation to a greater extent (M = 3.42, SD = 1.00) than those in the good economy condition (M = 3.22, SD = 1.02), F(1, 409) = 4.18, p = 0.041,  $\eta_p^2 = 0.010$ . The manipulation of the economic condition, however, did not significantly affect perceived friendliness (bad economy condition: M = 5.29, SD = 1.10; good economy condition: M = 5.23, SD = 1.10), F(1, 409) = .40, p > .250,  $\eta_p^2 = 0.001$ , perceived competence (bad economy condition: M = 5.84, SD = 1.02; good economy condition: M = 5.87, SD = 0.97), F(1, 409) = .10, p > .250,  $\eta_p^2 = 0.0002$ , liking of the target (bad economy condition: M = 5.15, SD = 1.10; good economy condition: M = 5.00, SD = 1.13), F(1, 409) = 1.95, p = .163,  $\eta_p^2 = 0.005$ , perceived likelihood of volunteering for extra work (bad economy condition: M = 3.97, SD = 1.31; good economy condition: M = 4.13, SD = 1.34), F(1, 409) = 1.57, p = .210,  $\eta_p^2 = 0.004$ , belief that work is its own reward (bad economy condition: M = 3.57, SD = 1.46; good economy condition: M = 3.84, SD = 1.35), F(1, 409) = 3.69, p = .055,  $\eta_p^2 = 0.009$ , or liking of the target (bad economy condition: M = 5.15, SD = 1.10; good economy condition: M = 5.00, SD = 1.13), F(1, 409) = 1.95, P = .163,  $\eta_p^2 = 0.005$ .

An interaction between the manipulation of the target worker's passion and the manipulation of the US economic condition on perceived likelihood of volunteering for extra work was not significant, F(1, 407) = 1.16, p > .250,  $\eta_p^2 = 0.003$ . The same interaction on belief that work is its own reward, F(1, 407) = 0.001, p > .250,  $\eta_p^2 = 0.000003$ , legitimization of exploitation, F(1, 407) = 0.05, p > .250,  $\eta_p^2 = .0001$ , perceived competence, F(1, 407) = 0.67, p > .250,  $\eta_p^2 = 0.002$ , liking, F(1, 407) = 0.39, p > .250,  $\eta_p^2 = 0.001$ , or perceived competence, F(1, 407) = 0.38, p = .123,  $\eta_p^2 = 0.006$ , was also not significant.

target worker. Participants also perceived that, compared to the weakly passionate worker, the strongly passionate worker is more friendly (strong passion condition: M = 5.74, SD = 0.95; weak passion condition: M = 4.77, SD = 1.03), F(1, 410) = 96.24, p < .001,  $\eta_p^2 = 0.19$ , and more competent (strong passion condition: M = 6.07, SD = 0.98; weak passion condition: M = 5.65, SD = 0.97), F(1, 410) = 19.13, p < .001,  $\eta_p^2 = 0.045$ . Participants also liked the strongly passionate worker (M = 5.39, SD = 1.11) more than the weakly passionate worker (M = 4.75, SD = 1.03), F(1, 410) = 35.69, p < .001,  $\eta_p^2 = 0.08$ .

*Perceived Likelihood of Volunteering for Extra Work.* As predicted, the target worker was perceived as more likely to voluntarily work longer and harder in the strong passion condition (M = 4.69, SD = 1.16) than in the weak passion condition (M = 3.39, SD = 1.15), F(1, 410) = 128.56, p < .001,  $\eta_p^2 = 0.23$ .

The Belief that Work is its Own Reward. As predicted, the target worker was perceived to be rewarded by his work to a greater extent in the strong passion condition (M = 4.43, SD = 1.26) than in the weak passion condition (M = 2.95, SD = 1.15), F(1, 410) = 152.74, p < .001,  $\eta_p^2 = 0.27$ .

The Legitimization of Exploitation. As predicted, participants legitimized exploiting the target worker more when he has strong (M = 3.47, SD = 1.04) rather than weak (M = 3.17, SD = 0.96) passion for his work, F(1, 410) = 9.03, p = .003,  $\eta_p^2 = 0.022$  (see bottom right panel of Figure 1).

Tests of Indirect Effect and Alternative Explanations. Next, we tested our hypothesis by exploring whether the manipulation of passion, via perceived likelihood of volunteering for extra work and belief that work is its own reward, predicted the legitimization of the management's exploitation of the target worker, even when controlling for other potential mediators. Using

Hayes's (2013) PROCESS macro (Model 4), with 10,000 bootstrap samples (95% bias-corrected bootstrap confidence interval), we first conducted the following mediation analysis: Condition (weak passion = 0, strong passion = 1) was entered as the independent variable, perceived likelihood of volunteering for extra work, belief that work is its own reward, and the legitimization of exploitation rating was entered as the dependent variable.

We found a significant indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via perceived likelihood of volunteering for work, b = .28, SE = 0.05, 95% CI = [0.17, 0.40], and the belief that work is its own reward, b = .38, SE = 0.06, 95% CI = [0.26, 0.52]. We then conducted the same analysis but including perceived friendliness, perceived competence, and liking as parallel mediators. We found a significant indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via perceived competence, b = -0.06, SE = 0.02, 95% CI = [-0.12, -0.02], but it predicted decreased rather than increased legitimization of the management's exploitation of the target worker. Namely, to the degree participants thought the passionate employee was more competent, the less legitimate they believed his treatment to be. We did not find a significant indirect effect via perceived friendliness, b = 0.06, SE = 0.05, 95% CI = [-0.04, 0.17], and liking, b = 0.007, SE = 0.03, 95% CI = [-0.05, 0.07]. Most importantly, even with all of these alternative mediators included in the model, we still observed a significant indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via perceived likelihood of volunteering for extra work, b = 0.30, SE = 0.06, 95% CI = [0.18, 0.42], and the belief that work is its own reward, b = 0.37, SE = 0.06, 95% CI = [0.25, 0.52].

### **Discussion**

Using a different target worker (i.e., an employee at a consulting firm as opposed to an artist-worker), this study conceptually replicated our previous findings. We again found that a strongly passionate worker ("John") is expected to be more likely than a weakly passionate worker to volunteer to work extra and find work to be its own reward, which in turn predict increased legitimization of the management's exploitation of the target worker. As in Study 3, perceived competence significantly mediated legitimization of passion exploitation, but it predicted decreased rather than increased legitimization of the management's exploitation of the target worker, indicating that our two mediators – perceived likelihood of volunteering for extra work and belief that work is its own reward – uniquely explain increased legitimization of exploiting the passionate worker. Finally, the current study explored whether the effects of passion manipulation on the legitimization of exploitation would vary by the manipulation of the US economy condition. Although the manipulation of the US economy had a significant effect on the legitimization of exploitation, it did not significantly moderate the effects of passion manipulation on the variables of interest. This finding suggests that perception of good (vs. bad) economy condition may not play a significant moderating role in the legitimization of exploiting workers.15

# 4. Study 5 (Tests of Indirect Effect for Strong Passion Condition Versus Weak Passion Condition)

We conducted the same mediation analysis, this time using the weak passion condition as the reference group (see Table 2 in the main text for details on indicator coding). As shown in Figure S1, we found a significant relative indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via perceived likelihood of volunteering for work,

<sup>&</sup>lt;sup>15</sup> Certainly, it is also possible that our manipulation of economic condition may not have been powerful enough, or that the lack of the significant interaction effect might be a false negative finding.

b = .40, SE = 0.06, 95% CI = [0.28, 0.53] and the belief that work is its own reward, b = .37, SE = 0.06, 95% CI = [0.26, 0.51]. We then conducted the same analysis but additionally including perceived friendliness, perceived competence, and liking as parallel mediators. We still observed a significant indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via perceived likelihood of volunteering for work, b = .41, SE = 0.06, 95% CI = [0.29, 0.55], and the belief that work is its own reward, b = .40, SE = 0.06, 95% CI = [0.28, 0.53], even when all of the parallel mediators were included in the model.

### 5. Study 6 (Mediation Analysis Additionally Controlling for Demographic Covariates)

We examined an indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via perceived likelihood of volunteering for work, the belief that work is its own reward, perceived friendliness, perceived competence, liking, and the seven demographic covariates (the type of industry participants work in, the subordinate's gender, how long the subordinate has worked for participant, the number of employees in the organization, participant's job level, the subordinate's job level, and the number of employees working under participant). This analysis revealed a significant indirect effect on the legitimization of exploitation via perceived competence, b = -.37, SE = 0.10, 95% CI = [-0.60, -0.19]. We did not find a significant indirect effect via the belief that work is its own reward, b = .29, SE = 0.18, 95% CI = [-0.05, 0.68], perceived friendliness, b = -.12, SE = 0.12, 95% CI = [-0.39, 0.09], and liking, b = -.01, SE = 0.13, 95% CI = [-0.28, 0.26]. We still observed a significant indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via perceived likelihood of volunteering for work, b = .60, SE = 0.17, 95% CI = [0.31, 0.99].

Next, we conducted the same analysis above, but this time using the frequency of exploitation (vs. the legitimization of exploitation) as a dependent variable. This analysis

revealed a significant indirect effect on the frequency of exploitation via perceived competence, b = -.27, SE = 0.08, 95% CI = [-0.47, -0.12]. We did not find a significant indirect effect via perceived friendliness, b = -.10, SE = 0.09, 95% CI = [-0.31, 0.07], or liking, b = -.11, SE = 0.11, 95% CI = [-0.35, 0.11]. Most importantly, we still observed a significant indirect effect of the strong passion (vs. weak passion) condition on the frequency of exploitation via perceived likelihood of volunteering for work, b = .40, SE = 0.12, 95% CI = [0.18, 0.63], and the belief that work is its own reward, b = .63, SE = 0.15, 95% CI = [0.34, 0.37].

### 6. Study 7 (Results Related to SDO)

### Method

Procedure and Materials. In addition to the General Belief in a Just World scale, participants completed the Social Dominance Orientation Short Scale (SDO<sub>7(s)</sub>; Ho et al., 2015). These two scales' order of presentation was counterbalanced. The SDO<sub>7(s)</sub> has two factors – the dominance factor and the anti-egalitarianism factor. The dominance factor contains two "protrait dominance" items (i.e., "An ideal society requires some groups to be on top and others to be on the bottom," "Some groups of people are simply inferior to other groups") and two "contrait dominance" items (i.e., "An ideal society requires some groups to be on top and others to be on the bottom," "Some groups of people are simply inferior to other groups"). The anti-egalitarianism factor contains two "protrait anti-egalitarianism" (i.e., "Group equality should not be our primary goal," "It is unjust to try to make groups equal") and two "contrait anti-egalitarianism" (i.e., "We should do what we can to equalize conditions for different groups," "We should work to give all groups an equal chance to succeed"). As suggested by the authors of the SDO scale (Ho et al., 2015), we created a composite score for SDO by averaging the four pro-trait items and the four reverse-scored con-trait items ( $\alpha = .90$ ; M = 2.58, SD = 1.32).

### **Results**

**Perceived Passion of the Target.** We tested whether SDO interacts with our predicted effect. To test this moderation effect, we first regressed perceived passion of the target on SDO, experimental condition (dummy-coded: 0 = neutral; 1 = exploited), and a SDO × Condition interaction term. The SDO × Condition interaction was not significant, b = .05, SE = .10, t(414) = 0.56, p > .250.

We also examined how SDO (which is positively and significantly correlated with BJW, r(418) = .12, p = .014) is related to the perceived passion of the target. SDO was not significantly correlated with the perceived passion of the target, r(418) = -.04, p > .250.

## 7. The Manipulation Effects on Alternative Explanations

Study 3. A one-way Analysis of Variance (ANOVA) indicated that condition significantly affected perceived friendliness, perceived competence, and liking of the target worker. Participants perceived the strongly passionate worker as more friendly (strong passion condition: M = 5.78, SD = 1.09; weak passion condition: M = 4.86, SD = 1.09), F(1, 207) = 36.59, p < .001,  $\eta_p^2 = 0.15$ , and more competent (strong passion condition: M = 6.17, SD = 0.90; weak passion condition: M = 5.78, SD = 1.01), F(1, 207) = 8.58, p = .004,  $\eta_p^2 = 0.04$ , than the weakly passionate worker. Participants also liked the strongly passionate worker (M = 5.66, SD = 0.96) more than the weakly passionate worker (M = 4.79, SD = 1.05), F(1, 207) = 38.76, P(1, 207) = 38.

Study 5. A one-way Analysis of Variance (ANOVA) indicated that condition significantly affected perceived friendliness of the target worker, F(2, 581) = 54.54, p < .001,  $\eta_p^2 = 0.158$ . Contrast analyses revealed that participants in the strong passion condition perceived that the target worker was more friendly (M = 5.72, SD = 0.96) than did participants in the weak

passion condition (M = 4.70, SD = 1.02), F(1, 581) = 105.85, p < .001, or the neutral passion condition (M = 5.37, SD = 0.94), F(1, 581) = 12.65, p < .001. Participants in the neutral passion condition perceived that the target worker was more friendly than did participants in the weak passion condition, F(1, 581) = 44.60, p < .001.

A one-way Analysis of Variance (ANOVA) indicated that condition significantly affected perceived competence of the target worker, F(2, 581) = 18.77, p < .001,  $\eta_p^2 = 0.061$ . Contrast analyses revealed that participants in the strong passion condition perceived that the target worker was more passionate (M = 6.15, SD = 0.84) than did participants in the weak passion condition (M = 5.56, SD = 1.07), F(1, 581) = 37.42, p < .001, or the neutral passion condition (M = 5.83, SD = 0.93), F(1, 581) = 11.16, p < .001. Participants in the neutral passion condition perceived that the target worker was more passionate than did participants in the weak passion condition, F(1, 581) = 7.54, p = .006.

A one-way Analysis of Variance (ANOVA) indicated that condition significantly affected liking of the target worker, F(2, 581) = 19.73, p < .001,  $\eta_p^2 = 0.064$ . Contrast analyses revealed that participants in the strong passion condition perceived that the target worker was more passionate (M = 5.48, SD = 0.99) than did participants in the weak passion condition (M = 4.86, SD = 0.98), F(1, 581) = 37.15, p < .001. Liking was marginally higher in the strong passion condition than the neutral passion condition (M = 5.31, SD = 1.07), F(1, 581) = 2.94, p = .087. Participants in the neutral passion condition perceived that the target worker was more passionate than did participants in the weak passion condition, F(1, 581) = 18.93, p < .001.

**Study 6.** A one-way Analysis of Variance (ANOVA) indicated that condition significantly affected perceived friendliness, perceived competence, and liking of the target worker. Participants also perceived that, compared to the weakly passionate subordinate worker,

the strongly passionate subordinate worker is more friendly (strong passion condition: M = 6.20, SD = 0.90; weak passion condition: M = 5.06, SD = 1.42), F(1, 189) = 44.01, p < .001,  $\eta_p^2 = 0.189$ , and more competent (strong passion condition: M = 6.44, SD = 0.80; weak passion condition: M = 5.25, SD = 1.39), F(1, 189) = 52.27, p < .001,  $\eta_p^2 = 0.217$ . Participants also liked the strongly passionate subordinate worker (M = 6.23, SD = 0.81) more than the weakly passionate subordinate worker (M = 4.95, SD = 1.36), F(1, 189) = 62.24, p < .001,  $\eta_p^2 = 0.248$ .

Study 7. A one-way Analysis of Variance (ANOVA) indicated that condition significantly affected liking of the target worker, F(1, 416) = 6.10, p = .014,  $\eta_p^2 = 0.014$ . Condition, however, did not significantly affect perceived friendliness, F(1, 416) = 0.21, p > .250,  $\eta_p^2 = 0.001$ , or perceived competence, F(1, 416) = 2.44, p = .119,  $\eta_p^2 = 0.006$ .

*Study 8.* A one-way Analysis of Variance (ANOVA) indicated that condition did not significantly affect perceived competence of the target US workers, F(1, 407) = 1.40, p = .236,  $\eta_p^2 = 0.003$ .

### 8. Details on Alternative Parallel Mediators

Study 3. We examined an indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via perceived likelihood of volunteering for work, the belief that work is its own reward, perceived friendliness, perceived competence, and liking. We found a significant indirect effect via perceived competence, b = -0.05, SE = 0.04, 95% CI = [-0.17, -0.0054], and liking, b = -0.12, SE = 0.06, 95% CI = [-0.27, -0.0097], but they predicted decreased rather than increased legitimization of the management's exploitation of the target worker. That is, to the degree participants thought the passionate employee was more competent and likable, the less legitimate they believed his treatment to be. We did not find a significant indirect effect via perceived friendliness, b = 0.04, SE = 0.06, 95% CI = [-0.091, 0.17].

Study 5. We examined a relative indirect effect of the weak passion (vs. neutral) condition on the legitimization of exploitation via perceived likelihood of volunteering for work, the belief that work is its own reward, perceived friendliness, perceived competence, and liking as parallel mediators. We found a significant relative indirect effect of the weak passion (vs. neutral) condition on the legitimization of exploitation via perceived competence, b = .02, SE = 0.01, 95% CI = [0.0013, 0.061]. That is, to the degree participants thought the weakly passionate (vs. neutrally passionate) employee was more competent, the more legitimate they believed his treatment to be. We did not find a significant relative indirect effect via perceived friendliness, b = .01, SE = 0.03, 95% CI = [-0.08, 0.04], and liking, b = .03, SE = 0.02, 95% CI = [-0.0061, 0.092].

We also examined a relative indirect effect of the strong passion (vs. neutral) condition on the legitimization of exploitation via the identical mediators above. We found a significant relative indirect effect of the strong passion (vs. neutral) condition on the legitimization of exploitation via perceived competence, b = -.02, SE = 0.01, 95% CI = [-0.068, -0.0007]. That is, to the degree participants thought the strongly passionate (vs. neutrally passionate) employee was more competent, the less legitimate they believed his treatment to be. We did not find a significant relative indirect effect via perceived friendliness, b = .009, SE = 0.01, 95% CI = [-0.024, 0.049], and liking, b = -.01, SE = 0.01, 95% CI = [-0.043, 0.0018].

We next examined a relative indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via the identical mediators above. We did not find a significant relative indirect effect via perceived competence, b = -.04, SE = 0.02, 95% CI = [-0.10, 0.0014], perceived friendliness, b = .02, SE = 0.05, 95% CI = [-0.071, 0.12], and liking, b = -.04, SE = 0.03, 95% CI = [-0.11, 0.01].

Study 6. We examined an indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via perceived likelihood of volunteering for work, the belief that work is its own reward, perceived friendliness, perceived competence, and liking. We found a significant indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via perceived competence, b = -.41, SE = 0.11, 95% CI = [-0.65, -0.21], but it predicted decreased rather than increased legitimization of the participants' exploitation of the target employee. That is, to the degree participants thought the passionate employee was more competent, the less legitimate they believed his or her treatment to be. We did not find a significant indirect effect via perceived friendliness, b = -.09, SE = 0.11, 95% CI = [-0.33, 0.11], or liking, b = .03, SE = 0.14, 95% CI = [-0.24, 0.34].

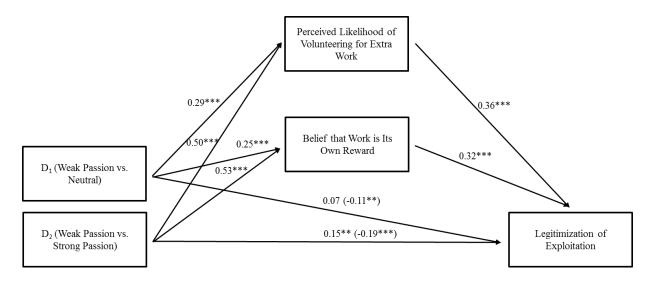
We also conducted the identical analysis above, but this time using the frequency of exploitation (vs. the legitimization of exploitation) as a dependent variable. We found a significant indirect effect on the frequency of exploitation via perceived competence, b = -.28, SE = 0.09, 95% CI = [-0.50, -0.12]. Thus, to the degree participants thought the passionate employee was more competent, they reported to have exploited him or her to a lesser degree. We did not find a significant indirect effect via perceived friendliness, b = -.06, SE = 0.09, 95% CI = [-0.26, 0.11], and liking, b = -.08, SE = 0.12, 95% CI = [-0.33, 0.17].

Study 8. We examined an indirect effect of the strong passion (vs. weak passion) condition on the legitimization of exploitation via perceived likelihood of volunteering for work, the belief that work is its own reward, and perceived competence. We did not find a significant indirect effect on the legitimization of exploitation via perceived competence, b = 0.01, SE = 0.01, 95% CI = [-0.0075, 0.072].

### Appendix S

- 6. Imagine that John's organization is tight on staff right now. How legitimate is it for the management to ask John to work extra hours for no extra reward?
- 7. Imagine that John's organization is tight on budget right now due to the economic recession and the organization needs to save money wherever they can. How legitimate is it that John's responsibility at the organization increases next year?
- 8. Imagine that John's organization is tight on budget right now due to the economic recession and the organization needs to save money wherever they can. How legitimate is it that John won't get an increase in his paid vacation leave next year?
- 9. Imagine that a manager from John's organization needs to go somewhere right now because something just came up. How legitimate is it for the manager to ask John to fill in for him? The job would involve working on some artworks, and John will not be compensated for it.
- 10. Suppose that John's organization is hiring a person (Scott) who has exactly the same qualifications and personality as John. How legitimate is it that Scott is hired as an unpaid intern as opposed to a paid full-time employee? An unpaid intern may get hired later as a full-time employee if the organization decides that it is necessary.
- 11. Imagine that John's organization is throwing a party that invites the company clients as well as the employees. The company clients are bringing their kids. How legitimate is it for the management to ask John to voluntarily dress up as a clown to amuse the guests?
- 12. Imagine that the cleaning staff at John's organization is not available because they are on strike. How legitimate is it for the management to ask John to voluntarily clean the office bathroom?

- 13. Imagine that an important business meeting is suddenly set up with some very important clients. How legitimate is it for the management to ask John to voluntarily change his works schedule on short notice to attend the meeting? John would have to miss his child's basketball game.
- 14. Imagine that a very important client suddenly set up a Sunday meeting (the only time the client is free). How legitimate is it for the management to ask John to voluntarily leave a day at the park with his family early to meet the client?
- 15. Imagine that John recently joined a project that is extremely important for the organization. How legitimate is it for the management to ask John to voluntarily come to work one hour earlier and go home one hour later than the usual for three weeks to finish the project in time?
- 16. Imagine that John's organization has a community service program. Employees in this program go to various places on weekends to help out people in need. The employees do not get paid for this activity, but the program greatly improves the organization's public image and the employees get to use their talent in the arts. How legitimate is it for the management to ask John to voluntarily participate in this program?



**Figure S1.** Results from Study 5: Mediation model for the passion condition, showing the indirect effect of the manipulation of the target's passion on legitimization of exploiting the target as mediated by perceived likelihood of volunteering for extra work and belief that work is its own reward. Standardized regression coefficients are shown (\*p < .05, \*\*p < .01, \*\*\*p < .001). The value inside parentheses indicates the coefficient when mediators were included in the model.

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