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Pay Transparency as a Moving Target: A Multi-Step Model of Pay Compression, I-Deals, and Collectivist Shared Values

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**PAY TRANSPARENCY AS A MOVING TARGET:
A MULTI-STEP MODEL OF PAY COMPRESSION, I-DEALS, AND
COLLECTIVIST SHARED VALUES**

ABSTRACT

Drawing from research on the transparency-privacy dilemma in management, we theorize that firm-level pay transparency elicits a multistep process involving managers and employees that shifts the dispersion in remuneration from more to less observable forms, thus making pay transparency a “moving target.” We posit a serial indirect effect of pay transparency on firm-level rates of i-deal grants (a less observable form of remuneration) via variable pay compression and heightened rates of employee i-deal requests, with this indirect effect amplified in firms characterized by collectivist shared values. First examining the role of managerial agency and collectivist shared values in the pay transparency–compression relationship in a simulation-based experiment, we test the overall model in a multisource field study using a sample of 111 medical device distribution firms. Our findings demonstrate that: (a) firm-level pay transparency is predictive of greater pay compression, (b) firm-level rates of i-deal grants are largely explained by this pay compression via its effects on employee i-deal requests, and (c) this sequential effect is amplified in firms with more collectivist shared values. Accordingly, we explicate how transparency triggers unintentional hiding, and suggest that accompanying more transparent pay may be an increased reliance upon rewards that, by their very nature, are less transparent.

Keywords: compensation; pay transparency; pay compression; pay dispersion; idiosyncratic deals

Pay transparency refers to a pay communication policy in which a firm voluntarily discloses information regarding pay practices and/or actual pay levels/ranges to its employees, and/or allows employees to discuss pay-related information with other employees inside the firm (Arnold, Fulmer, Sender, Allen, & Staffelbach, 2018; Marasi & Bennett, 2016). Pay transparency facilitates employees’ understanding of the basis of their firms’ pay systems (Belogolovsky & Bamberger, 2014) and how their pay stacks up relative to their colleagues (Fulmer & Chen, 2014). Globally, enterprises are increasingly aspiring to share pay information (e.g., ranges, medians) with individual employees (Payscale, 2021), and policymakers around the world are looking to regulate pay communications as a means by which to reduce gender and ethnic-based pay disparities (Bamberger, 2023).

Research on pay transparency has, to date, primarily focused on its impact on a variety of employee behavioral responses such as task performance (Belogolovsky & Bamberger, 2014),

turnover (Alterman, Bamberger, Wang, Koopmann, Belogolovsky, & Shi, 2021), helping (Bamberger & Belogolovsky, 2017), and counterproductive workplace behavior (SimanTov-Nachlieli & Bamberger, 2021). However, such research offers a rather one-sided perspective on the implications of pay transparency as it focuses largely on the response of the *observers* (i.e., the party receiving the information—employees), neglecting the potential response of the *observed* (i.e., the party accountable for remuneration decisions—managers). As Bernstein (2017) suggests, this is problematic in that, moving towards greater transparency is often accompanied by heightened privacy concerns among the observed, and as a result, an effort on their part to protect their privacy through hiding. To the extent that transparency may elicit such hiding, that is, an effort to actively “conceal anomalies” (Bernstein, 2017: 237), Bernstein (2017: 230) suggests that transparency itself can become a “moving target,” with the object of transparency (e.g., differentials in remuneration) shifted from more to less observable forms. Indeed, based on his extensive review of the literature, Bernstein (2017: 237) concludes that, “when it comes to a battle between transparency and hiding, human ingenuity tends to defeat even the best system design ... [such that] increased transparency can actually decrease the observer’s accurate awareness of the observed.”

Despite decades of research across a wide range of fields indicating a positive association between transparency and hiding (Bernstein, 2017), whether, how, and when *remuneration-related* transparency may be accompanied by hiding has yet to be explored. We address this gap by extending, operationalizing, and testing the principles at the core of the transparency-privacy model (Bernstein, 2017) with respect to pay transparency, and integrating it with research on compensating wage differentials theory (CWD; Rosen, 1974, 1986) and social comparison theory (e.g., Bamberger & Belogolovsky, 2017; Gibbons & Buunk, 1999). We extend this

transparency-privacy model by specifying its potential firm-level implications and exploring the process by which transparency may generate the shifting of differentials in remuneration from forms made more *observable* as a result of transparency, to those rendered less observable. We do so by explicating and testing a *three-step process* by which firm pay transparency culminates in higher firm rates of non-monetary idiosyncratic deals (i-deals)—individualized employment terms accommodating specific personal needs not shared by others (Rousseau, 2005). In contrast to the perspective proposed by Bernstein (2017: 237) which presents the observed’s hiding as a *direct* response to transparency in an effort to actively “conceal anomalies”, we propose and test the idea that, when it comes to remuneration, such concealment occurs *indirectly*, the result of a series of interconnected and practical (rather than intentionally deceptive) actions on the part of both managers and employees.

Bernstein’s (2017) model suggests that pay transparency likely reveals differences in pay among employees with similar job levels that may be perceived by observers as problematic anomalies. We propose that managers may seek to avoid potential controversy associated with perceived anomalies by reducing dispersion in observable rewards (Mas, 2017), resulting in firm-level pay compression. With observable differences in pay compressed (*step 1* in this process), we propose that *step 2* involves a response by employees to shift any requests for remuneration adjustments to less observable forms, as doing so may be perceived as increasing the likelihood that such requests will be granted. Non-monetary i-deals (e.g., extra vacation days, additional training) offer a means for doing so. We extend the transparency-privacy model by integrating research on CWD, which suggests that unattractiveness in one dimension of the effort-wage bargain can be offset by attractiveness in another (Rosen, 1974, 1986), arguing that transparency-induced pay compression results in higher rates of firm-level i-deal requests.

Finally, as i-deal requests are a primary antecedent for i-deal grants (Ho & Tekleab, 2016), we propose that the *granting* of these requests serves as *step 3*, with higher firm-level *rates* of i-deal grants suggesting the potential for managers to “hide” reward dispersion.

Building on Bernstein’s (2017: 237) notion that “increased awareness of being observed triggers an increased desire for privacy,” we suggest that organizational contexts that create an awareness or sensitivity to being observed may amplify the transparency-hiding linkage. We draw from social comparison research, which demonstrates that collectivist norms represent a critical contextual factor encouraging individuals to closely observe and monitor their peers (e.g., Bamberger & Belogolovsky, 2017; Gibbons & Buunk, 1999), to consider firm-level differences in collectivist shared values as a potential conditioning factor. Accordingly, we examine how, in firms characterized by high collectivist shared values, managers may have a heightened incentive to compress observable reward differentials, and employees may be more likely to respond by requesting less observable forms of equity-based adjustments such as i-deals.

----- **Insert Figure 1 about here** -----

We first test the causal linkage between pay transparency and manager’s pay compression decisions in a simulation-based experiment. We then test the overall, compression-mediated model in a field study of 111 firms. Our findings offer several contributions to the literature on transparency in general, and pay transparency in particular, as well as to the literature on i-deals. First, we extend the transparency-privacy model by applying it to one of the most contentious domains of organizational transparency, remuneration. In doing so, we explicate and empirically demonstrate a multi-step process by which the concealment of differential remuneration (in the form of heightened rates of i-deal-grants) in more pay transparent organizations is likely to transpire. This is important, because by demonstrating an indirect effect of pay transparency on rates of non-monetary i-deal grants, our study suggests that rather than potentially mitigating

disparities in remuneration, more transparent pay practices may, consistent with Bernstein's (2017) notion of transparency as "a moving target", facilitate a shifting of such disparities into forms that are less observable and hence less subject to regulation and control. It is also important in that higher rates of i-deals can have robust implications on non-tangible costs and hence, enterprise profitability (Lee, Bachrach, & Rousseau, 2015; Rousseau, 2005, 2006). As Lee and colleagues (2015: 797) noted, "bargaining individually with employees can be costly to employers not only because of the terms of [the resulting] individual contracts, but also because of the social and administrative burdens special deals create." Additionally, it is important because the indirect effects of pay transparency on i-deal grant rates that we demonstrate highlight the role that *observers* (employees) may have in the process, leading the *observed* (managers) to shift differential rewards to less observable forms such as i-deal grants.

Second, we know little about the inter-organizational variance in i-deals (for an exception, see Lee et al., 2015) as i-deal research has predominately focused on how individual attributes and perceptions affect employees' tendencies to seek special employment resources for themselves (Rosen, Slater, Chang, & Johnson, 2013). Our research contributes to our understanding of i-deals by offering insight into two factors potentially underlying the variance in rates of i-deals across firms, namely: (a) the role of firm-level differences in transparency and pay compression in explaining such variance, and (b) the role of collectivist shared values in amplifying these effects.

Regarding the former point (a), we extend i-deal research by demonstrating how, and explicating the process by which, a broad pay administrative policy (pay transparency), can explain variation across firms in rates of i-deal granting. Regarding the latter point (b), we extend Bernstein's (2017) model by isolating an important firm-level boundary condition, collectivist

shared values, having the potential to amplify these effects. Intuitively, one would expect that in ambient contexts characterized by such values, employees would make personal interests secondary to group harmony and collective interests, thus attenuating any indirect effect of transparency on rates of i-deal requests and hence grants. However, we posit and show that such conditions in fact *amplify* this indirect effect thus reinforcing the concealment of disparities in remuneration and demonstrating a potential unintended negative consequence of collectivist shared values.

THEORETICAL BACKGROUND AND HYPOTHESES

Firm Pay Transparency and Firm-Level Reward Outcomes

Pay transparency policies and practices vary across firms along three facets (e.g., Fulmer & Chen, 2014). The first two facets involve the distribution of pay-related information reflecting the processes and criteria by which pay is determined (i.e., *procedural pay transparency* or *pay process transparency*) and/or information regarding actual rates of pay (i.e., *distributive pay transparency* or *pay outcome transparency*). The third aspect involves the relaxing of restrictions on employees' ability to share pay information among colleagues, commonly referred to as *pay communication transparency*. The combination of these three aspects of pay transparency reflects a firm's overall approach to pay communication, and can be considered in terms of a continuum ranging from almost total secrecy to complete transparency (Alterman et al., 2021; Colella, Paetzold, Zardkoohi, & Wesson, 2007).

Findings regarding the consequences of pay transparency have been equivocal. On the one hand, research has found pay transparency to be associated with higher employee satisfaction (Futrell & Jenkins, 1978). Additionally, pay transparency enhances understanding of the nature of performance–pay contingencies (Belogolovsky & Bamberger, 2014), facilitating employees' ability to more accurately comprehend the degree to which any incremental increase in

performance level will be accompanied by a larger incremental return, and thus potentially boosting individual task performance (Bamberger & Belogolovsky, 2010; Belogolovsky & Bamberger, 2014). On the other hand, studies indicate that pay transparency may raise employee privacy and social concerns (Smit & Montag-Smit, 2018, 2019), facilitate upward comparison and envy such that employees may be less likely to provide unsolicited help to higher-paid colleagues (Bamberger & Belogolovsky, 2017), and, under certain conditions, even increase employee turnover (Alterman et al., 2021; Card, Mas, Moretti, & Saez, 2012).

In contrast to these direct *employee* responses to pay transparency, we know little about how it affects those whose decisions are ultimately made more observable—the managers making reward-related decisions, and how such decisions may impact the allocation of organizational rewards overall. With pay transparency demonstrated to reduce gender pay gaps (Bennedsen, Simintzi, Tsoutsoura, & Wolfenzon, 2019), enhance employee trust in management (Alterman et al., 2021), and boost employee perceptions of fair pay practices (Alterman et al., 2021; SimanTov-Nachlieli & Bamberger, 2021), conventional theories such as the fair process effect (Folger & Konovsky, 1989) might suggest that pay transparency leads employees to place more faith in the fairness of managerial reward decisions, and thus reciprocate by broadly accepting these decisions. This, in turn, could conceivably give managers greater flexibility to structure rewards as they deem fair and equitable, allowing them to *openly* widen reward differentials between low and high contributors without concern that such allocations might breed controversy and with less pressure to grant more discreet, particularistic arrangements. However, Bernstein's (2017) recent review of the organizational transparency literature suggests that there may be little basis for expecting such an auspicious outcome. Rather, the transparency-privacy model emergent from his review suggests that transparency is likely to result in hiding

behavior on the part of managers whose remuneration-related decisions, by virtue of pay transparency, become more observable.

The Transparency-Privacy Model and Its Implications for Pay Transparency

Bernstein's (2017: 218) review suggests that there has been an overwhelming focus on what transparency does to, or for, the observer, in terms of facilitating their learning and control. Paralleling that, however, is the tendency to "obscure observation's impact on the observed" (Bernstein, 2017: 218), and in particular, to neglect how the observed responds to being observed by taking steps to control their own degree of observability (i.e., hiding). Synthesizing the literatures on privacy and transparency—two literatures which Bernstein (2017) claims talk past each other—he argues that, "when we are the object of transparency rather than the recipient of it...we may more acutely feel the risks of learning and control rather than their benefits" (Bernstein, 2017: 219). Integrating the history of observation and transparency in management with centuries of accounts suggesting that people have a definite "preference for privacy" (Bernstein, 2017: 236), Bernstein's argument reinforces the accuracy of Rousseau's (1762/1974, as cited in Bernstein, 2017: 229) observation from 250 years ago, namely that "transparency practices may, 'instead of exposing frauds, only conceal them; for prudence is never so ready to conceive new precautions as knavery is to elude them.'" In other words, while transparency may be a useful tool by which to "reveal anomalies," those whose behaviors or decisions are subject to greater observability by virtue of the imposition of transparency, "adapt by changing their behavior to conceal those anomalies" (Bernstein, 2017: 237). Using the research literature as his evidence, Bernstein (2017) presents a compelling framework proposing that with transparency increasing one's awareness that others are watching, or in other words, the saliency of one's visibility to others, the response of the observed is to hide; behavior which ultimately obfuscates progress towards the overarching objective of transparency—to facilitate observers' learning and

control.

Applied to rewards management, Bernstein's (2017) framework broadly suggests that, rather than addressing anomalies in their pay-related decisions potentially exposed by virtue of pay transparency, transparency motivates managers to engage in behaviors allowing them to effectively conceal or hide these anomalies. Despite the intriguing nature of this proposition, Bernstein (2017) stops short of describing how such hiding unfolds and manifests in organizations. In the sections below, we extend this broad proposition to the realm of rewards management, offering a detailed model of a three-step process by which pay transparency may paradoxically drive the dispersion in firm-level rewards into less observable forms, or as predicted by Bernstein, "move" the very target aimed at by pay transparency initiatives.

Step 1: Firm Pay Transparency and Variable Pay Compression

Pay dispersion is defined by Shaw (2014: 522) as "differences in pay levels between individuals within (i.e., horizontal or lateral dispersion) and across (i.e., vertical dispersion) jobs or organizational levels", with pay compression relating to a relative absence of such differentiation. While vertical or cross-level dispersion is largely a function of market forces and the relative value of jobs to the firm, horizontal (i.e., within-level) dispersion is typically a function of individual performance. Further, while some of the within-job variance in pay may stem from merit-based adjustments to base pay (i.e., the fixed portion of the effort-wage bargain that represents the stable, agreed-upon amount an individual is paid for the performance of work duties; e.g., salary), in many jobs, the bulk of within-level dispersion is manifested in terms of variable, or performance-contingent remuneration such as incentives and bonuses (Gerhart & Fang, 2014). Accordingly, our theorizing revolves around performance-based or variable pay, and more specifically, around the degree of *within*-level variability in variable pay.

Although employee performance serves as the espoused determinant of performance-

contingent or variable pay, studies (e.g., Trevor, Reilly, & Gerhart, 2012) reveal that variation in employee variable pay is often unexplained by productivity-relevant inputs. As managers play a fundamental role in determining the magnitude of employees' variable pay, their behavior may serve as a reasonable alternative basis for such variation (Berger, Harbring, & Sliwka, 2013). For instance, managers not only play a central role in evaluating employee performance, they also determine whether and how any variance in evaluated contribution should be reflected in reward differentials. Managers can influence the variance in incentive intensity (i.e., the degree to which total compensation is driven by performance) as well as reward dispersion (i.e., the spread of bonus amounts or the size of differentials in tournament-based awards as in a sales contest). Because of their direct influence over their subordinates' variable pay, managers can directly shape the nature of horizontal pay dispersion within their units or firms with such pay being more dispersed in some units/firms and more compressed in others (Berger et al., 2013).

Pay transparency may deter managers from rewarding higher performers with relatively higher pay because wider differentials in variable pay, when visible to all, have the potential to elicit controversy (Nickerson & Zenger, 2008), thus motivating managers to allocate rewards more equally (Bartol & Martin, 1989; Leventhal, 1976; Leventhal, Karuza, & Fry, 1980; Leventhal, Michaels, & Sanford, 1972). Indeed, while there is strong evidence that justifiable pay differentials can enhance team or organizational performance (Trevor et al., 2012), there is equally strong evidence that managers tend to overweight the costs of subordinate-perceived pay disparities and the controversy, conflict, and complaints they may elicit relative to their potential benefits (i.e., positive sorting) (Golman & Bhatia, 2012; Grund & Przemeczek, 2012). Logically, to the extent that pay transparency makes these differentials more widely observable, it is likely to intensify this overweighting by managers of the costs of any perceived disparities, generating or

reinforcing a tendency towards compressing pay differentials, and thus resulting in a higher degree of firm-level pay compression. As noted by Nickerson and Zenger (2008: 1435), “by adopting uniform compensation, managers essentially avoid issues of distributive justice.”

Recent research suggests that, consistent with the logic above, those responsible for making pay allocation decisions are highly sensitive to potential controversies stemming from the enhanced visibility of pay, opting to mitigate such controversy by compressing pay differentials in response to heightened levels of pay transparency. For example, examining the causal impact of shifts in pay visibility on city administrators’ pay in California municipalities, Mas (2017) reported that managers in municipalities implementing pay transparency practices experienced a 7% relative reduction in average compensation. Similarly, Ohlmer and Sasson (2018), exploiting an October 2007 decision of Norway’s tax authority to allow all citizens to access the tax records of others online, examined the impact of a country-wide policy shift in pay outcome transparency on the change in wage dispersion over time (from 2008 to 2012). They found that, compared to the dispersion of wages in Norway prior to the 2007 transparency intervention, between 2008 and 2012, pay dispersion declined by 1.4 percentage points, equivalent to a total decline of 5.7% in national pay dispersion. Accordingly, we posit:

H1: Firm-level pay transparency is positively associated with variable pay compression.

Step 2: Variable Pay Compression and Firm-Level Rates of I-Deal Requests

Research indicates that variable pay compression can generate higher turnover intentions by making strong contributors feel undervalued (d'Ambrosio, Clark, & Barazzetta, 2018; Shaw, 2014). However, the effects of pay compression on turnover and turnover intentions may not be restricted to *objectively* strong contributors. They may also extend to those who simply *perceive* themselves to be strong contributors and thus feel unfairly rewarded when pay is less dispersed. Indeed, meta-analytic evidence indicates that distributive justice *perceptions* account for 16% of

the variance in employee withdrawal (Colquitt, Conlon, Wesson, Porter, & Ng, 2001), and a robust, positive association between pay compression and voluntary turnover has been demonstrated even among objectively average performers (Shaw & Gupta, 2007). Accordingly, pay compression may elicit those deeming themselves under-rewarded to seek redress, including going so far as seeking alternative employment (Akerlof, 1982; Akerlof & Yellen, 1990).

However, given the risks associated with switching employers, these same individuals may at least initially seek an equity-based adjustment in their remuneration (i.e., “voice”) (Hirschman, 1970). Of course, just as pay compression may heighten the interest of many employees to request an equity-based adjustment in their remuneration, it is almost by definition also associated with a lower probability of the request being granted, as any such granting would operate to increase rather than reduce pay dispersion. Accordingly, consistent with CWD theory (Rosen, 1974, 1986), pay compression is likely to motivate employees to look for reward adjustments on the basis of some alternative form of remuneration that managers may be more likely to grant, such as a non-monetary i-deal. CWD theory proposes that the net advantages of different jobs tend towards equality with remuneration advantages in one form compensating for disadvantages in another (Smith, 1937; Smith, 1979). Based on this logic, CWD researchers have theorized and demonstrated that employees are open to alternative forms of remuneration (e.g., compensation, benefits, or employment arrangements) that yield roughly equivalent levels of utility (Ehrenberg, 1980; Mas & Pallais, 2017; Smith, 1979).

I-deals reflect voluntary and personalized agreements successfully negotiated between employees and their employers with potential benefits for both parties (Rousseau, 2005; Rousseau, Ho, & Greenberg, 2006). Organizations have increasingly adopted i-deals as an important component of a total compensation strategy that allows more flexibility in rewarding

employees. For instance, in Europe, i-deal prevalence has increased from 25% to 75% in the past decade (Marescaux & De Winne, 2016; Raets, 2019). While various forms of i-deals have been proposed, we focus on those relating to skill and career development (*developmental i-deals*; Hornung, Rousseau, & Glaser, 2008, 2009) and additional benefits (*benefit i-deals*; e.g., supplemental health insurance) often left unspecified in the formal employment contract¹. These two types of non-monetary i-deals may be particularly relevant in contexts in which managers are constrained in their ability to adjust existing pay structures, or offer additional or one-time variable pay as such i-deals, if granted, can offer substantial utility from the employee perspective. For instance, developmental i-deals can put an employee in an advantageous career position, while benefit i-deals may offer a tax-free means by which to boost one's total reward.

Particularly in the context of transparency-induced pay compression, employees may—for several reasons—deem a request for a non-monetary i-deal more likely to be granted than a request for a pay adjustment. First, they are particularistic, thus making cross-employee comparisons difficult. Second, they are discreet, thus coming in “under the radar” even in contexts in which pay is more transparent. As Rousseau (2001: 263) noted, “the idiosyncratic arrangement is often like an iceberg, most of which is invisible below the waterline. Its existence is seldom made public and reflects local arrangements between workers and managers”.

The notion that transparency-induced pay compression may increase employee motivation to request non-monetary i-deals, and hence, the firm-level rate of i-deal requests, is supported by findings in two literatures. First, CWD research has consistently found that employees are often willing to accept less favorable pay conditions when, in their stead, they are offered enhanced

¹ We exclude other common forms of i-deals such as task (e.g., changes to the job content), work schedule, and location from our analysis because requests for such i-deals may be less relevant in sales positions, the empirical referent for the current study.

fringe benefits (Aflac, 2016; Hallock, 2012; Olson, 2002; Rosen, 1986; Villanueva, 2007).

Second, research on i-deals suggests that workers, “seek out...i-deals as a means of compensating for undelivered organizational rewards” (Hornung et al., 2009: 755). Accordingly, with i-deals being perceived by employees as a potential means by which to restore equity in organizations characterized by more compressed variable pay, based on the logic of summation (Coleman, 1990)², we posit that i-deal request *rates* are higher in firms characterized by more compressed variable pay, or in other words:

H2: Variable pay compression is positively associated with firm-level rates of employee i-deal requests.

The proposed association between pay transparency and pay compression further suggests:

H3: Firm-level pay transparency is indirectly associated with firm-level rates of employee i-deal requests via variable pay compression.

Step 3: From Firm-Level Rates of I-Deal Requests to Firm-Level Rates of I-Deal Grants

We propose that the final step linking pay transparency to concealing remuneration occurs as firms characterized by higher levels of transparency-based pay compression are confronted with higher rates of employee i-deal requests. When i-deal requests are elicited by heightened levels of transparency-based pay compression, the granting of these requests represents the potential shifting of what was once *observable* dispersion in remuneration to more *discreet* forms.

Research indicates that i-deals, as specialized arrangements, are typically negotiated on the basis of *employee-initiated i-deal requests* (Ho & Tekleab, 2016; Laulié, Tekleab, & Lee, 2019; Lee et al., 2015), or in other words, efforts of individual workers “to obtain personally

² This logic of summation is the basis for the additive approach in microfoundational research. It is applicable in the current case in that organizational rates of individual behavior capture a situation in which, by definition, “aggregation is simple and additive” (Barney & Felin, 2013: 145). For additional examples of the application of the additive approach, see page 146 of Barney and Felin (2013).

meaningful and valued employment conditions” (Lee et al., 2015: 795). But because i-deals require employers to “manage divergent arrangements among their workers,” managers may be hesitant to initiate such non-standard employment arrangements (Lee et al., 2015: 794). Indeed, i-deals can be complex for organizations to negotiate and costly for them to administer. Nevertheless, when their pay-related decisions are subject to greater observability, managers may be willing to incur such costs, deeming such non-standard arrangements the lesser of evils. Indeed, granting employee i-deal requests might offer the most prudent means by which to avoid the costs of compressed pay noted earlier—reduced motivation and negative sorting (Gerhart & Rynes, 2003; Gerhart, Rynes, & Fulmer, 2009). Empirical findings are consistent with this notion, with Ho and Tekleab (2016) reporting that half of the variance in i-deal grants is *directly* explained by employee i-deal requests. Based on this reasoning, and again building on the logic of summation (Coleman, 1990), firm rates of employee i-deal requests likely serve as a pre-requisite for firm rates of i-deal grants, thus leading us to propose:

H4: Firm-level pay transparency is indirectly associated with firm-level i-deal grants via variable pay compression and firm-level rates of employee i-deal requests.

The Moderating Role of Firm-Level Collectivist Shared Values

As pay transparency does not, in and of itself, assume individual awareness of (or interest in) the observability of pay information, we extend our model by considering contexts potentially moderating the sequential indirect effect of pay transparency on hiding. Extending Bernstein’s (2017) notion that conditions of heightened observability promote the desire to hide, we leverage findings from social comparison research suggesting that ambient contexts characterized by collectivist values engender situations likely heightening members’ sense of, and sensitivity to, observability (e.g., Bamberger & Belogolovsky, 2017; Gibbons & Buunk, 1999). Hence, we propose that firm-level contexts reflecting more collectivist shared values amplify the

transparency-hiding linkage.

Research on social comparison (e.g., Goodman & Haisley, 2007; Long & Nasiry, 2020) suggests that employee interest in the remuneration of their peers, or, the intensity of employee social comparison tendencies, rather than being universal, is often context-contingent and can vary from one firm to the next. In other words, individuals have varying levels of interest in soliciting comparative information, with those holding stronger collectivist values paying closer attention to, and engaging in, social comparison more intensively (Buunk & Gibbons, 2007; Gibbons & Buunk, 1999; White & Lehman, 2005). Collectivist values denote employees' extra-individual orientation, and thus an overarching concern with relationships, roles, and social duties (Heine, 2001; Triandis, 2018; Wagner & Moch, 1986). Although intuitively, strong collectivist values would suggest that employees prioritize working together with, and paying attention to the needs of, others (Clark, Oullette, Powell, & Milberg, 1987), such interdependence also demands fitting in with socially prescribed roles, standards, and duties, and thus requires comparison with others and the need to intensively monitor one's own state relative to that of others (Heine, 2001). To that point, research has consistently demonstrated more intensive social comparison and peer monitoring among those holding more collectivist values (Bamberger & Belogolovsky, 2017; Gibbons & Buunk, 1999; White & Lehman, 2005).

Research also indicates that over time, whether due to attraction-selection-attrition, social information processing, or other factors, unit members' values can become more shared and homogenized (Nahum-Shani & Bamberger, 2019; Salancik & Pfeffer, 1978). This may elicit an ambient context reinforcing employees' tendencies to compare against and monitor one another as a means by which to ensure the prioritization of the collective over the individual. To the extent that employees in firms characterized by shared values that are more collectivist in nature

may more intensively and regularly engage in social comparison and place a higher degree of saliency on any comparative pay information available to them, we consider firm-level differences in collectivist shared values as a potential conditioning factor. Firms characterized by high (vs. low) collectivist shared values experience heightened observability due to greater monitoring between individuals, such that social comparison underpins observability and the salience of others' standing. In particular, with employees in such firms likely to pay greater attention to, and place greater salience on, pay information when it is more transparent relative to firms in which pay is no less transparent but characterized by less collectivist shared values, managers' motivation to diminish differentials in remuneration is greater, as is the interest of employees to solicit any remuneration adjustment in a manner offering minimal observability.

With respect to the conditioning effect of collectivist shared values on the association between pay transparency and pay compression, we propose that with collectivist shared values associated with more intense and salient social comparisons by employees, contexts characterized by such values are likely to heighten managers' sense of transparency-driven observability. Bernstein (2017) suggests that any sense of heightened observability leads to "a desire to impose boundaries on observation", particularly when such observability may elicit controversy. In other words, firm-level collectivist shared values impose a context in which the risk of controversy over pay differentials is heightened. Precisely in such contexts, such differences are likely to be more salient to employees who are thus also more vigilant and cognizant of them. Accordingly, when pay transparency is applied in contexts with more collectivist shared values, managers are likely to have an even greater motivation to reduce observable differences in remuneration, thus eliciting greater pay compression, or in other words:

***H5a:** Firm-level collectivist shared values moderate the effect of firm-level pay transparency on variable pay compression, such that this positive relationship is amplified*

among firms characterized by more collectivist shared values.

A second implication of higher (lower) firm-level collectivist shared values is that variable pay compression may have stronger (weaker) effects on the prevalence of employee efforts to secure remuneration adjustments in the form of i-deals. Specifically, in contexts characterized by more collectivist shared values, the heightened intensity and salience of social comparisons is likely to increase employees' sensitivity to the observability of any reward adjustment aimed at addressing any perceived inequity stemming from pay compression. This is a somewhat counter-intuitive notion in that, as already noted, in contexts in which collectivist shared values dominate, organizational members are likely to place their personal interests secondary to their collective interests. Accordingly, in work contexts characterized by *less* collectivist shared values, one might expect employees to be more focused on restoring *individual* equity than in work contexts characterized by *more* collectivist shared values. However, research suggests that in contexts characterized by more collectivist shared values, employees are no less (and in some cases *more*) sensitive to perceived pay inequities (Allen, Takeda, & White, 2005; Chiang & Birtch, 2007; Wheeler, 2002). This may be because, with "collectivists preferring a more egalitarian allocation of rewards" (Wheeler, 2002: 615), precisely in such contexts, equality in contribution-to-reward ratios tends to be more salient, thus driving greater restorative actions aimed at restoring perceived equity (Tower, Kelly & Richards, 1997). Thus, the primary difference between firms characterized by more and less collectivist shared values is likely to lie in the *way* individuals address any perceived inequity. We posit that with their focus on harmony and group solidarity (Chiang & Birtch, 2007), in pay-transparent contexts characterized by more collectivist shared values, members will be more sensitive to the observability of particularistic adjustments made in their favor, thus amplifying their motivation to seek remuneration adjustments that are more discreet and less subject to easy comparison, with developmental and

benefit i-deals fitting the bill. This suggests that:

***H5b:** Firm-level collectivist shared values moderate the effect of variable pay compression on firm-level rates of employee i-deal requests, such that this positive relationship is amplified among firms characterized by more collectivist shared values.*

Combined, we expect that firm-level collectivist shared values will condition the multi-step process through which pay transparency promotes the hiding of differential pay in the form of heightened rates of i-deal grants. Given the heightened intensity and salience of social comparisons in firms characterized by more collectivist shared values, transparency is likely to amplify: (a) managers' motivation to mitigate controversy by diminishing observable pay differentials, and (b) employees' motivation to seek redress for any resulting perceived inequities in less observable and comparable forms such as non-monetary ideals. Accordingly, we posit:

***H6:** Firm-level collectivist shared values moderate the indirect effect of firm-level pay transparency on firm-level rates of employee i-deal grants via variable pay compression and firm-level rates of employee i-deal requests, such that this positive indirect relationship is amplified among firms characterized by more collectivist shared values.*

OVERVIEW OF STUDIES

We tested our hypotheses in an experiment (Study 1) and a multi-source, firm-level field study (Study 2)³. Although a number of studies in economics have demonstrated an association between pay transparency and compression (e.g., Cullen & Pakzad-Hurson, 2019; Obloj & Zenger, 2022; Ohlmer & Sasson, 2018), direct evidence of managerial agency in compressing pay in response to heightened observability is lacking. Thus, we designed Study 1 to assess the role of managerial agency underlying this firm-level relationship, with the prediction that pay transparency prompts managers' compression of subordinates' variable pay (H1), particularly in contexts characterized by higher levels of collectivist shared values (H5a). We then employed Study 2 to test the full model (H1-H6) and establish external validity.

³ Ethics approval for both studies was received from the University Ethics Review Board of one of the authors (reference number: HSEARS20181031001).

STUDY 1: METHOD

Sample

Participants ($N = 120$)⁴ from the U.S. and U.K. with managerial experience⁵ were recruited via Prolific. Participants were told that they will receive £2.5 for participation, with the possibility of earning up to another £2.5 depending on performance. However, upon completion, all participants received £5. The average age of participants was 44.41 years ($SD = 12.38$), 46.67% were women, and their average tenure in managerial positions was 5.20 years ($SD = 6.17$). Most participants were White (82.50%), and held a college degree or higher (63.33%).

Experimental Setting and Procedure

We conducted a pre-registered⁶ online business simulation experiment to examine managerial agency in compressing pay in response to pay transparency, as well as the moderating effect of firm collectivist shared values on this relationship. Participants were randomly assigned to one of four conditions that resulted from a 2×2 between-subjects design with pay communication policy (pay transparency vs. pay secrecy) and shared values (collectivist shared values vs. individualist shared values) as independent variables. Syntax, data, and experimental materials used in Study 1 can be found at <https://osf.io/nuvge/>.

Participants were informed that they would be randomly assigned to either the manager or employee role in a five-person online team. In fact, all participants were assigned to the manager role. They were also informed that their four “subordinates” would engage in two 3-minute rounds of online sales activity, and that the online system would use advanced machine learning algorithms to provide them with the scores of each subordinate on four sales performance

⁴ Based on a power analysis using G*Power, for a 2×2 experimental design, we would need 107 participants to detect an effect size of $f = 0.27$ (based on a pilot study), taking into account an alpha of .05 and power of .80. To account for any potential exclusions or errors, we collected data from 120 participants in total.

⁵ We applied pre-screening criteria using the managerial experience filter provided by Prolific, with participants responding to the question: “Do you have any experience being in a management position?”

⁶ Pre-registration material: https://aspredicted.org/blind.php?x=2P8_2TN

parameters (response sentiment, confidence, product knowledge, and time management).

Participants were told that after the first round, their task would be to appraise subordinates' individual performance, provide individual feedback and guidance, and allocate a bonus reward to each member based on a £10 bonus reward budget at their disposal; all while ensuring a "positive team experience". We emphasized that their subordinates would receive the bonus amount that they allocate, noting that "these bonus allocations can send important signals to team members as they go into the second performance round". In addition, participants were told that, depending on the number of subordinates meeting expected levels of customer service in the second round, they could themselves receive a bonus of up to £2.5.

While ostensibly waiting for team members to complete the first round of sales activity, participants provided demographic information. Following this, the online system displayed metrics indicating the first-round performance of each team member. To ensure that performance differences between team members were detectable, we made one team member a high performer (i.e., highest scores across all sales performance parameters). Participants were then asked to provide, via textbox, feedback, guidance, and suggestions to each subordinate as to how they might improve their performance in the next round. Participants were then asked to allocate their £10 performance-based bonus pool to their subordinates. Since the online system displayed the same set of individual performance scores to each participant, the distribution of variable pay allocated by the participant to their subordinates was entirely attributable to the participants' decision making. Upon completion of the first-round allocation, participants completed a manipulation check. Following the second round of sales activity, all participants were informed that subordinates met minimal performance standards, thus earning them their £2.5 bonus. During the experiment, two participants failed at least one of two embedded attention check

items, and one reported a suspicion that their subordinates were bogus. These three participants were excluded from the analyses, yielding 117 participants in our final sample.

Conditions

We manipulated pay communication policy (pay transparency vs. pay secrecy) and shared values (collectivist shared values vs. individualist shared values), communicating the assigned condition to participants before the first round of sales activity. In the pay transparency condition, we instructed participants that pay and performance information would be shared with all team members⁷ and team members would be allowed to discuss pay-related information with others⁸. In the pay secrecy condition, participants were informed that their subordinates would receive information regarding their own performance and bonus but not those of their peers. They were also informed that their subordinates were requested to keep their bonus confidential.

We manipulated collectivist (vs. individualist) shared values by adapting an established manipulation (Chatman, Polzer, Barsade, & Neale, 1998; see also Deng, Leung, Lam & Huang, 2017), and integrating it into the statement informing participants of their selection as manager:

You are assigned as the manager of a sales team in an organization that prides itself as a *group-based (an individualistic)* organization. In this organization, *cooperation and group work (individual effort and initiative)* are highly rewarded.

To strengthen the effects of our two manipulations, just prior to making their variable pay allocation decisions, participants were reminded of the descriptions for pay communication policy and shared values conditions in which they were operating.

Measures

Manipulation checks. To assess the effectiveness of the pay transparency (vs. pay secrecy)

⁷ Participants were informed that “*Individual bonus and performance score information is available for all team members to view if they so wish, allowing them to see how bonuses were allocated and better understand the logic you applied in making allocation decisions*”.

⁸ Participants were informed that “*Team members are free to communicate with each other on any matter—including pay—prior to initiating their second round of sales activity*”.

manipulation, we developed a six-item scale ($\alpha = .88$) to capture participants' level of agreement (1 = *strongly disagree* to 5 = *strongly agree*) with pay process transparency (“*My team members received information allowing them to understand how I allocated bonuses*” and “*My team members had a clear understanding of what I considered when making bonus decisions*”), pay outcome transparency (“*Each of my team members were able to view the bonuses I gave to their peers*” and “*Team member bonus information was available for all to access*”), and pay communication transparency (“*My team members could easily discuss their bonus with one another*” and “*My team members were encouraged to keep their bonus information confidential and not to share that information with their fellow team members [reverse-scored]*”). One-way analysis of variance (ANOVA) results showed a significant main effect for the pay transparency manipulation, $F(1, 115) = 144.70, p = .000, \eta^2 = .56$, such that $M_{\text{pay transparency}} = 4.04 (SD = .55)$ and $M_{\text{pay secrecy}} = 2.35 (SD = .93)$. We developed a two-item scale ($\alpha = .84$) to assess the effectiveness of the collectivist shared values (vs. individualist shared values) manipulation: “*In this organization, teams are cooperative in nature*” and “*In this organization, team members are quite 'we'-oriented*”. One-way ANOVA results revealed a significant main effect for the collectivist shared values manipulation, $F(1, 115) = 50.37, p = .000, \eta^2 = .30$, such that $M_{\text{collectivist shared values}} = 4.12 (SD = .82)$ and $M_{\text{individualist shared values}} = 2.81 (SD = 1.14)$. In sum, both manipulations were effective with only the obtained main effects for the checks being significant (i.e., there were no transparency \times collectivism interaction effects on either of them).

Variable pay compression. Manager participants were allocated a total of £10 to reward team members. We operationalized variable pay compression as the inverse value of variable pay dispersion, with dispersion assessed on the basis of the Gini coefficient (Donaldson & Weymark, 1980; Pfeffer & Langton, 1993), defined as:

$$\text{Gini coefficient} = 1 + \frac{1}{n} - \frac{2}{n^2 \bar{y}} (y_1 + 2y_2 + \dots + ny_n)$$

where y_1 to y_n are the bonus levels of team members arranged in decreasing order of size; \bar{y} is the mean bonus level in the team; and n is the number of team members (i.e., four). We multiplied the Gini coefficient by -1.0 as the measure of variable pay compression, such that the maximum value is 0, indicating complete variable pay compression; the minimum is -1.0, indicating absolute inequality of variable pay⁹.

STUDY 1: RESULTS AND DISCUSSION

H1 predicted that pay transparency would be positively related to variable pay compression. As shown in Table 1, the 2×2 ANOVA revealed a significant main effect of pay transparency on variable pay compression, $F(1, 113) = 18.93, p = .000, \eta^2 = .14, Power = .99$. Recalling that higher values indicate greater compression, participants (“managers”) in the pay transparency condition compressed the variable pay of their subordinates ($M = -.17, SD = .11$) significantly more than those assigned to the pay secrecy condition ($M = -.27, SD = .16$). Consistent with our theorizing, this suggests a causal effect of pay transparency on managers’ compression of subordinates’ variable pay, and thus of the role of managerial agency in influencing firm-level variable pay dispersion in response to pay transparency.

H5a predicted that collectivist shared values would moderate the effect of pay transparency on variable pay compression. The 2×2 ANOVA showed a marginally significant pay transparency \times collectivist shared values interaction, $F(1, 113) = 3.22, p = .076, \eta^2 = .03, Power = .43$ (see Figure 2). Interestingly, the interaction pattern, while not supporting our hypothesis, is consistent with the idea that collectivist (vs. individualist) shared values promote pay

⁹ There are two ways to calculate the inverse value of a number, either by multiplying the given value by -1.0 (additive inverse) or by calculating the reciprocal of the given value (multiplicative inverse). We used additive inverse because the multiplicative inverse is not possible when the denominator (i.e., Gini coefficient) is zero.

compression. While higher levels of pay compression were found in pay secrecy contexts characterized by collectivist (vs. individualist) shared values ($M = -.21$ versus $M = -.33$, difference in means = .12, $p = .005$), a similar, but smaller and non-significant difference in levels of pay compression by collectivist (vs. individualist) shared values was apparent in the pay transparency condition ($M = -.15$ versus $M = -.18$, difference in means = .03, $p = .804$).

----- **Insert Table 1 and Figure 2 about here** -----

There are limitations in our Study 1. First, our findings do not rule out the possibility that the association highlighted above could be reciprocal in nature, with variable pay compression impacting a manager's likelihood to make pay transparent¹⁰. That is, while transparency may motivate compression, managers with similarly paid subordinates (i.e., high pay compression) may also prefer to make pay decisions more transparent. Accordingly, we conducted a similar online simulation experiment to test this possibility. The results (detailed in Appendix A) failed to confirm the impact of variable pay compression on managers' pay transparency decisions. Second, given the short-term nature of participants' managerial role, our findings may not be generalizable to "real life" situations in which managers may consider the longer-term implications of compression. Further, similar to prior studies examining the transparency-compression relationship, here too we compared the effects of full transparency to full secrecy, leaving open the question of how sensitive pay dispersion may be to *incremental* differences in pay transparency. Finally, we tested only two of the six proposed hypotheses. In Study 2, we sought to assess the replicability of this positive association between pay transparency and variable pay compression in actual firms, and test the full theoretical model.

STUDY 2: METHOD

Using a multi-source study design, we collected data from medical device distribution

¹⁰ We thank an anonymous reviewer for raising this possibility.

firms in China which market, sell, and support products for device manufacturers. This sector offered four main advantages for testing our model. First, these enterprises are largely comprised of salespeople, nearly all of whom are employed at the same organizational level, perform similar sales-related work tasks, and have their performance evaluated on the basis of similar performance metrics. Thus, the sample of firms drawn from this sector provides a unique opportunity to test our hypotheses in a setting dominated by one occupation and in which nearly all variability in pay is within-level (i.e., vertical pay dispersion is negligible). Second, the majority of medical device distribution firms rely on performance-based pay systems incorporating both bonuses and sales incentives (i.e., commissions) of varying intensity to motivate their sales staff. Indeed, in nearly all firms in our sample, *variable* pay dispersion was greater than dispersion in *base* pay. That is, more than 80% of firms in our sample have a higher variable pay dispersion than base pay dispersion¹¹. Third, as these firms have a relatively low headcount, with the vast majority of employees in each firm doing nearly identical work, transparency enables employees to engage in relatively simple and straightforward comparisons, thus increasing the likelihood that we would be able to detect expected effects were they to be present. Finally, competitive conditions in the sector's primary labor market (heightening both turnover and wages) made employers in this sector highly amenable to participation in the study.

Sample and Procedure

Data were collected from participants in two phases. In the first phase, we obtained contact information for 135 medical device distribution firms in China, sending the owners or CEOs of these firms (hereafter: employers) an email with an attached questionnaire. We followed up by speaking with employers who failed to respond within several days, explaining the potential

¹¹ This estimate is based on the statistical dispersion (as measured by Gini coefficient) of each firm's base pay and variable pay. Simply put, we calculated the percentage of firms where variable pay is more dispersed than base pay.

benefits of learning more about pay transparency and its implications. Of the 135 employers, 111 agreed to participate and completed surveys (firm-level response rate = 82.22%). The average number of employees (i.e., both salespeople and non-sales related staff) per firm was 9.64 ($SD = 8.16$). As salespeople accounted for approximately 87% of firms' total headcount on average, we limited participation to sales staff. In the second phase (approximately one week later), we sent a separate questionnaire to the 805 salespeople (hereafter: employees) whose contact information we received from their employer. Of these, 645 (employee-level response rate = 80.12%) completed the questionnaires, with 3 to 15 employees responding per firm (average within-firm response rate = 87.03%). After matching responses from employers and employees, the final sample consisted of 645 employees in 111 firms. Average age of employee participants was 33.86 years ($SD = 7.24$), 336 (52.09%) were female, 92% held a college degree or higher, and average organizational tenure was 4.06 years ($SD = 2.88$).

We asked employers to report their firm's demographics, including number of employees, pay transparency, each employee's annual fixed and performance-based variable pay, and the frequency of i-deal grants in the past year¹². Among participating firms, variable pay, on average, accounted for 38.97% of employees' annual income and was given in the form of a combination of individual performance-based bonuses and incentives, with the latter adjusted by managers as a function of individual performance (e.g., size of commission contingent upon manager-assessed performance). We asked employees to report their demographics (e.g., gender, age, and tenure), collectivist values, and i-deal request frequency in the past year.

¹² Given the small size of these firms, the CEO or owner (typically the same individual) completed the employer survey in nearly all cases as they had complete and direct access to the data requested. Such individuals tend to make virtually all decisions related to the issues under investigation, with few if any viable alternative knowledgeable informants in SMEs. Indeed, scholars suggest that single-sourced data may be appropriate in SMEs, presenting few of the bias and data reliability concerns associated with single-sourced data in larger firms (Homburg, Klarmann, Reimann, & Schilke, 2012; Kull, Kotlar, & Spring, 2018; Kumar, Stern, & Anderson, 1993).

Syntax and data used in Study 2 can be found at <https://osf.io/nuvge/>.

Measures

All items used in our research were back-translated into Mandarin Chinese by bilingual experts following best practices (Brislin, 1980). As detailed below, the measurement reference period for all endogenous variables was specified as the past year.

Firm-level pay transparency (employer-rated). Following Alterman and colleagues (2021), who argue for and demonstrate the superiority of a scale integrating multiple aspects of pay transparency, we assessed pay transparency using Arnold and colleagues' (2018) 12-item scale which operationalizes pay transparency as an overarching construct tapping the three facets of pay process transparency, pay outcome transparency, and pay communication transparency. Specifically, pay components including (a) base pay (commonly known as salary or base wage); (b) pay raises; (c) individual-level variable pay (e.g., bonuses, commissions); and (d) team- or organization-level variable pay (e.g., group bonuses), were presented to employers. Employers answered three questions about these pay components: (1) how transparent their organization was with employees about the processes through which the particular pay component is determined (pay process transparency; 1 = *no transparency at all* to 5 = *very transparent*), (2) how much actual pay information the organization voluntarily discloses for the particular pay component (pay outcome transparency; 1 = *no or minimal information* to 5 = *exact individual information for all employees*), and (3) to what extent the organization allows individuals to discuss issues relating to that pay component (pay communication transparency; 1 = *formal obligation to not discuss pay with peers that would be punished in case of noncompliance* to 6 = *no communication restriction*). CFA results indicated that the three-factor model provided acceptable fit for the data (CFI = .97, TLI = .96, RMSEA = .09, SRMR = .04).

We also conducted a second-order CFA to examine whether the three components could be

used to capture a more global assessment of pay transparency. The CFA generated good fit indices for the second-order factor model (CFI = .97, TLI = .96, RMSEA = .09, SRMR = .04), and the factor loadings from the sub-scales to the second-order factor were all significant ($p = .000$) for pay process transparency (factor loading = .94; $\alpha = .95$), pay outcome transparency (factor loading = .71; $\alpha = .94$), and pay communication transparency (factor loading = .58; $\alpha = .95$). Thus, the second-order factor of pay transparency represents a more parsimonious model.

Firm-level collectivist shared values (employee-rated). Given that the prevalence of individual collectivist values in the organization sets the tone for that organization, we followed the direct consensus model approach (Chan, 1998) to consider aggregated scores (i.e., consensus) among employees' individual collectivist values as the functional relationship to specify the conceptualization of collectivist shared values at the firm level. Consistent with Jackson and colleagues' (2006: 886) view that “collectivists emphasize relationships with in-group members and prefer to exist within the bounds of the in-group”, decades of research reveal that work group preference is the key attribute of collectivism (Ho & Chiu, 1994; Oyserman, Coon, & Kemmelmeier, 2002; Triandis, 2018). Following this approach, we used Wagner and Moch's (1986) scale of collectivist values, in that it was specifically designed to capture employees' orientation towards working with others. More specifically, it asks employees their degree of agreement (1 = *strongly disagree* to 7 = *strongly agree*) with three statements such as: “*I prefer to work with others in my workgroup rather than to work alone*” and “*I like it when I work with others all the time, rather than members of my work group doing things on their own*”. We used two of these items and the multilevel CFA for the two-item scale¹³ indicated a satisfactory fit (CFI = .98, TLI = 1.00, RMSEA = .00, SRMR_{within} = .01, SRMR_{between} = .05). The reliability of

¹³ For an explanation regarding why we used only two (of the three original) items, see Appendix B.

this two-item scale was .74 at the within-level and .95 at the between-level. We assessed the level of support for operationalizing firm-level collectivist shared values on the basis of latent aggregation of collectivist values reported by employees in a firm. The findings indicated acceptable statistical support for aggregating collectivist values to the level of the firm: The mean rwg was .71 (Median = .76; James, Demaree, & Wolf, 1984), $ICC_1 = .29$ and $ICC_2 = .70$ (Bliese, 2000).

Variable pay compression (archival data). As noted, employers reported annual and performance-based variable pay in the past year as the sum of bonus and incentive pay for each employee in total RMB. In all of the sampled firms, the bonus-based component of variable pay was based on supervisors' subjective assessments of the performance of their subordinates which themselves may have been compressed. As in Study 1, we operationalized variable pay compression as the inverse value of variable pay dispersion (i.e., $-1.0 * \text{Gini coefficient}$).

Firm-level i-deal requests (employee-rated). Employees were asked to rate the frequency with which they requested developmental and benefit i-deals in the past year using Ho and Tekleab's (2016) five-item scale. Developmental i-deals were captured using four items (*training opportunities, skill development opportunities, on-the-job activities, career development opportunities*). Benefit i-deals was captured in the final item (*benefits, e.g., health benefits*) (1 = *never* to 5 = *frequently*). The multilevel CFA for the i-deal requests scale indicated an acceptable fit (CFI = .99, TLI = .98, RMSEA = .06, $SRMR_{\text{within}} = .02$, $SRMR_{\text{between}} = .06$). The reliability of developmental i-deal requests was .90 at the within-level and .98 at the between-level. For developmental i-deal requests, the mean rwg was .66 (Median = .73), $ICC_1 = .27$ and $ICC_2 = .68$; for benefit i-deal requests, the mean rwg was .56 (Median = .60), $ICC_1 = .31$ and $ICC_2 = .73$, thus justifying aggregation to the firm level.

Firm-level i-deal grants (employer-rated). We asked employers to indicate the extent to which the company has granted the requested developmental and benefit i-deals in the past year using the same five-item scale we used to capture i-deal requests (1 = *not at all* to 5 = *to a great extent*). The reliability of developmental i-deal grants was .91.

Control variables. To account for alternative explanations and provide a conservative test of our model at the firm level, we controlled a number of firm characteristics potentially affecting how rewards (e.g., income and i-deals) are distributed, including the number of employees in the firm and the firm's revenue (Kalleberg & Van Buren, 1996; Terborg & Lee, 1984). We measured revenue by asking employers to report annual sales revenue (in RMB) using a five-point scale (1 = *5 million or less*, 2 = *5 to 10 million*, 3 = *10 to 15 million*, 4 = *15 to 20 million*, 5 = *20 million or more*), representing a range of approximately US\$70,000 to US\$2,000,000. We controlled for the variability in workforce tenure diversity, a key determinant of sales performance, as well as various forms of workforce demographic heterogeneity (i.e., age diversity, education diversity, and gender diversity) to account for diverse employee needs potentially influencing wage distribution and allocation of i-deals (Lee et al., 2015). We used standard deviations (Hambrick, Cho, & Chen, 1996) to operationalize tenure diversity, age diversity, and education diversity, and Blau's (1977) index to operationalize gender diversity. We also controlled for: (a) the mean organizational tenure of employees which may reflect a more supportive work climate, prompting requests for i-deals (Rosen et al., 2013), and (b) the quadratic effects of the same as longer tenure may diminish employees' value to the firm (Rosen et al., 2013). Finally, we controlled for the dispersion (i.e., compression) of base pay by having employers report the annual fixed income (e.g., base pay) for each employee in their firm. We assessed base pay compression by multiplying the Gini coefficient by -1.0. As those in our

sample were all employed at a common pay grade in their respective firms, all of the variance in pay was within-level, thus making it unnecessary to control for vertical dispersion.

STUDY 2: RESULTS

Assessing the Measurement Model

To assess the factor structures of pay transparency, collectivist shared values, i-deal requests and grants, we conducted a multilevel CFA using Mplus 8.4 (Muthén & Muthén, 2017). The residual variances of benefit i-deal requests and grants were both fixed to zero because they were each measured by a single item. The resulting measurement model provided a good fit to the data (CFI = .96, TLI = .95, RMSEA = .03, SRMR_{within} = .03, SRMR_{between} = .07).

Descriptive Statistics

We present means and standard deviations of study variables in Table 2. Consistent with our theorizing, at the firm level, pay transparency was significantly associated with variable pay compression ($r = .20, p = .037$), and variable pay compression was significantly associated with both developmental ($r = .31, p = .001$) and benefit ($r = .23, p = .016$) i-deal requests. In addition, developmental i-deal requests were significantly associated with developmental i-deal grants ($r = .52, p = .000$), and benefit i-deal requests were significantly associated with benefit i-deal grants ($r = .47, p = .000$). Nevertheless, the positive correlations of pay transparency with both developmental and benefit i-deal requests and grants were not significant.

----- **Insert Table 2 about here** -----

Multilevel Model Estimation

The proposed model is composed of the firm-level predictor (pay transparency), firm-level mediator (variable pay compression), two mediators measured at the employee-level (developmental and benefit i-deal requests) and firm-level outcomes (developmental and benefit i-deal grants). As such, our theoretical framework manifests as a 2–2–1–2 model (Preacher, Zyphur, & Zhang, 2010), where the latent between-firm differences in the Level 1 mediators

(firm-level i-deal requests rated by employees) are estimated (Preacher et al., 2010). To estimate a 2–2–1–2 model, we used Mplus 8.4 (Muthén & Muthén, 2017) with a multilevel structural equation modeling approach (MSEM; Preacher et al., 2010). We estimated our model based on item-level data. Data were modeled using the full information maximum likelihood method implemented in Mplus to derive unbiased estimates (Muthén & Muthén, 2017). Based on ICC_{1s} previously reported for our i-deal requests measures, approximately 27% of the variance in employee developmental i-deal requests and 31% of the variance in benefit i-deal requests were between firms, warranting the use of our MSEM approach and analysis of the between-firm variance in Level 1 mediators (i.e., employee i-deal requests).

Testing Main and Indirect Effects (H1-H4)

To test the hypothesized main effects and serial indirect effects, we created an indirect effect model which specified all direct fixed effects embedded in the proposed model. We also controlled the number of employees, firm revenue, tenure diversity, age diversity, education diversity, gender diversity, mean tenure, mean tenure-squared and base pay compression on all Level 2 endogenous variables (i.e., variable pay compression, developmental and benefit i-deal requests and grants). Mean tenure was grand-mean centered prior to the creation of its quadratic term (Aiken & West, 1991). Our indirect effect model demonstrated acceptable fit ($\chi^2 = 640.01$, $df = 394$, $TLI = .94$, $CFI = .93$, $RMSEA = .03$, $SRMR_{within} = .03$; $SRMR_{between} = .07$). Table 3 and Figure 3 present the unstandardized coefficient estimates for the proposed model. Snijders and Bosker's (1994) formulas were used to calculate pseudo R^2 for the effect sizes in predicting outcomes. Overall, our model explained 18%, 20%, 13%, 61% and 39% of the total variance in variable pay compression, average developmental i-deal requests, average benefit i-deal requests, developmental i-deal grants and benefit i-deal grants, respectively.

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

H1 predicted that firm-level pay transparency would be positively related to variable pay compression. As Table 3 shows, firm-level pay transparency was positively related to variable pay compression ($\gamma = .05, p = .010$), supporting H1¹⁴. H2 predicted that variable pay compression would be positively related to firm-level i-deal requests. As Table 3 shows, variable pay compression was positively related to both developmental i-deal requests ($\gamma = 1.08, p = .000$) and benefit i-deal requests ($\gamma = 1.14, p = .004$), supporting H2. H3 predicted that firm-level pay transparency would be indirectly related to firm-level i-deal requests via variable pay compression. Our findings regarding H1 and H2 provided initial support for the indirect relationship described in H3. The indirect effect was further tested via a Monte Carlo simulation procedure using the open-source software R. This procedure was used to accurately reflect the asymmetric nature of the sampling distribution of an indirect effect (MacKinnon, Lockwood, & Williams, 2004; Preacher et al., 2010). As shown in Table 5, with 20,000 Monte Carlo replications, we found that the indirect effects of firm-level pay transparency on developmental i-deal requests (indirect effect = .05; 95% CI of [.01, .11]) and on benefit i-deal requests (indirect effect = .05; 95% CI of [.01, .12]) via variable pay compression were both significant. This finding indicates that firm-level pay transparency was positively and significantly related to firm-level i-deal requests via variable pay compression, providing support for H3.

H4 predicted that firm-level pay transparency would be indirectly related to firm-level i-

¹⁴ To test for possible reversed causation, we collected data from an independent sample of 69 medical device distribution firms (response rate = 87.34%) in China. Participants (i.e., employers) reported their firms' current level of pay transparency and each employees' current and previous year's variable pay. We measured pay transparency ($\alpha = .93$) and variable pay compression using the same measures as in Study 2. We analysed the data with a cross-lagged model. Controlling for number of employees, firm revenue, and base pay compression, we found no support for an association between pay compression and **subsequent** pay transparency ($\gamma = .40, p = .573$), but a positive association between pay transparency and **concurrent** variable pay compression ($\gamma = .03, p = .011$). Combined with our findings in the experimental studies (Study 1 and the supplementary experiment reported in Appendix A), this provides us with confidence in the sequential ordering of the effects of pay transparency on variable pay compression.

deal grants via variable pay compression and firm-level i-deal requests. Our analyses indicated that developmental i-deal requests were significantly associated with developmental i-deal grants ($\gamma = 1.54, p = .000$), and benefit i-deal requests were significantly associated with benefit i-deal grants ($\gamma = .94, p = .000$), which, together with our findings regarding H1-H3, provided initial support for the serial indirect relationship described in H4. As shown in Table 5, we found that the serial indirect effects of firm-level pay transparency on firm-level developmental i-deal grants (serial indirect effect = .08; 95% CI of [.01, .17]) and on firm-level benefit i-deal grants (serial indirect effect = .05; 95% CI of [.01, .11]) via variable pay compression and the corresponding firm-level i-deal requests were both significant. This finding indicates that pay transparency was positively and significantly related to firm-level i-deal grants via variable pay compression and firm-level i-deal requests, providing support for H4.

Testing the Moderating Effect and Conditional Indirect Effect (H5-H6)

To test the hypothesized moderating effects and conditional indirect effects (H5a, H5b, H6), we incorporated fixed effects of collectivist shared values and two latent interaction terms (pay transparency \times collectivist shared values and variable pay compression \times collectivist shared values) into the original indirect effects model. Since the multilevel estimation reached the saddle point¹⁵, we conducted piecemeal analyses to examine each newly added effect. We found that the latent interaction term between pay transparency and collectivist shared values was not related to variable compression ($\gamma = -.03, p = .242$). Thus, we rejected H5a (predicting that collectivist shared values would moderate the relationship between pay transparency and variable pay compression), and created an updated latent moderated MSEM model by removing the fixed effects of collectivist shared values and of the latent interaction term between pay

¹⁵ The model would not converge even when using the MLF estimator (i.e., ML estimation with SEs approximated by first-order derivatives) as suggested by Mplus.

transparency and collectivist shared values. Table 4 and Figure 4 presents the unstandardized coefficient estimates for this model which explained 18%, 34%, 19%, 58% and 37% of the total variance in variable pay compression, average firm-level developmental and benefit i-deal requests, and average firm-level developmental and benefit i-deal grants, respectively.

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

H5b predicted that collectivist shared values would moderate the relationship between variable pay compression and firm-level i-deal requests, such that the relationship would be more positive for firms with more collectivist shared values. As shown in Table 4, the interaction between variable pay compression and collectivist shared values was positively related to both firm-level developmental ($\gamma = 1.56, p = .001$) and benefit i-deal requests ($\gamma = 1.86, p = .002$). We plotted this moderating effect at the conditional values of collectivist shared values (1SD above and below the mean) in Figure 5. As shown in Figure 5, the relationships between variable pay compression and both developmental and benefit i-deal requests were stronger in firms with more collectivist shared values, providing support for H5b.

----- **Insert Figure 5 about here** -----

H6 predicted that firm collectivist shared values would moderate the serial indirect relationship between firm pay transparency and firm-level i-deal grants via variable pay compression and firm-level i-deal requests, such that the indirect relationships would be more positive for firms characterized by more collectivist shared values. To test H6, we estimated the indirect effect of firm pay transparency on firm-level i-deal grants via variable pay compression at higher (1SD above the mean) and lower (1SD below the mean) levels of firm collectivist shared values. As shown in Table 5, the serial indirect effect on firm-level developmental i-deal grants was stronger in firms characterized by more collectivist shared values (indirect effect = .15; 95% CI of [.03, .30]) vs. less collectivist shared values (indirect effect = .01; 95% CI of

[-.06, .07]). The difference between the two conditions was .14 with a 95% CI of [.02, .32]. For firm-level benefit i-deal grants, the indirect effect was stronger in firms characterized by more collectivist shared values (indirect effect = .10; 95% CI of [.02, .21]) vs. those with less collectivist shared values (indirect effect = .00; 95% CI of [-.06, .05]). The difference between the two conditions was .10 with a 95% CI of [.02, .23]. Taken together, H6 was supported, indicating that in firms with more collectivist shared values, pay transparency has a stronger positive effect on firm-level i-deal grants via pay compression and firm-level i-deal requests.

----- **Insert Table 5 about here** -----

To avoid the potential threat that our results were due to statistical artefacts driven by the choice of control variables, we re-ran our analyses in the absence of the control variables, obtaining essentially the same results¹⁶. We also conducted two supplementary analyses to assess the robustness of our findings. The results of these analyses (detailed in Appendix B) indicate: (a) no support for the association between variable pay compression and employees' requests and managers' grants for higher pay (i.e., financial i-deals), and (b) the robustness of our findings to adjustments in the measurement of both collectivist shared values (using the full three-item measure of collectivist shared values) and variable pay compression (using another dispersion measure commonly used in the literature—the coefficient of variation). Finally, Appendix B also displays the results of a post-hoc analysis exploring the differential effects of each pay transparency component separately on variable pay compression.

DISCUSSION

The current research extends Bernstein's (2017) transparency-privacy theory by proposing and demonstrating that pay transparency is associated with a heightened rate of non-monetary i-deal grants via a multi-step process involving managerial compression of variable pay and a

¹⁶ There was a negligible difference in the magnitude of effect parameters but not in their statistical significance.

subsequent, heightened rate of employee i-deals requests. Consistent with the literature on social comparison, our findings also indicate that collectivist shared values serve as an important boundary condition, with these serial indirect effects amplified at the second stage of mediation in firms characterized by stronger collectivist shared values. In firms characterized by weaker collectivist shared values, the indirect effect of pay transparency on i-deal grants via variable pay compression and i-deal requests is not significant.

Theoretical Implications

These findings suggest several important theoretical contributions. First, they suggest a counter-intuitive, yet noteworthy consequence of pay transparency consistent with Bernstein's (2017) transparency-privacy theory. Research on pay transparency has predominately focused on the response of the observers (employees), suggesting that transparency should elicit a sense of enhanced trust, and thus mutual goodwill between employees and employers (e.g., Colella et al., 2007; Hartmann & Slapničar, 2012; Trotter, Zacur, & Stickney, 2017). Conventional wisdom aligned with fairness heuristic theory (Lind, 2001) and the fair process effect (Folger & Konovsky, 1989) also suggests that pay transparency should attenuate any sense of inequity in remuneration and thus likely be reciprocated by employees normatively refraining from requesting more than they have already received (Alterman et al., 2021; Colella et al., 2007). Assuming that i-deal requests serve as a critical pre-requisite for i-deal grants, such theorizing would suggest a net *negative* association between pay transparency and firm rates of i-deal grants. In contrast, building on Bernstein's (2017) suggestion that transparency *directly* results in hiding behavior on the part of those whose behavior becomes more observable, we proposed an alternative, *indirect* logic. We posited and demonstrated a *positive* sequential indirect effect of pay transparency on organizational rates of i-deal grants, driven by more compressed pay differentials in firms with greater pay transparency, and consequently higher firm-level rates of i-

deal requests—a key precursor for higher firm-level rates of i-deal grants—as employees ostensibly search for alternative modes of remuneration. Accordingly, we not only demonstrate the applicability of Bernstein’s (2017) individual-level transparency-privacy perspective to the domain of rewards management at the level of the firm, we also extend this theory by explicating the process by which transparency may *indirectly* result in a firm-level shifting of reward differentials from more to less observable forms (i.e., hiding).

Second, we offer detailed insight into this multi-step process. In particular, while several studies have already demonstrated an association between pay transparency (vs. secrecy) and wage compression (Mas, 2017; Ohlmer & Sasson, 2018), ours is the first to test and demonstrate a *monotonic* relationship between the two, as well as to explicate and test down-the-road consequences of such compression. Specifically, in contrast to these prior studies which demonstrate a causal link between a legally-mandated shift from pay secrecy to transparency on pay compression, we demonstrate (Study 2) that pay dispersion in firms is sensitive to *incremental* differences in the *degree* of pay transparency. Further, consistent with the core principals of CWD theory, we argued and demonstrated that by responding to such compression with a heightened rate of non-monetary i-deal requests, employees also play a role in the process linking transparency to hiding. Accordingly, we contribute to research on i-deals by revealing for the first time that pay compression may serve as an important driver of employee i-deal requests and grants. Moreover, to the extent that a heightened rate of i-deal requests is, as we demonstrate, strongly linked with a heightened rate of i-deal grants, our findings suggest that pay compression is only the first step in a chain of firm-level, pay-related consequences associated with more transparent pay practices. In sum, our data suggest that rather than directly responding to pay transparency by *intentionally* hiding reward differentials in other forms of remuneration,

such hiding may occur more *out of convenience*, with the granting of employees' non-monetary i-deal requests providing managers with a means to be responsive to their subordinates and discreetly allocate differential rewards while complying with transparent pay practices. Understanding the nature of this process is critical if managers and policy makers wish to take action to address potential externalities (e.g., gender- and race-based pay disparities) associated with this relationship between pay transparency and a heightened rate of i-deal grants.

Third, we extend Bernstein's transparency-privacy framework by demonstrating that collectivist shared values, as an organizational characteristic heightening the salience of observability, may counter-intuitively amplify the transparency-privacy dynamic. While collectivist values are generally perceived as motivating behavior that enhances the interests of the group over the individual (Triandis, 2018), consistent with findings in the social comparison literature (i.e., that such values are associated with greater social monitoring and comparison; Gibbons & Buunk, 1999), we argued and found that in organizations characterized by such values, the association between pay compression and i-deal requests is indeed amplified. Interestingly, we found that this effect is more employee- than management-based, with the amplification effect occurring at the employee-driven, compression to i-deal request stage of the process. Overall, the significance of this boundary condition is important not only in that it demonstrates a firm-level amplification effect of collectivist shared values on pay transparency consequences similar to that found by others (Bamberger & Belogolovsky, 2017) at the individual level, but also because it offers some of the first empirical evidence of how firm-level factors associated with observability can intensify the transparency-privacy paradox, and heighten the tendency of employees to request (and thus, likely receive) non-monetary i-deals.

Finally, our findings contribute more generally to research and theory on i-deals by

demonstrating the role of pay communication as an organizational process in accounting for the solicitation of i-deals. This is important in that prior research on i-deal antecedents has largely focused on individual differences as accounting for the variance in i-deal requests and grants. For example, employees who have greater firm-specific human capital (e.g., knowledge, skills, and abilities; Lee et al., 2015), and/or who have stronger political skills (Rosen et al., 2013) have a higher tendency to pursue i-deals. Recently, however, Liao, Wayne, and Rousseau (2016) have called for research at the group- and organization-level and proposed several sources of antecedents for predicting group- or firm-level i-deals including societal norms, economic or strategic factors, organizational climate, group characteristics, and leader characteristics. Yet, to the best of our knowledge, only one empirical study has adopted such a group-level perspective, showing that employees in heterogeneous groups with diverse skills and functions are more likely to make i-deal requests (Lee et al., 2015). In the current research, we answer this call by considering how more transparent pay communication practices, particularly in contexts characterized by more collectivist shared values, may explain firm differences in employee tendencies to request i-deals. In doing so, we offer insight into whether and how the adoption of more transparent pay practices may be associated with greater employee initiatives to enhance their conditions of employment within a firm.

Moreover, we explain this variance in terms of pay communication practices and demonstrate a substantial effect on the variance of i-deals at the firm level. In fact, with our model accounting for 58% and 37% of the variance in development and benefit i-deal grants, respectively, our findings suggest that pay communication may have a substantial, albeit previously neglected, impact on enterprise overhead. For example, even if we consider only a *single* benefit such as paid leave, a 1-unit increase in this benefit granted could alone amount to

an average increase of nearly 11.3% of total compensation per employee per year¹⁷. Extending this further, to the extent that a 1-unit change in transparency is associated with a rise of .05 units more in benefit i-deal grants¹⁸, and that the approximate cost of a 1-unit increase in this particular i-deal benefit is approximately 3,565.13 RMB¹⁹ (US\$550), a single unit increase in transparency may result in an increased cost of 178.26 RMB (US\$30) per employee per year²⁰ for this single benefit. On the other hand, research suggests that short-term costs of training and development may be outweighed by longer-term benefits such as increased firm financial performance (Riley, Michael, & Mahoney, 2017) and organization-oriented employee citizenship behavior and commitment (Hornung et al., 2008). Further, while the granting of such requests may increase administrative and labor costs, not to mention demotivate employees failing to receive such customized deals (Abdulsalam, Maltarich, Nyberg, Reilly, & Martin, 2021), the failure to grant such requests may also be costly in terms of its negative effects on employee attitudes and contributions²¹ (Hornung, Rousseau, Glaser, Angerer, & Weigl, 2010).

Practical Implications

Our findings also offer several practical implications for management. First, as higher levels of pay transparency can trigger unintended consequences such as a heightened degree of

¹⁷ Calculated by dividing 7.9% by 69.9% from Hallock's (2012: 42) Table 4.1.

¹⁸ Obtained from the serial indirect effect of pay transparency on benefit i-deal grants (Table 3).

¹⁹ The average annual total pay for firms in this study is 112,633 RMB (approx. \$17,500). Based on Hallock (2012), we assumed that the cost of paid leave benefit is equal to 11.3% of total wage or salary compensation (i.e., 12,728 RMB; approx. \$2,000). Assuming the dispersion of benefit i-deal grants is the same as that of benefit costs of paid leave (i.e., having the same ratio of standard deviation to the mean), the cost of a single unit of benefit i-deal grant would be approx. 3,565 RMB ($1/3.57 * 12,727.50$ RMB).

²⁰ Calculated by multiplying .05 by 3,565 RMB.

²¹ In the independent study reported in Footnote 14, we also measured firm performance using a revenue-per-employee ratio (company's annual total revenue/total employees). We found that both developmental and benefit i-deal grants had a non-significant association with firm performance ($r = .06, p = .609$ and $r = -.13, p = .300$, respectively). Although these findings could inform future research, we were only able to collect data on i-deal grants *concurrently* with firm performance. Moreover, the data is from a relatively small number of firms ($N = 69$) that are independent from Study 2. Together with the fact that these data were collected in 2020 (Year 1 of the COVID pandemic), these shortcomings make it difficult to draw firm conclusions regarding how firm-level rates of i-deal grants may impact firm performance.

pay compression, leaders may consider steps aimed at mitigating the compression effects of pay transparency on wage dispersion. For example, in order to counteract any managerial tendency towards transparency-related pay compression, organizations may emphasize to managers that their own performance (and hence remuneration) will benefit by retaining or even expanding *clearly explainable and justifiable* pay differences.

Second, our findings suggest that in contexts characterized by more collectivist shared values, managers may need to be more attuned to a tendency of employees to engage in more intensive social comparison. Particularly in such contexts, organizations may seek to better explain and justify pay differences by making pay policies and practices more transparent. Additionally, consistent with such procedural pay transparency, managers might be better trained to help their subordinates better understand organizational rewards and pay practices, as well as to address any concerns that employees may have about perceived inequities.

Third, to the degree that the value of developmental and benefit i-deal grants may be disproportionately greater for some groups of employees than others (as suggested by Kristal, Cohen, & Navot, 2020), this heightened rate of i-deal granting may facilitate a shifting of pay disparities from one (more observable) pay form to another (that is less observable). Accordingly, organizations may find it in their interest to more carefully monitor and even control the allocation of non-monetary i-deals, taking steps to ensure that these more hidden forms of remuneration are not being used as a “back door” to retain gender- and ethnic-based disparities in cash remuneration “complicated” by pay transparency.

Finally, aside from the direct costs associated with the provision of non-monetary i-deals, the resources expended in negotiating such deals can be substantial (Lee et al., 2015). Organizations may thus consider adjusting accounting practices such that managers are aware of

and made accountable for the tangible and intangible costs associated with granting such i-deals.

Limitations and Future Research Directions

Several limitations warrant attention and offer opportunities for future research. First, although the experimental design in Study 1 allows us to suggest that pay transparency drives variable pay compression, as Study 2 applied a field study design, no such assertion can be made with regard to the causal nature of the association between firm-level variable pay compression and i-deals. A reversed relationship in which i-deals *cause* variable pay compression could occur if employers, for example, seek across-the-board reductions in variable pay to mitigate the costs of granting i-deals requested by employees. While it is hard to imagine how such a dynamic could, in turn, drive pay transparency, it would be fruitful to examine the causal link between pay compression and i-deals in experimental or quasi-experimental studies.

Second, our findings open a new avenue of research on the role of pay compression as a mechanism linking pay transparency to outcomes such as collective performance and human capital sorting. Although studies have examined the association of pay transparency with employee turnover (Alterman et al., 2021; Card et al., 2012), these studies have not examined pay compression as a possible explanatory factor. Given our limited understanding of the potential sorting effects of pay transparency, research is needed to examine whether employees self-select themselves into firms characterized by varying levels of pay transparency, and whether this may be a function of any resulting compression in either variable or fixed pay. Alternatively, future work should consider firm differences in reward systems as potential factors driving i-deals. Our findings provide initial evidence that pay systems influence i-deal requests and grants, suggesting that, particularly in organizations characterized by more collectivist shared values, pay dispersion may explain variance in i-deal requests and grants across firms. It would be advantageous to extend this work to consider, for example, the degree to which the

variance in other reward characteristics (e.g., forms of pay) may influence i-deal requests and grants.

Third, Study 2 used data collected from a sample of small firms in one context, which may limit the generalizability of our findings. While the small firm sizes in our sample enabled us to test our hypotheses in a context in which transparent pay information is more visible and easily interpreted, questions remain as to whether the magnitude of effects would be similar in larger enterprises in which comparisons may be more difficult for employees to make. Larger firms may also bring the complication in which responsibility for differentiating rewards among employees (as well as any resulting controversy) may be diffused among multiple managers, as well as complications associated with effects on vertical dispersion which, like Shaw, Gupta, and Delery (2002), we excluded from examination in the current study given our focus on variable pay. While we surmise that our results would hold in larger firms, research is needed to assess the generalizability of our findings to larger firms and firms in which vertical dispersion and hence tournament-type pay dynamics may be more relevant. Similarly, research is needed to better understand the degree to which leader mindset may serve as the common factor underlying the relationship between transparency, pay compression, and i-deal grants, as a more caring, supportive leader might facilitate transparency and advocate pay equality, while simultaneously encouraging members to voice their individual needs and working hard to meet those needs.

Relatedly, the current study was conducted within a single industry (medical device distribution firms) and focused on a single group of employees (salespeople). These approaches minimize inter-firm differences and confounds that arise across industries, yet future research that investigates cross-industry samples is encouraged. Such research would offer insight into the replicability of our findings across diverse occupations and at varying pay grades/levels, as well

as extend consideration of various types of i-deals (e.g., task i-deals). Moreover, given that the process by which pay transparency causes managers to compress variable pay differentials and hide the necessary dispersion to incentivise via i-deals may be more prevalent in certain cultural contexts (e.g., U.S. and Asia), such that hiding may manifest differently in other cultures (e.g., Europe), cross-cultural research designs should be considered. Given findings regarding the culturally-sensitive nature of pay compression (Shaw, 2014) and i-deals (Liao et al., 2016), culture may moderate the effects of pay transparency at the individual and firm levels not only on pay compression and i-deal requests, but on different employee and employer outcomes.

Fourth, while we reveal that in firms characterized by high collectivist shared values, employees' response to pay compression on the basis of i-deal requests is amplified, it would be beneficial for future research to unpack the dominant mechanism driving this conditional effect. For example, to what extent does collectivism lead employees to want to maintain group harmony and preserve interpersonal relationships, or attend more to others' pay and engage in behavior designed to meet individualistic needs and potentially sacrifice harmony within the group? Furthermore, as far as *mid-range theorizing* on the transparency-hiding linkage is concerned, we encourage research exploring other boundary conditions (e.g., organizational design, justice climate) potentially influencing individuals' awareness of being observed.

Finally, several additional questions remain open to future research. First, does transparency lead to i-deals in a way that allows managers to find unique ways to reward those making critical contributions, thus enhancing employee justice perceptions, or does it do the opposite, debilitating justice perceptions? Second, what factors drive the variance in pay transparency across firms? Third, at the individual level, future research may examine pay noticeability on the part of employees (e.g., the extent to which employees notice pay differences

and factors that may drive them to request additional incentives). Just because certain aspects of pay are made transparent does not necessarily mean they are noticed by or salient to employees. Finally, future research should consider whether greater employee understanding of the pay-performance linkage—the extent to which others’ performance is visible to each other—may mitigate potential harmful reactions to pay variance.

CONCLUSION

In a 1913 *Harper’s Weekly* article entitled “What Publicity Can Do”, Justice Louis Brandeis (1913) wrote: “If the broad light of day could be let in upon men’s actions, it would purify them as the sun disinfects”. The results of our study suggest, however, that when it comes to pay transparency, such “sunlight”, by compressing the observable forms of remuneration while extending more hidden forms, may result in pay transparency becoming a moving target.

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TABLE 1 ANOVA Results of Variable Pay Compression (Study 1)

	df	Sum of squares	Mean squares	F value	η^2	Power
Pay transparency	1	.35	.35	18.93**	.14	.99
Collectivist shared values	1	.17	.17	9.04**	.07	.84
Pay transparency \times Collectivist shared values	1	.06	.06	3.22†	.03	.43
Residuals	113	.07	.02			

Predictor	Moderator	N	Variable pay compression	
			Mean	SD
Pay transparency	Collectivist shared values	30	-.15	.11
	Individualist shared values	30	-.18	.12
Pay secrecy	Collectivist shared values	28	-.21	.12
	Individualist shared values	29	-.33	.18

† $p < .10$; ** $p < .01$.

TABLE 2 Means, Standard Deviations, and Correlations among Study Variables (Study 2)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Level 2: Firm (N = 111)															
1. Number of employees															
2. Firm revenue	.45**														
3. Tenure diversity	.15	.13													
4. Age diversity	.03	.06	.20*												
5. Education diversity	.01	.01	.09	.15											
6. Gender diversity	-.19*	-.02	.00	.20*	-.04										
7. Mean tenure	-.11	.00	.64**	.18	-.02	-.08									
8. Base pay compression	-.17	-.18	.07	-.11	-.02	-.03	-.01								
9. Firm pay transparency	.10	-.02	-.06	-.07	.10	-.06	-.19	.14							
10. Variable pay compression	-.11	-.09	-.04	-.08	-.20*	.12	.01	.22*	.20*						
11. Developmental i-deal grants	.05	.15	-.04	-.07	-.05	-.03	-.09	-.20*	.07	.09					
12. Benefit i-deal grants	.20*	.22*	-.02	-.03	.09	.06	-.08	-.21*	.04	.04	.51**				
Level 1: Employee (N = 645)															
13. Collectivist shared values	-.18	.00	.05	-.13	-.02	.00	.18	-.22*	-.14	.05	.30**	.07		.44**	.25**
14. Developmental i-deal requests	-.12	-.07	-.15	-.18	-.20*	.07	-.12	-.19*	.01	.31**	.52**	.33**	.58**		.47**
15. Benefit i-deal requests	-.04	.07	-.16	-.08	-.10	.13	-.19*	-.21*	.01	.23*	.36**	.47**	.33**	.74**	
Mean	9.64	3.16	2.16	5.48	.55	.38	4.07	-.13	3.31	-.29	3.21	3.57	5.08	2.83	2.72
SD Level 1													.78	.60	.92
SD Level 2	8.16	1.46	1.15	2.94	.25	.15	1.84	.10	1.10	.17	.80	.99	.58	.39	.56

Note: Correlations below the diagonal represent firm-level (Level 2) correlations (N = 111). Correlations above the diagonal represent employee-level (Level 1) correlations (N = 645). * $p < .05$; ** $p < .01$.

TABLE 3 Unstandardized Path Coefficients of the Multilevel Models for Testing Indirect Effect (Study 2)

Variable	Variable pay compression		Developmental i-deal requests		Benefit i-deal requests		Developmental i-deal grants		Benefit i-deal grants	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Control variables										
Number of employees	.00	.00	-.01	.01	-.01	.01	.00	.01	.03*	.01
Firm revenue	.00	.01	-.04	.04	.05	.06	.15**	.06	.05	.07
Tenure diversity	-.01	.02	.05	.06	.04	.08	.00	.09	-.04	.09
Age diversity	.00	.00	-.04*	.02	-.02	.02	.04	.03	-.01	.02
Education diversity	-.12*	.06	-.37	.19	-.10	.24	.42	.28	.59*	.29
Gender diversity	.12	.15	.16	.33	.46	.45	-.58	.47	.20	.58
Mean tenure	.02	.01	-.02	.04	-.10	.06	-.05	.06	.06	.08
Mean tenure ²	.00	.00	-.01	.01	.00	.01	.03*	.01	.01	.01
Base pay compression	.28	.15	-1.88**	.58	-2.02**	.75	.78	.86	.05	.88
Hypothesized predictors										
Firm pay transparency	.05*	.02	-.02	.07	-.06	.12	.09	.11	.02	.12
Variable pay compression			1.08**	.30	1.14**	.39	-.95	.57	-.37	.58
Developmental i-deal requests							1.54**	.25		
Benefit i-deal requests									.94**	.16
Residual variance										
Level 1			.43		.97					
Level 2	.02		.14		.31		.27		.59	
Pseudo R ²	.18		.20		.13		.61		.39	

Note: $N = 645$ employees within 111 firms. * $p < .05$; ** $p < .01$.

TABLE 4 Unstandardized Path Coefficients of the Multilevel Models for Testing Conditional Indirect Effect (Study 2)

Variable	Variable pay compression		Developmental i-deal requests		Benefit i-deal requests		Developmental i-deal grants		Benefit i-deal grants	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Control variables										
Number of employees	.00	.00	.00	.01	.00	.01	.00	.01	.02	.01
Firm revenue	.00	.01	-.06*	.03	.03	.05	.17**	.06	.06	.07
Tenure diversity	-.01	.02	.05	.06	.04	.08	-.01	.08	-.05	.09
Age diversity	.00	.00	-.02	.01	.00	.02	.04	.03	-.01	.02
Education diversity	-.12*	.06	-.35*	.17	-.06	.23	.44	.29	.60*	.29
Gender diversity	.12	.15	.21	.25	.46	.45	-.72	.46	.15	.59
Mean tenure	.02	.01	-.06	.04	-.12*	.06	-.02	.07	.07	.08
Mean tenure ²	.00	.00	-.01	.01	.00	.01	.02*	.01	.01	.02
Base pay compression	.28	.15	-.92	.49	-1.24	.70	.36	.82	-.08	.90
Hypothesized predictors										
Firm pay transparency	.05*	.02	-.01	.06	-.04	.11	.10	.11	.03	.12
Variable pay compression			1.07**	.27	1.15**	.37	-.88	.56	-.33	.58
Collectivist shared values			.77**	.19	.78**	.24				
Variable pay compression × Collectivist shared values			1.56**	.48	1.86**	.58				
Developmental i-deal requests							1.52**	.26		
Benefit i-deal requests									.94**	.17
Residual variance										
Level 1			.43		.97					
Level 2	.02		.08		.25		.29		.61	
Pseudo R ²	.18		.34		.19		.58		.37	

Note: $N = 645$ employees within 111 firms. * $p < .05$; ** $p < .01$.

TABLE 5 Results of Monte Carlo Test of Indirect Effects and Conditional Indirect Effects (Study 2)

	Estimate	SE	95% Confidence Intervals
Indirect effects			
Pay transparency → Variable pay compression → Developmental i-deal requests	.05	.02	[.01, .11]
Pay transparency → Variable pay compression → Benefit i-deal requests	.05	.03	[.01, .12]
Serial indirect effects			
Pay transparency → Variable pay compression → Developmental i-deal requests → Developmental i-deal grants	.08	.04	[.01, .17]
High collectivist shared values	.15	.07	[.03, .30]
Low collectivist shared values	.01	.03	[-.06, .07]
Difference	.14	.08	[.02, .32]
Pay transparency → Variable pay compression → Benefit i-deal requests → Benefit i-deal grants	.05	.03	[.01, .11]
High collectivist shared values	.10	.05	[.02, .21]
Low collectivist shared values	.00	.03	[-.06, .05]
Difference	.10	.06	[.02, .23]

FIGURE 1 Theoretical model at the firm level

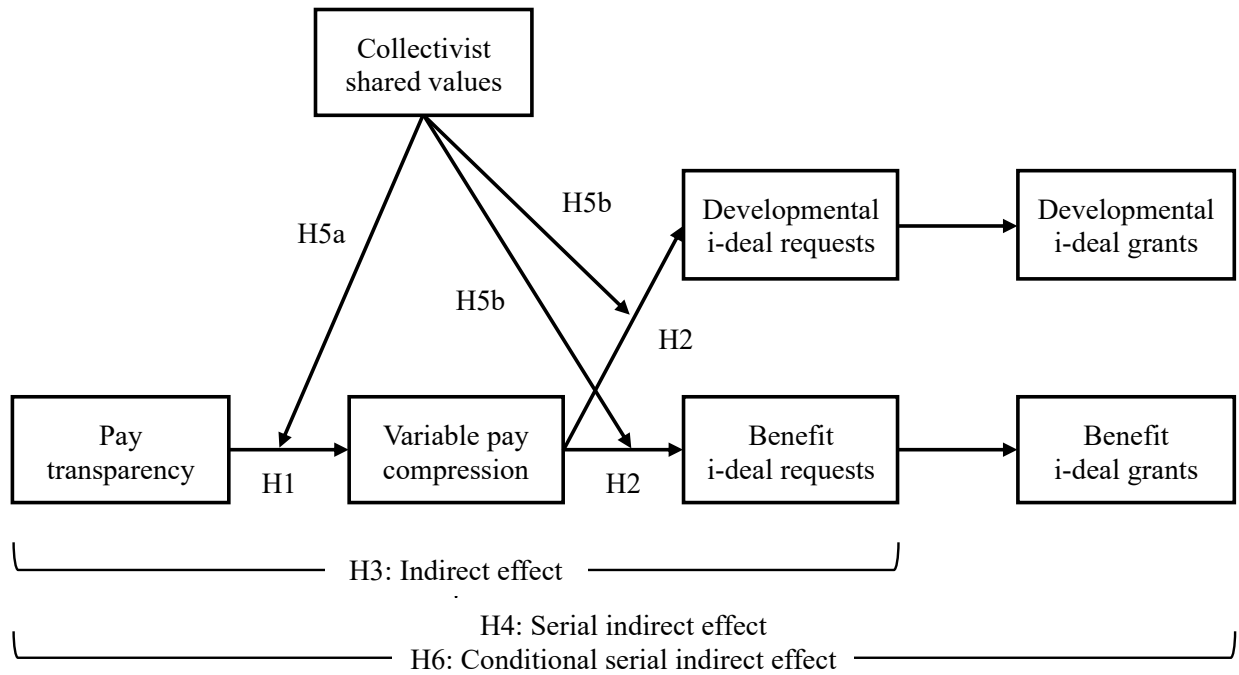


FIGURE 2 Interaction between pay communication policy and shared values predicting variable pay compression (Study 1)

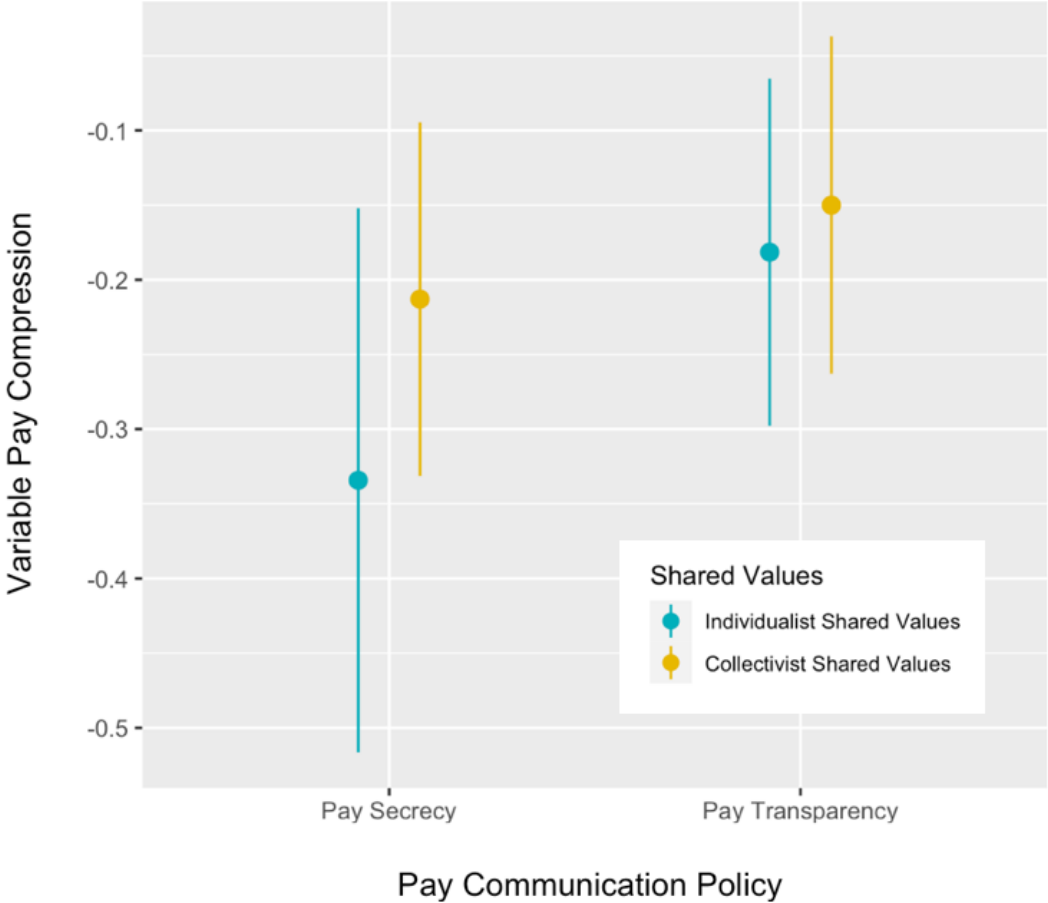
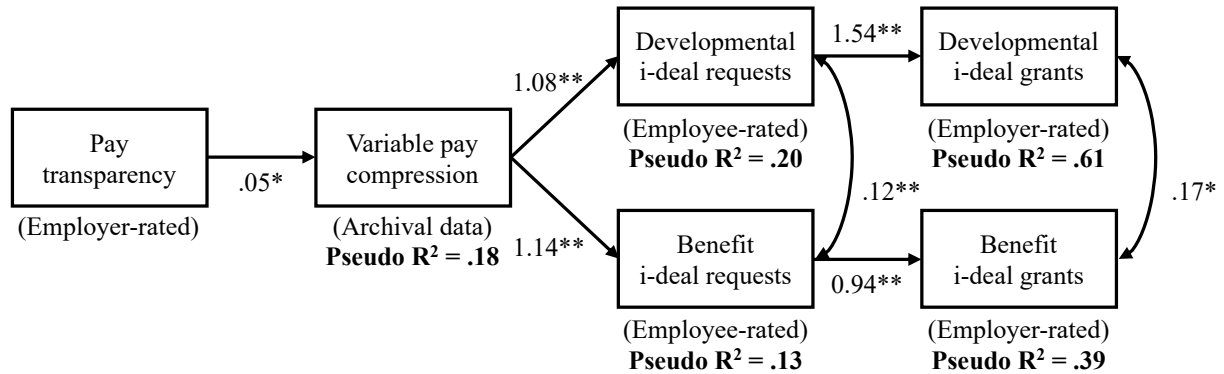
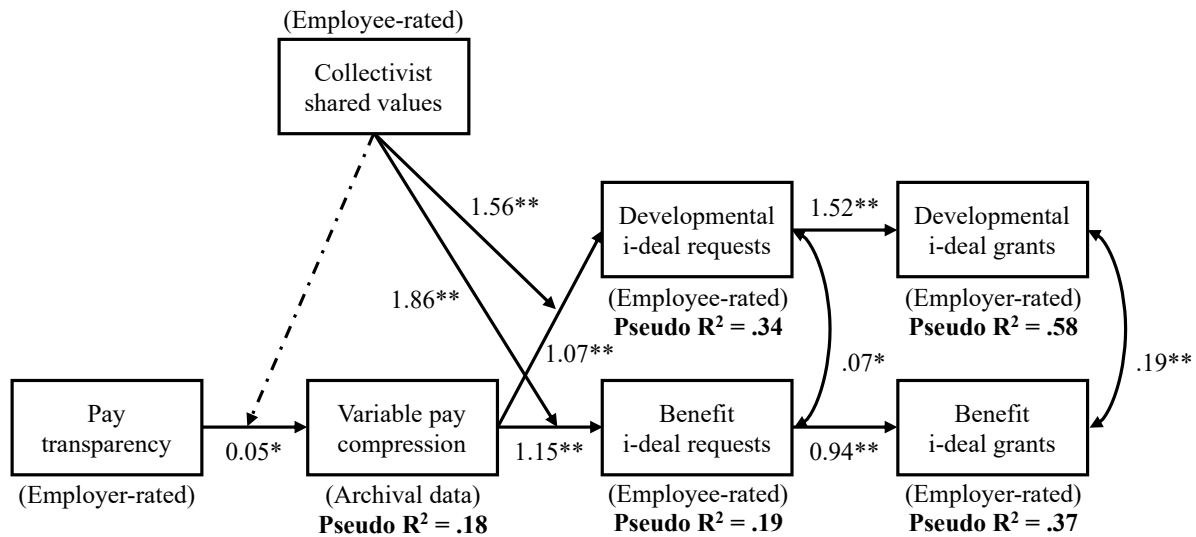


FIGURE 3 Unstandardized parameter estimates in the indirect effect model at the firm level (Study 2)



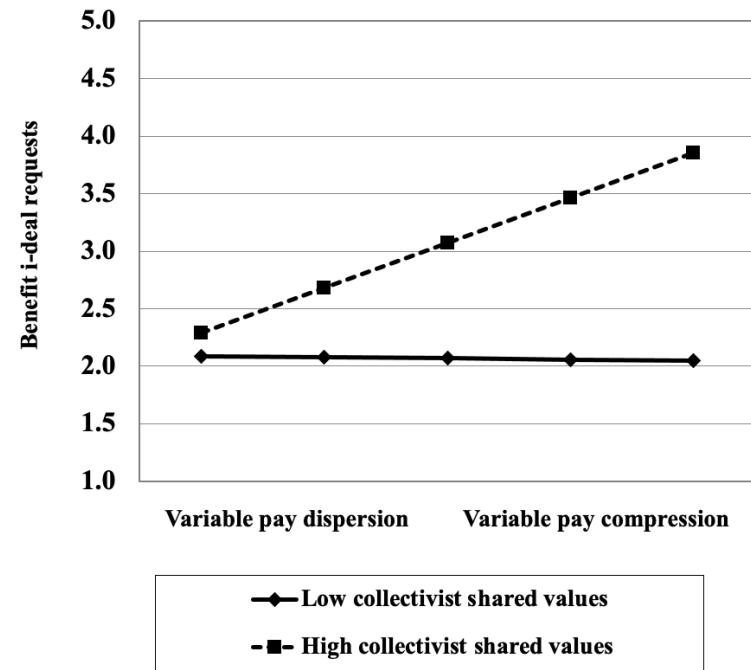
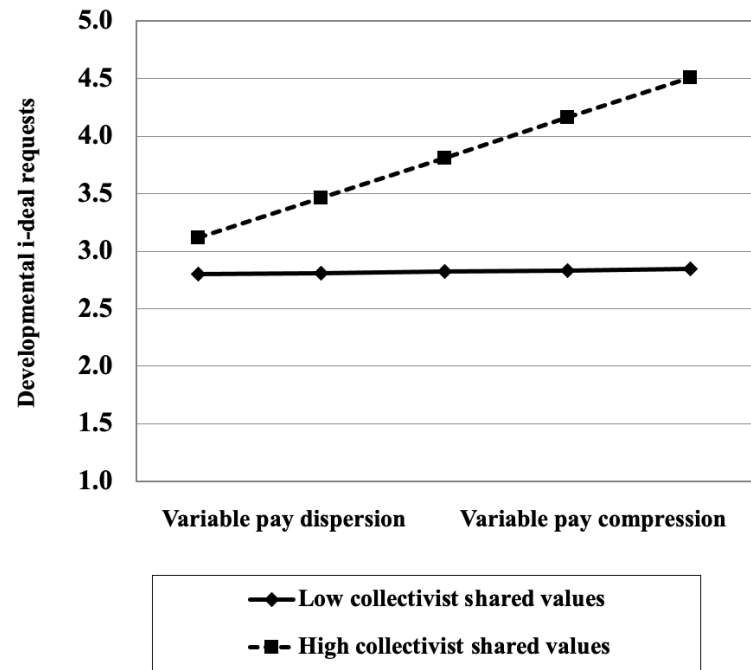
$\chi^2(394) = 640.01$, CFI = .94, TLI = .93, RMSEA = .03, SRMR_{within} = .03, SRMR_{between} = .07

FIGURE 4 Unstandardized parameter estimates in the conditional indirect effect model at the firm level (Study 2)



AIC = 16251.59, BIC = 16886.22, SABIC = 16435.37

FIGURE 5 The Moderating Effect of Firm Collectivist Shared Values on Firm-Level Rates of Employee I-Deal Requests (Study 2)



APPENDIX A

ONLINE BUSINESS SIMULATION EXPERIMENT TESTING THE IMPACT OF PAY COMPRESSION ON PAY TRANSPARENCY

Sample

Using the same procedure and incentive as in Study 1, we recruited participants ($N = 90$) from the U.S. and U.K. reporting managerial experience via Prolific. The average age of participants was 41.31 years ($SD = 12.15$), 63.33% of which were women, and their average tenure in managerial positions was 5.34 years ($SD = 4.95$). Most participants were White (91.11%), and held a college degree or higher (83.33%).

Experimental Setting and Procedure

To assess the effect of variable pay compression on subsequent pay transparency decisions, we conducted the same online business simulation experiment as in Study 1 with three exceptions. First, we did not include a manipulation for shared values. Second, when “manager” participants were asked to allocate their £10 performance-based bonus pool to their subordinates, they were presented with instructions relevant to the pay compression condition in which they were randomly assigned (described below). Third, after “manager” participants completed the bonus distribution and before their subordinates entered the second round of sales activities, participants were asked to specify pay transparency policies regarding how bonus and performance information should be communicated to team members. One participant failed at least one of two embedded attention check items, and one reported suspicion that their subordinates were bogus. These two participants were excluded from the analyses, yielding 88 participants in our final sample.

Conditions

Participants were randomly assigned to one of two conditions, pay compression ($N = 44$) vs. pay dispersion ($N = 44$). We presented our pay compression manipulation before the first round of sales activity and reminded participants of the descriptions for their respective conditions prior to making their variable pay allocation decisions. In the pay compression condition, “manager” participants were instructed to limit the bonus amount between £0 and £3²². In the pay dispersion condition, participants were instructed to assign bonus amounts between £0 and £10.

Measures

Manipulation check. We assessed the effectiveness of the pay compression manipulation via two means. First, following Study 1, we calculated the inverse value of variable pay dispersion (i.e., $-1.0 * \text{Gini coefficient}$) to assess pay compression. One-way ANOVA results showed a significant main effect for the pay compression manipulation, $F(1, 86) = 29.14$, $p = .000$, $\eta^2 = .25$, such that $M_{\text{pay compression}} = -.09$ ($SD = .04$) and $M_{\text{pay dispersion}} = -.22$ ($SD = .15$).

Second, we developed a scale ($\alpha = .68$) assessing participants’ degree of agreement (1 = *strongly disagree* to 5 = *strongly agree*) with two statements: “*Those assessed as having the highest level of performance on my team were awarded a bonus far larger than that awarded to*

²² Participants were informed that “*According to our organization’s pay scale, the bonus amount for those in sales associate positions is limited to a range of £3. As all of your team members are sales associates, the bonuses that you assign must fall between £0 and £3*”.

those assessed as having the lowest performance level [reverse-scored]” and “I allocated my bonus equally across all of my subordinates such that all of my team members received essentially the same bonus amount”. One-way ANOVA results revealed a significant main effect for the pay compression manipulation, $F(1, 86) = 5.46, p = .022, \eta^2 = .06$, such that $M_{\text{pay compression}} = 2.52 (SD = 1.15)$ and $M_{\text{pay dispersion}} = 2.01 (SD = .87)$.

Pay transparency. “Manager” participants were asked to specify the pay transparency policies regarding how bonus and performance information should be communicated to team members. They were asked to indicate whether or not (Yes = 1, No = 0) they wished to implement pay process transparency (“Provide your team members with information about the performance parameters considered when determining bonus amounts”), pay outcome transparency (“Make the bonus amounts of your team members visible to all team members [that is, letting all team members see the bonuses received by their fellow team members]”), and pay communication transparency (“Restrict team member communication about their bonuses, asking them to keep their personal reward information confidential”). They were told that their responses would influence how information regarding performance appraisal and bonus decisions would be disclosed to subordinates before the next round of sales activity. We operationalized pay transparency as the sum of the three responses.

Results and Discussion

ANOVA results indicate that participants (managers) in the pay compression condition did not choose to make pay systems transparent ($M = 1.69, SD = .76$) any more than those assigned to the pay dispersion condition ($M = 1.70, SD = .60; F(1, 86) = .00, p = .952, \eta^2 = .00, Power = .05$). This study, therefore, failed to support the reverse causality of H1. Combined, Study 1 and the current supplementary experiment provide us with confidence in the internal validity for the effect of pay transparency on pay compression.

APPENDIX B SUPPLEMENTARY ANALYSES OF STUDY 2

Robustness Checks

We conducted two additional analyses to check the robustness of Study 2’s results. First, based on CWD theory, we assumed that when variable pay is more compressed, rather than pursuing other forms of monetary compensation, employees would pursue other, alternative modes of remuneration such as developmental opportunities and benefits. Simply put, this theory suggests that individuals compensate for certain limitations in the effort-reward bargain (i.e., financial i-deals) by seeking remuneration in other forms. To ascertain the validity of this assumption, as a first robustness check, we added financial i-deal requests and grants as supplemental dependent variables in our model, testing the indirect effect (via variable pay compression) of pay transparency on it alongside the parallel effects on developmental and benefit i-deals. We asked employees to rate the frequency with which they requested financial i-deals with a single-item from Ho and Tekleab (2016): “In the past year, how often did you ask for individual arrangements different from your colleagues in terms of compensation (e.g., pay, bonuses)” on a scale ranging from 1 = never to 5 = frequently, and asked employers to indicate the extent to which the company has granted the requested financial i-deals (e.g., pay, bonuses) that year (1 = not at all to 5 = to a great extent).

Results indicated non-significant associations between variable pay compression and financial i-deal requests ($\gamma = .16, p = .677$) and between financial i-deal requests and grants (γ

= .30, $p = .303$) with no appreciable effect on any of the other Model 2 parameters (i.e., indirect effects of pay transparency on developmental i-deal grants via pay compression on developmental i-deal requests = .07; 95% CI of [.01, .16] and on benefit i-deal grants via pay compression on benefit i-deal requests = .05; 95% CI of [.008, .10], respectively). These findings support our assumption regarding the displacement of i-deal requests away from requests for higher variable pay and towards other forms of remuneration as a function of heightened variable pay compression.

Second, we examined whether our findings are robust to adjustments in measurement. Although Wagner and Moch's (1986) scale is a three-item measure, we ran our primary analyses using a two-item version of Wagner and Moch's (1986) measure capturing collectivist shared values due to the threat that potential bi-dimensionality might have on the measure's validity and reliability (e.g., Credé, Chernyshenko, Bagrami, & Sully, 2009; Dalbert, Lipkus, Sallay, & Goch, 2001; Fincham & Linfield, 1997). Specifically, the third item we removed is phrased in the opposite direction of collectivist values, focusing on more individualist values ("*Given the choice, I would rather do a job where I can work alone rather than do a job where I have to work with others in my workgroup*"). While this may be justified on the assumption that "the individualism-collectivism distinction [is] a continuum composed of intermediate points as well as extremes" (Wagner & Moch, 1986: 286), others (Markus & Kitayama, 1991; Triandis, 2018) have questioned this assumption of unidimensionality. Because potential bi-dimensionality could impact the validity of the measure, we ran a multilevel CFA and assessed the reliability of the three-item measure. The results of this analysis revealed poor fit (CFI = .87, TLI = .74, RMSEA = .16, SRMR_{within} = .01, SRMR_{between} = .45), with the three-item measure manifesting low reliability (α for within = .10, α for between = .34). Accordingly, we removed the item capturing individualist values and ran our primary analyses using the remaining two items.

As a robustness check, we re-ran the analyses presented above using the full three-item measure of collectivist shared values. In theory, the limited validity and reliability of the three-item measure should have weakened our results. In fact, however, we found that even with this three-item measure of collectivist shared values, the results held, with virtually identical effects and significance levels. In addition, while we used the Gini coefficient to capture variable pay compression in our primary analyses, such compression may be captured in other ways. Accordingly, as an additional robustness check, we calculated another dispersion measure commonly used in the literature—the coefficient of variation (i.e., the standard deviation of variable pay levels within a firm divided by the mean). We multiplied the coefficient of variation by -1.0 as the measure of variable pay compression. The correlation between pay compression computed based on the Gini coefficient and on the coefficient of variation was .98 ($p = .000$). Results were virtually the same (i.e., all hypotheses were supported) when the coefficient of variation operationalization was used.

Post-Hoc Analysis

As a post-hoc analysis, we examined the effect of each pay transparency component on variable pay compression. We first examined simple correlations among each pay transparency component and variable pay compression. Our results indicate that variable pay compression was only associated with process pay transparency ($r = .21, p = .029$), but not with outcome pay transparency ($r = .13, p = .167$), or communication pay transparency ($r = .12, p = .228$). This may provide initial evidence that process pay transparency, but not the other two components, is the key driver of variable compression.

Next, we regressed variable pay compression on the three components of pay transparency simultaneously. Results indicate that none of the pay transparency components were significantly associated with variable pay compression (process pay transparency: $\gamma = .00, p = .996$; outcome pay transparency: $\gamma = .03, p = .110$; communication pay transparency: $\gamma = .00, p = .970$). We believe this is due to the high collinearity among the three pay transparency components: process pay transparency was highly associated with outcome pay transparency ($r = .69, p = .000$) and communication pay transparency ($r = .57, p = .000$), and outcome pay transparency was highly associated with communication pay transparency ($r = .43, p = .000$). Indeed, the high correlations among the three pay transparency components support our claim that a global assessment of pay transparency is more appropriate.

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