

RUNNING HEAD: BONUSES, PERCEIVED MANAGER DISCRETION AND INTRINSIC
MOTIVATION

WELL IT'S ONLY FAIR: HOW PERCEPTIONS OF MANAGER DISCRETION IN BONUS
ALLOCATION AFFECT INTRINSIC MOTIVATION

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Perceptions of manager discretion in incentive allocation are theoretically and practically
important to help explain the much-debated relationship between performance-related bonuses
and intrinsic motivation. We argue, and demonstrate, that perceived managerial discretion is a
key moderator to this relationship because of its relevance to procedural fairness. In a first study,
we developed a measure for perceived manager discretion and distinguished it from related
concepts. In a second experiment, we found that higher bonuses associated with higher levels of
perceived manager discretion enhanced procedural fairness but those based on lower discretion

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did not. In a third field study, we found that actual bonuses implemented by a service organization enhanced intrinsic motivation indirectly through procedural fairness, but only when employees perceived their bonus to be based on higher levels of perceived manager discretion. Conversely, when bonus level was associated with lower perceived manager discretion, it negatively predicted of intrinsic motivation.

Keywords: compensation; intrinsic motivation; manager discretion; pay-for-performance; procedural fairness.

Organizations are increasingly interested in creating work environments to encourage passion, purpose, and engagement (Pink, 2010; Cable, 2018). These factors are about engendering intrinsic motivation – doing a job because it aligns with who you are, and your core interests and values, rather than pursuing work-related tasks for extrinsic reasons (Deci, 1971). At the same time, organizations invest large amounts of money in extrinsic motivators. Pay for individual performance (PFIP), in particular, is one of the most common forms of workplace financial incentives, used by organizations across countries and industries (Willis Towers Watson, 2018) and considered a central component of strategic HR management (Heneman, Ledford, & Gresham, 2002; Gerhart, Rynes, & Fulmer, 2009). Yet, there is still a lack of clarity about the relationship between extrinsic incentives and intrinsic motivation. Our study aims to contribute to the current understanding of how incentives (i.e., PFIP) enhance or detract from intrinsic motivation in the workplace (Deci, Olafsen & Ryan, 2017; Gerhart & Fang, 2015).

PFIP, or individual performance-related bonuses, are lump sum payments which recognize past performance (Milkovich, Newman, & Gerhart, 2013). The use of PFIP to motivate performance is underpinned by principles of agency theory (Eisenhardt, 1989), expectancy theory (Vroom, 1964), and goal-setting theory (Locke & Latham, 1990), which suggest that individuals are motivated to achieve outcomes which are more instrumental. This is supported by empirical evidence which has found that extrinsic incentives can increase effort, productivity, and job performance (e.g. meta-analyses by Cerasoli, Nicklin, & Ford, 2014; and Jenkins, Mitra, Gupta & Shaw, 1998). However, in driving individuals' attention towards achieving specified outcomes, the instrumentality of PFIP may also have unintended behavioral and attitudinal consequences (see discussion by Shaw & Gupta, 2015). Specifically, as articulated in self-determination theory (SDT; Deci & Ryan, 1985 [and in a similar vein in crowding-out theory from the economics domain; Frey & Oberholzer-Gee, 1997]), while instrumental incentives drive extrinsic motivation, by directing behavior towards a specific outcome, the same instrumentality might undermine individuals' intrinsic motivation, which is driven by interest or enjoyment in the task itself (Deci, 1971; Deci & Porac, 1979; Ryan, Mims & Koestner, 1983; Ryan & Connell, 1989). After much historical debate on this topic (see reviews from Deci et al., 2017 and Gerhart & Fang, 2015), in the most recent meta-analysis, Cerasoli and colleagues (2014, p.996) concluded that:

Incentives alone have little omnibus impact on intrinsic motivation ($r = .06$). However, incentive contingency has a very strong link to intrinsic motivation ($r = .78$): More controlling (directly salient) incentives are associated with lower intrinsic motivation, while less controlling (indirectly salient) incentives have a positive link.

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What is clear, therefore, is that the presence of a performance-contingent incentive, in itself, does not undermine intrinsic motivation, rather it is the perceived design of the system which makes the instrumentality of the incentive more or less salient (Fall & Roussel, 2014; Gagné & Forest, 2008). This has led scholars to suggest that we need move beyond the debate about whether or not performance-contingent incentives are detrimental to intrinsic motivation, to provide more insight into *when* (i.e. under which contingencies) and *why* (i.e. through which mediating mechanisms) this undermining occurs (Cerasoli et al., 2014; Gagné & Forest, 2008; Gerhart et al., 2009; Rynes, Gerhart & Parks, 2005; Shaw & Gupta, 2015).

Individuals' responses to incentives have consistently been found to be informed by how the incentive is administered (e.g. Folger & Konovsky, 1989; Rynes et al., 2005; Trevor, Reilly & Gerhart, 2012). In an ideal world, PFIP would recognize employees' unique contribution to the organization. However, it is widely recognized that this is unobtainable through formal measurement alone (e.g. Lawler, 1971; Rynes et al., 2005; Trevor et al., 2012) because performance is often complex and difficult to quantify (Gibbs, Merchant, Van der Stede, & Vargus, 2004). To overcome this, and to eliminate the 'noise' in measurement accounted for by those things which cannot be easily measured (Murphy & Oyer, 2001), managers can use their discretion to decide what they reward and how they reward it (Bol & Smith, 2011; Lawler, 1971; Moers, 2005). In fact, several Fortune 500 companies (Buckingham & Goodall, 2015; Cappelli & Tavis, 2016) have reported a shift away from standardized bonus allocation schemes towards managers exerting more discretion in pay decision making. In this paper, we examine the implications of this phenomenon.

In order to examine how perceived managerial discretion in the allocation of PFIP informs employees' responses to their incentive, we turn to individuals' evaluations of the fairness of the bonus allocation procedure (Colquitt, 2001; Cropanzano, Bowen & Gilliland, 2007; Zapata-Phelan, Colquitt, Scott, & Livingston, 2009). Procedural fairness perceptions have consistently been found to be an important mechanism through which individuals evaluate their incentives (e.g. Greenberg, 2003; Folger & Konovsky, 1989). At first glance, perceptions of managerial discretion might seem contrary to evaluations of procedural fairness, as the idiosyncratic nature of discretion undermines the idea of a standardized procedure to evaluate every employee (Ittner, Larcker and Meyer, 2003; Lawler, 1971). However, when considering the difficulties in accounting for the factors that lead to good performance, the recipient of the bonus may perceive managerial discretion as a fairer way to reflect what she or he uniquely contributes to the organization (Gibbs et al., 2004; Voußem, Kramer & Schäffer, 2016). This is particularly important in the context of intrinsic motivation, which is nurtured when individuals feel that their personal contribution is valued (Deci & Ryan, 1985). We therefore predict a mediated-moderation model in which the indirect effect of the interaction between bonus level and perceptions of manager discretion on intrinsic motivation is mediated by procedural fairness. Our hypothesized model is presented in Figure 1.

In specifying this model, we make several contributions to prior literature. First and foremost, we move beyond the traditional question about *whether* contingent incentives undermine intrinsic motivation to *when* and *why* undermining or enhancing might take place. Prior work on SDT has advocated and shown that, while incentives can undermine intrinsic motivation when designed to control behavior (for a recent review, see Deci et al., 2017), this need not be the case if the incentive is perceived to be informational about how the person

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contributes to the organization (Thibault-Landry, Forest, Zigarmi, Houson, & Boucher, 2018). In fact, when incentives inform the person about how he or she is personally valued, this may actually enhance their intrinsic motivation. In this paper, we follow a similar logic and extend this perspective with insights about procedural fairness: Where SDT suggests that incentives may increase motivation when they are perceived as informational, fairness theory helps us understand what (i.e., perceptions of managerial discretion) is seen as more or less informational, and thus ultimately what is seen as fair. In turn, fairness perceptions are a well-studied and strong determinant of workplace motivation (e.g. Zapata-Phelan, et al., 2009).

Second, our study helps close the science-practice gap when it comes to perceptions of managerial discretion. Scholarly thinking has largely associated manager discretion with bias, and therefore viewed it as detrimental to fairness evaluations (Ittner et al., 2003; Lawler, 1971). In practice, by contrast, managerial discretion in incentive allocation is increasingly recognized as an important way to recognize the value of the individual to the organization (e.g. Buckingham & Goodall, 2015). We align with the latter idea and provide a nuanced, theory-driven account of how perceptions of manager discretion can enhance procedural fairness because it better accounts for the challenges and complexities involved with determining good performance. We further highlight why this novel, more positive perspective on managerial discretion is important: Incentives perceived to be based on managers' discretion provide a clearer signal of individuals' idiosyncratic worth to the organization (Bol, 2008; Kaplan & Norton, 1996), thus fostering intrinsic motivation (Kuvaas, 2006).

Third, and more broadly, investigating the role of perceived managerial discretion in pay allocation is also important in light of the recent trend towards HR devolution. As the responsibility for enacting HR practices has been progressively devolved to the line, the role of

managers in people management has become increasingly important (Purcell & Hutchinson, 2007). While traditionally HR decisions were centrally controlled, and therefore standardized and uniform throughout the organization, first-line supervisors are now more heavily involved in important HR-related processes (Colling & Ferner, 1992). Although this trend has occurred with respect to many HR activities (e.g., selection, job design, training and development), bonus allocation is one decision where managers increasingly take ownership (Bol, 2008; Nagar, 2002). Our study clarifies how this trend towards HR devolution is important not only for strategic reasons (e.g., in aligning perceived with enacted HR; Nishii & Wright, 2008) but that perceptions of managerial discretion may play a crucial role in boosting the intrinsic motivation of employees.

THEORY AND HYPOTHESES

Perceived manager discretion in bonus allocation

We define perceived manager discretion as employee's perceptions of the application of professional judgment to account for performance-relevant information in incentive decision-making. For example, Jim is a sales executive who failed to reach his sales targets this year, on which his annual bonus is based. This happened because he was working on building relationships with a big potential client which could yield long-term benefits for the company, but no sale has yet been agreed. When discussing his annual bonus, Jim's manager commended his long-term thinking and told him that he would receive a bonus even though he didn't meet his sales targets, in recognition of his contribution to the organization. This led Jim to form the perception that his manager used her discretion to circumvent the pre-defined criteria, to give Jim a bonus anyway.

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It is important to note that our conceptualization focuses on individuals' perceptions of whether their manager applied discretion to their situation, rather than whether managerial discretion is permissible in the design of the incentive system, or how discretion is applied across groups of employees.¹ This focus on perceived discretion aligns with evidence that employees' perceptions of HR practices enacted by their manager are more predictive of attitudinal and behavioral outcomes than the design of the practice (Liao, Toya, Lepak & Hong, 2009; Nishii, Lepak & Schneider, 2008; Purcell & Hutchinson, 2007; Williams, McDaniel, & Nguyen, 2006). Indeed, the HR practices intended in design are rarely the same as those experienced by employees (Nishii & Wright, 2008). Furthermore, in focusing on employees' interpretation of their manager's decision-making in allocating the incentive, we recognize that individuals' perceptions of their reality provide an important indication of the meaning and understanding that they attach to their experiences (Salancik & Pfeffer, 1978) and are therefore critical in explaining how individuals make sense of, and respond to, the incentives which they are allocated.

In elucidating this definition, it is also important to distinguish perceived manager discretion from other, related constructs. Prior empirical research has, for example, used terms such as bias and discretion interchangeably (Bol, 2008; Prendergast & Topel, 1993; Rynes et al., 2005). Bias is seen as contamination of the evaluation process by performance-irrelevant factors related to personal characteristics about the ratee, such as gender or manager liking (Lefkowitz, 2000; Prendergast & Topel, 1993). The key distinction is therefore whether the incentive decision is believed to recognize performance-irrelevant (e.g., personal characteristics such as gender or race) or performance-relevant (e.g., more difficult to quantify work-related behaviors) factors. Therefore, while bias might dilute the messages sent by the incentive about the

individual's unique value and contribution (Lefkowitz, 2000; Moers, 2005; Prendergast & Topel, 1993), discretion can actually enhance this (Bol, 2008; Shaw & Gupta, 2015).

Likewise, perceived manager discretion has also been theoretically equated with evaluation criteria based on inputs or behaviors. These criteria are normally indicative of *how* the job was done, rather than outputs or results, which focus on *what* was done (Gerhart et al., 2009; Rynes et al., 2005). Input-based criteria, which are commonly referred to as subjective (Bol, 2011), are important but focus only on the design of the practice, and fail to recognize that managers can use their discretion to reward factors which are input-based (more subjective), output-based (more objective) or often a combination (Gibbs et al., 2004). In sum, perceived manager discretion emphasizes employees' perceptions of *how* information is used in the decision-making process, not which criteria are used.

Perceived manager discretion in bonus allocation and procedural fairness

One of the most important perceptual factors with respect to how individuals' respond to compensation within organizations is their evaluation of the fairness of their pay (Folger & Konovsky, 1990; Rynes et al., 2005; Voußem et al., 2016). As we are concerned primarily with *how* incentives are allocated, we focus in particular on procedural fairness (Colquitt, 2001; Cropanzano & Greenberg, 1997; Folger & Konovsky, 1990). Theories relating to procedural fairness are generally predicated on the perspective set out by Leventhal (1980); that individuals make evaluations based on the extent to which they perceive that certain rules are satisfied. These rules suggest that procedures should be applied with a) consistency, b) free from bias, c) accurately, d) allow for flawed decisions to be corrected, e) conform to ethical standards, and f) allow for multiple perspectives to be incorporated into decision-making (for a review of this theory applied to organizational research, see Cropanzano & Greenberg, 1997).

Applying Leventhal's (1980) rules to our current discussion, it is clear that perceptions of manager discretion could violate the rule of (a) consistency, in that factors unique to the individual or situation are taken into account and people are therefore treated differently (Morand & Merriman, 2012), the rule of (b) non-bias, because managers have a vested interest in individuals being happy with their bonus outcome (Prendergast & Topel, 1993; Trevor et al., 2012) or (c) accuracy if the individual felt that managerial discretion was used to discount important, performance-relevant information. On the other hand, perceptions of manager discretion can also signal satisfaction of Leventhal's (1980) rules for the need for (c) accuracy in allowing for the individuals' unique value to the organization to be recognized (Bol & Smith, 2011; Hartmann and Slapničar, 2012b), which is the purpose of the incentive (Kuvaas, 2006), and may indicate that (d) discretionary corrections have been made to bonus decisions (Bol, 2008; Murphy & Oyer, 2001).

Scholars have therefore acknowledged that there are arguments for both a positive and negative relationship between manager discretion in PFIP decisions and procedural fairness (e.g. Rynes et al., 2005; Vouřem et al., 2016), and this is supported by mixed empirical evidence. For example, on the one hand, manager discretion enables decision makers to restore fairness in the incentive allocation process by making adjustments to recognize factors which cannot be objectively measured (Bol, 2008; 2011; Moers, 2005). This is supported by Lau and Moser (2008), who found that the use of non-financial performance measures was perceived as procedurally fairer. On the other hand, Ittner et al. (2003) found that individuals complained of favoritism and lack of fairness when managers were allowed discretion to account for non-financial measures in performance evaluation. Similarly, research has suggested that pay decisions which rely less on manager discretion are perceived as fairer when there are low levels

of role ambiguity (Hartmann and Slapničar, 2012b) and when objective measurement is clearly linked to the organization's strategic goals (Burney, Henle and Widener, 2009).

Importantly, however, Leventhal (1980) suggests that individuals will selectively apply rules in their evaluation of procedural fairness depending on the situation. In particular, if someone is pleased with the outcome of the decision (e.g., they receive a high bonus) they are more likely to apply rules which make the procedure seem fairer. This is supported by research which has found that higher incentives enhance perceptions of procedural fairness (Greenberg, 2003), although less so for individual rather than purely collective incentives (Kuvaas, 2006). Leventhal's suggestion may explain the previously mixed conclusions about managerial discretion and fairness, because prior studies have failed to take into account the outcome of the incentive decision. Together this implies that, while higher bonuses will be perceived as procedurally fairer overall, the perception of manager discretion should enhance this relationship by emphasizing that the individuals' unique value to the organization is recognized. Likewise, a lower bonus is generally perceived as less fair, but particularly in the context of perceived manager discretion as it will seem to violate rules associated with consistency (Leventhal, 1980). This reasoning is in line with the general perspective that pay dispersion is perceived as fairer for those who benefit, and less fair for those who do not (Trevor et al., 2012). Overall, this therefore implies that:

Hypothesis 1: Perceived manager discretion moderates the positive relationship between bonus level and procedural fairness such that the relationship is stronger when discretion is high.

Implications for intrinsic motivation

As we established in the introduction, scholars now generally agree that incentives can have differential effects on intrinsic motivation in different domains and contexts. In line with this, Fall and Roussel (2014, pp. 208–9) suggest that “the effects of rewards depends on the functional significance that individuals attribute to them”. In particular, central to SDT is the idea that rewards contain two types of cues; controlling and informational (Deci & Porac, 1979).

Controlling cues are those which put the individual under “pressure to attain a particular behavioral outcome; in other words, one that is interpreted as attempting to induce or coerce the recipient into acting in a specific manner” (Ryan, 1982, p.451). Controlling cues are therefore particularly salient when incentives reward the achievement of outcomes (Deci, Koestner & Ryan, 1999). When controlling cues are more salient individuals are more likely to attribute their motivation towards an external locus of causality, namely towards gaining the reward (e.g. Shalley & Perry-Smith, 2001), and away from their intrinsic motivation for the task which is representative of an internal locus of causality (Ryan et al., 1983). This perspective is supported in various studies. For example, bonus level – which represents a higher contingency incentive, and is therefore more controlling – was found to have no significant relationship (Kuvaas, 2006), and annual variable merit pay a negative relationship, with intrinsic motivation (Kuvaas, Buch, Gagné, Dysvik & Forest, 2016). Likewise, while short-term cash or cash equivalent incentives predicted short-term increases in productivity, productivity dropped to levels lower than before the bonus was administered only two days later, indicating reduced intrinsic motivation (Bareket-Bojmel, Hochman, & Ariely, 2014). In their meta-analysis, Cerasoli and colleagues (2014) concluded that, while intrinsic motivation is a better predictor of performance in the presence of incentives, this relationship was weaker when the link between pay and performance

was more salient – in other words, when the instrumentality associated with the controlling component of incentives was higher.

In contrast, *informational cues* provided by incentives are those which “provide people with behaviorally relevant information in the absence of pressure for a particular outcome” (Ryan, 1982, p.451). In other words, informational cues provided by rewards signal the individuals’ unique value and contribution to the organization (Kuvaas, 2006), and are more likely to be non-performance contingent or contingent on factors other than performance outcomes, such as general engagement with work tasks (Deci et al., 1999). When informational cues are more salient, the task itself becomes the perceived cause of the action, maintaining or enhancing intrinsic motivation (Ryan, 1982; Thibault-Landry et al., 2018). This perspective is supported by empirical research which suggests, for example, that base pay level – which represents a low contingency incentive, which is therefore more informational – is either directly (Kuvaas 2006; Kuvaas et al., 2016) or indirectly (Olafsen et al., 2015) positively related to autonomous motivationⁱⁱ (Gagné & Deci, 2005). Further, in explicitly exploring the functional significance that individuals attach to incentives, Thibault-Landry and colleagues (2018) found in two cross-sectional field surveys that individuals reported higher levels of autonomous motivation when they believed their incentives to be informational.

In sum, the principle of informational and controlling cues allows for incentives to either enhance or diminish intrinsic motivation (Gagné & Forest, 2008; Thibault-Landry et al., 2018), depending on the attributes and context of the incentive (Ryan et al., 1983; Reeve & Deci, 1996). Past research has highlighted the role of individual managers in influencing whether either informational or controlling cues are more salient. For instance, prior studies have suggested that informational cues are provided through feedback which focuses on learning, relative to

controlling feedback which focuses on outputs (Shalley & Perry-Smith, 2001). Likewise, that informational cues are emphasized when managers recognize the employee's perspective, provide a meaningful rationale for their request, offer opportunities for choice, and encourage self-initiation (Baard, Deci & Ryan, 2004). We suggest that perceived managerial discretion is an important factor that determines whether the informational or controlling cues provided by the incentive are more salient. When associated with a high bonus, perceived manager discretion emphasizes informational cues about the individuals' value to the organization. On the other hand, when associated with a low bonus, high levels of perceived manager discretion emphasize control because individuals feel that the incentive decision was out of their hands; they received a low reward even when they believe their manager had the discretion to recognize their performance should they wish. This is important as we know little about how specific aspects of the design or implementation of incentives provide informational signals (Thibault-Landry et al., 2018), despite their direct relevance to those incentives (Fall & Roussel, 2014).

We argued earlier that the informational value arising from bonuses based on high discretion is likely encoded as perceptions of procedural fairness; these perceptions indicate that the incentive provides information about the individual's unique value to the organization (Bol, 2008; Kuvaas, 2006; Voußem, et al., 2016). In turn, perceptions of procedural fairness can boost intrinsic motivation. We find support for this reasoning in that pay fairness is a motivational process in which individuals who perceive the PFIP process to be fair are motivated without fear of exploitation or exclusion (Cropanzano & Rupp, 2003; Roberson & Stewart, 2006). Likewise, Zapata-Phelan and colleagues (2009) suggested that fairness perceptions foster intrinsic motivation because they engender positive emotions towards work; in other words, fairness leads individuals to evaluate their job as more intrinsically enjoyable. This proposition is supported by

empirical evidence which has consistently found that procedural fairness is a positive predictor of intrinsic motivation (e.g. Cohen-Charash & Spector, 2001; Folger & Konovsky, 1989; Hartmann & Slapničar, 2012a; Olafsen, Halvari, Forest & Deci, 2015; Zapata-Phelan et al., 2009).

In sum, fairness perceptions can be seen as a mediator to the relationship between informational incentives such as high bonuses perceived to be based on managerial discretion, and intrinsic motivation. This leads us to the complete mediated moderation model (Muller, Judd & Yzerbyt, 2006) summarized in Figure 1 and the following hypothesis:

Hypothesis 2: Perceived manager discretion moderates the indirect relationship between bonus level and intrinsic motivation through perceptions of procedural fairness.

In the following sections we present three empirical studies to test these hypotheses. In study 1, we set out to validate a measure of perceived manager discretion, providing conceptual clarity and demonstrating discriminant validity from related constructs. In study 2 we test, using experimental conditions, the key mechanism in our model; that perceived manager discretion is not opposed to procedural fairness as has been previously assumed but may actually enhance perceptions of procedural fairness when associated with a high bonus. Finally, in study 3 we test our full model in the field, making use of objective pay data alongside subjective employee perceptions relating to bonus allocation in an actual organization. In this study, we consider the motivational implications of fairness perceptions through our mediated-moderation model of the relationship between the bonus level–perceived manager discretion interaction and intrinsic motivation through perceptions of fairness.

STUDY 1

The aim of this pilot study was to validate a measure of perceived manager discretion and test the discriminant validity of this from related concepts of input-based performance evaluation (Rynes et al., 2005) and manager bias (Prendergast & Topel, 1993).

Measures

The perceived manager discretion scale was developed following Hinkin's (1998) deductive approach to scale development. We began with the definition of perceived manager discretion provided in the introduction to develop a list of items. As the scale was to be used in an organizational setting with employees, the definition and proposed items were discussed with employees (recipients of the bonus), managers (responsible for allocating the bonus) and with HR experts (responsible for the design of a PFIP system). The discussions resulted in five items which all parties agreed represented our definition of perceived manager discretion. This, therefore, established that the items were appropriate for the context in question (Hinkin, 1998).

While these items were deemed appropriate for perceived managerial discretion, they may still show confound or overlap with other, related constructs. In order to test discriminant validity we also included scales for input-based evaluation and manager bias. Four items were included to measure performance evaluated on the basis of inputs or behaviors (as opposed to outputs or results), based on Rynes et al. (2005). Finally, five items aimed to tap manager bias, adapted from McPherson Frantz (2006). All items (see Table 1) were rated on a 7-point Likert scale of level of agreement from 1 (not at all) to 7 (very much).

Participants and Procedure

The perceived manager discretion scale was validated with a sample of undergraduate students ($N = 215$) studying a Business Administration course in the Netherlands. Their ages ranged from 17 to 27 years ($M = 20$, $SD = 1.64$) and 33% were female. In order to test the scale in an ecologically valid situation, students were asked to think about the assignment that they were currently working on, and the way in which their professor (rather than manager) made decisions about their course grade (as a proxy for bonus). We deemed this context an appropriate proxy for manager discretion in bonus allocation because the professor, like the manager, has decision-making responsibility for the reward (grade). The professor is likewise able to exercise discretion in how the student's performance is evaluated and how the grade is distributed, within a structured procedure, in much the same way as a manager with respect to bonus allocation. Participants then responded to a survey including the items for perceived manager discretion, input-based evaluation and manager bias.

Analyses and Results

We first carried out exploratory factor analysis (EFA) using maximum likelihood estimation with promax rotation to recognize that the constructs are likely to be correlated (Ford, MacCallum & Tait, 1986). Rotated factor loadings (Table 1) indicated that our perceived manager discretion items loaded cleanly onto one factor, separate from both input-based evaluation and manager bias constructs. The coefficient alpha for the five perceived manager discretion items was .86, for the input-based evaluation items was .72 and for the bias items was .88. These analyses, therefore, support the reliability and discriminant validity of our measure of perceived manager discretion compared to the related constructs of bias and input-based

measures. Although perceived manager discretion was positively correlated with both input based evaluation ($r = .19, p < .01$) and manager bias ($r = .60, p < .01$), indicating that these are conceptually related, this pilot study supports our prediction that perceptions of manager discretion are distinct. Following the recommendations of Hinkin (1998) the scale was further validated in study 2 (reported below), through confirmatory factor analysis (CFA) to test discriminant validity from these related constructs in an independent sample. This scale validation the way for testing our theoretical proposition that perceived manager discretion provides unique insights into how individuals' evaluate their PFIP.

STUDY 2

Our second study was an online experiment with the primary aim to test the explanatory mechanism in our model; the extent to which perceived manager discretion moderates the relationship between bonus level and perceptions of procedural fairness (hypotheses 1). We test this here as it is the key indicator of our argument that perceptions of manager discretion in bonus allocation is not always negative, but can rather be seen as beneficial when individuals benefit from this. The experimental conditions allowed us to test causality within this portion of our model.

Participants and procedure

Participants were 88 MBA students at a university in the Netherlands. Participants ages ranged from 24 to 40 ($M = 31, SD = 3.2$) and 33% ($N = 29$) were female. Their years of work experience ranged from 1 to 15 ($M = 7.2, SD = 2.7$), and they had on average 2.5 years of experience as a manager ($SD = 2.5, range = 0$ to 10). In other words, these participants had ample experience with compensation systems in work organizations.

The study used a 2 (low bonus vs high bonus) x 2 (low manager discretion vs high manager discretion) between-persons design, where participants were randomly allocated to one of four scenarios selected by the online system. The first part of the scenario, which was identical for all conditions, described their job as involving complex work, which required problem solving and challenges. The scenarios then included a description of the procedure for allocating their annual bonus to manipulate higher or lower levels of perceived manager discretion, and the participants were finally informed whether they received a high or low bonus. The design of the 'high discretion' condition reflects the discretionary evaluation outcome in Bol and Smith's (2011) study, in which participants were instructed to make a discretionary evaluation based on a range of performance information.

We did not specify the monetary amount of the bonus because these students worked in diverse jobs, levels of seniority, and sectors meaning that their conceptualization of 'high' and 'low' was likely to vary. Our manipulation therefore allowed them to formulate their own conceptualization of high vs low, to reduce between-person differences. The manipulation was designed to emphasize the role of their manager's discretion in deciding the level of the incentive. In line with the suggestion of Gibbs et al (2004), the scenario allowed that manager discretion could be perceived at different stages of the bonus allocation process; in how the manager interacted with employees, in how he allocated the performance evaluation, and in what factors he could take into account in the final bonus decision. For the purposes of our study, we are only concerned with whether or not perceived discretion is present, not at which stage. The scenario descriptions are provided in the appendix. After reading the scenarios, participants were then asked to answer a series of scales relating to the scenario.

Measures

Procedural fairness. Three items were adapted from Greenberg's (2003) scale (e.g. "How fair would you say the policy is that your manager used to determine your bonus?").

Respondents rated items on a 1 (not at all) to 7 (a great deal) Likert scale about the allocation of their bonus. Alpha coefficient was .92.

Perceived manager discretion. The five item scale developed in study 1 was used to measure perceived manager discretion, scored on a Likert scale from 1 to 7. Whereas items in study 1 referred to professor and course grade, for the present study they were adapted to refer to manager and bonus. The coefficient alpha of the five items was .90. This measure was included as a manipulation check. To further validate our scale and manipulation we also included the items from study 1 for perceived bias ($\alpha = .90$) and input-based evaluation ($\alpha = .85$).

Demographic variables. Perceptions of PFIP are likely to be influenced by the personal experiences of the individual (Nyberg, Pieper & Trevor, 2013). As such, we controlled for years of work experience, and years of managerial experience as these are likely to shape perceptions of PFIP.

Preliminary analysis

Before testing our hypotheses, we carried out a manipulation check with analysis of variance (ANOVA) to examine the different levels of perceived manager discretion between our experimental conditions. In the first step, in order to further validate our perceived manager discretion scale, we carried out CFA to test the discriminant validity of perceived manager discretion from input-based evaluations, and bias perceptions. In support of our measure, the three-factor model demonstrated an adequate fit to the data based on the comparative fit index

(CFI) = .96, Tucker Lewis index (TLI) = .95, and root mean squared error of approximation (RMSEA) = .08 (confidence intervals = .05, .11) (Bentler, 1990). This model also represented a better fit than the single factor model (CFI = .63, TLI = .56, RMSEA = .23 [.21 / .26]) and alternative two factor models combining perceived manager discretion with firstly bias (CFI = .86, TLI = .83, RMSEA = .14 [.12 / .17]) and secondly with input (CFI = .71, TLI = .64, RMSEA = .21 [.19 / .23]). This, therefore, supports the reliability and discriminant validity of our measure of perceived manager discretion compared to the related constructs of bias and input-based measures.

We then carried out ANOVA to test our manipulation. The manipulation was supported in that the mean differences in perceived manager discretion between the high manager discretion ($M = 5.34$) and low manager discretion conditions ($M = 4.79$) were in the expected direction, and significant ($t(84) = -1.94, p < .05$). Likewise, the self-reported scales for bias ($t(84) = -1.65, p > .10$) and input-based evaluation ($t(84) = -1.55, p > .10$) showed no significant difference between the high and low manager discretion conditions, further supporting that our manipulation focused on manager discretion. Mean, standard deviation and correlation coefficients are reported in Table 2.

Hypothesis testing

We first performed an independent samples t-test comparing between the high and low bonus conditions first for the group manipulated to perceive high levels of managerial discretion, then low manager discretion. For the high manager discretion group, those receiving a high bonus reported higher procedural fairness ($M = 4.25$) than those receiving a low bonus ($M = 2.94$) as expected, and these groups were significantly different ($t(40) = 3.03, p < .01$). Although

the pattern was the same for the low manager discretion group (high bonus $M = 4.19$; low bonus $M = 3.74$) these groups did not significantly differ ($t(41) = 1.22, p = .15$). Analysis of covariance (ANCOVA) was then carried out to examine the interaction between level of manager discretion and the bonus received (high bonus vs low bonus) on procedural fairness. In testing our hypothesis, the interaction between these conditions was marginally significant with respect to procedural fairness; $F(1, 81) = 3.54, p = .06^{iii}$. Figure 2 depicts this interaction effect, which illustrates that the positive relationship between bonus level and procedural fairness is stronger when manager discretion is high. Although the interaction effect was only marginally significant, the t-test comparing conditions supports our prediction (Hypothesis 1) that the relationship between bonus and procedural fairness was stronger under high levels of manager discretion.

STUDY 3

In our final study we test all hypotheses in our model within a field-setting, in an organization operating a PFIP scheme. Adding to study 2, we examine the motivational implications of our findings by looking at procedural fairness as a mediator to the relationship between the bonus level–perceived manager discretion interaction and intrinsic motivation.

Organizational and reward context

The organization under investigation employed 733 staff at the time of the survey. It is funded by the UK government but operates independently in relation to decisions about HR policies such as pay. Employees are office-based and perform highly complex work. They are highly educated, with more than 75% holding university degrees, and more than 40% of workers having postgraduate qualifications. Individuals' performance is assessed based on performance against

objectives which might incorporate results-based measures, where available, but often a high level of management judgment. Individuals at the same job level, receiving the same performance rating would expect to receive a similar bonus but managers have discretion to give higher or lower bonuses within a range.

The procedure for allocating bonuses is communicated to staff, as is the maximum bonus that they might receive, and a report of mean bonus payments by groups (organizational unit, gender, age, and ethnicity) is provided to employee representatives. This communication approach represents a 'partially open' system of bonus allocation (Lawler & Jenkins, 1992). Within the decision-making process it is possible that manager discretion can be perceived at various stages; when objectives are set, when performance is evaluated, and in deciding the final bonus level. As identified by Gibbs et al. (2004), this is typical in many organizations. The design of the PFIP system means that individual variation in perceptions of level of manager discretion and fairness are also likely (Greenberg, 2003).

Procedure and participants

Self-reports of intrinsic motivation, perceptions of procedural fairness and perceived manager discretion were collected via an emailed survey, administered after employees received their bonus payment. Self-reported intrinsic motivation was also collected 12 months earlier, to be included as a control. Of 733 employees who received the survey, 196 respondents completed it at both time points, giving a response rate of 26.7%. Bonus data were obtained from organizational records only where permission was given. Of 196 respondents, 155 gave permission to access their pay records. Of these 155, 36.7% were female and the average age was 41.29 (SD = 10.52). The average tenure was 8.65 years (SD = 7.38). No significant

differences were found ($p > .05$) in demographics between respondents and non-respondents and the distribution of respondents across job levels was representative of the organization. In line with recommendations from Armstrong and Overton (1977), non-response bias was also checked through time trend extrapolation; comparing responses of those who responded earlier in the two-week survey period to those who responded later. No bias was indicated by the time of response.

Measures

Bonus level. Bonus data were obtained from organizational records. Bonus as a percentage of base pay, rather than an absolute financial amount, was used in order to control for salary level. The mean bonus payment across the whole sample was 4.23% of base salary ($SD = 3.95$). The mean bonus received by average performers (rated 'good', which is the scale mid-point) was 0.27% (min = 0, max = 5.3%). Those rated "very good" received 5.62% on average (min = 0, max = 12.6%) and those rated "outstanding" had a mean bonus of 8.98% (min = 4.4%, max = 13.5%). This therefore represents a mean differential of 8.71%, or a multiple of 32, between average and top performers. This bonus scheme does therefore effectively differentiate between average and top performers (Gerhart & Fang, 2014), indicating a high level of performance-contingency in the design of the system (Heneman et al., 2002; Kuvaas, Shore, Buch & Dysvik, 2017).

Perceived manager discretion. The scale validated in studies 1 and 2 was used to measure perceived discretion, worded to relate to manager's decisions about bonuses (e.g. "Your manager's subjective judgment about your performance"). Coefficient alpha was .87.

Procedural Fairness. As in study 2, Greenberg's (2003) measure of procedural fairness was adapted for this study, using the same three items. Coefficient alpha was .95.

Intrinsic motivation. Intrinsic motivation was measured with three items from Gagné et al. (2014) rated on a 7-point Likert scale with the question stem; "Why do you put effort into your job?" An example item is; "Because the work that I do is interesting". Coefficient alpha was .92 at both measurement points.

Control variables. Data about job tenure, gender and organizational unit were all obtained from organizational records and were included as control variables. Job tenure is likely to have a direct impact on bonus level as those who are more established may be recognized as higher performers (Nyberg et al., 2013). Although the organization attempted to ensure gender parity regarding pay decisions, gender is controlled for to remove any potential bias (Madden, 2012). Department was included to control for potential differences between organizational units in how bonuses were distributed. Each department has one manager responsible for pay decision-making so this also accounted for between-manager differences.

Validation of measurement model

To test for discriminant validity between variables, we first tested the measurement model using CFA in Mplus (Muthen & Muthen, 2012), with the self-report variables. CFA supported the expected measurement model (three factors; intrinsic motivation, perceived manager discretion, procedural fairness) with a good fit to the data; CFI = 0.97, TLI = 0.96, RMSEA = .06 (.04 / .08).

When conducting pairwise χ^2 (1) test, where we constrain factor correlations to 1 (Anderson & Gerbing, 1988), we found that our hypothesized model outperformed any of the constrained

models ($p < .05$). Means, standard deviations and correlation coefficients are presented in Table 3. All predictor variables were standardized before analysis.

Tests of Hypotheses

We tested our hypotheses through multiple regression models examining the interaction between bonus level and perceived manager discretion on procedural fairness (Hypothesis 1).

We then used the PROCESS macro for SPSS (Preacher & Hayes, 2004) with 5,000 bootstrapped samples to test the significance of the conditional indirect effect expected in hypothesis 2 (mediated moderation).

The key aim of this study was to test the implications of the fairness outcomes, examined in study 2, on intrinsic motivation. As such, before we tested our hypotheses, we began by examining the relationship between the bonus level–perceived manager discretion interaction and intrinsic motivation, for the sake of completeness. We performed hierarchical linear regression with intrinsic motivation as the dependent variable, regressed onto the control variables (step 1), main independent variable (step 2), interaction (step 3) and mediator (step 4). As reported in Table 4, the interaction effect is marginally significant ($\beta = .12, p = .05$). Figure 3 depicts this interaction effect differentiating between one standard deviation above and below the mean (Aiken & West, 1991). Only the slope for low level of perceived manager discretion is significant ($t = -1.8, p < .05$). The results therefore suggest that perceived manager discretion does not significantly directly enhance the motivational value of the bonus. However, an undermining effect was found for low levels of perceived manager discretion in that a high bonus was negatively related to change in intrinsic motivation when associated with low levels of perceived manager discretion.

In our first hypotheses we predicted that perceived manager discretion would moderate the relationship between bonus level and evaluations of procedural fairness. We expected that the relationship between bonus level and procedural fairness would be stronger when manager discretion was perceived to be high. Hierarchical linear regression was performed regressing procedural fairness onto the control variables, the main effect of bonus level, and interaction effect in subsequent steps (Table 5). In line with our prediction, the interaction between bonus level and perceived manager discretion on procedural fairness was positive ($\beta = .26, p < .05$). Figure 4 depicts this interaction effect, again differentiating one standard deviation above and below the mean. A simple slopes analysis revealed that bonus level had a positive relationship with procedural fairness when perceived manager discretion was high ($t = 3.23, p < .05$) but no significant relationship when perceived manager discretion was low ($t = 0.16, p > .10$).

Hypothesis 1 is therefore supported.

Finally, as stated in Hypothesis 2, we expected that perceptions of manager discretion would also moderate an indirect effect between bonus level and intrinsic motivation, through procedural fairness (mediated moderation). We followed the recommendations of Preacher, Rucker, and Hayes (2007) to calculate the indirect effects of bonus level on procedural fairness at various levels of our moderator. Building on our above findings we found a significant positive indirect effect between bonus and intrinsic motivation through procedural fairness (indirect effect = .06, bootstrap 95% confidence interval [CI]: [.001, .19]). Furthermore, the expected conditional indirect effect was positive and significant when individuals reported mean (indirect effect = .06, CI: [.01, .18]) and high levels of perceived manager discretion (indirect

effect = .12, CI: [.02, .32]) indicating that the positive indirect effect was stronger when perceived manager discretion is higher.

Robustness Checks

We ran supplementary analyses to further test the robustness of some of the assumptions within our model. Firstly, we estimated the models without the lagged effects of intrinsic motivation to see if these effects also hold cross-sectionally. We found that the pattern (direction and significance) of the hypothesized relationships remained the same. Secondly, we wanted to be certain that some of the effects of bonus level were not accounted for by simply receiving or not receiving a bonus. We therefore estimated the model with binomial regression (where 1 indicated receipt of a bonus and 0 indicated no bonus). This had no significant relationship with intrinsic motivation or procedural fairness and, once again, this led to no change in the pattern of relationships thus confirming our assumption about the role of bonus level rather than bonus presence. Furthermore, to account for prior findings that the relationship between incentives and intrinsic motivation is moderated by the level of pay contingency (e.g. Cerasoli et al., 2014), we re-ran our model including base pay level as a control, which can be seen as a proxy for pay with lower levels of pay contingency (Kuvaas, et al., 2017). This did not change the direction, strength or significance of the relationships.

Finally, although our theoretical model posits that procedural fairness is the key mediator to our hypothesized relationship, with strong theoretical rationale, individuals' perceptions of their incentive are also informed by their evaluation of the fairness of the outcome of pay decisions, albeit less strongly (e.g. Folger & Konovsky, 1989). As such, we ran supplementary analysis including distributive fairness as an additional mediator (measured with items from

Greenberg's [2003] scale). The interaction between bonus level and perceived manager discretion on distributive fairness was positive ($\beta = .28, p < .05$); the relationship between bonus level and distributive fairness was positive when perceived manager discretion was high ($t = 2.71, p < .01$) but was not significant when discretion was low ($t = -0.90, ns$), in line with the findings with respect to procedural fairness. However, we found no significant indirect effect between the interaction and intrinsic motivation through distributive fairness.

DISCUSSION

In this paper, we suggest that levels of perceived manager discretion are important to our understanding of the relationship between PFIP and intrinsic motivation, as manager discretion is central to the bonus allocation process, and informs the signals provided by the incentive. While perceptions of manager discretion have generally been viewed as a negative characteristic of PFIP allocation, we rather suggest that these perceptions enhance the potential motivating force of the incentive by being perceived as fairer by those who benefit from the discretion, emphasizing the informational signals provided by the reward.

In study 1, we supported perceived manager discretion as distinct from related concepts (bias and input-based incentives) in explaining how individuals perceive incentives. Next, in study 2, we supported our key mechanism in finding that the relationship between bonus level and procedural fairness was enhanced by perceptions of manager discretion. Finally, in study 3, we demonstrated the significance of this mechanism in that bonus level was indirectly, positively related to intrinsic motivation when associated with perceived manager discretion, explained through perceptions of procedural fairness.

Theoretical Implications

The role of perceived manager discretion with respect to PFIP is valuable to our understanding of the motivational outcomes of incentive allocation, and is particularly important given the wider context that managers are gaining more responsibility for incentive decisions which were traditionally made centrally, through the process of HR devolution (Colling & Ferner, 1992; Purcell & Hutchinson, 2007). In current scholarship there are differing perspectives on whether discretion has a negative (e.g. Lawler, 1971; Latham, Almost, Mann & Moore, 2005; Gagné & Forest, 2008) or positive (e.g. Bol, 2008; Bol & Smith, 2011; Moers, 2005) impact on employees' attitudes and behaviors. Returning to Leventhal's (1980) original conceptualization of procedural fairness, we suggest that this difference of opinion is evident because prior research has largely failed to consider that individuals apply different rules to their evaluation of the fairness, depending on whether or not they benefit from their manager's discretion. Furthermore, the intention of PFIP is to differentiate individuals based on performance, to incentivize higher performance and to encourage only the best performers to join and stay with the organization (Rynes et al., 2005). As such, we suggest that perceptions of greater manager discretion in bonus allocation are aligned with the equity perspective of fairness (i.e., those who contribute the most should receive the most; Adams, 1965, Leventhal, 1976) in that equity is achieved when the incentive differentiates between individuals' unique contributions (Thomas & Ely, 1996; Morand & Merriman, 2012). This unique contribution is signaled more strongly when individuals believe that their manager has applied discretion in incentive allocation.

With this in mind, our findings have important implications for the alignment between HR practices and organizational values. Incentive schemes, which aim to differentiate on performance, are predicated on the norm of equity (Cropanzano & Greenberg, 1997; Trevor et al., 2012). When a company values an equity perspective, seeking to individually differentiate top performers from low performers, and thus installs a bonus system that rewards these individuals, we argue that it may represent a better strategic fit to allow managers discretion in incentive decision-making (Wright & McMahan, 1992). Likewise, this perspective is also in line with the principles of the sorting effect (e.g. Cadsby et al., 2007; Schneider, 1987; Shaw, 2015), which suggests that incentives deliver a message to the individual about whether or not their unique contribution is valuable, and therefore whether or not they should remain in the organization (Shaw, 2015). When individuals believe that their manager has used his or her discretion to provide a high bonus, they will believe that their contribution is uniquely valued. In contrast, individuals who lose out from incentives receive the message that there is a mismatch between themselves and the organization (Trevor, Gerhart, & Boudreau, 1997). Incentives perceived to be based on low levels of manager discretion, on the other hand, dilute the sorting effect because there is no clear signal from the incentive about their unique value. This idea is in line with research which has found that high performers prefer performance-related incentives, lower performers view these negatively (Lazear, 2000; Trank, Rynes, & Bretz Jr., 2002), and are more likely to leave the organization (Shaw, 2015).

This study, furthermore, answers the call of researchers who have suggested that the disparity in prior research regarding the undermining/enhancing effect of bonus on intrinsic motivation might be explained by the neglected role of context (Byron & Khazanchi, 2012; Gagné & Forest, 2008; Gerhart & Fang, 2015). Contextual information is important as it helps

determine whether bonuses are perceived as informational or controlling and thus whether they will respectively enhance or undermine intrinsic motivation (Deci & Porac, 1979; Fall & Roussel, 2014; Salancik & Pfeffer, 1978). We suggested that perceived manager discretion associated with bonus allocation is an important source of this contextual information. Our results support our expectation that low levels of perceived manager discretion signal a more controlling context, whereas high levels of perceived manager discretion provide more complete information about performance (Thibault-Landry et al., 2018). While low levels of discretion remove any disparity in fairness perceptions (i.e. the evaluation of procedural fairness is not contingent on whether the bonus is high or low), this controlling context is detrimental to intrinsic motivation. Therefore, without an understanding of the level of perceived manager discretion associated with bonus allocation, it will be difficult to predict how incentives influence intrinsic motivation. Our research, therefore, makes important contributions to this debate, meeting calls for research to look at *when* not *whether* bonuses can enhance or undermine intrinsic motivation (Shaw & Gupta, 2015).

Finally, it is interesting to note that – even though we did not set out to test a direct relationship between bonus level and intrinsic motivation – bonus level was negatively related to changes in intrinsic motivation when associated with low perceived manager discretion. This result is interesting because annual PFIP is generally assumed to have a lower level of performance contingency, which is less salient and therefore less undermining (Deci et al., 1999; Cerasoli et al., 2014), although Kuvaas and colleagues (2016) found, similar to us, that annual PFIP negatively predicted intrinsic motivation. We anticipate that our findings are because the bonus associated with low perceived manager discretion is perceived to represent an incomplete evaluation of performance (Bol, 2008), making the outcome more salient (Cerasoli et al., 2014),

which could be seen as controlling (Ryan et al., 1983). This finding further underlines the importance of context in understanding whether informational or controlling cues are salient, and therefore undermining or not (Fall & Roussel, 2014; Thibault-Landry et al., 2018). Furthermore, although perceptions of procedural fairness explained the enhancing effect of the bonus on intrinsic motivation, the undermining effect was not explained through this mechanism. This implies that there may be a competing mediator explaining the undermining effect which we have not tested here, which we discuss as an avenue for future research.

Suggestions for Future Research

We predicated our theoretical model on the principles of informational versus controlling cues based on prior theory and empirical research. Research by Thibault-Landry et al. (2018) has supported the distinction between informational vs controlling perceptions of incentives by exploring the attitudinal and behavioral correlates of these perceptions. Future research could combine our model with theirs by examining antecedents to informational and controlling perceptions; how are these informed by incentive design and administration, for example? With a more fine-grained understanding of which contextual factors enhance more controlling versus informational signals, practitioners can then implement a more optimal design of their incentive system.

Likewise, while we focus here on intrinsic motivation as an outcome, SDT scholars suggest that, when individuals' basic psychological needs are satisfied, they can internalize external motivators (Deci & Ryan, 1985; Gagné & Deci, 2005) and there is some indication that the resulting *identified* regulation is a better predictor of performance outcomes than intrinsic motivation (Burton, Lydon, D'Alessandro & Koestner, 2006). Future research might, therefore,

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extend our model by exploring the implications of perceived manager discretion in incentive allocation for the full range of motivation regulation proposed by SDT, particularly identified motivation given the strong association with performance outcomes. Likewise, the results from study 3 suggest that procedural fairness only explains part of our model, implying additional mediators to the undermining effect. As the satisfaction (or frustration) of individuals' basic psychological needs is theorized to be the key facilitator (or hinderer) of both intrinsic motivation and internalization (Ryan & Deci, 2000; Thibault-Landry et al., 2017), future research might examine whether this represents an explanation for the undermining effect observed here (e.g. Olafsen et al., 2017).

In this research we focus on one processual explanation for the relationship between performance-contingent incentives and intrinsic motivation. It is clear, however, that this relationship is complex and multi-faceted. Future research might take into account, for example, that the relationship between money and behavioral and attitudinal outcomes are informed by subconscious processes (e.g., Vohs, Meade & Goode, 2006). Likewise, that there are individual differences in how people process the motivational information provided by incentives, which moderates the undermining effect (e.g., Hagger & Chatzisarantis, 2011). This allows that, while a bonus perceived to be based on higher levels of manager discretion may be evaluated as fairer by some, it may be perceived as especially unfair by others, thus negating the overall motivational effect at the higher level of analysis (Pfeffer, 2001). This also has practical implications as practitioners should be careful to conclude that our results can be indicative of whether an incentive system will foster higher collective motivation and performance.

Another important avenue for future research is to examine what determines perceptions of managerial discretion. As we highlighted earlier in this paper, we were less interested in whether managers *actually* employ discretion as much as whether employees *perceived* such discretion to be in place. This is important as ultimately the subjective reality of the employee is an important driver of their behavior (Salancik & Pfeffer, 1978), and therefore to improve perceived fairness and intrinsic motivation it is more important that employees believe such discretion was in place than how objectively true that is. This raises the question about what determines perceptions of managerial discretion. For example, Gibbs and colleagues (2004) concluded that actual discretion can occur at multiple points in the performance evaluation process. Likewise, Carpenter and Golden (1997) found individual differences in the amount of discretion which managers themselves believe they can apply to decision-making. We also know that individuals' attributions of others' behaviors are informed by biases, prior experiences, and beliefs (Kelley & Michela, 1980). This offers the possibility that specific factors – for example, the number of performance factors taken into account, or the way the manager communicates or frames the decision – influence individuals' perceptions. Yet, we do not know how this will (or will not) translate into global perceptions of discretion. It would therefore be valuable for future research to examine how the perceptual processes, which we examine here, work alongside practical considerations about the design of the system. This recognizes that there are important differences in how practices are designed by the organization, implemented by line managers, and perceived by employees (Nishii & Wright, 2008).

A final suggestion for future research is to develop a better understanding of the different implicit theories that may exist for fairness. In our discussion we highlighted (similar to others, Cropanzano et al., 2007; Dwertmann, Nishii & van Knippenberg, 2015; Morand & Merriman,

2012; Thomas & Ely, 1996) that individuals and companies as a whole can differ in whether they have an equality (i.e., treating people similarly is fairer) or an equity (i.e., treating people differently is fairer) view of fairness. In the context of this study, we suggest that an equity view of fairness was present, which helps explain our findings. Future research should, however, measure these equality versus equity perspectives more explicitly and look at the moderating role of this at the individual and/or the organizational level. A better assessment of those implicit assumptions regarding fairness can help practitioners decide the most effective incentive system for a specific individual or context.

Limitations

We took every effort to ensure that the design of the studies allowed us to minimize the risk of potential biases and fundamental errors (Podsakoff, MacKenzie, & Podsakoff, 2012) through our multi-wave, multi-source field study, and the lagged effects model combined with experimental study enabled us to test causality. However, it is important to acknowledge that the use of a single organization in the field study is not ideal for confirming the generalizability of our theoretical model. Future research might extend this by drawing on multiple organizations, which would provide additional, context-sensitive test of generalizability. It would also be valuable to test for additional controls to add weight to our theoretical model. For example, it may be possible that performance and intrinsic motivation are inter-dependent, with prior performance predicting intrinsic motivation. While we did include prior intrinsic motivation in our field study, providing some control for this, we cannot entirely rule out that performance, rather than the incentive, was driving intrinsic motivation. Likewise, while our CFA confirms the factorial validity of the constructs included in our measurement model (i.e., our constructs do not

overlap), this does not alleviate concerns about common method variance as similarity in measurement timing and method (i.e., survey approach) may still have strengthened the correlation. Longitudinal data collection with more than three time points, or a field-based experiment would allow a further test of causality.

Second, the findings presented here may be limited in generalizability in other ways. We suggested that our findings have implications for the alignment of HR practices within organizational strategy (i.e., adopting an equity philosophy). The same comparison could be made at organizational or societal level in that the equity perspective would fit better with the principles of more individualistic cultures (Fischer & Smith, 2003). For example, prior research suggests there are cross-national differences in how individuals weight information in forming fairness perceptions (Kim & Leung, 2007), and individuals' pay perceptions are informed by both national differences and job sector (Chiang & Birtch, 2007). Therefore, while there is consistent evidence that intrinsic motivation is important across contexts (e.g. Gagne et al., 2014), the antecedents to this – in particular how individuals perceive manager discretion in incentive allocation – may depend on organizational, sector, or national context. This is important because some scholars have raised serious concerns about the global proliferation of characteristics of Anglo-Saxon economies, including individual performance-related incentives (e.g. Kasser, Cohn, Kanner & Ryan, 2007). Future research might, therefore, extend our model to take into account different cultural philosophies.

Conclusion and Practical Implications

Through three empirical studies we set out to provide insights into the role of perceived manager discretion and procedural fairness in explaining the relationship between individual performance-related bonuses and intrinsic motivation. This is important given the ongoing debate about the motivational role of these widely used incentives, and the trend towards devolving pay decision-making to line managers. We first demonstrated that perceived manager discretion is distinct from the related concepts of input-based performance evaluation and manager bias, and as such is a valuable explanation for how individuals evaluate their incentive pay. This distinction is important given prior confusion between these concepts; both in academic terms but also from a managerial perspective, which might lead managers away from enacting their discretion in pay decision-making if they are, for instance, trying to avoid bias. We hope that the distinction between input, bias, and discretion helps managers to understand better the implications of how they approach incentive decision-making and can become a textbook distinction that informs future scholars and practicing managers of these important constructs.

Having clarified these distinctions, we then supported our supposition that perceived manager discretion can actually foster perceptions of procedural fairness when associated with a high incentive. This insight is important because concerns of procedural fairness might be one reason why managers shy away from exerting their discretion in these complex people-related processes. Our results would suggest that these concerns are valid for those who do not benefit from this perceived discretion, but not for those who do. The implications of this were underpinned by our next finding; that perceived manager discretion can indirectly enhance the motivational value of the incentive, through procedural fairness. From a practical perspective, the findings suggest that perceptions of manager discretion can enhance the ability of incentives

to sort the 'good' from the 'less good' employees. This is, after all, one desirable outcome of PFIP, but managers and decision-makers should be aware that it is not beneficial to all. Given that managers are concerned with fostering intrinsic motivation in an environment full of extrinsic motivators, we hope that our findings help managers to make more informed choices about how their decisions might achieve balance between these potentially competing factors.

More broadly, our results also have important implications for strategic HRM. With some high profile cases of organizations choosing to remove formal performance evaluation as the basis for bonuses (e.g. Buckingham & Goodall, 2015), this research suggests that perceptions of manager discretion may have beneficial motivational outcomes. By demonstrating that discretion can actually enhance procedural fairness we emphasize that perceptions of fairness in incentive allocation are best understood through an equity perspective, which will not suit all organizational contexts. In an attempt to foster perceptions of equality through standardization managers may unwillingly undermine the principles of equity, and also therefore the importance of recognizing individuals' unique value to foster intrinsic motivation. As such, we highlight the importance of the philosophy underlying the design and implementation of performance-based incentives, and we advocate for more alignment between the organization's philosophy and their pay system. Whether explicit in vision statements or implicitly present in the organizational culture, organizations and their leaders are wise to consider to what extent their core values align with an equity philosophy and to make pay decisions accordingly.

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Table I: Exploratory factor analysis of perceived manager discretion scale (study 1)

Construct	Items ¹	Factor loadings		
		1	2	3
Perceived manager discretion	Your professor's opinions of your performance, rather than facts		0.57	
	Your professor's subjective assessment of your performance, rather than your actual performance against criteria		0.65	
	Your professor's subjective judgment about your performance		0.66	
	Your professor's opinion of the quality of your work		0.63	
	Your professor's subjective evaluation of your work		0.84	
Biased evaluation	Intentional bias by your professor	0.60		
	The extent to which your professor liked you, or not	0.93		
	Unintentional bias by your professor	0.60		
	Your professor's opinions of you as a person	0.99		
	Your professor's general impression of you	0.90		
Input evaluation	The overall effort that you put in to the project			0.56
	The behaviors that you displayed during the project	0.40		0.47
	The way that you managed the project process			0.90
	The way that the project went, overall			0.60

Notes:

N = 88.

¹ In studies 2 and 3 'professor' was replaced with 'manager' and 'the project' with 'your work'
 Item stem: To what extent do you think your grade [bonus] was based on the following factors?
 Rotated eigenvalues are presented. EFA with maximum likelihood extraction, promax rotation.
 Eigenvalues of <.30 are suppressed

Table II:
Single-order correlations, means and standard deviations (study 2)

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1 Gender (female)	-	-							
2 Age	1.40	0.62	-0.18						
3 Work experience (years)	7.23	2.68	-0.16	0.80**					
4 Manager experience (years)	2.51	2.46	-0.01	0.31**	0.46**				
5 Perceived manager discretion	5.07	1.29	0.05	-0.27*	-0.22*	-0.25*			
6 Manager discretion condition	-	-	0.15	0.07	0.09	-0.05	0.21*		
7 Bonus condition	-	-	0.12	-0.22*	-0.21	-0.18	0.21	0.00	
8 Procedural Fairness	3.78	1.40	-0.07	-0.03	0.01	0.02	0.00	-0.14	0.31**

Note. $N = 88$.

* $p < .05$.

** $p < .01$

Table III:**Single-order correlations, means and standard deviations (study 3)**

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1 Gender (female)	-	-							
2 Tenure	8.65	7.38	-0.10						
3 Department	-	-	0.02	-0.24**					
4 Intrinsic motivation (lagged)	4.21	1.26	-0.06	-0.09	-0.04				
5 Bonus level	4.23	3.95	-0.01	-0.08	0.04	0.18*			
6 Perceived manager discretion	4.58	1.41	0.03	0.00	0.17*	0.14	-0.06		
7 Procedural fairness	3.88	1.50	0.12	-0.05	0.15	0.15	0.18*	0.30**	
8 Intrinsic motivation	4.35	1.16	-0.09	-0.03	-0.07	0.70**	0.07	0.15	0.18*

Note. $N = 155$.

* $p < .05$.

** $p < .01$

Table IV:
Moderated hierarchical linear regression analysis predicting intrinsic motivation (study 3)

	Step 1			Step 2			Step 3			Step 4		
	Estimate	SE	t	Estimate	SE	t	Estimate	SE	t	Estimate	SE	t
Intercept	4.43	0.14	31.10**	4.42	0.14	31.02**	4.46	0.15	30.72**	4.48	0.15	30.77**
Gender	0.00	0.07	-0.01	0.00	0.07	-0.05	-0.02	0.07	-0.30	-0.02	0.07	-0.29
Tenure	-0.03	0.14	-0.44	-0.03	0.14	-0.47	-0.02	0.14	-0.39	-0.03	0.14	-0.49
Department	-0.02	0.04	-0.30	-0.02	0.04	-0.26	-0.03	0.04	-0.50	-0.04	0.04	-0.62
Intrinsic motivation time 1	0.70	0.07	11.19**	0.71	0.07	11.04**	0.70	0.08	10.68**	0.71	0.08	10.75**
Bonus level				-0.04	0.07	-0.65	-0.04	0.07	-0.69	-0.06	0.07	-0.92
Perceived manager discretion							0.03	0.07	0.51	0.00	0.07	-0.03
Discretion x bonus level							0.12	0.07	1.93†	0.10	0.08	1.63
Procedural fairness										0.09	0.07	1.36
ΔF	32.60***			0.42			1.90			1.85		
ΔR^2	0.50			0.00			0.01			0.01		

Note. $N = 155$. Standardized coefficients are reported. Values in bold are relevant to tests of hypotheses.

† $p = .05$. * $p < .05$. ** $p < .01$.

Table V:**Moderated hierarchical linear regression analysis predicting procedural pay fairness (study 3)**

	Step 1		Step 2		Step 3	
	Estimate	<i>SE</i>	Estimate	<i>SE</i>	Estimate	<i>SE</i>
Intercept	3.36**	0.27	3.35**	0.27	3.54**	0.26
Tenure	-0.01	0.13	0.02	0.13	-0.03	0.13
Gender	0.19	0.27	0.23	0.27	0.22	0.26
Department	0.12	0.07	0.11	0.07	0.06	0.06
Bonus level			0.28*	0.13	0.29*	0.12
Perceived manager discretion					0.46**	0.12
Discretion x bonus level					0.26*	0.13
ΔF		1.33		4.88*		8.36**
ΔR^2		0.03		0.07		0.13

** $p < .01$ * $p < .05$

Figure 1:
Theoretical model

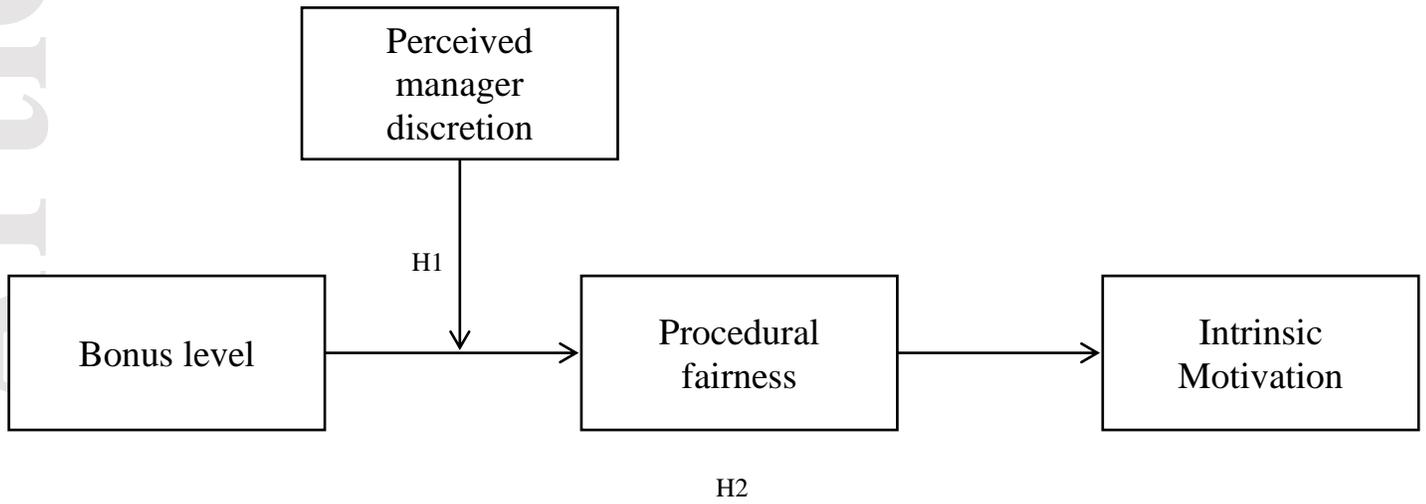


Figure 2:

Slopes of the interaction between manager discretion and bonus conditions on procedural fairness (study 2)

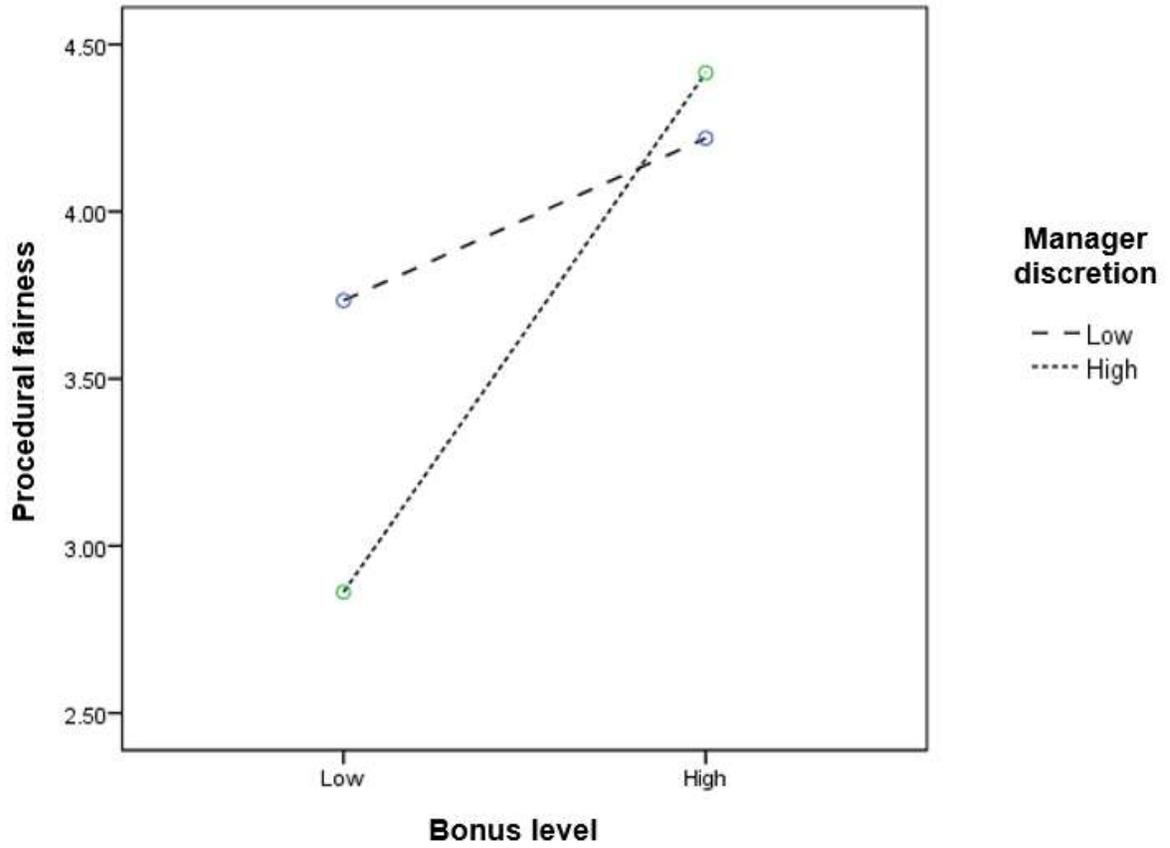


Figure 3:

Slopes of the interaction between perceived manager discretion and bonus level on intrinsic motivation (study 3)

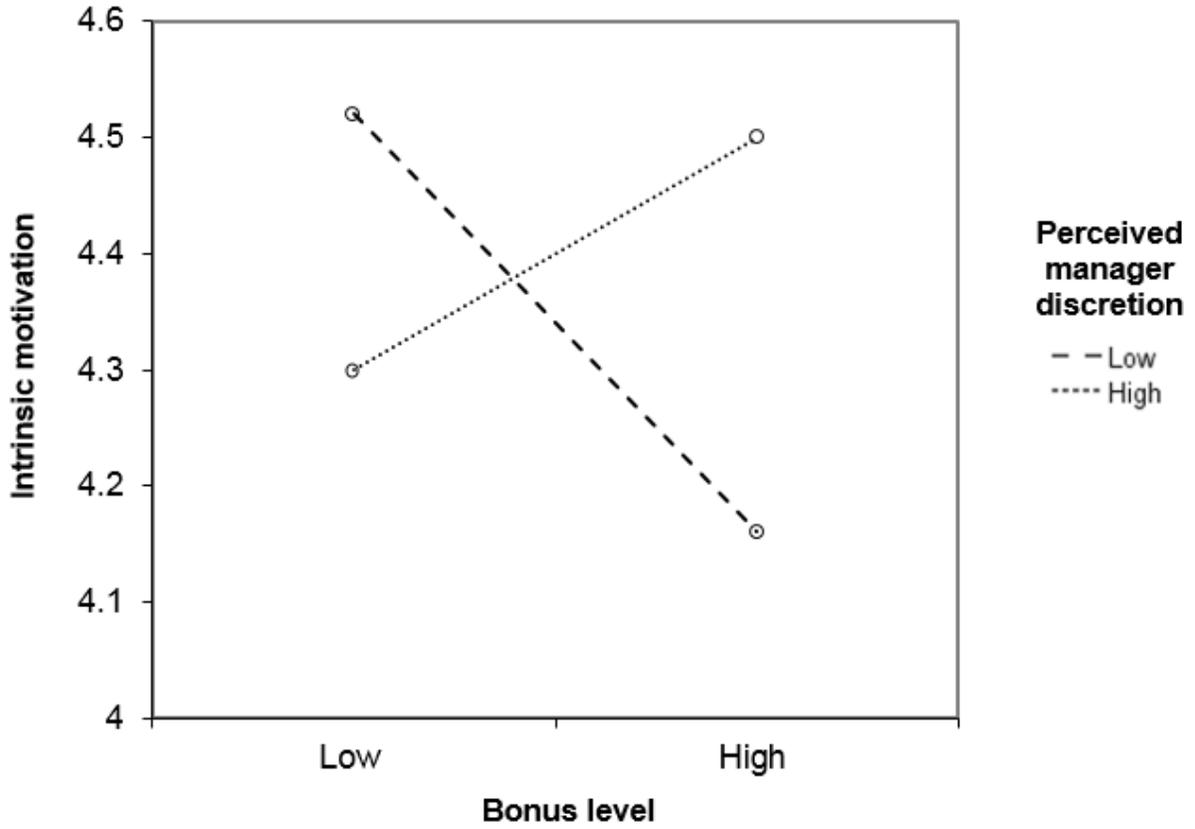
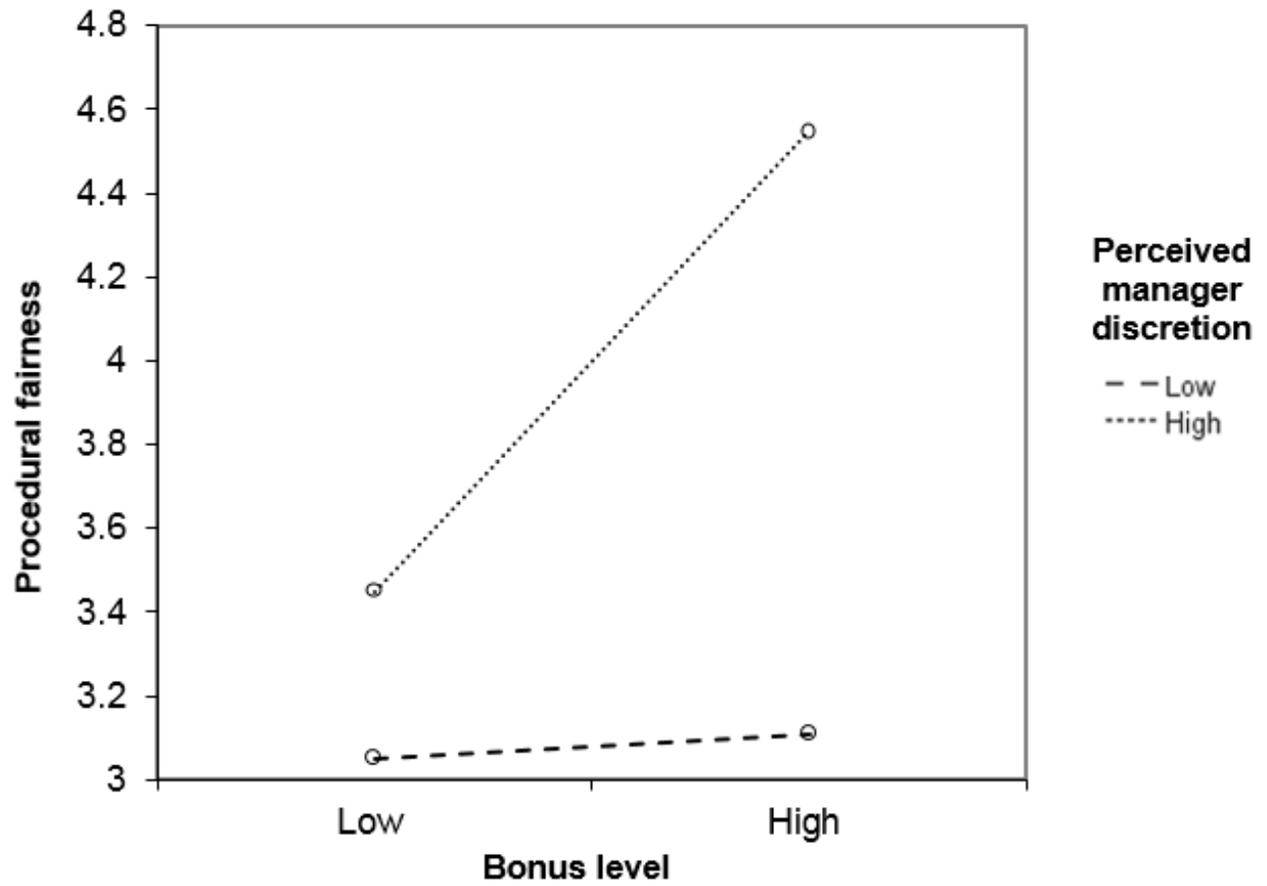


Figure 4:

Slopes of the interaction between perceived manager discretion and bonus level on procedural fairness (study 3)



APPENDIX

Scenarios for study 2

Scenario introduction (all participants)

Your job is complex, with many different facets and relationships to manage. It requires you to apply your skills and experience to make decisions, and you are often managing multiple, competing demands at the same time. This year you have faced some challenges. One major project could not be delivered on time because of problems with one of the suppliers. You worked hard to try to solve the problems, and the project did get delivered but it was later than planned and over budget. You also had some challenges in your team because one of the people that you manage was under-performing, which had implications for the performance of the whole team and some things got missed as a result. You have worked hard to improve the performance of that team member; giving them honest performance feedback and providing them development opportunities, and their performance is improving. You have kept your manager informed about the challenges and discussed your approach to dealing with them throughout the year. Your manager has given you support and guidance to help you to deal with these issues.

Your organization operates a performance bonus scheme, which provides you with a cash bonus to recognize your individual performance on the job. Staff are eligible for a bonus if their performance is above the mid-point in the performance scale; the better the performance, the bigger the bonus. Bonuses are paid once a year, to recognize performance for the year gone by. Your manager is responsible for deciding on the performance rating and bonus that you receive, within the boundaries of the bonus policy.

High manager discretion

Your bonus is decided by your manager - and only your manager - based on their overall impression of your individual performance. Your manager's evaluation can include multiple factors including the way that you managed and overcame difficulties during the year, and their general impression of your performance on the job, as well as what you delivered. Your manager has the discretion to allocate whatever level of bonus he decides to the people that he manages. Only your manager decides on the amount of bonus you receive as it is believed that he is the most knowledgeable about the work that you do and the challenges that you faced along the way so is the best person to make that evaluation.

Low manager discretion

Your bonus amount is based solely on an evaluation of performance criteria, which is applied to everyone in the same way (although the criteria are specific to the jobs that people do). These criteria take into account what you deliver throughout the year and no more information. Your bonus amount is decided by your manager based only on these objective criteria. Your manager gives a mark to each criteria based on what you have delivered, and then gives you an overall performance rating based on the mean of these criteria. This performance rating is then directly mapped to the amount of bonus that you will receive, as a percentage of your base salary. The director responsible for your area reviews the bonus decisions across the department to ensure that criteria are applied in the same way. The goal is to remove any potential bias.

Incentive condition

You received a low bonus. OR You received a high bonus.

NOTES

ⁱ Prior research has primarily operationalized manager discretion based on a calculation of the amount of variance in incentive allocation unaccounted for by objective measures (such as financial outcomes, sales targets, call center process indicators, e.g. Prendergast & Topel, 1993; Trevor et al., 2012; Voußem et al., 2016). This assumes, firstly, that employees are aware of the variance and, secondly, that they interpret this variance in the same way. In fact, we know that employees often make idiosyncratic interpretations of HR practices (Nishii, Lepak & Schneider, 2008), which is particularly the case as this variance could be accounted for by multiple factors (Trevor et al., 2012). Employees might believe, for example, that variance in incentive allocation is due to incomplete measurement in productivity, or a willful decision by the manager to account for subjective performance information, or rather intentional or unintentional bias on behalf of the manager.

ⁱⁱ Autonomous motivation is commonly operationalized through a composite of intrinsic and identified motivation (for recent discussions see Deci et al., 2017, and Gagné et al., 2015), based on the theoretical proposition that these forms of behavior regulation are both experienced as self-determined (Ryan & Connell, 1989).

ⁱⁱⁱ In the experimental condition in Study 2 the manipulation for high manager discretion said that the “manager’s evaluation can include multiple factors” (see appendix), but this was not mentioned in the low manager discretion condition. To discount the potential that this manipulation confounded the range of performance factors with manager discretion we re-ran the experiment with 102 MBA students with a small amendment to the manipulation to emphasize in both conditions that multiple performance indicators could be accounted for. The results were replicated in that the interaction between bonus level and manager discretion on procedural fairness was $F = 4.15$ ($p = .06$). This marginally stronger relationship indicates that, while the number of performance factors taken into account does influence perceptions of manager discretion, it is only one factor and therefore distinct from the more global perception which we are concerned with here.