The Effects of Meritocracy Beliefs on Evaluations of Pay Dispersion

by

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A Thesis
Presented to
The University of Guelph

In partial fulfillment of requirements
for the degree of
Master of Arts
In
Psychology

Guelph, Ontario, Canada

ABSTRACT

THE EFFECTS OF MERITOCRACY BELIEFS ON EVALUATIONS OF PAY DISPERSION

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This study investigates the relation between Americans' meritocracy beliefs and their evaluations of pay dispersion at three fictional American organizations. The current research draws on existing theories, including tournament theory and distributive justice theory, to investigate factors that affect people's evaluations of pay dispersion. 637 participants, recruited from Amazon's Mechanical Turk, completed two online surveys, and rated the degree to which they believed outcomes (e.g., jobs, rewards) were (and should have been) distributed based on merit. They also reported how they felt about various levels of pay dispersion. The results indicated that individuals rated high levels of pay dispersion less positively than low levels of pay dispersion. As well, more people perceived that meritocracy existed, the more positively they evaluated pay dispersion. This relation was mediated by people's perceptions of equity and their perceptions of whether pay dispersion benefited organizations. The implications for research and practice are discussed.

ACKNOWLEDGEMENTS

The completion of this document would not have been made possible by the collaborative efforts of many individuals. To my advisor Dr. Leanne Son Hing, thank you for your guidance, trust, and patience throughout this process. The skills, knowledge, and confidence I have gained under your leadership are invaluable, and I will forever be grateful to have been one of your graduate students. To my committee member Dr. Harjinder Gill, thank you for your prudent and thoughtful contributions for my thesis. To my external examiner Dr. Gloria Gonzalez-Morales, thank you for your help on my statistical analyses and for an enjoyable defense experience.

To my friends and colleagues in the IO psychology program, thank you for your support and encouragement throughout this process. Graduate school would not have been nearly as fun and fulfilling if it had not been for your company. Thank you, Scott Cassidy, for sharing your unmatched statistical expertise. To those in Dr. Leanne Son Hing's lab, especially Rebecca Lee, Cailin Stamarski, Baylee Rubinoff, and Nouran Sakr, thank you for your continuous cooperation and encouragement over the last two years. A special thanks to Alyssa Payne, Brooke Charbonneau, Janie Vu, Jordan Ho, Marian Pitel, Adam Wali, Patricia Baratta, and Ryan Perez for their unwavering support and much-needed pep talks during stressful times.

Lastly, to my incredible parents, Anita Li and Louis Sin. I am forever grateful for all you have done to provide me with the opportunities to pursue my dreams. It is only with your decades of hard work and unconditional love that I am able to accomplish all that I have.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

The Effects of Meritocracy Beliefs on Evaluations of Pay Dispersion

Since 1980, national levels of income inequality have been rapidly rising for many countries in the world (e.g., Canada, the United Kingdom, Japan; Roser & Oritz-Ospina, 2016). Among developed nations, the United States possesses uniquely high levels of income inequality (Hillebrand, 2009). From 1980 to 2014, the top 1% of American income earners have received an average annual income increase of $24,800, while the bottom 50% have received an average annual increase of just $5.88 (Piketty, Saez, & Zucman, 2016). Despite this, several studies have reported that the majority of Americans hesitate to support policies that would diminish pay differences (e.g., increasing minimum wage, capping chief executive officers' (CEO's) salaries; Bartels, 2005; Kuziemko, Norton, Saez, & Stantcheva, 2015; Lübker, 2004; Norton, Neal, Govan, Ariely, & Holland, 2014; Tóth & Keller, 2011). As high levels of income inequality may negatively affect population health, well-being, and social cohesion (Kaplan, Pamuk, Lynch, Cohen, & Balfour, 1996; Pickett & Wilkinson, 2015; Wilkinson & Pickett, 2006), it is imperative to understand why people may be inclined to accept high levels of income inequality.

Research suggests that people's attitudes towards income inequality may be influenced by the degree to which they believe that outcomes (e.g., pay, jobs, status) are distributed based on merit (i.e., skills, effort, capabilities; Kluegel & Smith, 1986). Indeed, studies have found that the more people believe that effort and hard work lead to success, the less they believe that income inequality is too large in their country (Hadler, 2005). And although some have speculated as to why meritocratic beliefs may lead to greater acceptances of inequality (e.g. reasons concerning productivity, motivation, justice; Berger et al., 1972; Kelley & Zagorski, 2004), no study has ever empirically tested these relations. The current research fills this gap in the literature by exploring two potential mediating factors: people's perceptions about the benefits of pay

dispersion and people's perceptions of whether pay dispersion was equitable. I drew on several literatures (e.g., human resource management, political science) and theories (e.g., tournament theory, distributive justice theory, system justification theory) to test my research questions.

In the following sections, I (a) begin by arguing why it is important to reduce high levels of income inequality, emphasizing that high levels of income inequality may have negative effects on societies, (b) review the literature on pay dispersion and explain how pay dispersion contributes to income inequality, (c) explain why people believe that certain levels of pay dispersion may be fair and necessary, (d) explain why people's meritocracy beliefs may influence their attitudes towards pay dispersion, and (e) introduce the current study, which aims to investigate what factors may lead one to accept greater levels of pay dispersion.

Income Inequality

Income inequality in the United States is on the rise, with the top 10% of income earners making more than the bottom 90% (Saez, 2015). Research on economic trends revealed that the bottom 50% of American earned only 1% more in 2014 than they did 1980.[1] In the same period: the top 10% have earned 121% more; the top 1% have earned 205% more; and the top 0.1% have earned 321% more (Piketty, Saez, & Zucman, 2016). A recent article from *The Guardian* news outlet reported that "America's top CEOs pocket 340 times the average workers" in 2015 (Kasperkevic, 2016). Clearly, there is a growing disparity between those at the top and those at the bottom.

Large levels of income inequality can affect population health and wellbeing (Pickett & Wilkinson, 2015). Even though several studies have reported mixed findings between income inequality and population health (Lynch et al., 2004; Macinko, Starfield & Shi, 2003; Zheng,

[1] These figures are referring to pre-tax income.

2012), most of this literature, including large-scale meta-analyses with over 300 studies, have found evidence that income inequality is associated with notable population health and social problems (Pickett & Wilkinson, 2015; Wilkinson & Pickett, 2006). For example, those who simply reside in societies with greater income inequality face increased mental health issues including depression and stress (Brunner, 1997; Layte & Whelan, 2014; Lorant et al., 2003), as well as physical health problems including obesity, cardiovascular disease, and shorter life expectancies (Crepaz & Crepaz, 2004; Dahl, Elstad, Hofoss, & Martin-Mollard, 2006; Kawachi & Kennedy, 1997; Kondo et al., 2009; Subramanian & Kawachi, 2004; Wilkinson & Pikett, 2006). These findings demonstrate that high levels of income inequality may have profound health-related consequences.

Another consequence of income inequality is its effect on social relations. Because greater income inequality punctuates the differences between social classes (i.e., the rich and the poor), individuals who live in more unequal societies experience less group cohesion (Uslaner & Brown, 2005), resulting in greater social distrust (Delhey & Draglov, 2013) and social conflict (Kawachi & Kennedy, 1997); people are less likely to cooperate with one another; drug use is more frequent, and crime rates are significantly higher (Krohn, 1976; Pickett & Wilkinson, 2010; Wilkinson & Pickett, 2009). A study by Kaplan and colleagues (1996) found that even when controlling for socioeconomic status, higher objective levels of income inequality were associated with increased smoking, unemployment, imprisonment, homicides, and violent crimes. These results reinforce the notion that income inequality affects everyone regardless of their status, and that simply living in an unequal society can be disadvantageous (Chiang, 1999; Lochner, Pamuk, Makuc, Kennedy, & Kawachi, 2001; Kawachi, Kennedy, Lochner, & Prothrow-Stith, 1997; Shi et al., 2003; Wilkinson, 1996).

Despite the negative implications of income inequality, most Americans seem to be hesitant to support policies that would decrease income inequality and redistribute wealth (e.g., Bartels, 2005; McCall & Kenworthy, 2007; Kuziemko et al., 2015). Perhaps this is because people are not necessarily as concerned with whether outcomes are being distributed equally as they are concerned with whether outcomes are being distributed 'fairly' (Starmans, Sheskin, & Bloom, 2017). People may believe that outcomes should be distributed based on one's merits – which of course may vary drastically from person to person. It may also be that people believe that wage inequality is a result of compensation strategies that reward high performers, which in turn benefit organizations (Durham & Bartol, 2000). Indeed, there may be multiple incentives that lead people to support pay differences, especially in organizations where workers are often evaluated on the basis of their contributions. In the following section, I review the literature on pay dispersion, and speculate why people may be likely to accept high wage gaps in organizations.

Pay Dispersion

What is Pay Dispersion: An Overview. Broadly, pay dispersion is defined as the differences in wages between individuals with the same job (i.e., horizontal or lateral dispersion) or different jobs (i.e., vertical dispersion; Bloom, 1999; Shaw, 2014). It should be noted that pay dispersion and income inequality are not synonymous concepts. Pay dispersion refers to the differences in pay at the organization-level, between two or more workers. Income inequality encompasses any earnings outside of base pay, such as annual bonuses, incentive payments, stock options, capital gains, and executive pensions, and is often calculated for a population within a given society (e.g., state, country). Thus, pay dispersion merely contributes to a small portion of income inequality. A recent American congressional report found that the largest

contributors to income inequality between 1996-2006 were not disparities in salary, but rather by capital gains and dividends (Hungerford, 2011). However, even though pay dispersion may not be a substantial contributor to income inequality, people's inclinations to support high levels of income inequality may stem from their beliefs about whether they believe wages are equitable (see Kelley & Zagorski, 2004).

Perceptions of Equity. People may perceive that pay dispersion is a consequence of maintaining equitable outcome distribution between different types of workers. For example, most people believe that a certain degree of pay dispersion is necessary because those in higher-status occupations (e.g., doctors, chairman of a large company) deserve to get paid more than those in lower-status occupations (Kelley & Zagorski, 2004). Distributive justice theory (Deutsch, 1975) stipulates that there are various factors that dictate how goods should be allocated. For instance, distributing resources based on *equality* is thought to be important for fostering cohesion among employees; distributing resources based on *need* is thought to be important for development. Likewise, distributing resources based on *equity* (or merit) is thought to be important for increasing productivity and performance (Deutsch, 1975, 1985; Hook & Cook, 1979; Wagstaff, Huggins, & Perfect, 1993).

Equity theory (Adams, 1965) helps explain how employees may be impacted by these distributive strategies. According to equity theory, individuals compare the ratios of their inputs (e.g., effort, hard work, commitment) and outcomes (e.g., pay, promotion, recognition) with their peers and colleagues to determine whether they are being compensated fairly (Adams, 1965; Huseman, Hatfield, & Miles, 1987). Because organizations largely reward only a select few employees, workers may put in a great deal of effort and contribute to their organizations only to fall short of the prize. As a result, those who are not awarded with prizes may feel discouraged,

frustrated, and resentful, leading to job dissatisfaction and turnover (Messersmith, Guthrie, Ji, & Lee., 2011; Pfeffer & Davis-Blake, 1992).

These adverse feelings and behaviours may be more common than one might expect because people tend to overestimate their performance (Harrison & Shaffer, 1994; Kruger & Dunning, 1999). As pay disparities increase, there are more opportunities for workers to perceive that the equity principle is violated (Trevor & Wazeter, 2006). There are negative effects for those who may benefit from inequity as well (see Son Hing, Stamarski, et al., in preparation). For instance, studies have shown that those higher in the social hierarchy also experience stress – likely because they constantly need to compete to retain their favourable outcomes (Sapolsky, 2004; Wittchen, Krimmel, Kohler, & Hertel, 2012). Thus, it is not surprising that organizations with greater pay dispersion have been found to be associated with less teamwork, group cohesion, and higher rates of turnover (Baron & Pfeffer, 1994; Bloom & Michel, 2002; Ensley, Pearson, & Sardeshmukh, 2006; Ridge, Hill, & Annie., 2014; Shaw, 2014; Wade, O'Reilly, & Pollock., 2006).

The equity principle may also be violated when comparing the wage gap between average workers and top executives (e.g., CEOs). Although it may be relatively straightforward to measure and compare inputs between workers in the same job position, it is quite difficult to determine whether CEOs deserve to earn 354 times the average worker. Consider piece-rate incentive systems for salespeople. If one salesperson sells double the amount of goods compared to their colleague, then perhaps they should earn double the commission. This is an equitable distribution of outcomes. However, do CEOs possess 354 times as much inputs as the average worker? It certain does not seem like Americans believe they do. According to a study by Kiatpongsan & Norton (2014), Americans believe that the average CEO in their country should only earn approximately seven times the average worker. Thus, the more pay dispersion people

perceive, the more likely their equity principles become violated. Supporting this line of evidence, past research has found that perceiving greater wage gaps between CEOs and workers was associated with more negative attitudes towards the wage gap (McCall & Chin, 2013).

To summarize, people's perceptions of equity may be an essential predictor for how they feel about pay dispersion. On one hand, individuals may hold more negative evaluations of pay dispersion when they perceive that outcomes are unequitable and pay dispersion leads to negative organizational outcomes (e.g., increased turnover). Following the same logic, individuals may hold more positive evaluations of pay dispersion when they perceive that outcomes are equitable. Indeed, when people perceive that outcomes are distributed equitably, they may also likely believe that pay dispersion is beneficial for organizations (e.g., motivate employees and increase performance). As I discuss in the following section, this is because people associate performance with equity (Adams, 1965; Deutsch, 1975; Kepes, Delery, & Gupta, 2009; Trevor & Wazeter, 2006) and with pay dispersion (Conroy, Gupta, Shaw, & Park, 2014; Downes & Choi, 2014; Gupta, Conroy, & Delery, 2012; Shaw, 2014).

The Benefits of Pay Dispersion. There are two theories that explain why individuals may believe that pay dispersion benefits organizations. First, individuals may perceive a strong association between effort, performance, and outcomes. This is best explained by expectancy theory (Vroom, 1964). According to expectancy theory, people's tendencies to work hard depends on three motivations: (1) they value outcomes (e.g., a high pay); (2) they believe that their efforts will lead to greater performance; and (3) they perceive that greater outcomes are attainable through increased performance (Vroom, 1964). Meta-analytic evidence has shown that greater levels of motivation can be achieved by providing larger rewards and establishing a closer relationship between pay and performance (Van Eerde & Thierry, 1996), and studies have documented the benefits of performance-based pay for employee and organizational productivity

(e.g., Heneman, 1992; Jenkins, Mitra, Gupta, & Shaw, 1998). Indeed, pay dispersion has been found to be positively related to performance when pay was based on performance (Kepes et al., 2009; Shaw et al., 2002; Trevor, Reilly, Gerhart, 2012). Thus, it is possible that people believe that pay dispersion may be necessary to motivate employees and increase performance.

Second, people may believe that competition is beneficial for employee performance. This is best explained by tournament theory (Lazear & Rosen, 1981). According to tournament theory, employees should be motivated to work harder when they compete with one another to obtain rewards (Lazear & Rosen, 1981). As organizations increase the values of their rewards (e.g., pay raises, promotions), employees subsequently compete harder to 'win' (Audas, Barmby, & Treble, 2004; Ehrenberg & Bognanno, 1990; Lazear & Rosen, 1981). Assuming that outcomes are distributed based on merit, higher performers would receive greater rewards, and lower performers would receive lesser rewards, and as some suggest, would inevitably turnover from the organization (Carnahan, Agarwal, & Campbell, 2012; Lazear & Rosen, 1981; Rosen, 1986). Thus, organizations that adopt tournament-style systems emphasize that pay differences are important to an organization's success because pay differences foster a performance-oriented culture, attracting and maintaining high-performers (Milkovich & Newman, 1986).

Consistent with expectancy theory and tournament theory, many studies have found that pay dispersion is associated with increased employee, team, and organizational performance (Conroy et al., 2014; Downes & Choi, 2014). Among truck drivers, higher levels of pay dispersion were associated with less out-of-service days and greater return-on-equity (Kepes et al., 2009). In professional basketball, greater incentive values (e.g., size of prizes and chances of winning) were positively related to individual performance (e.g., points scored, rebounds, blocks/assists, turnovers) as well as team performance (i.e., season game wins; Frick, Prinz, & Winkleman, 2003; Simmons & Berri, 2011). Similar effects were also found in other sports such

as autoracing (Becker & Huselid, 1992) and golf (Ehrenberg & Bognanno, 1990). These positive effects were not limited to Western society; Ding, Akhtar, and Gee (2009) found that in Chinese manufacturing organizations, differences in pay were positively related to sales growth, product quality, and sales quality. Additional studies have reported that greater vertical pay dispersion was associated with increased performance in firms from the United States, Denmark, China, and Israel (Lee, Lev, & Yeo, 2008; Main et al. 1993). Overall, a plethora of studies support the positive relation between pay dispersion and performance. In the following section, I review the literature on meritocracy, explaining why individuals who believe that workplaces are meritocratic may be more likely perceive that pay dispersion is beneficial and equitable.

Meritocracy

Given the lack of past research on people's evaluations of pay dispersion, a critical first step is to explore this topic through the lens of meritocracy – the belief that one's financial and social outcomes are determined primarily by one's skills, efforts, and capabilities (Kluegel & Smith, 1986, Young, 1958). The meritocratic belief is arguably the most widely accepted socioeconomic ideology in western free-market societies (Gao, 2015; Kluegel & Smith, 1986). A recent report by the Pew Research Center reported that approximately 73% of Americans and 50% of the world *strongly agree* with statements suggesting that their society is meritocratic (i.e., "it is 'very important' to work hard in order to get ahead in life"; Gao, 2015). Given its seemingly impartial distribution of resources, merit-based systems are often perceived as fair in that everyone is responsible for their own consequences and everyone has the opportunity to succeed (Pandey & Joseph, 2014). As such, it is not surprising that meritocratic ideals are highly popular in societies, as evident by commonplace narratives (e.g., the "American Dream" ideology) and workplace norms (e.g., Castilla & Benard, 2010; Son Hing et al., 2011). However,

as researchers have demonstrated, individuals can hold multiple beliefs about meritocracy (Son Hing et al., 2011).

Perceptions that Meritocracy Exists: The System Justification Belief. To varying degrees, individuals can perceive that systems are meritocratic – that is, outcomes are distributed based on skills, effort, and abilities (Son Hing et al., 2011). The more people perceive workplaces to be meritocratic, the more they should believe that pay dispersion is beneficial and equitable. This is because when outcomes are distributed based on merit, employees should be motivated to work harder and compete for greater outcomes. As well, pay differences should be perceived as more equitable and deserving; this is because those with lesser merits are rewarded with less salaries, while those with greater merits are rewarded with greater salaries.

According to system justification theory, people are motivated to support the social system and defend the status quo, even at the expense of their own interests (Jost & Banaji, 1994; Jost, Banaji, & Nosek, 2004). That is, people have a "tendency to construe the current status quo as the most desirable and reasonable state of affairs (i.e., as the most representative of how things should be)" (Kay et al., 2009, p.421). They endorse a set of 'system justification beliefs' that uphold various aspects of the system (e.g., hierarchies, norms), and in doing so, they reduce social uncertainty, perceived threats, and cognitive/ideological dissonance (Greenwald, 1980; Jost & Hunyady, 2002, 2005; Jost, Blout, Pfeffer, & Hunyady, 2003; Jost, Ledgerwood, & Hardin, 2008; Kay et al., 2007). As a result, system justification may serve a palliative function to make sense of existential and epistemic threats towards oneself (Jost & Hunyady, 2002; Kay et al., 2009).

One way to justify existing inequalities is to believe that the system operates in a meritocracy (Jost, Pelham, et al., 2003; Kay et al., 2009; Ledgerwood, Mandisodza, Jost, & Pohl, 2011; Son Hing et al., 2011). Indeed, studies have found that individuals are more likely to

accept greater amounts of income inequality when they believe that their systems are meritocratic (Hadler, 2005; Kuhn, 2011). Across 30 countries with approximately 35,000 respondents, Hadler (2005) found that the more people agreed with statements like "In my country, people get rewarded for their efforts," the more they believed that differences in income are not too large in their country. Similarly, a study by Kuhn (2011) observed 45 countries from four time periods between (1987 and 2009). His results revealed that people were more likely to legitimize wage gaps between low status occupations (e.g., shop assistant, unskilled worker) and high-status occupations (e.g., doctor, minister) when they believed that rewards were allocated based on merit (i.e., intelligence, effort, and skills). Taken together, these results add to the notion that people may justify inequalities when they believe that outcomes are distributed based on merit.

Preference for the Merit Principle. In addition to people's perceptions of meritocracy, people can also vary on the degree to which they prefer outcomes to be distributed based on merit (Davey, Bobocel, Son Hing, & Zanna, 1999; Son Hing et al., 2011). This may seem similar to the distributive principle of equity, as previously described (Adams, 1965; Deutsch, 1975, 1985; Greenberg, 1990). However, distributive justice theory assumes that distributive norms (i.e., equity, equality, and need) should be determined based on situational factors (e.g., fostering cooperation, increasing performance). In contrast, Davey and colleagues (1999) argued that some people may generally prefer certain distributive norms more than others – that is, one's preference for the merit principle is an individual difference. Such preferences for equitable outcomes may be motivated by concerns surrounding justice, (e.g., Greenberg, 1990; Lerner, 1980) and ethical values (e.g., Protestant Work Ethic; Furnham, 1982; Rosenthal, Levy, & Moyer, 2011).

Even though perceptions that meritocracy exists and preferences for the merit principle are two independent beliefs, people who prefer the merit principle may be more inclined to believe that meritocracy does exists (and vice versa; Son Hing et al., 2011). On one hand, this may be a consequence of people's tendencies to rationalize the status quo as fair and just (Jost & Hunyady, 2002; Jost et al., 2004). That is, "people engage in "sour grapes" and "sweet lemons" rationalizations by adjusting their preferences to fit with their expectations about what is likely to occur" (Jost et al., 2004, p.889). People do this to satisfy intrinsic needs: to feel like they are in control (Jost et al., 2004), to reduce cognitive dissonance (Jordan, Spencer, Zanna, Hoshino-Browne, & Correll, 2003), defend against perceived threats (Andorno Frenkel-Brunswik, Levinson, & Stanford, 1950), and enhance self-esteem (Tesser, 2000; Tesser, Crepaz, Collins, Cornell, & Beach, 2000).

At the same time, people may engage in a manner of self-serving information processing that favours their own beliefs and biases (Kunda, 1990). That is, not only are people motivated to prefer what they perceive to exist, but "people are [also] capable of believing what they want to believe" (Jost, Glaser, Kruglanski, & Sulloway, 2003, p.340). Self-serving cognitions may also influence their perceptions; that is, individual beliefs and preferences can affect how one perceives people, relationships, or situations (Fiske, 1993). Thus, one might expect that the more people prefer the merit principle, the more likely they are to believe that workplaces are meritocratic.

Indeed, Son Hing and colleagues (2011) demonstrated that people who believe that outcomes *ought to be* distributed based on merit were more likely to believe that outcomes *are* distributed based on merit. In their study, participants responded to set of identically-worded items about whether meritocracy exists and whether meritocracy should exist (e.g., "In organizations, people who do their jobs well [ought to] rise to the top"). Their results revealed

that these constructs shared a modest correlation (r = .27).[2] This finding importantly indicates that these meritocracy beliefs are fundamentally distinct. Interestingly, the more people perceived outcomes to be distributed based on merit, the more they endorsed hierarchy-legitimizing beliefs: be politically conservative, identify with right-wing authoritarian beliefs, hold racist beliefs, and believe in socially dominant ideologies. In contrast, people's preferences for the merit principle were not associated with hierarchy-legitimizing ideologies.

The Current Research

Previous studies have demonstrated that the more people perceived that their systems were meritocratic, the more income inequality they believed was acceptable (Hadler, 2005; Kuhn, 2011). Some researchers have theorized that this relation may stem from a cognitive need to rationalize the status quo (Jost, Pelham, et al., 2003; Jost et al., 2004). Others have speculated that merit-based inequalities may be perceived as fair because motivates individuals to work harder (Berger et al., 1972; Deutsch, 1975; Kelley & Zagorski, 2004). However, these conjectures lack empirical support. To fill this gap in the literature, the current study investigated two potential mediators (perceptions of equity and perceptions of benefits) that may help explain the relation between people's perceptions that meritocracy exists and evaluations towards pay dispersion in organizations. In addition to the main research question, the current research broadly examines how people's evaluations of pay dispersion are affected by how overpaid they believe CEOs to be and how underpaid they believe entry-level workers to be. I also analyze whether people evaluated low levels of pay dispersion more positively than high levels of pay dispersion, and whether people's evaluations of pay dispersion are related to their political ideologies.

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[2] Tilby and Kalin (1980) and Cota, Reid, & Dion. (1991) found very similar correlations between similarly-worded measures about gender stereotypes (r = .27, .26, respectively).

After completing a series of questionnaires measuring individual differences (i.e., income, political affiliation, meritocracy beliefs), participants were asked to rate how overpaid (or underpaid) they believe the average American entry-level worker, middle-level worker, and CEO to be. They were also asked to evaluate low, medium, and high levels of pay dispersion at three fictional American organizations. For each organization, I assessed the degree to which they believed that the pay dispersion in the organization was: beneficial and equitable (which were the mediators of the study) and appropriate (which was the outcome variable of the study).

Hypotheses

There is ample evidence indicating that people are more likely to accept and legitimize greater amounts of inequality when they perceive their systems as meritocratic (Hadler, 2005; Jost, Pelham, et al., 2003; Kelley & Zagorski, 2004; Kuhn, 2011; Son Hing et al., 2011). This is because when people believe that systems are meritocratic, outcomes are often believed to be fairly allocated. Those who have greater skills, efforts, and capabilities deserve to earn higher wages than those who have less skills, efforts, and capabilities. As such, I hypothesize:

Hypothesis 1: The more people believe that outcomes are distributed based on merit, the more positively they should evaluate pay dispersion.

As Son Hing and colleagues (2011) have demonstrated, people's judgements may be influenced by their perceptions that meritocracy exists as well as their preferences for the merit principle. When individuals perceive that workplaces are meritocratic, they should evaluate pay dispersion more positively. Importantly, this effect should be stronger among those who more strongly prefer the merit principle and weaker among those who less strongly prefer the merit principle. This is because those who less strongly prefer the merit principle may be more likely

to believe that other factors (e.g., maintaining equality, helping those in need) may take precedent when distributing pay.

Hypothesis 2: There will be an interaction between people's preferences for the merit principle and perceptions that meritocracy exists, such that among those who less strongly believe that outcomes should be distributed based on merit, there should be no relation between people's beliefs that outcomes are distributed based on merit and their evaluations of pay dispersion. Conversely, among those who strongly believe that outcomes should be distributed based on merit, as their beliefs that outcomes are distributed based on merit increases, the more positively they should evaluate pay dispersion.

To further explain why perceptions that meritocracy exists should lead to more positive evaluations of pay dispersion, I propose two mediating factors. First, those who perceive that workplaces are meritocratic should also perceive that pay dispersion benefits organizations. This is because these people perceive that merit-based outcome allocation may be important for motivating employees to work harder and compete for rewards, which in turn will increase organizational-level productivity and performance (Frick, Prinz, & Winkleman, 2003; Simmons & Berri, 2011). Thus, the more people perceives pay dispersion to benefit organizations, the more positively they should evaluate pay dispersion. Second, concerning desires to view the distribution of outcomes to be fair and just, those who perceive that workplaces are meritocratic should also perceive that employees and executives alike deserve the pay they receive; that is, their pay is a reflection of their contributions to their organizations (Deutsch, 1975). Consequently, the more people perceive pay to be fair, legitimate, and justified, the more positively they should evaluate pay dispersion (Jost, Blount, et al., 2003). Therefore, I hypothesize:

Hypothesis 3: The positive relation between perceptions that meritocracy exists and positive evaluations of pay dispersion should be mediated by (a) perceptions of benefits and by (b) perceptions of equity.

Exploratory Research Questions

In addition to the hypotheses, the current study poses three exploratory research questions. The first research question explores whether the interaction effect between perceptions that meritocracy exists and preferences for the merit principle on evaluations of pay dispersion is explained (or mediated) by people's perceptions of benefits to organizations and by their perceptions of equity.

Research Question 1: Do people's perceptions of benefits and perceptions equity mediate the interaction effect of perceptions that meritocracy exists and preferences on the merit principle on evaluations of pay dispersion?

Although there have been several studies documenting people's attitudes towards pay and income inequality, most studies in the literature do not examine whether these attitudes are associated by how they feel towards the those at the bottom and those at the top (c.f., Osberg & Smeeding, 2006). These attitudes are important to differentiate as they may be driven by different psychological needs. For instance, with respect to those at the bottom (e.g., entry-level workers), individuals may be concerned with whether people are being paid enough to sustain themselves and their families (recall the distributive norm of *need*). People may feel empathic towards those who only meet the minimum threshold for paid labour, and they may feel a moral obligation to reduce such inequalities, especially when these individuals are contrasted with those who earn substantially higher salaries (Hoffman, 1990). However, research suggests that people generally are less concerned about increasing wages for those at the bottom than they are

about reducing earnings for those at the top (Osberg & Smeeding, 2006). This may be because while wages were predominantly stagnant for the majority of Americans over the last few decades, the top 1% of income earners have seen an exponential increase in their salaries (Piketty et al., 2016). To further explore people's attitudes towards earnings for those at the bottom and those at the top, I propose the following research question:

Research Question 2: How are people's evaluations of pay dispersion affected by their attitudes towards earnings for those at the bottom and those at the top?

Pilot Study

Participants in the main study were asked to read descriptions of three fictional American organizations (OnlineSales.com, Julian Group, and Growth Foods) and evaluate the level of pay dispersion at each company. A critical first step was to ensure that individuals held equivalent evaluations of all three organizations. This was important because people's favourability towards the organizations may confound with the level of inequality to impact people's evaluations of pay dispersion.

Methods

Thirty participants were recruited from Amazon's Mechanical Turk (MTurk) website in February 2018. They were asked to read descriptions for three fictional American organizations: OnlineSales.com, Julian Group, and Growth Foods (see Appendix A). For each organization, participants rated from -5 (*strongly disagree*) to 5 (*strongly agree*), the extent they agreed with the following statements: "[Organization] is performing well.", "The leaders at [organization] are doing a good job.", and "Employees at [organization] are good contributors to the organization." The organizations were presented in random order. Participants were compensated $0.50 for their participation.

Results and Discussion

Participants evaluated leaders, employees, and organizations similarly ($\alpha = .92$ for OnlineSales.com, $\alpha = .86$ for Julian Group, $\alpha = .92$ for Growth Foods). Thus, participants' responses for each organization were aggregated. A one-way analysis of variance (ANOVA) test was conducted to assess the mean differences between people's evaluations of the three target organizations. The overall model was not statistically significant ($F(2,87) = 0.83$, $\eta^2 = .02$, 95% CI [.00,.07], $p = .44$), indicating that people were equally favourable to OnlineSales.com ($M = 1.91$, $SD = 2.29$), Julian Group ($M = 1.72$, $SD = 1.94$), and Growth Foods ($M = 2.38$, $SD = 1.82$).[3] Thus, it was concluded that participants should not be biased to evaluate any one organization more favourably than the others.[4]

Main Study: Method

Design

The main experiment was a 3 within-participants (level of pay dispersion: low, medium, and high) x 2 between-participants (order: low pay dispersion first, medium pay dispersion second, high pay dispersion last or high pay dispersion first, medium pay dispersion second, low pay dispersion last) mixed-factorial design. Level of pay dispersion was manipulated by varying pay ratios for entry-level workers and CEOs. In the low pay dispersion level, the CEO earned approximately 20 times more than the entry-level employee. In the medium pay dispersion level, the CEO earned approximately 100 times more than the entry-level employee. In the high pay dispersion level, the CEO earned approximately 1000 times more than the entry-level employee.[5]

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[3] The results from a post-hoc Tukey's Honestly Significant Difference test confirmed that there were no statistically significant mean differences between the organizations (see Table 1).
[4] This lack of difference could be due to low statistical power ($n = 30$).
[5] Many CEOs in the United States earn more than 1,000 times their employees. For instance, in 2017, the CEO-worker pay ratios for: VF is 1,353:1; Del Monte Produce is 1,465:1; Six Flags is 1,920:1; Manpower is 2,483:1; Aptiv is 2,526:1 (Anderson & Pizzigati, 2018).

Middle-level employees earned similar salaries across all conditions. Each participant rated all three levels of pay dispersion.

Participants were randomly assigned to a 'low-first' order (i.e., the first organization had low levels of pay dispersion; the second organization had medium levels of pay dispersion; the third organization had high levels of pay dispersion) or a 'high-first' order (i.e., the first organization had high levels of pay dispersion; the second organization had medium levels of pay dispersion; the third organization had low levels of pay dispersion). It should be noted that the order of the organizations did not change; OnlineSales.com was always presented first, followed by Julian Group, and Growth Foods. The individual difference predictors in this study were: preferences for the merit principle, perceptions that meritocracy exists, and perceptions about whether entry-level workers, middle-level workers, and CEOs were overpaid (or underpaid). The outcome variable was positive evaluations towards pay dispersion. The mediators were perceptions about whether pay dispersion was beneficial for organizations and whether pay dispersion was equitable. Income and political conservatism were included as potential covariates.

Sample Size Analyses

Size analyses were conducted to determine the number of participants required for my hypotheses. No previous study has explored the effects of meritocracy beliefs, perceptions of overpayment, or level of pay dispersion on positive evaluations of pay dispersion, and thus there were no established effect sizes related to my predictions. Despite this, there are strong theoretical arguments as to why these effects may exist. As a result, the analyses were conducted with a medium estimated effect size (r = .16; Bosco, Aguinis, Singh, Field, & Pierce, 2015).[6] Not

[6] Effect sizes were converted to Cohen's d and f^2 when appropriate.

surprisingly, the results revealed that my mediation model (H3) demanded the largest sample size; a Monte Carlo simulation (Muthén & Muthén, 2002) conducted with a simulation of 10,000 samples indicated that 620 participants were required to achieve adequate power and fulfill recommended parameters: (a) provide adequate power (> .83), (b) provide a 94% coverage of the actual parameter value, and (c) ensure that there is less than 10% bias for the parameter estimates (Beaujean, 2014; Muthén & Muthén, 2002).

Participants

One thousand six hundred and twelve American participants (54.59% female) were invited through MTurk to complete a two-phase study in March 2018.[7] The mean age of this sample was 37.5 years (*SD* = 12.8). The mean household income was $45,371 USD (*Mdn* = $40,000). The sample was ethnically diverse: 49.37% Western European, 20.91% Eastern European, 6.95% Hispanic/Latino, 9.49% Black/African-American, 1.86% American Indian or Alaskan Native, 4.90% East Asian, 1.67% South Asian, and 4.34% individuals who identified with another ethnicity. The political affiliation of the sample was relatively diverse, *M* = 4.43 (*SD* = 2.16, skewness = 0.12, kurtosis = -0.79), (1 = e*xtremely Liberal*, 9 = e*xtremely Conservative*).

Procedure

Participants completed a two-phase study in which they responded to a series of Likert-scale questionnaires. Each survey took approximately 30 minutes to complete and participants were awarded $0.50 and $1.25 for completing phase one and two, respectively. Participants were told that the purpose of the study was to investigate how aspects of a person, such as employment background and general attitudes, were related to attitudes towards social and organizational policies.

In phase one, participants read the consent form and were asked whether they intended to respond honestly and accurately to the survey (0 = *no*, 1 = *yes*). Those who did not intend to report honestly and accurately were omitted from analyses. They then proceeded to complete the Preference for the Merit Principle Scale followed by additional measures that were included for a

[7] MTurk respondents have been found to be more attentive than 'traditional subject pool samples' (Hauser & Schwarz, 2016)

broader study.[8] Participants then completed a demographic questionnaire reporting their income and political affiliation. There were two instructional inattention checks that asked participants to select a specific response option (e.g., "For this item, please select the option '*strongly agree*'.").[9] Those who did not select the correct response failed the inattention check. Following these measures, participants were asked to rate how honestly and accurately they responded to the survey (1 = *not at all honestly and accurately*, 2 = *somewhat honestly and accurately*, 3 = *moderately honestly and accurately*, and 4 = *very honestly and accurately*). Participants who reported a score below 3 were omitted from analyses. They were then thanked for their participation and asked whether they would like to complete the second phase of the study. If participants indicated that they did not wish to continue, they were debriefed, thanked, and compensated for their participation. If participants indicated that they wished to continue, they were compensated and informed that they would be contacted one week later through their MTurk accounts to complete phase two.[10]

In phase two, participants read the consent form and were again asked whether they intended to respond honestly and accurately to the survey. Those who did not intend to report honestly and accurately were omitted from analyses. They proceeded to complete the Perceptions that Meritocracy Exists Scale and a questionnaire that assessed people's attitudes towards various human resource practices. This measure was included to bolster the cover story and placed at this point to separate the predictors and outcome variables (see Appendix B). Subsequently, participants read descriptions for three fictional American organizations

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[8] These measures included the Social Dominance Orientation Scale (Pratto et al., 1994), System Justification Short Scale (Kay & Jost, 2003), Belief in a Just World Scale (Lipkus, 1991), perception of social mobility (McCall, 2017; General Social Survey), perceptions of income inequality (Eriksson & Simpson, 2012), and evaluations of income inequality (Eriksson & Simpson, 2012; Hadler, 2005). These measures had no impact on the current results as they were placed after the measures used for this study.

[9] One instructional inattention check was placed near the beginning of the survey and the other near the end.

[10] A message was delivered to MTurk participants using the R packages "XML" and "MTurkR".

(OnlineSales.com, Julian Group, and Growth Foods, see Appendix C and D). For each organization, participants completed three measures: (1) perceptions of benefits to organizations, (2) perceptions of equity, and (3) positive evaluations of pay dispersion. Afterwards, participants rated how overpaid (or underpaid) they believed the average American entry-level worker, middle-level worker, and CEO to be. They then completed additional measures that were included for a broader study.[11] Two instructional inattention checks were included in phase 2.[12] Finally, participants were again asked how honestly and accurately they responded to the survey (1 = *not at all honestly and accurately*, 2 = *somewhat honestly and accurately*, 3 = *moderately honestly and accurately*, and 4 = *very honestly and accurately*). Participants who reported a score below 3 were omitted from analyses. They were debriefed, thanked, and compensated for their participation.

Materials and Measures

Predictors.

Perceptions of Overpayment. Participants were asked to rate the extent to which they believed that "In a typical American organization, [entry-level workers/middle-level workers/CEOs] are [-4 (*extremely underpaid*) to 4 (*extremely overpaid*)]." See Appendix E.

Perceptions that Meritocracy Exists. Perceptions that meritocracy exists was measured by the 11-item Perceptions that Meritocracy Exists Scale (Son Hing et al., 2011), which assessed people's beliefs that outcomes are being distributed based on merit in organizations. Minor wording modifications were made to the original scale to evenly cover domains of inputs (i.e., ability, effort, skill) and outcomes (i.e., job positions, success, rewards). For this scale,

[11] These measures included attitudes towards redistribution (Kuhn, 2011) and a group attitudes measure that asked participants to rate how warm (or cold) they felt towards various individuals or groups (e.g., firefighters, Democrats, Donald Trump). These measures had no impact on the current results as they were placed after the measures used for this study.

[12] One instructional inattention check was placed near the beginning of the survey and the other near the end.

participants were asked to rate from -4 (*extremely disagree*) to 4 (*extremely agree*) the extent to which they agree with statements like “In organizations, people who do their job well rise to the top.” and “People’s success in the workplace depends primarily on their skills.” Previous research has demonstrated that this scale has good predictive validity, good discriminant validity, and adequate internal consistency (Son Hing et al., 2011). This scale was reliable (α = .95). See Appendix F.

Preference for the Merit Principle. Preference for the merit principle was measured by the 11-item Preference for the Merit Principle Scale developed by Son Hing et al., (2011), which assessed people’s beliefs that outcomes ought to be distributed based on merit. This scale is identical to the Perceptions that Meritocracy Exists Scale except that the statements measured people’s ideals about how outcomes should be allocated rather than how they perceive outcomes are currently allocated. Minor wording modifications were made to the original scale to evenly cover domains of inputs (i.e., ability, effort, skill) and outcomes (i.e., job positions, success, rewards). For this scale, participants were asked to rate from -4 (*extremely disagree*) to 4 (*extremely agree*) the extent to which they agree with statements like “In organizations, people who do their job well ought to rise to the top.” and “People’s success in the workplace ought to depend primarily on their skills.” Previous research has demonstrated that this scale has good predictive validity, good discriminant validity, and adequate internal consistency (Son Hing et al., 2011). This scale was reliable (α = .90). See Appendix G.

Outcome Variable.

Positive Evaluations of Pay Dispersion. Positive evaluations of pay dispersion were measured by three items. Participants were asked to rate from -4 (*extremely disagree*) to 4 (*extremely agree*) the extent to which they agreed with statements like “At [organization], the pay difference between [entry-level employee] and the CEO is not big enough.” and “At

[organization], the pay differences between the average [entry-level employee] and the CEO is too large." (reverse-coded). This measure was reliable (α = .89). See Appendix H.

Mediators.

Perceptions of Benefits to Organizations. Three items assessed the degree to which participants perceived that pay dispersion benefits organizations. For this measure, participants were asked to rate from -4 (*extremely disagree*) to 4 (*extremely agree*) the extent to which they agreed with statements like "I think that the differences in pay at [organization] are likely to lead to high organizational performance." and "I think that the differences in pay that exist at [organization] motivate employees to work harder." This scale was reliable (α = .93). See Appendix I.

Perceptions of Equity. Three items assessed the degree to which participants perceived pay dispersion to be equitable in organizations. For this measure, participants were asked to rate from -4 (*extremely disagree*) to 4 (*extremely agree*) the extent to which they agreed with statements like "I think that the differences in pay at [organization] reflects people's effort and hard work." and "I think that the differences in pay that exist at [organization] reflect people's capabilities." This scale was reliable (α = .93). See Appendix J.

Covariates.

Income. Income was measured by asking participants to provide a numeric response for the following statement "What is your current annual income?" See Appendix K.

Political Conservatism. Political Conservatism was measured by asking participants to respond to the following statement: "Please indicate your political orientation by choosing where your orientation falls." Response options ranged from -4 (extremely Liberal/left-wing) to 4 (extremely Conservative/right-wing). See Appendix K.

Results

Participant Screening

Among the 1612 participants initially recruited, 853 completed both phases of the study. Among the participants who completed both surveys, a total 216 participants were omitted from analysis: one participant failed to report that they would respond honestly and accurately before starting the survey; 16 participants failed to report that they responded honestly and accurately after completing the survey, and 199 participants failed to respond correctly to at least one of three instructional inattention checks.[13] This resulted in a final sample of 637 participants.

Preliminary Analysis

Data Preparation. The data from phase 1 and phase 2 were loaded into R Studio version 3.3.2. The dataset was merged using participants' Mechanical Turk IDs. Scores from nine-point Likert scales were recoded from (-4 to +4) to (0 to 9). Negatively-worded items were reverse-coded, and measures were built by taking the mean scores of items. Interitem reliability was assessed by calculating Cronbach's alphas for each measure. To test interactions, continuous predictors were centered and multiplied to create interaction terms. Simple effects were tested at one standard deviation above and below the mean (Aiken & West, 1991). Contrast vectors were created to compare low levels of pay dispersion with medium levels of pay dispersion (low pay dispersion was coded as -1, medium pay dispersion was coded as 1, high pay dispersion was coded as 0) and medium levels of pay dispersion with high levels of pay dispersion (low pay dispersion was coded as 0, medium pay dispersion was coded as -1, high pay dispersion was coded as 1).

[13] Only three of the four inattention checks were included in data screening as the last check item was placed after all key measures for the current study was assessed in phase 1. Eight hundred and twenty participants correctly answered at least one inattention check, and 778 participants correctly answered at least two inattention checks.

Correlations. I began by reviewing the zero-order correlations presented on Table 2. Importantly, the results indicated that preference for the merit principle was weakly correlated with perceptions that meritocracy exists (r = .13), supporting the notion that these are indeed fundamentally different constructs (Son Hing et al., 2011). Moreover, perceptions that meritocracy exists significantly correlated with income, political conservatism, perceptions of benefits, and perceptions of equity, whereas preference for the merit principle did not statistically significantly correlate with these variables.[14] Additionally, whereas stronger perceptions that meritocracy exists predicted more positive evaluations of pay dispersion (r = .22), stronger preferences for the merit principle predicted less positive evaluations of pay dispersion (r = -.20).

Correlation tests were conducted to determine whether income and political conservatism should have been considered as covariates in the main analyses. Results revealed that income was not related to positive evaluations of pay dispersion (r = .06, 95% CI [-.02, .14], p = .96), and thus was not treated as a covariate in the main analyses. On the other hand, there was a statistically significant relation between political conservatism and positive evaluations of pay dispersion (r = .25, 95% CI [.18, .32], p < .001). As such, political conservatism was treated as a covariate.[15]

Multicollinearity. There was a high correlation between the two proposed mediators – perceptions of benefits to organizations and perceptions of equity (r = .85, 95% CI = [.82, .87], p < .001). These variables also demonstrated a similar pattern of correlations with predictors and outcome variables. To test for multicollinearity, I explored the variance inflation factor (VIF) for the predictors in a regression model wherein positive evaluations of pay dispersion was regressed on perceptions of benefits to organizations and perceptions of equity. Results indicated that

[14] Dependent sample z-tests indicated that these correlations were statistically significantly different.
[15] Results from the main analyses would not have (statistically) significantly differed if political conservatism was not included.

multicollinearity was present (*VIF* = 3.51). Because of this, I proceeded to aggregate these variables into a new construct (*perceptions of effectiveness*).

To ensure that perceptions of effectiveness is a single construct, an exploratory factor analysis of the six items was conducted using an oblimin rotation (Corner, 2009). The items best loaded on to one factor, which explained 85% of the variance ($X^2(5) = 68.13$, $p < .001$). In this model, all six items had primary loadings above .5 (see Table 3), and only one component of the analysis received an eigenvalue above 1.0 (Kaiser, 1960). Results from a parallel analysis are presented on Table 4 and a scree plot (Cattell, 1966) is illustrated on Figure 1. The new construct possessed good internal reliability ($\alpha = .93$).

Order and Level of Pay Dispersion. To test the effects of order and level of pay dispersion, a two-way repeated measures ANOVA was conducted on the influence of level of pay dispersion (low vs medium vs high) and order (low-first vs high-first) on positive evaluations of pay dispersion. The results revealed that there was a main effect of order on positive evaluations of pay dispersion ($F(1, 635) = 49.1$, $p < .001$, $\eta^2_g = .05$), such that those who perceived higher levels of pay dispersion first evaluated pay dispersion more positively (M = 3.39, SD = 2.09) compared to those who perceived lower levels of pay dispersion first (M = 2.56, SD = 1.74). See Table 5.

There was also a main effect of levels of pay dispersion on positive evaluations of pay dispersion ($F(2, 1131) = 381.35$, $p < .001$, $\eta^2_g = .13$). A Levene test for the equality of variances found that variances were significantly different across order and level of pay dispersion cells ($F(5, 1905) = 8.86$, $p < .001$), suggesting that an alternative post hoc test for pairwise differences of means should be used. Thus, I conducted a Dunnett-Tukey-Kramer pairwise multiple comparison test, adjusting for unequal variances and unequal sample sizes. The results revealed that individuals rated high levels of pay dispersion (M = 2.12, SD = 1.63) less positively than

medium levels of pay dispersion (*M* = 3.01, *SD* = 1.82, Δ*M* = .88, 95% CI [.65, 1.11]), and medium levels of pay dispersion less positively than low levels of pay dispersion (*M* = 3.80, *SD* = 1.80, Δ*M* = .79, 95% CI [.54, 1.04]).

Additionally, there was a statistically significant interaction effect of levels of pay dispersion x order on positive evaluations of pay dispersion ($F(2, 1131) = 66.3$, $p < .001$, $\eta^2_g = .03$), such that the main effect of level of pay dispersion was significantly greater for those in the high-first order. Participants who rated high levels of pay dispersion first evaluated low levels of pay dispersion more positively (*M* = 4.58, *SD* = 1.86) than participants who rated low levels of pay dispersion first (*M* = 3.02, *SD* = 1.73, Δ*M* = 1.56, 95% CI [1.16, 1.96], $p < .001$). As well, participants who rated high levels of pay dispersion first evaluated medium levels of pay dispersion more positively (*M* = 3.40, *SD* = 1.86) than participants who rated low levels of pay dispersion first (*M* = 2.61, *SD* = 1.78, Δ*M* = .80, 95% CI [.40, 1.19], $p < .001$). There was no statistically significant difference between evaluations for high levels of pay dispersion between participants who rated high levels of pay dispersion first (*M* = 2.19, *SD* = 1.70) and participants who rated low levels of pay dispersion first (*M* = 2.04, *SD* = 1.74, Δ*M* = .15, 95% CI [-.24, .55], $p = .87$). See Table 6, Figure 2.

Main Analyses

A four-step hierarchical linear model was created with positive evaluations of pay dispersion as the outcome variable. For all models, political conservatism and level of pay dispersion were entered into step one of the model as covariates. As well, within-subject variance was also calculated in step one to control for repeated-measure effects. For models 2, 3, 4, the main predictor (perceptions that meritocracy exists) was entered into step two. For model 3, the moderator (preferences for the merit principle) and the interaction term (perceptions that

meritocracy exists x preferences for the merit principle) were entered into step three. Lastly, for model 4, the mediator (perceptions of effectiveness) was entered in step four (see Table 7).

Model 1, which included only step one variables revealed that pay dispersion accounted for an estimated 48.9% of the within-subject variance in people's evaluations of pay dispersion (R^2 *within-subject*), while political conservatism accounted for 16.4% of the variation in people's evaluations of pay dispersion (R^2 *between-subject*). In model 2, adding perceptions that meritocracy exists explained an additional 1.8% of the between-subject variation in evaluations of pay dispersion. Specifically, the more people perceived that outcomes were distributed based on merit, the more positively they evaluated pay dispersion (B = .17, $SE\ B$ = .04, 95% CI [.09, .24], p < .001). See Table 7, Model 2. Thus, hypothesis 1 was supported.

In model 3, the addition of preferences for the merit principle and the interaction of preferences for the merit principle and perceptions that meritocracy exists explained an additional 3.3% of the between-subject variation in people's evaluations of pay dispersion. The results indicated that there was no interaction between preferences for the merit principle and perceptions that meritocracy exists on evaluations of pay dispersion (B = -.01, $SE\ B$ = .04, 95% CI [-.08, .06], p = .77). See Table 7, Model 3. Thus, hypothesis 2 was not supported. Because there was no statistically significant moderation effect, research question 1 (mediated moderation) was not tested further.

To test for mediation in model 4, perceptions of effectiveness was added to the hierarchical linear model, which explained an additional 21.9% of the between-subject variation in people's evaluations of pay dispersion. Specifically, when controlling for the other predictors, the more people perceived that pay dispersion was effective – in that it was both equitable and beneficial for organizations – the more positively they evaluated pay dispersion (B = .54, $SE\ B$ = .02, 95% CI [.51, .58], p < .001). Importantly, the main effect of perceptions that meritocracy

exists on positive evaluations of pay dispersion statistically significantly decreased when controlling for perceptions of effectiveness (*B* = -.09, *SE B* = .03, 95% CI [-.15, -.02], $p < .001$; Δ *B* = .26, *SE B* = .03, 95% CI [.21, .30], $p < .001$), demonstrating full (inconsistent) mediation.[16] See Table 7, Model 4. Thus, hypothesis 3 was supported.

To fully obtain values for my mediation model, a second two-step hierarchical linear mixed-effects model was created with perceptions of effectiveness as the outcome variable. For both models, political conservatism and level of pay dispersion were entered into step one of the model as covariates. As well, within-subject variance was also calculated in step one to control for repeated-measure effects. For model 2, the main predictor (perceptions that meritocracy exists) was entered into step two. Controlling for step one variables, the results from model 2 revealed that the more people perceived that outcomes were distributed based on merit, the more they perceived pay dispersion to be effective (*B* = .47, *SE B* = .04, 95% CI [.40, .54], $p < .001$). See Table 8, Model 2 and Figure 3 for the mediation model.

Perceptions of Overpayment. A two-step hierarchical linear mixed-effects model was created to test the unique effects of perceptions of overpayment of entry-level employees and CEOs on positive evaluations of pay dispersion. For both models, political conservatism and level of pay dispersion were entered into step one of the model as covariates. As well, within-subject variance was also calculated in step one to control for repeated-measure effects. For model 2, perceptions of overpayment for entry-level workers and CEOs were entered in step two. Controlling for step one variables, the results from model 2 revealed that the more people perceived that CEOs were overpaid, the less positively they evaluated pay dispersion (*B* = -.54, *SE B* = .04, 95% CI [-.62, -.45], $p < .001$). Additionally, the more people perceived that entry-

[16] Inconsistent mediation occurs when the mediating (or indirect) effect is significantly stronger than the main (or direct) effect, causing its coefficient to invert. It should be interpreted as a full mediation (MacKinnon, Fairchild, & Fritz, 2007).

level workers were overpaid (or rather the more they perceived that entry-level workers were underpaid). The more positively they evaluated pay dispersion (B = .23, $SE\ B$ = .04, 95% CI [.15, .30], p < .001). See Table 9, Model 2.

Discussion

The purpose of this study was to investigate what factors contributed to people's evaluations of pay dispersion in organizations. Drawing on several long-standing theories (e.g., expectancy, equity, system justification), I proposed that people's evaluations of pay dispersion were driven by a number of factors – central to these were people's beliefs about meritocracy. My results indicated that the more people perceived that workplaces were meritocratic, the more positively they evaluated pay dispersion within three organizations. This was because the more people perceived that workplaces were meritocratic, the more they perceived pay dispersion to be equitable and beneficial to organizations. Controlling for perceptions that meritocracy exists, the more people perceived pay dispersion to be equitable and beneficial to organizations, the more positively they evaluated pay dispersion. The results also indicated that people's evaluations of pay dispersion were influenced by their perceptions of overpayment of CEOs and entry-level employees, political ideologies, preferences for the merit principle, and the level of pay dispersion they were asked to evaluate. In the following section, I will discuss the theoretical and practical implications of my results, as well as strengths, limitations, and recommendations for future research.

The results from the current study supported several overarching research questions. First, the results revealed that the more people perceived workplaces in general to be meritocratic, the more positively they evaluated pay dispersion in these three organizations. This finding is consistent with previous studies documenting the effect of meritocratic ideology on

acceptance of economic inequality (Hadler, 2005; Jost, Pelham, et al., 2003; Kluegel & Smith, 1986; Kuhn, 2011; Major & McCoy, 2007). More importantly, the analyses revealed that this relation was completely mediated by their perceptions about whether pay dispersion was effective in that it was both equitable and beneficial for organizations. This finding is a meaningful contribution to several areas of research detailed in the following paragraphs.

Concerning the literatures on organizational justice and motivation, the current finding strengthens the notion that a merit-based (or equity-based) distribution systems are perceived to be associated with greater organizational benefits – such as increased performance. This is likely because when outcomes are distributed based on merit, workers may be motivated to work harder because they expect that their efforts would lead to greater outcomes (recall expectancy theory; Vroom, 1964). As well, it could be that people expect meritocratic organizations to attract and retain high performers by compensating them much more than low performers (e.g., Carnahan, Agarwal, & Campbell, 2012). This finding is consistent with ideas surrounding distributive justice theory (Deutsch, 1975), expectancy theory (Vroom, 1964), tournament theory (Lazear & Rosen, 1981; Rosen, 1986), and research documenting the benefits of performance-based pay (e.g., Kepes et al., 2009; Milkovich & Newman, 1986).

The current results are also a relevant addition to the literature investigating people's attitudes towards income inequality. Specifically, this finding supports the notion that, despite people's favourability for egalitarian distribution of outcomes (e.g., Dawes, Fowler, Johnson, McElreath, & Smirnov, 2007; Fehr, Bernhard, & Rockenbach, 2008; Xiao & Bicchieri, 2010), they are willing to accept inequality if they perceive that it is deserved (Hadler, 2005; Kepes et al., 2009; Starmans et al., 2017) and when inequality has functional utility (e.g., motivation; Tyler, 2011). This is an important finding considering that people may be misinformed about

whether unequal distribution of outcomes is effective (e.g., Conroy et al., 2014, Downes & Choi, 2014).

Second, the results indicated that the more people preferred the merit principle, the less positively they evaluated pay dispersion (r = -.20). Based on this finding, it appears that the pay differences presented in this study exceeded the amount of inequality that participants believed to be attributed to differences in merit.[17] This finding is an important addition to the existing literature, suggesting that people's preferences for the merit principle may not only be violated by policies that would lessen inequality (e.g., affirmative action; Son Hing et al., 2011), but also by perceiving excessive inequality. Moreover, in spite of nearly identically-worded items, there was a weak correlation between responses for the Preference for the Merit Principle Scale and Perceptions that Meritocracy Exists Scale (r = .13), adding to the notion that these constructs are in fact fundamentally distinct. It should be noted that the correlation between these constructs was substantially lower than what was reported in a previous study (r = .27; Son Hing et al., 2011). One explanation for these results may be that participants completed these measures one week apart (as opposed to in the same survey), and as a result, they may have been less susceptible to common-method variance. Taken together, the current results added construct validity and discriminant validity for the two meritocracy beliefs.

Third, the current study found no statistically significant interaction effect of preferences for the merit principle and perceptions that meritocracy exists on positive evaluations of pay dispersion. Regardless of people's preferences for the merit principle, the more people perceived that outcomes were distributed based on merit, the more positively they evaluated pay dispersion. A possible explanation for the lack of moderation may be the range restriction for people's responses towards the Preference for the Merit Principle Scale. The standard deviation

[17] This was also evident from the low mean value for people's evaluations of pay dispersion (M = 2.97).

of the scale was notably lower than the other measures (*SD* = 1.00), and even those who less strongly preferred the merit principle (reported one standard deviation below the mean) were well in favour of meritocratic values (*M* = 6.30).[18] Given my sample's restricted range on this measure, I was unable to test the full effects of preferences for the merit principle. It is likely that a stronger interaction effect would exist for a sample with weaker preferences for the merit principle.

Fourth, the more people identified as right-wing/conservative, the more positively they evaluated pay dispersion. This was not surprising considering that Conservatives have been shown to be less bothered by high levels of income inequality (Savani & Rattan, 2012), accept greater levels of income inequality (McCall & Chin, 2013; Savani & Rattan, 2012), and support policies that would increase income inequality (e.g., Bartels, 2005). System justification theory stipulates that this is because people are strongly motivated to uphold the status quo, in spite of self-serving desires (Jost & Banaji, 1994; Jost & Hunyady, 2002). In keeping with system justification theory, the results add to the growing literature that Conservatives are more likely to legitimize higher levels of inequality than Liberals because they are more likely to justify hierarchies and the status-quo (Jost, Glaser, et al., 2003; Trump, 2013). This finding is critical in a time where Americans are becoming increasingly polarized in their political ideologies (McNeil, 2014).

Fifth, individuals were more likely to believe that pay differences were too large if they felt that: (a) the average American entry-level employee was underpaid, and (b) the average American CEO was overpaid. This finding emphasizes the importance of considering people's opinions about individuals from both ends of the income distribution, especially because these opinions may be brought about by different motivations to maintain justice (e.g., Hoffman, 1990;

[18] Scores from the Preference for the Merit Principle Scale ranged from 1 to 9.

Osberg & Smeeding, 2006). For instance, people may be concerned for whether those at the bottom are being paid enough to sustain a living, as the distributive principle of *need* may be violated when too few resources are provided for these individuals. In contrast, the *equity* principle may be violated when those at the top are paid too much. After all, it is unlikely that any one person yields over 354 times as much inputs as another. Importantly, I found that after controlling for their political affiliations, people's evaluations of pay dispersion were associated more with their concerns that CEOs are being overpaid (sr^2 = .12) than with their concerns that entry-level workers are being underpaid (sr^2 = .03).[19] The current results are consistent with research documenting that people are more concerned with reducing wages for those at the top than increasing wages for those at the bottom (Osberg & Smeeding, 2006).

Sixth, the results indicated that individuals rated high levels of pay dispersion (i.e., where the CEO earned approximately 1000 times more than the entry-level worker) less positively than low levels of dispersion (i.e., where the CEO earned approximately 20 times more than the entry-level worker). This finding was consistent with previous research documenting that those who perceived greater amounts of income inequality were more likely to believe that income inequality was too large in their country (Hadler, 2005; McCall & Chin, 2013; Niehues, 2014). This may be because large levels of income inequality breaches distributive norms (e.g., the equity principle; Adams, 1965; Deutsch, 1975). For instance, people do not believe that CEOs deserve to earn several hundred times entry-level workers because they do not provide several hundred times the input. Kiatpongsan and Norton (2014) found that the average American believes that CEOs should earn only about seven times as much as the average unskilled worker

[19] Dependent sample z-tests indicated that these effects were statistically significantly different.

when they in fact earn approximately 354 times as much.[20] Another explanation for these results may be that people prefer egalitarian systems (i.e., equal distribution of outcomes; Deutsch, 1975; Hadler, 2005; Leventhal, 1980) A study by Diekmann, Samuels, Ross, and Bazerman (1997) found that in a series of hypothetical resource allocation tasks, participants were inclined to distribute outcomes evenly among ingroup and outgroup members even when they believed that differences in outcomes may be allocated based on merit.

Lastly, it is important to address the effects of order on participants' evaluations of pay dispersion. Participants who rated ascending levels of pay dispersion (i.e., low-medium-high levels) evaluated pay dispersion significantly less positively than participants who rated descending levels of pay dispersion (i.e., high-medium-low levels). This finding is important as it illustrates how people's judgments and attitudes may be influenced by the serial-order of information. That is, people tend to accept greater levels of inequality when they first perceive higher levels of inequality. The differences in ratings may be explained by cognitive heuristics (Strack & Musswiler, 1997; Tversky & Kahneman, 1974). Specifically, participants may have been prone to anchoring – using the initial presented level of pay dispersion as a reference point by which upward and downward comparisons can be subsequently made (Furnham & Boo, 2011). Indeed, the current results suggest that presenting people with initial high levels of inequality may lead them to subsequently accept greater amounts of inequality. This type of serial-order manipulation has important applications in business and politics, where terms of negotiation are initially presented to skew perceptions, judgments, and decision-making. For more on these applications, see Furnham and Boo (2011) and Galinsky and Mussweiler (2001).

Strengths, Limitations, and Future Directions

[20] This may be why participants were relatively discontent with the levels of pay dispersion presented in the current study (see Table 7).

The current study possesses a number of strengths. One strength was that the sample was diverse in age, gender, ethnicity, education, income, occupational status, and political orientation, which was a benefit to the external validity of the study. Generalizability would further be improved from testing multi-national samples, as Americans possess notably strong meritocratic ideals and accept exceptionally high levels of income inequality relative to other developed nations (Gao, 2015). It is possible that different patterns of results would be found in Central East Europe – a region where people perceive social connections to be important (more so than hard work) for to move up in society (Cichocka & Jost, 2014; Loveless & Whitefield, 2011). Thus, in these nations, meritocracy beliefs may have less of an impact for how individuals perceive and evaluate pay dispersion and income inequality.

The use of hierarchical multi-level models was another strength to the study as I was able to test for between-subject (or fixed-) effects while simultaneously accounting for within-subject variations. This was important as the effects of my predictors (e.g., perceptions that meritocracy exists) may have been confounded by the level of pay dispersion participants were asked to evaluate – especially because preliminary analyses revealed that participants rated low levels of pay dispersion more positively than medium levels of pay dispersion and medium levels of pay dispersion more positively than high levels of pay dispersion. As well, the use of a hierarchical model allowed me to illustrate how much (estimated) variance was explained by incrementally adding additional predictors to my models.

Precaution was taken to avoid common-method variance in the current study. Due to semantic similarities between the Preference for the Merit Principle Scale and the Perceptions that Meritocracy Exists Scale, it was important to separate these measures (Chang, Van Witteloostujin, & Eden, 2010). As such, the Preference for the Merit Principle Scale was presented in phase one and the Perceptions that Meritocracy Exists Scale was presented in phase

two (one week later). Additionally, the measures in phase 2 were carefully ordered to ensure that predictors (e.g., perceptions that meritocracy exists) and outcome variables (e.g., evaluations of pay dispersion) were separated with a questionnaire that was unrelated to either variable (see Appendix B).

The use of published and validated scales (i.e., Perceptions that Meritocracy Exists Scale and Preferences for the Merit Principle Scale; Son Hing et al., 2011) was another strength of the study as these measures have already been tested for measurement error, internal consistency, as well as face validity, construct validity, and discriminant validity (Kimberlin & Winterstein, 2008). Further modifications were made to better fit the context of the current study. Reverse-coded items were dropped from the original measures, and minor wording modifications were made to the original items to evenly capture different dimensions of merit (i.e., skills, hard work, competence) and workplace outcomes (i.e., jobs, promotions). As a result, these scales were even more reliable than the original measures (Son Hing et al., 2011).

Lastly, several steps taken to increase mundane realism. Descriptions of the organizations (OnlineSales.com, Julian Group, and Growth Foods) were derived from statements found on real American-based company websites, and the salaries for entry- and middle-level workers closely resembled real occupational earnings – according to O*NET OnLine.[21] In providing real, accurate, and nontrivial information, participants should be less suspicious of deception and respond more authentically to situations (Aronson & Carlsmith, 1968). Furthermore, the inclusion of three organizations in this study allowed me to examine people's attitudes towards low, medium, and high levels of pay dispersion. As a result, a better understanding was gained

[21] O*NET OnLine is a United States government-sponsored occupational database detailing job summaries and salaries for nearly 1,000 occupations.

into how people's evaluations towards pay dispersion varied across different levels of pay dispersion.

As with any research, this study is not without its limitations. First, a weakness with online surveys is the possibility of participants to be inattentive, which may be problematic to internal validity, construct validity, and statistical conclusion validity (Cheung, Burns, Sinclair, & Sliter, 2016). I relied on several methods to test for inattention: providing presurvey warnings (Ward & Pond, 2015), pre-screening applicants (Osborne & Blanchard, 2011), including instructional inattention checks (Berinsky, Margolis, & Sances, 2014), and post-screening applicants (Meade & Craig, 2012). In doing so, 216 (25.3%) participants were omitted from analyses. Importantly, supplemental analyses indicated that results would not have differed if I included participants who have correctly responded to at least one of three instructional inattention checks (resulting in a larger sample, n = 778; see Appendix L).

Second, it was possible that the descriptions of the organizations did not provide sufficient information for the participants to make clear and accurate judgments of the companies. For instance, participants may have been unaware of how entry-level workers, middle-level workers, and CEOs were performing at each organization. Participants may have relied on their own assumptions and beliefs about companies that were similar to the ones provided (e.g., organizations in the same industries), and thus their responses may have been biased.

Third, several constructs in the current study were assessed by original measures created by the researchers. As such, it was important to ensure that the measures were reliable. As indicated by high Cronbach's alpha levels (> .80), items in our measures were internally consistent. As well, the items were worded to reflect the conceptual definition of the construct. For example, people's perceptions of overpayment for CEOs was assessed by the item "In a

typical American organization, the CEO is [extremely underpaid to extremely overpaid].” Thus, these items should possess strong face validity and content validity.

Lastly, there were challenges from testing and measuring three different levels of pay dispersion presented in two different orders. For one, participants’ responses may have been influenced by serial-position effects (i.e., primacy effects and recency effects).[22] In an effort to minimize these effects, I followed recommendations by Smith, Greenlees, and Manley (2009) and asked participants to evaluate each organization immediately after reading their respective descriptions. This technique was found to reduce scoring discrepancies for information presented in opposite orders (Smith, Greenlees, & Manley, 2009). As well, the manipulation of order impacted the effects of perceptions that meritocracy exists on positive evaluations of pay dispersion.[23] Importantly, the results indicated that order moderated the effect of perceptions that meritocracy exists on positive evaluations of pay dispersion, such that the effect was stronger for those who perceived descending levels of pay dispersion (i.e., high-medium-low levels). As order was found to be a statistically significant confounding variable, I am not able to confidently conclude that greater perceptions that meritocracy exists led to more positive evaluations of pay dispersion.

Practical Implications

The current study has several meaningful practical implications. First, the current findings suggest that people may be more likely to justify greater levels of pay inequality when they perceive that outcomes are distributed based on merit. This is important as Americans possess an exceptionally strong meritocratic culture (e.g., “The American Dream”, rags-to-riches

[22] A primacy effect occurs when information presented near the beginning has a stronger influence on the overall impression in a series, and a recency effects occurs when information presented near the end has a stronger influence on the overall impression in a series (Murdock, 1962).
[23] This effect was tested because they were the central research questions of the current study.

ethos), which may lead them to overestimate how meritocratic their system actually is. For instance, the controversial publication, "The Bell Curve" by Herrnstein & Murray (1994) illustrate that there are a wide range of ascriptive variables (e.g., age, sex, class of birth, residence) that predict or social and economical success, and by extension, social and economical inequality.[24] Even organizations that explicitly promote meritocratic practices do not operate as true meritocracies (Castilla, 2008). The overestimation of meritocratic systems may be concerning as Shariff, Wiwad, and Aknin (2016) explain, "…many populations may be accepting policies that reinforce inequality under the mistaken assumption that inequality is more transient and fair than it actually is." (p.379). Indeed, if people indeed desire a meritocratic system, then it is important to properly educate them on the various processes that work against a fair operating meritocracy (e.g., the advantages of coming from a wealthy family).

It is important to note that people's perceptions about meritocracy may be easily manipulated by stories of individual success (Sawhill & Morton, 2007; Wakslak, Jost, Tyler, & Chen, 2007), word-scrambling tasks (Ledgerwood et al., 2011, McCoy & Major, 2007) or even commonplace news articles (Goode & Keefer, 2016; see also McCall, Burk, Laperriere, & Richeson, 2017). News and media organizations may selectively espouse pro-meritocratic or anti-meritocratic information to influence their viewers in favour of (or in opposition to) important social issues like income inequality. As such, it is important for people to be cognisant of the information they receive from the media – particularly those with vested socioeconomic or political interests (e.g., partisan news networks like America's *MSNBC* and *Fox News*).

Finally, the findings from the current study suggest that people's attitudes towards pay dispersion may be strongly influenced by perceive that pay dispersion is important for an

[24] See also "How meritocratic is the United States?" by Kingston (2006) for a comprehensive review of the "Bell Curve" debate.

organization's success. That is, people should be more inclined to justify high levels of pay dispersion in organizations that are (or are perceived to be) performing well. A possible explanation for this may be that people attribute the success of an organization to its leaders (e.g., CEOs), and as such, they believe that leaders deserve their high salaries when organizations are performing well. Indeed, the strong relation found between people's perceptions that pay dispersion benefits organizations and perceptions of equity suggests that people tend to associate equitable outcomes with high performance. This is important as those who would benefit the most from a high-performing organization (i.e., CEOs, executives) also have the most resources to control how information about their organizations' performance is broadcasted and advertised. For instance, to convince people that they deserve their high salaries, CEOs and executives may pay journalists and media organizations to emphasize and exaggerate how great their organizations are performing. Thus, to avoid conflict of interests, it is important that those who may benefit from strong organizational performance to have limited control over the dissemination of such information.

Conclusion

As income inequality continues to exponentially rise in the United States, it becomes increasingly important to understand why Americans may hold positive attitudes towards pay differences. The current study investigated various factors that lead people to evaluate pay dispersion more positively. The results indicated that people's evaluations of pay dispersion were driven more about their opinions about CEOs than they were about entry-level workers. The findings also indicated that people may have a lay-understanding of expectancy theory and tournament theory, perceiving that one's merits are closely related to performance and rewards. Stronger perceptions that meritocracy exists predicted more positive evaluations of pay

dispersion regardless of whether people believed that outcomes should have been distributed based on merit. Adding to the burgeoning literature on income inequality, my results demonstrated that people rated higher levels of inequality more negatively than lower levels of inequality. Overall, the results of this research are important in that they establish a basis for researchers to further investigate how people's beliefs about meritocracy may affect their attitudes towards pay dispersion.

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Table 1

Pilot Study: Tukey's Honestly Significant Difference pairwise comparison test with positive evaluations of pay dispersion as the outcome variable

(I)	(J)	*M* (I)	*M* (J)	Mean Difference (I-J)	95% Confidence Interval	
					Lower Bound	Upper Bound
OnlineSales.com	Julian Group	1.91	1.72	0.07	-1.37	1.50
OnlineSales.com	Growth Foods	1.91	2.38	-0.70	-2.13	0.73
Julian Group	Growth Foods	1.72	2.38	-0.77	-2.20	0.67

Note. Total n = 30.

Table 2

Means, standard deviations, and correlations with confidence intervals

Variable	*M*	*SD*	1	2	3	4	5	6	7	8
1. Income	45822.86	30878.60								
2. PC	4.36	2.01	.05							
			[-.03, .13]							
3. PMP	7.30	1.00	.00	.02						
			[-.07, .08]	[-.06, .09]						
4. PME	5.42	1.59	.09*	.23***	.13***					
			[.01, .17]	[.16, .31]	[.06, .21]					
5. Ben	4.31	1.69	.04	.28***	-.01	.48***				
			[-.03, .12]	[.21, .35]	[-.09, .07]	[.41, .53]				
6. Equity	4.46	1.80	.07	.31***	.00	.48***	.85***			
			[-.01, .15]	[.24, .38]	[-.08, .08]	[.41, .53]	[.82, .87]			
7. Eval	2.97	1.56	.06	.25***	-.20**	.22***	.61***	.60***		
			[-.02, .14]	[.18, .32]	[-.27, -.12]	[.14, .29]	[.56, .66]	[.55, .65]		
8. CEO	7.95	1.38	-.07	-.31***	.24***	-.20***	-.42***	-.41***	-.61***	
			[-.14, .01]	[-.38, -.24]	[.17, .31]	[-.27, -.12]	[-.48, -.35]	[-.47, -.34]	[-.66, -.56]	
9. Entry	2.55	1.55	.06	.35***	-.23***	.27***	.45***	.43***	.51***	-.58***
			[-.01, .14]	[.28, .42]	[-.31, -.16]	[.20, .34]	[.38, .51]	[.36, .49]	[.45, .56]	[-.63, -.52]

Note. n = 637. *SD* = standard deviation; * indicates $p < .05$; ** indicates $p < .01$; *** indicates $p < .001$. Values in square brackets indicate the 95% confidence interval for each correlation; PC = political conservatism; PMP = preference for the merit principle, PME = perceptions that meritocracy exists; Ben = perceptions of benefits to organizations; Equity = perceptions of equity; Eval = positive evaluations of pay dispersion; CEO = perceptions that CEOs are overpaid; Entry = perceptions that entry-level workers are overpaid

Table 3

Factor loadings for exploratory factor analysis with oblimin rotation for perceptions of effectiveness

Item	Factor
Pay differences motivates employees	.92
Pay difference promotes organizational success	.94
Pay differences will lead to high organizational performance	.94
Pay differences are an indication of people's contributions	.92
Pay differences reflect people's capabilities	.90
Pay differences reflect people's efforts and hard work	.91

Note. Total n = 637.

Table 4

Parallel analysis for perceptions of effectiveness

Component	Raw Data Eigenvalues	Raw Data Means	Percentile Random Data Eigenvalues
1	5.09	1.13	1.09
2	.43	1.07	1.04
3	.18	1.02	.99
4	.12	.98	.95
5	.10	.93	.89
6	.07	.88	.83

Note. Total n = 637.

Table 5

Two-way repeated measures ANOVA: Comparisons of means investigating the effects of order and level of pay dispersion on positive evaluations of pay dispersion

Predictor	df_{Num}	df_{Den}	SS_{Num}	SS_{Den}	F	η^2_g
(Intercept)	1	635	16908.00	4322.62	2483.81^{***}	.74
Order	1	635	334.39	4322.62	49.12^{***}	.05
Level	2	1131	906.02	1508.65	381.35^{***}	.13
Order x Level	2	1131	157.58	1508.65	66.33^{***}	.03

Note. Total n = 636. * indicates $p < .05$; ** indicates $p < .01$; *** indicates $p < .001$. df_{Num} and df_{Den} indicate the degrees of freedom for the numerator and denominator, respectively. SS_{Num} and SS_{Den} indicate the sum of squares for the numerator and denominator, respectively. η^2_g indicates generalized eta-squared.

Table 6

Summary of a Dunnett-Tukey-Kramer pairwise comparison test with positive evaluations of pay dispersion as the outcome variable

	Low pay dispersion first [a]		High pay dispersion first [b]			
	M	*SD*	*M*	*SD*	Mean Difference	95% CI [LL, UL]
Low pay dispersion	3.02	1.73	4.58	1.86	1.56***	[1.16, 1.96]
Medium pay dispersion	2.61	1.78	3.40	1.86	0.80***	[.40, 1.19]
High pay dispersion	2.04	1.56	2.19	1.70	0.15	[-.24, .55]
Overall	2.56	1.74	3.39	2.05	0.84***	[.64, 1.01]

Note. Total $n = 636$. [a] $n = 324$; [b] $n = 312$. *SD* = standard deviation. * indicates $p < .05$; ** indicates $p < .01$; *** indicates $p < .001$.

Table 7

Summary of hierarchical linear mixed-effects model with positive evaluations of pay dispersion as the outcome variable

	Model 1				**Model 2**				**Model 3**				**Model 4**			
	Variance Est.	*b*	*SE*	*b* 95% CI [LL, UL]	*Variance Est.*	*b*	*SE*	*b* 95% CI [LL, UL]	*Variance Est.*	*b*	*SE*	*b* 95% CI [LL, UL]	*Variance Est.*	*b*	*SE*	*b* 95% CI [LL, UL]
Level 1																
Random Effects																
Intercept (Subject)	1.85				1.78				1.66				0.92			
Residual	1.31				1.31				1.31				1.13			
Fixed Effects																
Intercept		2.12 ***	0.14	[1.84, 2.40]		1.35 ***	0.23	[.09, .24]		3.43 ***	1.44	[.61, 6.25]		0.77 ***	0.18	[.41, 1.12]
Level: Low-Med		-0.82 ***	0.04	[-.89, -.75]		-0.82 ***	0.04	[-.89, -.75]		-0.82 ***	0.04	[-.89, -.75]		-0.41 ***	0.03	[-.47, -.34]
Level: Med-High		-0.85 ***	0.04	[-.92, -.78]		-0.85 ***	0.04	[-.92, -.78]		-0.85 ***	0.04	[-.92, -.78]		-0.34 ***	0.04	[-.41, -.26]
PC		0.19 ***	0.03	[.13, .25]		0.16 ***	0.03	[.10, .22]		0.16 ***	0.03	[.10, .22]		0.07 ***	0.02	[.02, .11]
Level 2																
Fixed Effects																
PME						0.17 ***	0.04	[.09, .24]		0.28	0.28	[-.27, .82]		-0.09 ***	0.03	[-.15, -.02]
Level 3																
Fixed Effects																
PMP										-0.31	0.19	[-.68, .07]				
PMP x PME										-0.01	0.04	[-.08, .06]				
Level 4																
Fixed Effects																
Effectiveness														0.54 ***	0.02	[.51, .58]
Model Fit, *AIC*				7003.4				6986.5				6952.9				6270.1
df				6				7				9				8
R^2 *Within*				.489				.472				.439				.312
R^2 *Between*				.164				.182				.215				.434
ΔR^2 ***Between***				**.164**				**.018**				**.033**				**.219**

Note. $n = 637$. * indicates $p < .05$; ** indicates $p < .01$; *** indicates $p < .001$. *SE* represents standard error; *b* represents unstandardized regression weights; *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively; *df* represents degrees of freedom; *AIC* represents Akaike information criterion; R^2 *Within* represents total estimated variance explained by error effects; R^2 *Between* represents total estimated variance explained by fixed effects. PC represents political conservatism; PMP represents preference for the merit principle; PME represents perceptions that meritocracy exists; Effectiveness represents perceptions of effectiveness.

Table 8

Summary of hierarchical linear mixed-effects model with perceptions of effectiveness as the outcome variable

	Model 1				**Model 2**			
	Variance Est.	*b*	*SE*	*b* 95% CI [LL, UL]	*Variance Est.*	*b*	*SE*	*b* 95% CI [LL, UL]
Level 1								
Random Effects								
Intercept (Subject)	2.03				1.50			
Residual	1.50				1.50			
Fixed Effects								
Intercept		3.26 ***	0.15	[2.96, 3.55]		1.07 ***	0.21	[.65, 1.49]
Level: Low-Med		-0.76 ***	0.03	[-.84, -.68]		-0.76 ***	0.03	[-.84, -.68]
Level: Med-High		-0.95 ***	0.04	[-1.02, -.87]		-0.95 ***	0.04	[-1.02, -.87]
PC		0.26 ***	0.03	[.20, .32]		0.17 ***	0.03	[.12, .23]
Level 2								
Fixed Effects								
PME						0.47 ***	0.04	[.40, .54]
Model Fit, *AIC*				7242.2				7094.2
df				6				7
R^2 *Within*				.472				.348
R^2 *Between*				.180				.304
ΔR^2 ***Between***				**.180**				**.124**

Note. n = 637. * indicates $p < .05$; ** indicates $p < .01$; *** indicates $p < .001$. *SE* represents standard error; *b* represents unstandardized regression weights; *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively; *df* represents degrees of freedom; *AIC* represents Akaike information criterion; R^2 *Within* represents total estimated variance explained by error effects; R^2 *Between* represents total estimated variance explained by fixed effects. PC represents political conservatism; PME represents perceptions that meritocracy exists.

Table 9

Summary of hierarchical linear mixed-effects model with positive evaluations of pay dispersion as the outcome variable

	Model 1				**Model 2**			
	Variance Est.	*b*	*SE*	*b* 95% CI [LL, UL]	*Variance Est.*	*b*	*SE*	*b* 95% CI [LL, UL]
Level 1								
Random Effects								
Intercept (Subject)	1.31				1.00			
Residual	1.85				1.31			
Fixed Effects								
Intercept		2.12 ***	0.14	[1.84, 2.40]		6.60 ***	0.43	[5.76, 7.43]
Level: Low-Med		-0.82 ***	0.04	[-.89, -.75]		-0.82 ***	0.04	[-.89, -.75]
Level: Med-High		-0.85 ***	0.04	[-.92, -.78]		-0.85 ***	0.04	[-.92, -.78]
PC		0.19 ***	0.03	[.13, .25]		0.02	0.03	[-.03, .07]
Level 2								
Fixed Effects								
Entry Overpay						0.23 ***	0.04	[.15, .30]
CEO Overpay						-0.54 ***	0.04	[-.62, -.45]
Model Fit, *AIC*				7003.4				6712.8
df				6				8
R^2 *Within*				.489				.266
R^2 *Between*				.164				.388
ΔR^2 ***Between***				**.164**				**.224**

Note. n = 637. * indicates $p < .05$; ** indicates $p < .01$; *** indicates $p < .001$. *SE* represents standard error; *b* represents unstandardized regression weights; *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively; *df* represents degrees of freedom; *AIC* represents Akaike information criterion; R^2 *Within* represents total estimated variance explained by error effects; R^2 *Between* represents total estimated variance explained by fixed effects. PC represents political conservatism.

Table 10

Means, standard deviations, and correlations with confidence intervals

Variable	*M*	*SD*	1	2	3	4	5	6	7	8
1. Income	45689.03	30968.93								
2. PC	4.37	2.04	.05							
			[-.02, .12]							
3. PMP	7.35	1.01	-.01	.05						
			[-.08, .06]	[-.02, .12]						
4. PME	5.47	1.62	.08*	.25***	.16***					
			[.01, .15]	[.18, .32]	[.09, .23]					
5. Ben	4.33	1.73	.04	.28***	.00	.50***				
			[-.03, .11]	[.22, .35]	[-.07, .07]	[.45, .55]				
6. Equity	4.48	1.83	.06	.30***	.01	.50***	.86***			
			[-.01, .13]	[.24, .37]	[-.06, .08]	[.44, .55]	[.84, .88]			
7. Eval	2.97	1.55	.05	.26***	-.19***	.24***	.61***	.60***		
			[-.02, .12]	[.19, .32]	[-.26, -.12]	[.17, .30]	[.56, .65]	[.55, .64]		
8. CEO	7.94	1.40	-.04	-.31***	.25***	-.19***	-.41***	-.41***	-.61***	
			[-.11, .03]	[-.37, -.25]	[.18, .31]	[-.26, -.12]	[-.47, -.35]	[-.46, -.35]	[-.66, -.57]	
9. Entry	2.59	1.62	.06	.34***	-.20***	.30***	.47***	.46***	.51***	-.57***
			[-.01, .13]	[.27, .40]	[-.27, -.13]	[.24, .37]	[.41, .52]	[.40, .51]	[.46, .56]	[-.62, -.52]

Note. $n = 778$; *SD* = standard deviation; * indicates $p < .05$; ** indicates $p < .01$; *** indicates $p < .001$. Values in square brackets indicate the 95% confidence interval for each correlation; PC = political conservatism; PMP = preference for the merit principle, PME = perceptions that meritocracy exists; Ben = perceptions of benefits to organizations; Equity = perceptions of equity; Eval = positive evaluations of pay dispersion; CEO = perceptions that CEOs are overpaid; Entry = perceptions that entry-level workers are overpaid

Table 11

Summary of hierarchical linear mixed-effects model with positive evaluations of pay dispersion as the outcome variable

	Model 1				**Model 2**				**Model 3**				**Model 4**			
	Variance Est.	*b*	*SE*	*b* 95% CI [LL, UL]	*Variance Est.*	*b*	*SE*	*b* 95% CI [LL, UL]	*Variance Est.*	*b*	*SE*	*b* 95% CI [LL, UL]	*Variance Est.*	*b*	*SE*	*b* 95% CI [LL, UL]
Level 1																
Random Effects																
Intercept (Subject)	1.79				1.72				1.58				0.59			
Residual	1.35				1.35				1.35				0.91			
Fixed Effects																
Intercept		2.11 ***	0.13	[1.86, 2.36]		1.30 ***	0.2	[.91, 1.69]		3.44 ***	1.25	[.99, 5.90]		0.68 ***	0.13	[.43, .94]
Level: Low-Med		-0.83 ***	0.03	[-.90, -.76]		-0.83 ***	0.03	[-.90, -.76]		-0.83 ***	0.03	[-.90, -.76]		-0.06	0.03	[-.13, .01]
Level: Med-High		-0.85 ***	0.03	[-.91, -.78]		-0.85 ***	0.03	[-.91, -.78]		-0.85 ***	0.03	[-.91, -.78]		-0.61 ***	0.03	[-.66, -.55]
PC		0.20 ***	0.03	[.15, .25]		0.16 ***	0.03	[.11, .22]		0.16 ***	0.03	[.11, .21]		0.07 ***	0.02	[.02, .11]
Level 2																
Fixed Effects																
PME						0.17 ***	0.04	[.11, .24]		0.28	0.24	[-.19, .75]		-0.06 ***	0.02	[-.15, -.02]
Level 3																
Fixed Effects																
PMP										-0.32	0.19	[-.64, .00]				
PMP x PME										-0.01	0.03	[-.07, .05]				
Level 4																
Fixed Effects																
Effectiveness														0.60 ***	0.01	[.57, .63]
Model Fit, *AIC*				8579				8555				8510				7266
df				6				7				9				8
R^2 *Within*				.475				.455				.420				.177
R^2 *Between*				.168				.188				.223				.552
ΔR^2 ***Between***				**.168**				**.020**				**.035**				**.299**

Note. $n = 778$. * indicates $p < .05$; ** indicates $p < .01$; *** indicates $p < .001$. *SE* represents standard error; *b* represents unstandardized regression weights; *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively; *df* represents degrees of freedom; *AIC* represents Akaike information criterion; R^2 *Within* represents total estimated variance explained by error effects; R^2 *Between* represents total estimated variance explained by fixed effects. PC represents political conservatism; PMP represents preference for the merit principle; PME represents perceptions that meritocracy exists; Effectiveness represents perceptions of effectiveness.

Table 12

Summary of hierarchical linear mixed-effects model with positive evaluations of pay dispersion as the outcome variable

	Model 1				**Model 2**			
	Variance Est.	*b*	*SE*	*b* 95% CI [LL, UL]	*Variance Est.*	*b*	*SE*	*b* 95% CI [LL, UL]
Level 1								
Random Effects								
Intercept (Subject)	1.48				1.09			
Residual	2.08				2.08			
Fixed Effects								
Intercept		2.86 ***	0.12	[2.62, 3.11]		1.03 ***	0.18	[.68, 1.38]
Level: Low-Med		-1.28 ***	0.04	[-1.36, -1.20]		-1.28 ***	0.04	[-1.36, -1.20
Level: Med-High		-0.40 ***	0.04	[-.49, -.32]		-0.40 ***	0.04	[-.49, -.32]
PC		0.23 ***	0.03	[.18, .28]		0.15 ***	0.02	[.10, .20]
Level 2								
Fixed Effects								
PME						0.40 ***	0.03	[.34, .46]
Model Fit, *AIC*				9231.6				9079
df				6				7
R^2 *Within*				.472				.348
R^2 *Between*				.180				.304
ΔR^2 ***Between***				**.180**				**.124**

Note. n = 778. * indicates $p < .05$; ** indicates $p < .01$; *** indicates $p < .001$. *SE* represents standard error; *b* represents unstandardized regression weights; *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively; *df* represents degrees of freedom; *AIC* represents Akaike information criterion; R^2 *Within* represents total estimated variance explained by error effects; R^2 *Between* represents total estimated variance explained by fixed effects. PC represents political conservatism; PME represents perceptions that meritocracy exists.

Table 13

Summary of hierarchical linear mixed-effects model with positive evaluations of pay dispersion as the outcome variable

	Model 1				**Model 2**			
	Variance Est.	*b*	*SE*	*b* 95% CI [LL, UL]	*Variance Est.*	*b*	*SE*	*b* 95% CI [LL, UL]
Level 1								
Random Effects								
Intercept (Subject)	1.79				0.95			
Residual	1.35				1.35			
Fixed Effects								
Intercept		2.11 ***	0.13	[1.86, 2.36]		6.43 ***	0.37	[5.70, 7.15]
Level: Low-Med		-0.83 ***	0.03	[-.90, -.76]		-0.83 ***	0.03	[-.90, -.76]
Level: Med-High		-0.85 ***	0.03	[-.91, -.78]		-0.85 ***	0.03	[-.91, -.78]
PC		0.20 ***	0.03	[.15, .25]		0.03	0.02	[-.02, .07]
Level 2								
Fixed Effects								
Entry Overpay						0.22 ***	0.03	[.16, .29]
CEO Overpay						-0.53 ***	0.03	[-.60, -.45]
Model Fit, *AIC*				8579.3				8215.6
df				6				8
R^2 *Within*				.475				.250
R^2 *Between*				.168				.392
ΔR^2 ***Between***				**0.168**				**.224**

Note. n = 778. * indicates $p < .05$; ** indicates $p < .01$; *** indicates $p < .001$. *SE* represents standard error; *b* represents unstandardized regression weights; *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively; *df* represents degrees of freedom; *AIC* represents Akaike information criterion; R^2 *Within* represents total estimated variance explained by error effects; R^2 *Between* represents total estimated variance explained by fixed effects. PC represents political conservatism.

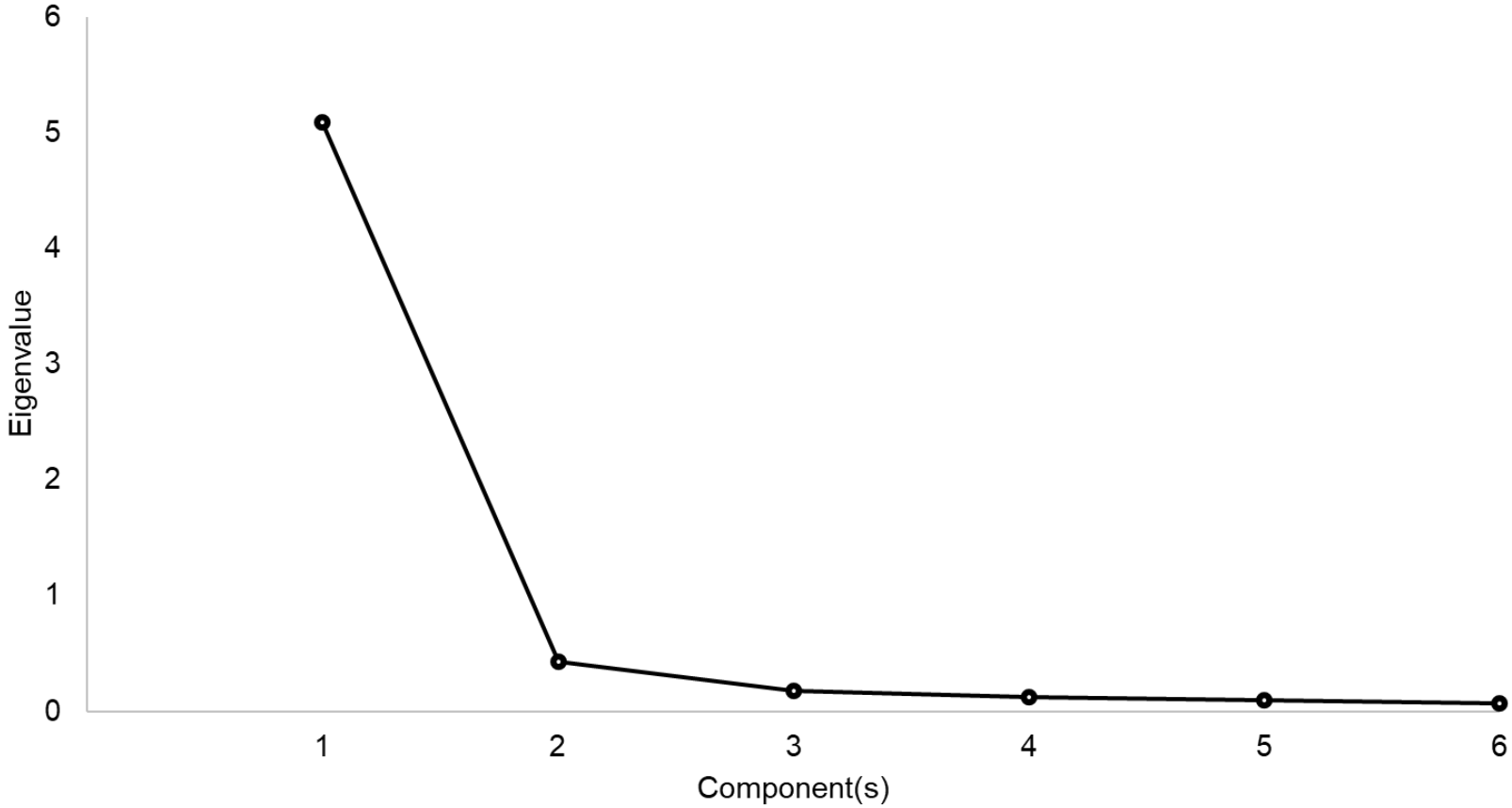

Figure 1. Scree plot showing eigenvalues for each component, in factor extraction data obtained from the 6-item *perceptions of effectiveness* measure.

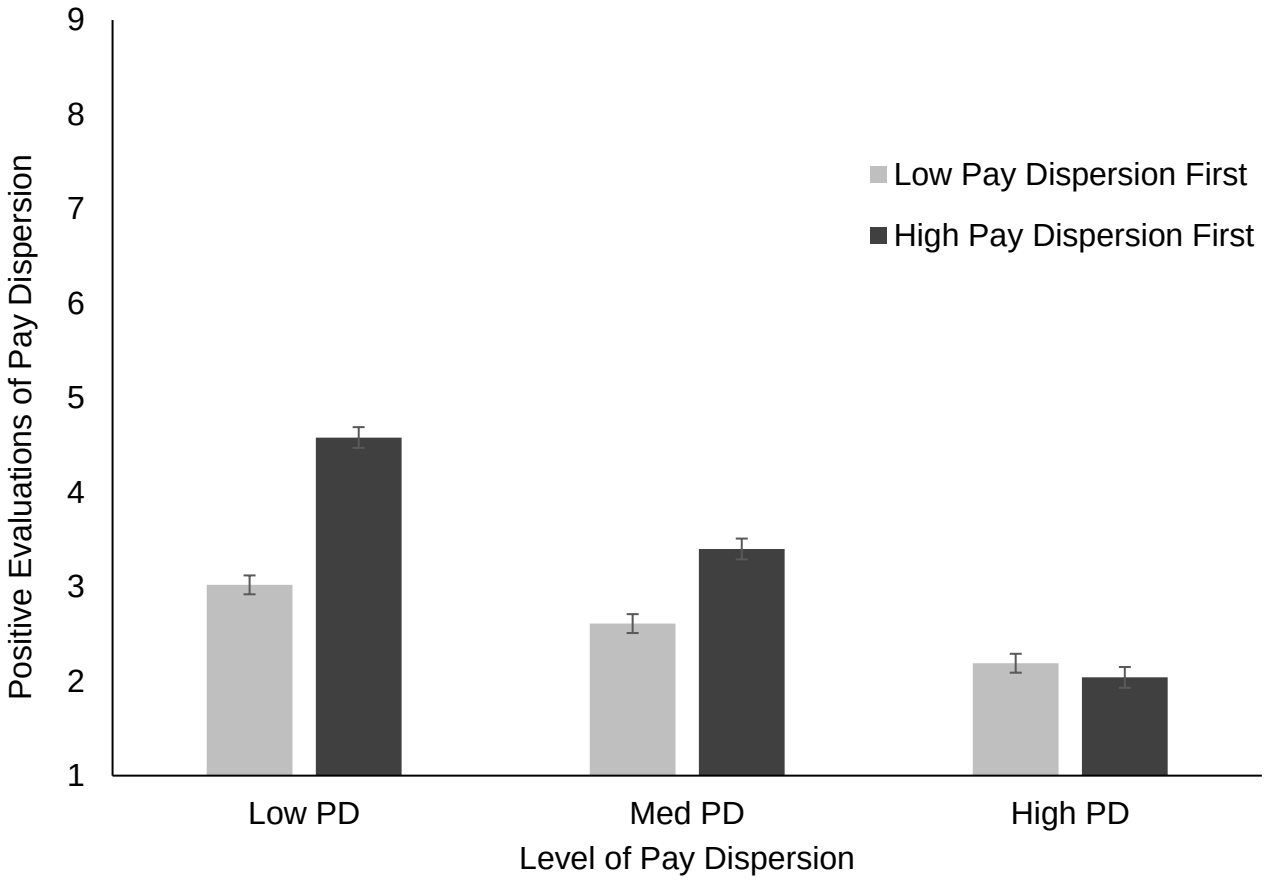

Figure 2. Means scores for positive evaluations of pay dispersion as a function of order and level of pay dispersion. Total *n* = 636. Error bars = one standard error above and below the mean.

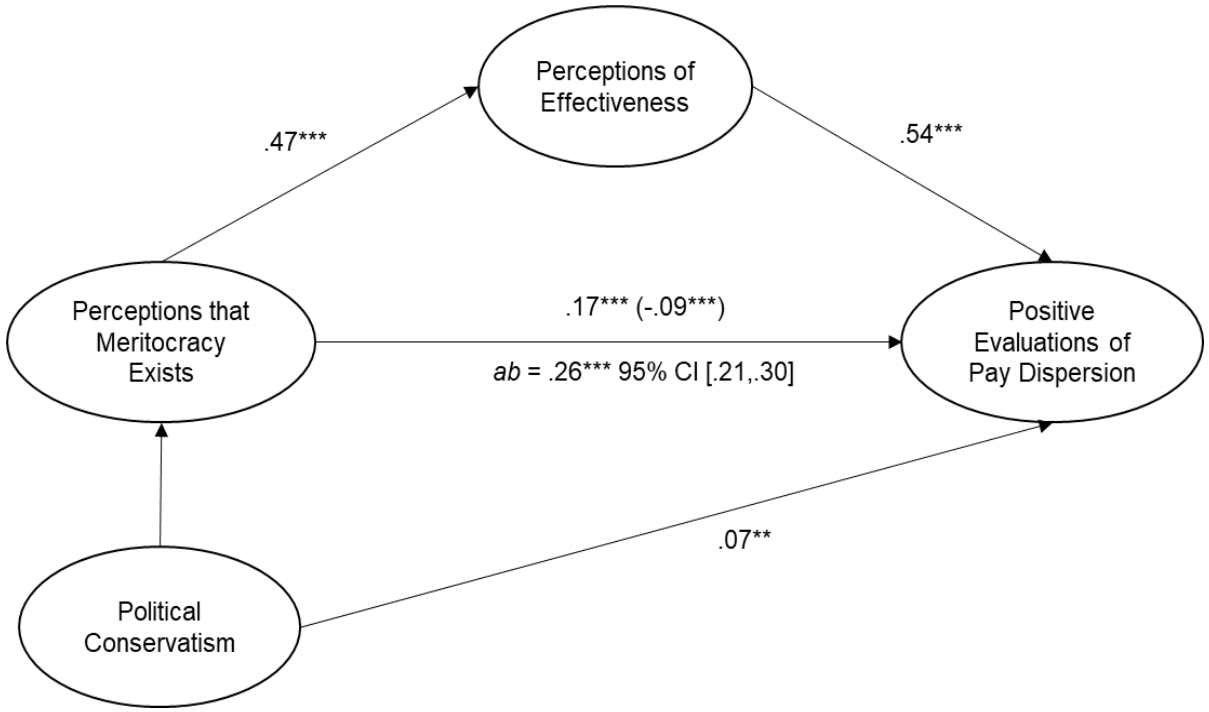

Figure 3. Mediating effects of perceptions of effectiveness on the effects of perceptions that meritocracy exists on positive evaluations of pay dispersion, controlling for political conservatism; Total n = 637. * indicates $p < .05$; ** indicates $p < .01$; *** indicates $p < .001$.

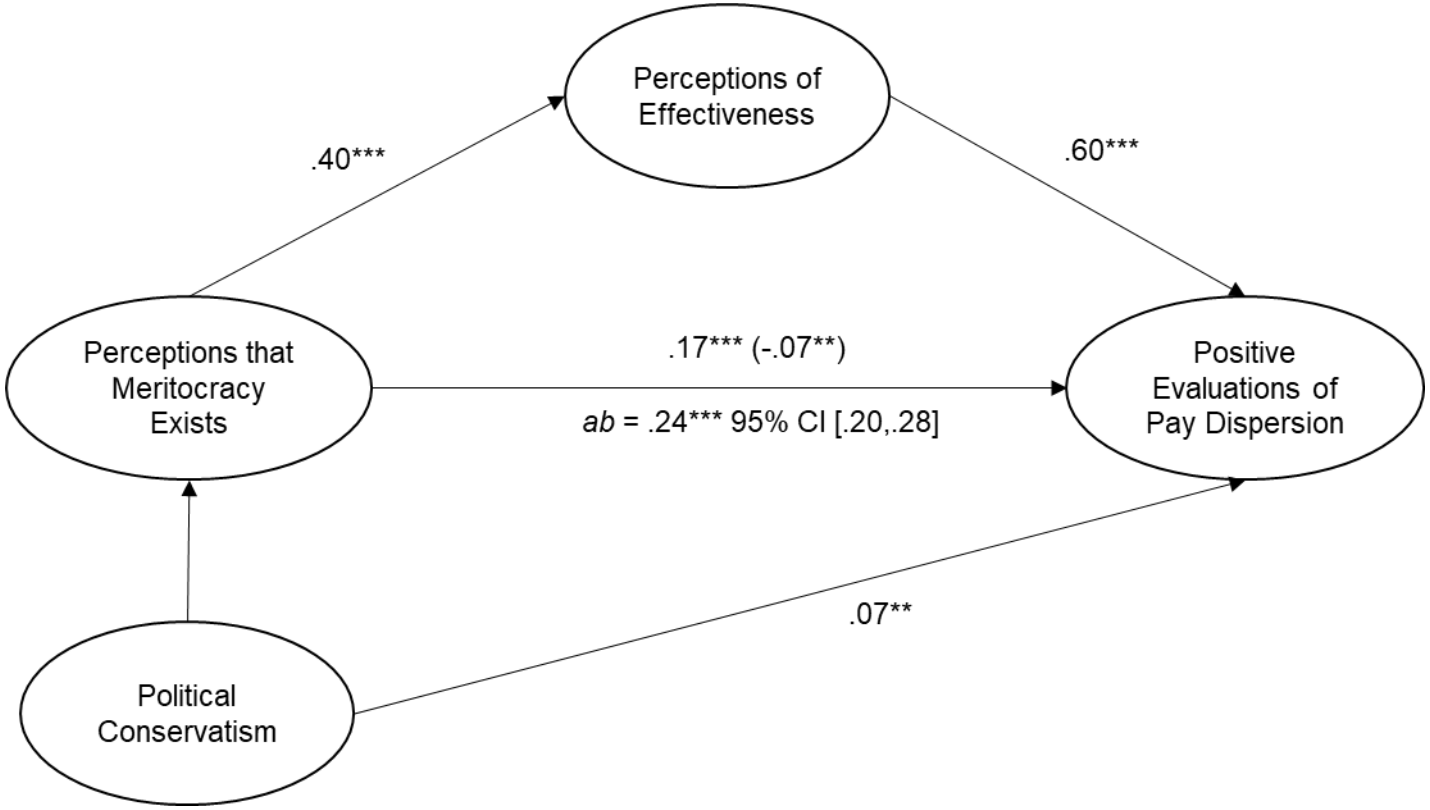

Figure 4. Mediating effects of perceptions of effectiveness on the effects of perceptions that meritocracy exists on positive evaluations of pay dispersion, controlling for political conservatism; Total n = 778. * indicates $p < .05$; ** indicates $p < .01$; *** indicates $p < .001$.

Appendix A: Pilot Materials

Instructions: *You will be presented with information about three American organizations. Please read carefully and answer the questions below using the scales provided*

Organization 1

OnlineSales.com is an American electronic commerce and cloud computing organization. This tech organization is a large internet-based retailer. Compared to the industry, this organization suffered one of the most significant losses during the 2008 recession, with 30% decrease in gross sales. Since then, the organization has recovered, and has expanded with six new branches throughout the United States. Over half of OnlineSales.com employees reported that they are satisfied with their work.

-5 *Extremely Disagree*	***-4***	***-3***	***-2***	***-1***	***0*** *Neither disagree nor agree*	***1***	***2***	***3***	***4***	***5*** *Extremely Agree*

1. OnlineSales.com is performing well.
2. The leaders at OnlineSales.com are doing a good job.
3. Employees at OnlineSales.com are good contributors to the organization.

Organization 2

Julian Group is a multi-national corporation that specializes in providing diversified insurance (e.g., life insurance, car insurance, home insurance). This organization lost nearly three weeks of revenue from extended maintenance and rebranding of many of their branches in 2017. However, projections from marketing analysts reported that maintenance and rebranding will strongly benefit the organization in the long run, saving costs in damages and attracting new customers. Most Julian Group employees regularly attend and participate in the organization's town hall meetings.

-5 *Extremely Disagree*	***-4***	***-3***	***-2***	***-1***	***0*** *Neither disagree nor agree*	***1***	***2***	***3***	***4***	***5*** *Extremely Agree*

1. Julian Group is performing well.
2. The leaders at Julian Group are doing a good job.
3. Employees at Julian Group are good contributors to the organization.

Organization 3

Growth Foods is a store brand that includes a variety of grocery and household products. Two years ago, this organization launched a product with which customers were strongly dissatisfied. However, they sought feedback from their clientele and subsequently, their three most recent products were enthusiastically well received. The majority of Growth Foods employees are rarely absent from work.

-5 *Extremely Disagree*	***-4***	***-3***	***-2***	***-1***	***0*** *Neither disagree nor agree*	***1***	***2***	***3***	***4***	***5*** *Extremely Agree*

1. Growth Foods is performing well.
2. The leaders at Growth Foods are doing a good job.
3. Employees at Growth Foods are good contributors to the organization.

Appendix B: General Human Resources Questionnaire

Below, you will be presented with policies from various organizations. Please indicate how you feel towards each policy using the scale below.

-4 *Extremely Disagree*	***-3*** *Strongly Disagree*	***-2*** *Moderately Disagree*	***-1*** *Slightly Disagree*	***0*** *Neither Disagree nor Agree*	***1*** *Slightly Agree*	***2*** *Moderately Agree*	***3*** *Strongly Agree*	***4*** *Extremely Agree*

1. Organization A requires employees to encrypt (encode) personal electronic devices used for work (e.g., cellphones, laptops).
2. Organization B requires employees to complete 30-hours of health and safety training before starting work.
3. Organization C requires employees to use their company email for all work-related communication.
4. Organization D requires employees to submit a 20-page claim document if they wish to be compensated for any work-related expenses.
5. Organization E enforces a strict code of conduct to help prevent workplace harassment.

Appendix C: Information about Target Information [Low Inequality Condition]

In the next section, you will be presented with information about three American organizations. Please read carefully and answer the questions below.

OnlineSales.com is an American electronic commerce and cloud computing organization. This tech organization is a large internet-based retailer. Compared to the industry, this organization suffered one of the most significant losses during the 2008 recession, with 30% decrease in gross sales. Since then, the organization has recovered, and has expanded with six new branches throughout the United States. Over half of OnlineSales.com employees reported that they are satisfied with their work.

At OnlineSales.com:
The average warehouse worker earns $36,766 per year.
The average software engineer earns $97,140 per year.
The CEO earns $794,193 per year.

Julian Group is a multi-national corporation that specializes in providing diversified insurance (e.g., life insurance, car insurance, home insurance). This organization lost nearly three weeks of revenue from extended maintenance and rebranding of many of their branches in 2017. However, projections from marketing analysts reported that maintenance and rebranding will strongly benefit the organization in the long run, saving costs in damages and attracting new customers. Most Julian Group employees regularly attend and participate in the organization's town hall meetings.

At Julian Group:
The average intern earns $27,533 per year.
The average finance manager earns $121,750 per year.
The CEO earns $3,880,523 per year.

Growth Foods is a store brand that includes a variety of grocery and household products. Two years ago, this organization launched a product with which customers were strongly dissatisfied. However, they sought feedback from their clientele and subsequently, their three most recent products were enthusiastically well received. The majority of Growth Foods employees are rarely absent from work.

At Growth Foods:
The average general labourer worker earns $18,489 per year.
The average production manager earns $100,080 per year.
The CEO earns $17,019,778 per year.

Appendix D: Information about Target Information [High Inequality Condition]

In the next section, you will be presented with information about three American organizations. Please read carefully and answer the questions below.

OnlineSales.com is an American electronic commerce and cloud computing organization. This tech organization is a large internet-based retailer. Compared to the industry, this organization suffered one of the most significant losses during the 2008 recession, with 30% decrease in gross sales. Since then, the organization has recovered, and has expanded with six new branches throughout the United States. Over half of OnlineSales.com employees reported that they are satisfied with their work.

At OnlineSales.com:
The average warehouse worker earns $18,489 per year.
The average software engineer earns $100,080 per year.
The CEO earns $17,019,778 per year.

Julian Group is a multi-national corporation that specializes in providing diversified insurance (e.g., life insurance, car insurance, home insurance). This organization lost nearly three weeks of revenue from extended maintenance and rebranding of many of their branches in 2017. However, projections from marketing analysts reported that maintenance and rebranding will strongly benefit the organization in the long run, saving costs in damages and attracting new customers. Most Julian Group employees regularly attend and participate in the organization's town hall meetings.

At Julian Group:
The average intern earns $27,533 per year.
The average finance manager earns $121,750 per year.
The CEO earns $3,880,523 per year.

Growth Foods is a store brand that includes a variety of grocery and household products. Two years ago, this organization launched a product with which customers were strongly dissatisfied. However, they sought feedback from their clientele and subsequently, their three most recent products were enthusiastically well received. The majority of Growth Foods employees are rarely absent from work.

At Growth Foods:
The average general labourer worker earns $36,766 per year.
The average production manager earns $97,140 per year.
The CEO earns $794,193 per year.

Appendix E: Perceptions of Overpayment

Below are several statements concerning [organization]. Please indicate the extent to which you agree with each of the following statements by using the scale below.

-4 *Extremely Underpaid*	***-3*** *Strongly Underpaid*	***-2*** *Moderately Underpaid*	***-1*** *Slightly Underpaid*	***0*** *Neither Underpaid nor Overpaid*	***1*** *Slightly Overpaid*	***2*** *Moderately Overpaid*	***3*** *Strongly Overpaid*	***4*** *Extremely Overpaid*

1. In a typical American organization, CEOs are:
2. In a typical American organization, entry-level workers are:
3. In a typical American organization, middle-level workers are:
4. To answer this question, please select "Slightly Underpaid."[25]

[25] This is an instructional inattention check item.

Appendix F: Perceptions that Meritocracy Exists Scale (Son Hing et al., 2011)

Below are several statements concerning how employment outcomes and rewards ought to be distributed. Please indicate the extent to which you agree with each of the following statements by using the scale below.

-4 *Extremely Disagree*	***-3*** *Strongly Disagree*	***-2*** *Moderately Disagree*	***-1*** *Slightly Disagree*	***0*** *Neither Disagree nor Agree*	***1*** *Slightly Agree*	***2*** *Moderately Agree*	***3*** *Strongly Agree*	***4*** *Extremely Agree*

1. In organizations, people who do their job well always rise to the top.
2. At work, people are rewarded solely based on their competence and ability.
3. In organizations, success is possible for anyone who works hard enough.
4. People's success in the workplace depends primarily on their skills.
5. Anyone who is willing to work hard enough is able to find a decent job.
6. At work, people's success depends primarily upon their performance.
7. Organizations always offer the job to the most capable candidate.
8. At work, people's rewards are always determined by their effort and ability.
9. People who work hard have the most opportunities for advancement.
10. To answer this question, please select "strongly disagree." [26]
11. Employers always hire the most skilled candidate for a job.
12. In organizations, rewards are determined primarily by employees' effort.

[26] This is an instructional inattention check item.

Appendix G: Preference for the Merit Principle Scale (Son Hing et al., 2011)

Below are several statements concerning how employment outcomes and rewards ought to be distributed. Please indicate the extent to which you agree with each of the following statements by using the scale below.

-4 *Extremely Disagree*	***-3*** *Strongly Disagree*	***-2*** *Moderately Disagree*	***-1*** *Slightly Disagree*	***0*** *Neither Disagree nor Agree*	***1*** *Slightly Agree*	***2*** *Moderately Agree*	***3*** *Strongly Agree*	***4*** *Extremely Agree*

1. In organizations, people who do their job well ought to always rise to the top.
2. At work, people ought to be rewarded solely based on their competence and ability.
3. In organizations, success ought to be possible for anyone who works hard enough.
4. People's success in the workplace ought to depend primarily on their skills.
5. Anyone who is willing to work hard enough ought to be able to find a decent job.
6. At work, people's success ought to depend primarily upon their performance.
7. Organizations ought to always offer the job to the most capable candidate.
8. At work, people's rewards ought to be always determined by their effort and ability.
9. People who work hard ought to have the most opportunities for advancement.
10. Employers always ought to hire the most skilled candidate for a job.
11. To answer this question, please select "strongly agree."[27]
12. In organizations, rewards ought to be determined primarily by employees' effort.

[27] This is an instructional inattention check item.

Appendix H: Evaluations of Pay Dispersion

Below are several statements concerning [organization]. Please indicate the extent to which you agree with each of the following statements by using the scale below.

-4 *Extremely Disagree*	***-3*** *Strongly Disagree*	***-2*** *Moderately Disagree*	***-1*** *Slightly Disagree*	***0*** *Neither Disagree nor Agree*	***1*** *Slightly Agree*	***2*** *Moderately Agree*	***3*** *Strongly Agree*	***4*** *Extremely Agree*

1. At [organization], the CEO makes too much money compared to the average [entry-level employee].
2. At [organization], the pay difference between the average [entry-level employee] and the CEO is not big enough.
3. At [organization], the pay difference between the average [entry-level employee] and the CEO is too large.

Appendix I: Perceptions of Benefits to Organizations

Below are several statements concerning [organization]. Please indicate the extent to which you agree with each of the following statements by using the scale below.

-4 *Extremely Disagree*	***-3*** *Strongly Disagree*	***-2*** *Moderately Disagree*	***-1*** *Slightly Disagree*	***0*** *Neither Disagree nor Agree*	***1*** *Slightly Agree*	***2*** *Moderately Agree*	***3*** *Strongly Agree*	***4*** *Extremely Agree*

1. I think that the differences in pay that exist at [organization] motivate employees to work harder.
2. I think that the differences in pay that exist at [organization] promote organizational success.
3. I think that the differences in pay that exist at [organization] will lead to high organizational performance.

Appendix J: Perceptions of Equity

Below are several statements concerning [organization]. Please indicate the extent to which you agree with each of the following statements by using the scale below.

-4 *Extremely Disagree*	***-3*** *Strongly Disagree*	***-2*** *Moderately Disagree*	***-1*** *Slightly Disagree*	***0*** *Neither Disagree nor Agree*	***1*** *Slightly Agree*	***2*** *Moderately Agree*	***3*** *Strongly Agree*	***4*** *Extremely Agree*

1. I think that the differences in pay that exist at [organization] are an indication of people's contributions to the organization.
2. I think that the differences in pay that exist at [organization] reflect people's capabilities.
3. I think that the differences in pay that exist at [organization] reflect people's efforts and hard work.

Appendix K: Demographic Questionnaire

Please answer the following questions. Leave blank any question you prefer not to disclose.

1. What is your gender?
   a. Female
   b. Male
   c. Other: _____ (Please specify)
2. How old are you? _____ years
3. What is the highest level of education you have attained?
   a. Some high school
   b. High school (or equivalent)
   c. Some college
   d. 2 year college degree (e.g., Associate's)
   e. 4 year college degree (e.g., BA)
   f. Master's degree
   g. Doctoral degree
   h. Professional degree (e.g., MD, JD)
4. What is your ethnic origin? (Ethnic origin refers to the ethnic or cultural group(s) to which your ancestors belong. Ancestry should not be confused with citizenship or nationality). **Check all that apply**.
   a. Western European
   b. Eastern European
   c. Hispanic or Latino
   d. Black or African-American
   e. American Indian or Alaskan Native
   f. East Asian
   g. South Asian
   h. Native Hawaiian or Pacific Islander
   i. Other: _____ (Please specify)
5. How many years have you lived in the United States? _____ years
6. Please indicate your political orientation by choosing where your orientation falls.

Extremely left-wing	Strongly left-wing	Moderately left-wing	Somewhat left-wing	Independent or neutral	Somewhat right-wing	Moderately right-wing	Strongly right-wing	Extremely right-wing
Extremely Liberal	Strongly Liberal	Moderately Liberal	Somewhat Liberal	Neither Liberal nor Conservative	Somewhat Conservative	Moderately Conservative	Strongly Conservative	Extremely Conservative

7. What is your current annual income? $_____ (in American dollars)
8. What is your current employment status? (Circle one)
   a. Employed - full time
   b. Employed - part time
   c. Unemployed
9. [If employed] In what sector are you currently employed?
   a. Not-for-profit
   b. Public

c. Private
d. Other _____ (Please specify)

10. [If employed] How long have you been employed by your current organization? _____ years _____ months
11. [If employed] Think of this ladder as a representation of where jobs and occupations fall within the United States. At the top of the ladder are the jobs that are most respected and prestigious (e.g., judges, doctors). At the bottom are the jobs that are least respected and prestigious (e.g., custodian, kitchen assistant). Where would you place your job or occupation on this ladder?

[Mood repair item]:

People feel happy for a lot of reasons. Please recall one event that made you happy in the last week. Think about what happened and why it made you feel positively.

How did this activity make you feel?

1	2	3	4	5
Not at all happy	A little happy	Somewhat happy	Very happy	Prefer not to answer

Appendix L: Supplemental Analyses (*n* = 778)

In spite of the benefits of inattention checks, such procedures may introduce demographic bias (Vannette, 2017). The results presented in the main manuscript were conducted with a sample of participants that have correctly responded to all three instructional inattention checks (*n* = 637). This appendix presents results for analyses conducted with a sample of participants that have correctly responded to only two of three instructional inattention checks (*n* = 778). The purpose of these analyses was to illustrate any differences in results if a less stringent data screening measure was utilized. They are not intended to replace or diminish the significance of the original results. A correlation table is presented on Table 10.

A four-step hierarchical linear model was created with positive evaluations of pay dispersion as the outcome variable. For all models, political conservatism and level of pay dispersion were entered into step one of the model as covariates. As well, within-subject variance was also calculated in step one to control for repeated-measure effects. For models 2, 3, 4, the main predictor (perceptions that meritocracy exists) was entered into step two. For model 3, the moderator (preferences for the merit principle) and the interaction term (perceptions that meritocracy exists x preferences for the merit principle) were entered into step three. Lastly, for model 4, the mediator (perceptions of effectiveness) was entered in step four (see Table 11).

Model 1, which included only step one variables revealed that pay dispersion accounted for an estimated 47.5% of the within-subject variance in people's evaluations of pay dispersion (R^2 *within-subject*), while political conservatism accounted for 16.8% of the variation in people's evaluations of pay dispersion (R^2 *between-subject*). In model 2, adding perceptions that meritocracy exists explained an additional 2.0% of the between-subject variation in evaluations of pay dispersion. Specifically, the more people perceived that outcomes were distributed based

on merit, the more positively they evaluated pay dispersion (*B* = .17, *SE B* = .04, 95% CI [.11, .24], *p* < .001). See Table 11, Model 2. Thus, hypothesis 1 was supported.

In model 3, the addition of preferences for the merit principle and the interaction of preferences for the merit principle and perceptions that meritocracy exists explained an additional 3.5% of the between-subject variation in people's evaluations of pay dispersion. The results indicated that there was no interaction between preferences for the merit principle and perceptions that meritocracy exists on evaluations of pay dispersion (*B* = -.01, *SE B* = .03, 95% CI [-.07, .05], *p* = .75). See Table 11, Model 3. Thus, hypothesis 2 was not supported. Because there was no statistically significant moderation effect, research question 1 (mediated moderation) was not tested further.

To test for mediation in model 4, perceptions of effectiveness was added to the hierarchical linear model, which explained an additional 29.9% of the between-subject variation in people's evaluations of pay dispersion. Specifically, when controlling for the other predictors, the more people perceived that pay dispersion was effective – in that it was both equitable and beneficial for organizations – the more positively they evaluated pay dispersion (*B* = .60, *SE B* = .02, 95% CI [.57, .63], *p* < .001). Importantly, the main effect of perceptions that meritocracy exists on positive evaluations of pay dispersion statistically significantly decreased when controlling for perceptions of effectiveness (*B* = -.06, *SE B* = .02, 95% CI [-.15, -.02], *p* < .001; Δ *B* = .24, *SE B* = .03, 95% CI [.20, .28], *p* < .001), demonstrating full (inconsistent) mediation.[28] See Table 111, Model 4. Thus, hypothesis 3 was supported.

To fully obtain values for my mediation model, a second two-step hierarchical linear mixed-effects model was created with perceptions of effectiveness as the outcome variable. For

[28] Inconsistent mediation occurs when the mediating (or indirect) effect is significantly stronger than the main (or direct) effect, causing its coefficient to invert. It should be interpreted as a full mediation (MacKinnon, Fairchild, & Fritz, 2007).

both models, political conservatism and level of pay dispersion were entered into step one of the model as covariates. As well, within-subject variance was also calculated in step one to control for repeated-measure effects. For model 2, the main predictor (perceptions that meritocracy exists) was entered into step two. Controlling for step one variables, the results from model 2 revealed that the more people perceived that outcomes were distributed based on merit, the more they perceived pay dispersion to be effective (B = .40, $SE\ B$ = .03, 95% CI [.34, .46], p < .001). See Table 12, Model 2 and Figure 4 for the mediation model.

Perceptions of Overpayment. A two-step hierarchical linear mixed-effects model was created to test the unique effects of perceptions of overpayment of entry-level employees and CEOs on positive evaluations of pay dispersion. For both models, political conservatism and level of pay dispersion were entered into step one of the model as covariates. As well, within-subject variance was also calculated in step one to control for repeated-measure effects. For model 2, perceptions of overpayment for entry-level workers and CEOs were entered in step two. Controlling for step one variables, the results from model 2 revealed that the more people perceived that CEOs were overpaid, the less positively they evaluated pay dispersion B = -.53, $SE\ B$ = .03, 95% CI [-.60, -.45], p < .001). Additionally, the more people perceived that entry-level workers were overpaid (or rather the more they perceived that entry-level workers were underpaid). The more positively they evaluated pay dispersion (B = .22, $SE\ B$ = .03, 95% CI [.19, .29], p < .001). See Table 13, Model 2.