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Compensation, Benefits, and Total Rewards: A Bird's-Eye (Re)View

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Abstract

Research on compensation and employee benefits has enjoyed a long and rich history. Energized by a new generation of scholars, changes in the broader workplace context, and developments in adjacent areas of inquiry, many classic theoretical tensions and research questions have begun to evolve in novel directions, and exciting new areas of research are developing. In addition, there have been numerous calls for more academic research on both compensation and benefits and for greater alignment of that research with the needs and interests of practice, including the tendency of many practitioners (and employees) to view pay and benefits holistically as a package. In this review we highlight selected recent research on key components of core total rewards—compensation plus retirement, health, and work-life benefits. Extrapolating from our review, we identify evolving themes and trends and advance several recommendations for future research and suggestions for practice.

INTRODUCTION

Of all the formal human resource (HR) management practices implemented in organizations, compensation and employee benefits are among the most vital to organizational success. At a fundamental level, the exchange of desired employee effort for remuneration from an employer is one of the defining elements of the employment relationship. Compensation systems, which elaborate on the details, components, and bases of this exchange, shape not only an organization's relationship with individual employees but also overall workforce composition by providing signals that facilitate employees' attraction and choices to continue at particular organizations and directing their efforts while on the job (Gerhart & Rynes 2003). Similarly, discretionary employee benefits offered by many employers, which can include nearly anything given to employees that is not considered cash compensation (Barringer & Milkovich 1998), can be tailored to suit organizations' business strategies and employee attraction/retention strategies (Rynes & Barber 1990, Werner & Balkin 2021). And because employees and prospective employees often take a holistic view of the overall combination of compensation and benefits and vary in their preferences for different combinations (e.g., Eriksson & Kristensen 2014), organizations may consciously tailor their overall compensation plus benefits packages to attract, retain, and motivate particular types of employees.

For example, a typical compensation and benefits package for an entry-level employee in a professional job at a mid- or large-sized organization in the United States could include salary, paid time off (vacation and holidays), possibly incentives or commission (depending on the job type), and employer-provided or employer-subsidized benefits such as health and dental insurance and some kind of retirement plan option [e.g., a defined contribution 401(k)]. Many organizations also provide other benefits such as the opportunity to request flexible work schedules or locations (e.g., telecommuting) and other types of miscellaneous benefits that can range widely from child or elder care subsidies to wellness benefits, transportation or parking benefits, tuition reimbursement and student loan repayment assistance, to name a few (e.g., Society for Human Resource Management 2019). Organizations may tailor their overall pay and benefits mix and/or the specific types of benefits they offer to reflect particular recruitment and retention objectives such as satisfying generational differences in preferences among different worker groups (e.g., Martin & Ottemann 2016), accommodating different types of dual-earner workers in their organizations (e.g., Martin 2020), or other goals. For example, many Generation Z workers (born in the mid-1990s or later) have more student loan debt than previous generations, so organizations seeking to appeal to this group may choose to offer financial planning assistance, student loan repayment assistance, and other benefits that help younger workers manage their expenses such as commuting assistance and remote work options (Sammer 2018).

Pay and benefits packages are also, of course, tailored to specific jobs and industries. For example, a hospital seeking to recruit a physician might offer a salary that reflects current market demand for his or her specialty, plus a production incentive bonus linked to the volume and quality of procedures performed and other metrics, plus benefits. For physicians, benefits packages often include health insurance, malpractice insurance, and a retirement plan [e.g., 401(k)] and may also include student loan forgiveness, paid time off, and, possibly, scheduling flexibility (Merritt-Hawkins 2020, Mosley & Miller 2019).

Compensation and benefits are expensive, however, comprising a significant proportion of overall costs in many organizations. And although sometimes referred to as fringe benefits, in terms of their financial impact, employer-provided benefits are anything but trivial. Benefits costs among civilian workers in the United States account for approximately 31% of total employer costs for overall employee compensation, with benefits representing an even larger percentage in

some sectors such as state and local government where benefits account for approximately 38% of costs on average (Bureau of Labor Statistics 2021). Conversely, the failure to set pay and benefits at appropriate levels can inhibit an organization's ability to hire desired talent and increase turnover, which is also quite costly [e.g., lost productivity, search and recruitment costs, time to get new employees up to speed (Cascio et al. 2019)]. As organizations become increasingly savvy in using data analytic and artificial intelligence capabilities to combine information about salary, benefits and other HR practices with information about employee workplace attitudes and behaviors (Oswald et al. 2020), managers are understandably keen on leveraging total rewards in the most efficient and effective way to ensure that their organizations remain competitive and thriving. Accordingly, in HR practitioner journals there has been a strong emphasis on compensation and benefits relative to other topics. In contrast, the relative proportion of scholarly research on these topics has been much lower, leading to repeated calls over the years for more academic research to better align with the needs and interests of professionals (Deadrick & Gibson 2007, Markoulli et al. 2017).

Another notable difference between research and practice is that academic research in management and applied psychology has tended to focus on either compensation or employee benefits, but not the two together. Compensation practitioners and employees, however, often tend to take a more holistic approach (e.g., using terms like total rewards, compensation and benefits package, or reward mix) (Baeten 2014), acknowledging that employees vary in their preferences for different combinations of pay and benefits (e.g., Eriksson & Kristensen 2014), as well as for different combinations of benefits. For example, one of the top professional associations for HR professionals specializing in compensation and benefits, WorldatWork, is organized around a very broad model of total rewards including compensation, benefits, well-being (which includes workplace flexibility), recognition, and development/career opportunities (https://www.worldatwork.org/total-rewards/; see also Day 2019). This disconnect between scholarly research and practice has fueled appeals for academic research on total rewards that goes beyond the study of wages or benefits separately (e.g., Baeten 2014, Gibbs 2016).

To stimulate more research on each of these topics, as well as research that considers compensation and benefits together, in this article we offer a high-level targeted review of research on compensation, benefits, and combinations of compensation and benefits from the past approximately 15 years, highlighting emerging themes and complementarities on which future researchers interested in taking a total rewards perspective might build. Given the enormous breadth of our subject, we are purposely selective and representative in our approach, rather than exhaustive. We focus on the denoted timeframe given that, to our knowledge, there has been neither a similarly broad review of the compensation literature in management or applied psychology since 2007 (Dulebohn & Werling 2007) nor a similarly general review of employee benefits research since 2009 (Dulebohn et al. 2009). Building on review articles and meta-analyses for highly researched topics and citing illustrative primary studies for more nascent topics, we aim to provide a resource that invigorates further inquiry.

We focus on what we term core total rewards and its components, which we define for the purposes of this review as including compensation and employer-provided retirement benefits, health benefits, and work-life benefits. Compensation research typically is broadly construed to include organizations' pay practices and structures, including factors influencing pay-setting as well as proximal and distal reactions and consequences at the individual and organizational levels. In terms of benefits, we concentrate on retirement, health, and work-life benefits, as these are among the most commonly offered by organizations (Dulebohn et al. 2009) and, according to research by Glassdoor Economic Research, are among the best predictors of overall satisfaction with benefits (Chamberlain & Tian 2016). Given major international differences in political

and regulatory structures, we focus on the US context, where the provision of most benefits is typically not required by statute or coordinated by government; rather, the decision to offer benefits is voluntary and their costs are generally borne by employers, although to a growing extent, employees share in these costs. Benefits research similarly encompasses organizational practices, their antecedents, and individual and organizational outcomes.

We begin with a selective and bird's-eye (i.e., high-level) overview of core total rewards components—compensation and benefits including retirement benefits, health benefits, and work-life benefits—with an eye toward articulating how recent research has evolved to resolve old theoretical tensions and to highlight new ones. Although there is not much research that combines both compensation and benefits, we highlight some examples that do exist. We highlight cross-cutting themes and areas of potential complementarity that emerge from our review, leveraging them to suggest several directions for future research and implications for practice.

A BIRD'S-EYE REVIEW OF RESEARCH ON COMPENSATION, BENEFITS, AND TOTAL REWARDS

Compensation

In their review of compensation research, Dulebohn & Werling (2007) observed that up until the 1980s scholarship had had a mainly internal labor market focus, with significant attention to internal equity within organizations, and was characterized by attention to employee attitudes and perceptions such as pay satisfaction and fairness perceptions. Their review concluded that, despite shifts in compensation practice beginning in the 1980s toward the use of more externally focused practices, such as market pricing, with a few exceptions (e.g., Gerhart & Milkovich 1990), academic compensation research had generally not followed suit. They recommended that future research take a more balanced perspective by devoting more attention to external, individual, and organizational factors that have also been proposed to influence pay-setting (e.g., Gerhart & Newman 2020).

Internal equity/pay structure. Compensation research since then has still been highly attuned to internal equity and intra-firm pay structures, although there has been much less attention to internal labor markets, job evaluation, and formal compensation structures [e.g., pay grades and ranges (Gerhart & Newman 2020)] and much more focus on what may be thought of as the residual distributional pay structure, that is, the snapshot of actual pay rates that represent the cumulative effects of and differences among employees resulting from previous pay decisions. Research on pay differences, including pay dispersion (i.e., the distribution of pay rates/levels among employees within a workgroup or an organization), is not new (e.g., Bloom & Michel 2002, Cowherd & Levine 1992, Pfeffer & Langton 1993) but has increased in volume in recent years. Multiple review articles summarizing research from a variety of theoretical perspectives and levels of analysis (e.g., Downes & Choi 2014, Gupta et al. 2012, Shaw 2014) have found conflicting evidence for the effects of pay dispersion, with pay differences found to have "positive and negative, linear and curvilinear, direct and moderated" (Conroy et al. 2014, p. 2) effects.

The theoretical conversation and empirical research on pay dispersion have shifted toward clarifying and, in some cases, integrating the core theoretical tensions of older research, where scholars tended to argue either that greater pay dispersion leads to more negative workplace outcomes due to enhanced inequity perceptions or that greater dispersion leads to more positive outcomes due to heightened tournament motivation among organizational members (for a review of this debate, see Shaw 2014). Newer research has sought to reconcile the theoretical debate by identifying the contingencies in the relationship between pay dispersion and performance (including organizational

performance, team performance, and individual performance) that might lead to positive versus less positive or negative outcomes. Some notable boundary conditions of this relationship include the level of work interdependence and identifiability of individual inputs (Beaumont & Harris 2003, Shaw et al. 2002, Shaw & Zhou 2021), the basis of pay dispersion [explained/legitimate reasons, such as individual incentives, the use of pay-for-performance (PFP), and individual talent or performance, versus unexplained or nonlegitimate bases, such as political reasons (Kepes et al. 2009, Shaw et al. 2002, Shaw & Gupta 2007)], and the overall pay level/competitiveness of an organization (Brown et al. 2003, Yang & Klaas 2011). These results suggest that the effects of pay dispersion or pay spread on the level of employee effort and turnover and on team/organizational productivity are moderated by the characteristics of other pay decisions and the characteristics of workers and work contexts. For example, higher pay dispersion is associated with greater motivation and performance when due to use of performance-based pay (Conroy & Gupta 2019) and is linked to reduced turnover among better performers (Shaw & Gupta 2007). At the team level, the findings are more mixed. Some studies testing overall pay dispersion and team performance have demonstrated a negative or nonsignificant relationship (e.g., Bloom 1999, Katayama & Nuch 2011, Mondello & Maxcy 2009). More recent team-level studies, however, differentiate between explained and unexplained pay dispersion. They find that explained pay dispersion (that is, dispersion that is attributable to individuals' performance differences in the past or use of performance-based pay) is positively related or curvilinearly related to team performance outcomes, whereas unexplained pay dispersion is not significantly related to team performance (e.g., Simmons & Berri 2011, Trevor et al. 2012), suggesting that the legitimacy of reasons for the pay dispersion is a crucial team-level factor to consider. At the organizational level, research that investigates vertical (between-job) and horizontal (within-the-same-job) pay dispersion has found that vertical pay dispersion may positively link to organizational performance outcomes, whereas horizontal pay dispersion has less positive effects (e.g., Ding et al. 2009, Yanadori & Cui 2013). Moreover, the direction and strength of these relationships varies according to the different measures of organizational performance (Shaw 2014). In summary, this line of scholarship represents a major step forward in reconciling mixed findings and competing theoretical points of view regarding the relationship between pay dispersion and performance at different levels of theory and analysis.

That said, and perhaps reflective of the current broader societal attention to inequality, we also note new theory development and empirical research on the many nuanced aspects of social comparisons that arise within pay systems (e.g., Chi et al. 2019, Larkin et al. 2012, Nickerson & Zenger 2008). For example, scholars in this stream of research argue that although incentives that differentiate among employees' and/or among managers' performance (creating differences in their pay) can increase motivation and performance, these positive effects may be offset by negative psychological effects of social comparisons (e.g., envy), particularly in situations when such comparisons are easier to make (Obloj & Zenger 2017). As an administrative practice that makes social comparisons easier, pay transparency has been studied and found to influence some individuals' experience of envy and their subsequent willingness to help those who are more highly paid under a PFP system, but this effect is contingent on individual differences in individualism and prosocial motivation (Bamberger & Belogolovsky 2017). More specifically, the indirect effect of greater pay transparency on reducing the help given to higher-paid peers, mediated via increased envy, was only significant among less prosocially motivated employees and was strongest among those who were both low in prosocial motivation and low in individualism. Other research in this vein has found that employees react more negatively and are more likely to leave an organization when underpaid compared to demographically similar coworkers (same-sex and race) than when they are underpaid relative to dissimilar coworkers (Cobb et al. 2021).

External market considerations. Turning next to research on external factors influencing pay, such as the effects of labor market competition or of employee pay comparisons with external peers, our general observation is that this work has continued to be relatively scarce when it comes to non-executive employees. The studies that have looked at external factors have generally focused on top executives' pay, given that executives' peers/comparators are typically all external and because those executives' and peers' pay, strategic actions, and firm performance are often public information, available to other executives as well as to researchers. Fulmer (2009), for example, found that even after accounting for sociopolitical and agency-based explanations for CEO pay, external labor market factors significantly predicted how firms set executive compensation levels and their pay at risk, particularly for high-performing executives most prone to being poached away by other firms. Ezzamel & Watson (1998) found that CEO underpayment relative to industry average predicted subsequent raises, suggesting that firms are aware of and take action to avoid executive exit. An emerging line of research has begun investigating what happens when firms do not pay executives at market-comparable levels, examining strategic choices of executives paid less than average or less than would be predicted given their industry, firm size, etc. Studies suggest that underpaid executives are more likely to engage in actions that they would expect to have a positive effect on their pay, including layoffs (Bentley et al. 2019), acquisitions (Seo et al. 2015), and manipulation of research and development spending (Fong 2010). They are also more likely to exit their firms for other organizations (Fong et al. 2010, Ridge et al. 2017). These results are consistent with general predictions of labor economics and also consistent with what would be expected for other types of employees.

As noted, however, few recent studies have examined external influences on pay of non-executive employees. In a rare exception that studied managers below the CEO level, Gartenberg & Wulf (2020) found that increased product market competition increases pay differences between organizations but not the pay gap within them; however, this effect is contingent on the ease of social comparisons. In firms where employees are expected to have fewer opportunities for social comparisons, the intra-firm pay gap is much more similar to the between-firm gap. Probing further, Gartenberg & Wulf determined that in organizations where social comparisons are likely and that face increased external pressure to increase dispersion, firms manage to maintain the pay gap status quo by overpaying lower paid workers via non-performance-based pay and offering strong incentives only to selected managers, rather than broadly.

Individual and collective determinants, novel outcomes, and a fresh look at an old question. Shifting gears, we next consider individual factors affecting or affected by compensation, an area that has enjoyed several important new theoretical advances and a healthy level of research attention. Research on individual PFP—pay practices designed to tie incentive pay to individuals' performance—is a case in point. Key meta-analyses linking PFP and individual performance were published in the mid-/late-1990s (Cameron & Pierce 1994, Jenkins et al. 1998), and the conclusions of more recent reviews and meta-analyses have continued to be the same—that PFP can be a highly effective motivator of individual performance, contingent on appropriate implementation and fit of PFP to workplace setting, task type, and performance outcome measured (qualitative, quantitative, behaviors or results) (e.g., Garbers & Konradt 2014, Gerhart et al. 2009, Shaw & Gupta 2015). That said, scholars also warn that when poorly designed and/or implemented inappropriately, PFP can lead to undesirable results. Indeed, they argue that much of the research that finds negative effects of PFP illustrates this point, as they are often studying inappropriately designed or implemented systems (Gerhart et al. 2009, Shaw & Gupta 2015). For example, Shaw & Gupta (2015) highlighted an example of field research where an incentive scheme was implemented, leading to improved performance. When the incentives were then removed without explanation, productivity dropped; the original authors concluded that intrinsic motivation had been undermined by the incentive. But as Shaw & Gupta pointed out, the issue was more likely with poor implementation (i.e., the apparently arbitrary removal without explanation led to feelings of injustice or anger) than to demotivating effects of the incentive itself.

A related line of research that has experienced something of a theoretical renaissance is the study of whether PFP undermines intrinsic work motivation (e.g., Deci & Ryan 1985; Gerhart & Fang 2014, 2015; Rynes et al. 2005) or other intrinsically driven work behaviors, such as creativity (Amabile 1983, 1996). Although early studies, many involving children, hinted that this might be the case, there has never been much solid, consistent evidence for this undermining effect in research involving adults, especially in field/workplace settings (Jenkins et al 1998, Shaw & Gupta 2015). Indeed, scholars have found the opposite to be true, with meta-analytic evidence supporting significant positive impacts of PFP on intrinsic motivation and creativity (Byron & Khazanchi 2012, Cerasoli et al. 2014). An important step forward in the thinking regarding whether PFP will result in positive motivational effects has been facilitated by increased attention to individuals' varied perceptions of extrinsic rewards (i.e., PFP), often drawing on self-determination theory (e.g., Balkin et al. 2015, Fang & Gerhart 2012, Gerhart & Fang 2014, Parker et al. 2019). Individuals may form either positive (i.e., motivated to achieve challenging goals) or negative (i.e., controlled to complete compulsory goals) views of extrinsic rewards, which in combination result in a net positive or negative effect on motivation. For example, Parker et al. (2019) demonstrated that individuals experience autonomous motivation, feeling less stressed and more prosocial, when they frame PFP as a challenge. Conversely, they are more likely to experience controlled motivation and to feel stressed and less prosocial when they appraise PFP as a hindrance. However, even if PFP is initially viewed as controlling, organizations can reverse individuals' perceptions of PFP by modifying other characteristics of compensation policies. Balkin et al. (2015) found that individuals' perceptions of being controlled by PFP can be mitigated when specific design elements are included (i.e., the proportion of PFP to total pay is low, or when rewards are linked to generalized performance outcomes) such that employees' sense of autonomy can be preserved.

Another direction for recent individual PFP research has been to go beyond the study of traditional workplace outcomes like performance and employee work attitudes to look at more distal and negative effects. For example, in a study of more than 300,000 employees, Dahl & Pierce (2020) found that PFP adoption seems to be linked to employee mental health outcomes, based on evidence of increases in anti-depressant and anti-anxiety medication usage, as well as increased turnover among certain employees. In a separate study of UK establishments, the use of PFP was associated with better financial performance that was partially offset by indirect negative effects due to elevated levels of injury; results also suggested that the effect of PFP on quality was negative due to increased risk of injury (Devaro & Heywood 2017). In a unique study of spillover effects of PFP use from one group to another, the use of PFP for managers increased turnover of nonmanagerial employees, unless organizations also had in place other HR practices that encouraged managers to treat employees well and reduce strain on the employment relationship (Pohler & Schmidt 2016). Organizations' use of PFP has also been theorized to predict increased bullying due to greater work intensification and competition (e.g., Samnani & Singh 2014). However, recent related empirical research found that employees experiencing more performance-oriented HR systems that include performance-contingent pay (i.e., high-performance work systems) actually reported less exposure to bullying (Salin & Notelaers 2020), a finding that seems to be explained by the mediating effect of workers' perceptions of organizational justice and reduced role conflict in more performance-oriented high-performance work systems.

PFP that is tied to collective, rather than individual, outcomes has also been studied for both executive and non-executive employees. A recent meta-analysis of this research found a significant

effect of collective PFP on collective outcomes (overall effect size of $\rho = 0.11$). The authors also noted a heavy emphasis on incentive effects in this research, with less attention to the effects of collective PFP on employee attraction or retention (Nyberg et al. 2018).

Individualization in compensation research. Yet another nascent trend in compensation research might be labeled individualization, and we include in that category two types of research. The first is research that goes beyond studying average employee reactions to a given pay practice or system, instead focusing on the differing effects on individual employees within the same pay system that arise due to the interaction of pay system with personal characteristics like personality, gender, standing in a group, etc. To be sure, prior compensation research has sometimes tested for individual difference contingencies in pay effects, but typically as a secondary or side issue. New theoretical advances in the understanding of person-based differences in pay reactions (i.e., compensation-activation theory) has facilitated a major review and reinterpretation of prior research (Fulmer & Shaw 2018). This line of theoretical development further contributes to the conversation on how particular pay systems/practices systematically attract or drive off particular types of people, and to thinking about how customization of pay practices to fit individuals could foster (or preclude) a workforce that is diverse on a wide array of person-based characteristics.

This later point is reflected in a few studies on what could be considered a second focus of individualization research: individualized pay arrangements. HR systems that strategically differentiate among employee types/groups have been observed and theorized about for some time (e.g., Lepak & Snell 1999), as has the use of individualized work arrangements or idiosyncratic deals (i-deals) that differentiate among employees, usually at their own request (Rousseau et al. 2006). As such, it comes as no surprise that we have begun to see greater research attention to individualized compensation arrangements. Recent research on the prevalence of idiosyncratic work arrangements documents the existence of financial i-deals (Rosen et al. 2013). In addition, field research has begun considering individualized arrangements, in this case, exceptions made for certain employees to prevent them from being overly demotivated due to the downside of PFP (Maltarich et al. 2017). Related research also considers the reactions of other employees to such individual exceptions (Abdulsalam et al. 2021).

Administrative consideration: pay communication. Finally, we observe a noticeable increase in research examining how compensation systems are administered and especially the renewed attention to organizations' policies about pay communication and transparency (Arnold & Fulmer 2019, Colella et al. 2007, Fulmer & Arnold 2020, Fulmer & Chen 2014). Pay communication, of course, is important for informing employees about their pay system so that they have accurate knowledge of their pay and understand what to do to increase their pay. However, much of the current research has been at least as motivated by societal conversations about pay inequality, with transparency in pay communication (or lack thereof) being seen as a factor that can reduce or exacerbate inequality. This line of research dovetails with research on employees' pay comparisons, given that one tool that organizations can wield to control social comparisons about pay is to control the information that it shares or that it allows employees to share with one another.

In general, this research has been organized around two (Marasi & Bennett 2016) or three (Arnold & Fulmer 2019) complementary categorizations of pay transparency practices. The two-category approach focuses on whose communication is being restricted—organization or employee—whereas the three-category approach also takes into account specific information that is being restricted—(a) the sharing of actual pay or salary information by the organization (i.e., pay outcome transparency), (b) the sharing of information by the organization about how pay is determined (i.e., pay process transparency), and (c) the level of restriction (formal or informal) on

whether employees are allowed to communicate with one another about pay. Although there is research aimed at assessing the prevalence of each of these different types of pay communication practices enacted by organizations (e.g., Arnold et al. 2018), other research at the organizational level, such as the determinants of or organizational outcomes of different policies, is relatively sparse. An exception is research by Castilla (2015), which found that an organization's pay transparency policy adoption reduced its prior race- and gender-based pay gaps; one point to note about this study, however, was that it focused on a transparency intervention for managers, not for employees more generally. Much more of the research in recent years has been focused on employee reactions to different types and levels of transparency (e.g., Bamberger & Belogolovsky 2010, 2017; Card et al. 2012; Day 2012; SimanTov-Nachlieli & Bamberger 2021) and on employee preferences for different levels of transparency (e.g., Scott et al. 2015; Smit & Montag-Smit 2018, 2019).

Retirement, Health, and Work-Life Benefits

In their review of the academic literature on employee benefits, Dulebohn et al. (2009) observed that "when reviewing the human resource management (HRM) literature, there is a surprising general absence of attention given to employee benefits" (p. 86). Since then, the volume of academic research on work-life benefits and on some health-related benefits has grown, but research on retirement benefits has continued to be thin. Also notable is that the emphasis of research over the past approximately 15 years has been on employee reactions to and outcomes of benefits programs, with much less theory development and empirical research at the organizational level. Although many practitioners and academic scholars take for granted that employee benefits choices can have significant sorting and retention effects on workers, in turn affecting firm performance and competitive advantage, very little rigorous research has actually examined the role of strategic considerations in the design of employee benefits systems (Murray & Dulebohn 2021). On an encouraging note, there have been concerted efforts to encourage more strategic benefits research, including a recent special issue in The Journal of Total Rewards (Fickess 2021), a bridge journal with both an academic and practitioner audience interested in compensation and benefits. In what follows, we highlight several of the major currents in research over the past approximately 15 years on retirement, health, and work-life benefits.

Retirement benefits. Earlier research on retirement benefits often focused on employees' satisfaction with benefits and employee decision-making about benefits, such as worker preferences for types of retirement plans, whether they are saving adequately for retirement, and individuals' investment choices within plans that offer employee discretion (e.g., Dulebohn 2002; Dulebohn et al. 2000, 2009; Mitchell & Moore 1998). Although sparse, some recent retirement benefits research has taken more of a strategic lens, examining organizational outcomes. For example, Werner et al. (2016) found that firms in the long-haul trucking industry that offered supplemental retirement plans had lower property and liability insurance premium costs, a proxy for safer driving records. Although they were not able to test the specific mechanisms directly, their expectation was that these retirement plans served a sorting function, with firms offering such plans more likely to attract higher-quality and/or less risk-prone employees, who would in turn also presumably be safer drivers.

Health- and well-being-related benefits. When it comes to health-related benefits, one interesting direction taken in recent research involves examining employees' reactions to the administration of healthcare benefits. In a novel study of employee interactions with health insurance administrators, Pfeffer et al. (2020) found that time spent on the phone with health insurance

representatives was associated with lower satisfaction and engagement and with more negative outcomes like stress, absenteeism, and burnout. On the basis of their results, they calculated that "the total direct cost of workers' time spent with insurance administration was \$21.6 billion . . . the cost of lost workdays was about \$26.4 billion and the effects of lower job satisfaction we estimated to be more than \$95.6 billion" (Pfeffer et al. 2020, p. 333).

Another major theme of research has been attention to workplace mindfulness interventions aimed at reducing stress and improving other mental health outcomes. Notably, much of this research has not necessarily been published in journals that usually publish research on compensation or other employer-provided benefits, but rather in journals in related areas such as health or clinical psychology. For example, in the mid-2000s, a pair of meta-analyses in the Journal of Health Psychology examined organizational interventions designed to prevent or alleviate stress and to manage overall wellness. Richardson & Rothstein (2008) conducted a meta-analysis of experimental intervention studies with stress outcomes, updating a prior meta-analysis that had found generally positive effects across a wider range of study types (van der Klink et al. 2001). Their metaanalysis found that stress-management interventions focused on cognitive behavioral skills training (e.g., noticing and changing one's appraisal of stressful workplace situations and responses) were more effective overall than other secondary stress interventions such as relaxation (including meditation), multimodal interventions combining several components, or alternative interventions including exercise programs, journaling, and biofeedback training; their results further suggested more positive effects for single interventions than multimodal interventions. Richardson & Rothstein found no effect on stress outcomes for organizational interventions such as support groups and increasing workers' decision-making authority, consistent with van der Klink et al.'s meta-analysis. Parks & Steelman (2008) focused on two types of organizationally sponsored wellness programs—fitness-only programs and comprehensive programs that combined fitness with another element like nutrition or stress reduction—and two work-related employee outcomes absenteeism and job satisfaction. The empirical results indicated positive effects on absenteeism reduction and on job satisfaction for participation in a wellness program, but the type of program was not a moderator.

More recently, considerable research attention has been paid to unpacking what prior research bundled together as relaxation interventions, with systematic reviews and meta-analyses summarizing accumulating research on interventions related to meditation and mindfulness. Some have zeroed in on specific occupations. For example, Lomas et al. (2018) systematically reviewed mindfulness studies (e.g., mindfulness-based stress reduction, mindful communication, occupational mindfulness training) conducted among healthcare professionals. Among the subset of intervention studies they reviewed, most found generally positive effects on outcomes of stress, anxiety, and depression and other well-being measures, as well as measures more closely related to job performance such as compassion/empathy, self-efficacy, team functioning, etc., but more equivocal results were found for burnout. The authors also noted, however, that research quality varied among the studies examined and called for more rigorous research. Bartlett et al. (2019) conducted a meta-analytic review of 23 randomized controlled trials of workplace mindfulness-based programs, including moderator analysis by intervention characteristics. Situating this research within common health psychology frameworks of neurobiological stress reduction, job demandsresources theory, and coping, they found a consistent positive effect on overall stress reduction, depression, anxiety, and well-being, with little significant effect on burnout or on narrower job stress

¹Most studies in the Richardson & Rothstein meta-analysis examined psychological stress outcomes, with fewer including measures of physiological stress or organizational outcomes like productivity or absenteeism.

measures. Moderator analysis did not reveal significant effects of intervention mode or content or of workplace sample characteristics. They also noted that studies reporting follow-up results (post-intervention) typically showed lasting results for weeks or months after the intervention.

In a twist on this research, scholars have also examined meditation and mindfulness interventions targeted at managers or leaders. Donaldson-Feilder et al. (2019), in a small systematic review of 19 studies, found promising effects for leader outcomes such as increased mindfulness, stress reduction, anxiety reduction, and some leadership measures, although they were unable to ascertain the degree to which leaders' mindfulness was the mechanism that mediated the effects of interventions on other outcomes. They also noted that there were no studies that examined spillover effects on leaders' subordinates despite theoretical literature suggesting there might be such effects.

Although several of these meta-analyses commented on the variable quality of research studies of mindfulness and meditation, there have been excellent recent examples of well-designed research on other types of health-related programs. One example is research by Gubler et al. (2018) that investigated the effects of a corporate wellness program on objective outcomes including worker health and productivity. As the authors noted, many prior studies like this had focused on cost savings rather than on top-line improvements leading to increased revenue. Theoretically grounding their research in arguments that such wellness programs increase both satisfaction and reciprocity as well as fitness and capability for work, they documented productivity improvements linked to the health improvements achieved via this program—improvements that were particularly strong for workers in poorer health to begin with. They also estimated a large return on investment for the organization, even though all employees did not participate in the program, and some left the company before productivity gains could be realized.

Work-life benefits. Turning to work-life benefits, there has been a steady stream of research on various practices and policies over the past several years. As with other types of benefits research, most studies have focused on employee reactions and behaviors in response to these benefits, rather than on their prevalence in organizations or on strategic, organization-level considerations (notable examples of exceptions pre-dating our review include studies by Konrad & Mangel 2000, Osterman 1995, and Milliken et al. 1998). Several different constructs have been studied that fall under the umbrella of work-life benefits, with the broad categorization of work-family supports (WFS), defined as "discretionary and formal organizational policies, services, and benefits aimed at reducing employees' work-family conflict and/or supporting their family roles outside of the workplace" (Masterson et al. 2021, p. 118), largely overlapping with the conceptual terrain of work-life benefits. Conveniently, a very recent systematic review of WFS provides an excellent overview of studies since 2008 that examined outcomes related to the availability or use of policies labeled as work-family, work-life, and family-friendly. Although this review specifically focused on better understanding the subset of research (114 studies) that has found positive effects of WFS on individual and organizational outcomes, the authors do comment on other studies with mixed or nonsignificant findings. Masterson et al. (2021) note that a range of similar theoretical perspectives including conservation of resources, job demands-resources, social exchange, boundary, self-interest, identity, and signaling theories have dominated the employee-level studies in this literature, whereas firm-level studies have been typically grounded in contingency theory and context-emergent turnover theory. Although they identified more than 60 different outcomes that have been examined in this literature, they noted that the vast majority of studies have focused on employee work-family outcomes (like work-family conflict) or on job attitudes. Their summary of studies highlighted commonly examined individual difference moderators (gender, marital status, parental status) as well as some key mediators of positive WFS-outcomes relationships, namely work-family conflict, exchange-related variables (e.g., positive organizational support, supervisor support and affective commitment), and job autonomy. They also noted that, beyond the subset of studies reporting positive relationships, a nontrivial number of studies have reported mixed or nonsignificant effects of WFS. Across studies, there have also been mixed effects for gender as a moderator of the WFS-outcomes relationship and mixed or equivocal results for organizational outcomes such as productivity and profitability (e.g., Bloom et al. 2011, Lee & DeVoe 2012).

Other reviews and meta-analyses, many of which overlap with the more recent Masterson et al. (2021) review, have focused on specific aspects of work-family benefits. Examples include Bal & Jansen's (2016) review of the literature on workplace flexibility from the perspective of how it has been conceptualized across the lifespan, with particular attention to older workers. Gajendran & Harrison (2007) meta-analyzed the research up to that time on telecommuting, and a meta-analysis by Allen et al. (2013) examined different forms of flexibility (time versus location) and differentiated between availability of flexibility practices and their actual use in summarizing prior research on employee outcomes of flexible work arrangements.

Research on Total Rewards?

As noted in the introduction and demonstrated in the review thus far, compensation and benefits have not often been studied together, either historically or more recently. Consequently, we know little about antecedents of organizations' decisions regarding their overall total rewards system or practices, or about organizational consequences of total rewards systems. Our knowledge is largely limited to a few studies that include multiple other job characteristics along with pay that can be found in the applicant attraction literature, where scholars investigate what features of organizations are attractive to would-be individual employees (e.g., Cable & Judge 1994, Hollenbeck et al. 1987), as well as in studies of motivation and job attitudes in incumbent workers (e.g., Igalens & Roussel 1999). Meta-analytic evidence suggests that benefits are a stronger individual predictor $(r_{\text{corrected}} = 0.31)$ of applicant attraction than compensation/pay/salary $(r_{\text{corrected}} = 0.23)$, with the combination (i.e., total compensation) correlated with attraction at $r_{\text{corrected}} = 0.29$ (Uggerslev et al. 2012). Because most applicant attraction studies estimate separate relative effects of pay policies and benefits policies (or of satisfaction with these policies), and do not typically focus on the question of whether employees view them as a total rewards bundle or whether they trade off one (e.g., high pay) for the other (e.g., work flexibility), they are arguably not directly studying employee reactions to total rewards.

That said, a few recent studies have begun to do so. Tetrick et al. (2010) examined both separate and interactive effects of salary level, health insurance cost-sharing, retirement plan, and annual leave on job choice. They found separate effects for all four on organizational attractiveness, but did not find interactive effects among them. The lack of interactions suggests that employees' views of salary as an attractor were not contingent on other benefits offered, consistent with the view that they were not seen as substitutes. This contrasts with other research that finds that prospective employees do differ in their preferences for different combinations of pay and benefits (e.g., Eriksson & Kristensen 2014). More research is needed to better understand both organizations' decisions to offer total rewards and the perceptions and preferences of people receiving them.

THEMES AND FUTURE RESEARCH DIRECTIONS

Our review points to several exciting opportunities for future research (see **Table 1** for a summary). One emerging theme from our birds-eye review is the heightened attention to implementation and administration of both compensation and benefits and not simply to the organization's

Table 1 Suggestions for future research

Opportunities for future research	Suggested directions
Implementation and administration of compensation and benefits	Greater direct theoretical and empirical attention to compensation, benefits, and total rewards implementation considerations
	Control for implementation variables in studies of the effects of compensation, benefits, and total rewards practices and systems
Sorting and total rewards	Consider sorting effects (i.e., recruitment and turnover of employees) of the strategic implementation of organizational total rewards practices and systems Consider evolution of total rewards systems to match the current or anticipated future workforce
Variability and dispersion of pay and benefits resulting from multiple reward decisions	Increase attention to the differential availability in pay components other than base pay and to differential availability of benefits to different employees (e.g., due to hire date, union membership, job type) Consider between-group differences in pay and benefits (e.g., gender- or race-based pay/benefit/total rewards gaps) Develop methods estimating the financial value of benefits to better quantify gaps in benefits/total rewards
Individualized total rewards practices	Examine the determinants of organizational offerings of customized pay and benefits (i.e., financial i-deals, individualized benefits) Examine employees' reactions to total rewards and to individualized total rewards offerings and how those reactions are contingent on individual characteristics such as demographics and personality
Contingent and gig work and total rewards	Examine how contingent and gig workers self-assemble their total rewards, including benefits that are normally employer-provided Examine how people who transition from employment to self-employment as gig or contingent workers experience changes in their health and preparation for retirement as a result of shifting away from employer-provided- to self-provided-total rewards

intended practices or chosen plan design. Examples of newer work in this vein include the research on employee reactions to health insurance benefits hassles as well as to pay communication and transparency (e.g., Bamberger & Belogolovsky 2010, 2017; Card et al. 2012; Day 2012; Pfeffer et al. 2020). Many scholars have previously cautioned that the failure to find expected effects of particular types of pay systems or practices may be due to failures in the implementation and communication of those practices, rather than in the practices themselves (Fulmer & Chen 2014, Gerhart et al. 2009, Shaw & Gupta 2015). If we really believe this could be true, then we need to not only pay greater attention to theory and empirical research on implementation of pay and benefits, but we should probably also be including implementation variables like communication more explicitly, at least as control variables, in empirical studies of compensation, benefits, and total rewards.

A second theme that points to opportunities for future inquiry, and one also noted by other researchers recently (e.g., Nyberg et al 2018), is that organizational compensation and benefits research has been dominated by studies that focus on how pay and benefits motivate individuals' efforts in the workplace, that is, to incentive effects such as productivity and performance. With a few notable exceptions (e.g., Trevor et al. 2012) there has been far less attention to sorting effects like recruitment and turnover. Without this kind of research, we are unable to fully understand how total reward systems systematically attract and transform the talents of particular types of employees into valuable human capital resources necessary for organizational performance and competitive advantage over the long term (Ployhart & Moliterno 2011, Nyberg et al.

2014). We strongly encourage more research on strategic considerations in organizations' total reward choices combined with greater attention to the sorting effects of these choices. Such research could take two paths. First, as most of the limited research in this vein has done to date, scholars could consider the effects of a given total rewards system on recruitment and retention in the relatively short term. Second, a more novel and long-term approach might be to examine how organizations with workforces they wish to retain (e.g., highly skilled, long-tenured workers) evolve their total rewards systems to reflect the changing preferences and needs of both the maturing older workers they want to retain and of the younger workers they need to eventually hire and integrate in order to maintain a stable and high-quality workforce.

Third, we note a shift over time from simply studying compensation and benefits practices to studying the consequent structure of individual pay rates and differences created by those practices, i.e., pay dispersion, which may or may not have been explicitly designed or intended. Although organizations do formally set pay grades and ranges to differentiate among jobs at different levels (Gerhart & Newman 2020), this formal structure usually pertains to base salary, which is only part of what comprises total employee compensation, and rarely fully reflects differences in total rewards, pay other than base pay, or benefits. Pay dispersion results from the accumulation of pay decisions made by an organization about individual employees over time, including job-based pay structure, performance-differentiated pay raises (e.g., merit pay), seniority and cost-of-living raises, and individually negotiated pay or raises (e.g., retention raises). More specific types of group differences, such as gender- and race-based pay gaps are similarly the result of an accumulation of many decisions, from the initial negotiated salary to years of subsequent annual raises and promotion adjustments that ultimately result in wage levels favoring one group over another.

If we extend this logic, it is not hard to see how differential availability of benefits among members of a workgroup (e.g., due to differing start date, union membership, or job type affecting eligibility) together with different availability and utilization of informal individually negotiated deals—or i-deals—as they relate to benefits such as flexible work arrangements or financial i-deals effectively creates benefits dispersion. If benefits availability/utilization and i-deals negotiation are systematically related to employees' gender or race [e.g., individuals in some subgroups may be more likely to request certain benefits or i-deals and/or may be more effective in receiving them when they request them (see, e.g., Bowles et al. 2019, Ho & Tekleab 2016)], this could contribute to undesirable between-group differences as well (e.g., gender- or race-based benefit gaps). Together, the combined effect of pay and benefits dispersion then theoretically creates dispersion in total rewards as well as the potential for total rewards gaps favoring different groups. Although there is a solid foundation of research documenting the gender wage gap, we do not know much at all about gender- (or other demographic-group-based) benefits gaps or about the corresponding total rewards gap. One obstacle in this research is that some benefits (e.g., flexible schedule) are difficult to estimate a value for in financial terms to use in computations of dispersion or gaps. To nudge scholars to think creatively about how they might tackle this important topic, we highlight a unique study by Hallock et al. (2014) where the authors generated an estimated value for benefits and included it with pay to create what they called total compensation (we would likely call it total rewards) to compare the gap for disabled and non-disabled workers.

Another complicating consideration is that utilization of some types of benefits (e.g., work-family flexibility) is perceived by supervisors/managers as a lack of commitment to the organization that reduces the size of merit raises and/or slows the frequency of promotions and promotional raises (Glass 2004, Hammer et al. 2005, Kossek et al. 2017, Leslie et al. 2012, Pailhé & Solaz 2019, Weeden 2005). Systematic differences in choice or utilization of benefits could indirectly contribute to gender pay gaps and to gender total rewards gaps among individuals in certain groups (e.g., women, parents) relative to others (e.g., men, non-parents). Comparing pay

gaps and total rewards gaps in the same research could shed light on important questions such as, for example, whether women systematically receive less pay and less valuable benefits (resulting in similar gender pay gaps and gender total rewards gaps), or receive less pay (or forego pay), but receive (or choose) higher levels of benefits, such that we might expect to see a narrower gender total rewards gap than gender pay gap.

A fourth theme subtly weaving its way through recent research is the shift away from onesize-fits-all systems and from a focus solely on the group mean response to a single system or practice, toward greater attention to the individual. Broadly construed, this encompasses both (a) what organizations offer such as customized pay including individually negotiated contracts and financial i-deals requested by employees (Rosen et al. 2013) and formal or informal customizable or individualized benefits (Fulmer et al. 2021), as well as (b) how individual employees react nonuniformly to or perceive differences in the value of a given organizational pay or benefits offering, contingent on their personal characteristics (e.g., Fulmer & Shaw 2018). The former may offer a solution to the latter; that is, customized or individualized total rewards offerings may help organizations address heterogeneity in employee needs and preferences, thereby optimizing incentive effects across a diverse workforce and modulating sorting. Total rewards customization may also potentially reduce intergenerational conflict in the workplace. Dencker et al. (2007) have argued that demographic shifts in the US labor force coupled with rising costs of some benefits will have important effects, diluting the attractiveness and motivational effectiveness of standard onesize-fits-all employee benefits programs in increasingly age-heterogeneous organizations. This view implies that over time, attention to both benefits levels/content and how benefits are implemented will be increasingly important for organizations (Dulebohn et al. 2009) and will, of course, in turn also influence total rewards. In addition to demographic variables such as age/generation and gender (e.g., Eriksson & Kristensen 2014), we also encourage attention to other person-based differences in preferences for and reactions to benefits and to overall total rewards, extending the logic of compensation-activation theory (Fulmer & Shaw 2018) to the benefits and total rewards context. For example, personality traits (e.g., openness to experience, risk aversion) may influence the degree to which people prefer or are attracted to organizations that offer certain types of health-wellness benefits (e.g., mindfulness/meditation benefits) or may influence applicants' preferences for particular configurations of total rewards packages. As we have noted, recent theoretical developments and empirical research in compensation and in benefits are separately pointing in the direction of individualization and customization. We expect that there will be especially useful complementarity and utility in studying them together as customizable/individualized total rewards.

Additional suggestions for future research relate to contingent and gig workers, a group on which we did not see much focus in our review of pay, benefits, or total rewards. Contingent workers include those who have temporary jobs or jobs they do not expect to last (Kosanovich 2018), and although there are many definitions of gig work, one (narrow) definition of a typical gig worker is an individual hired for a particular task to work on demand, with the work often mediated through a central digital platform/marketplace (e.g., an Uber driver or Instacart shopper). In 2017, there were 5.9 million contingent workers and 1.6 million workers describing themselves as electronically mediated workers (Bureau of Labor Statistics 2017, Kosanovich 2018). Given the tendency of compensation and benefits researchers to focus on traditional workplace contexts and to focus more on the employer as provider of total rewards, the lack of research on this topic is perhaps unsurprising. As independent contractors/self-employed workers, gig workers are not typically eligible for employer-provided benefits from their gig employment, nor are most contingent workers, due to the temporary nature of their employment. In essence, unless they are also employed elsewhere with employer-provided benefits or are married and eligible to be covered

under a spouse's benefits, these workers usually are responsible for assembling their own "total rewards," including health and retirement benefits and work-life balance.

One of the purported advantages of such work is the flexibility in work schedule, so in this sense the work provides its own work-life flexibility. However, as some scholars have noted, "[g]ig work is promoted as offering flexibility and autonomy ... but it is performed without the safety nets that are more common in formal employment. It can bring unpredictability in both work-time and income, work intensification and financial hardship that all impact work-life balance" (Warren 2021, p. 522).

Among the safety nets foregone by many of these workers are employer-provided health and retirement benefits. An important research question we know relatively little about is how gig workers and other contingent workers operating as independent contractors cobble together coverage for health and wellness and plan for their retirement. Recent research using panel survey data in the United States suggests that people who transition from being employed to being selfemployed (a category which includes many gig workers) are much less likely to have health insurance and more likely to delay medical care in the next year than those who remained employed, despite similar income levels between people who remained employed and those who became self-employed (Berkowitz et al. 2021). It is unclear whether this situation persists over time as selfemployed people become established in those roles, so further research is definitely needed on this question. Bureau of Labor Statistics research has found that although 75% of contingent workers had health insurance from some source, they were half as likely as permanent workers to have it from an employer; similarly, contingent workers were significantly less likely to have access to and participate in an employer-sponsored retirement plan (Kosanovich 2018). For such workers, there are alternatives such as being covered by an employed spouse's/partner's health insurance, or purchasing their own health insurance through government-sponsored public insurance marketplaces or professional organizations, and self-employed individuals can set up individual retirement accounts on their own. But many of these alternatives can be more expensive, less generous, and more logistically challenging to implement for self-employed workers. At present, this situation disadvantages contingent/self-employed/gig workers by reducing the overall total rewards they are likely to be able to derive from work (and potentially affecting their health and ability to save for retirement, which has implications later for broader society). The increase in the number of contingent workers over the past few years has led some researchers to propose retirement plan reforms that de-couple benefits more from traditional employment and expand their availability, with some states already taking steps in this direction (Gale et al. 2020). We encourage greater attention to non-employer-provided total rewards in future research as things develop in this area.

IMPLICATIONS FOR ORGANIZATIONAL PRACTICE

A key insight of our review is that managers, like researchers, would also be wise to pay as much attention to how total rewards are administered on a day-to-day basis as to how they are designed in general. Two often-overlooked administrative mechanisms—the role of managers in implementing total rewards and the communication policies related to total rewards—are critical for the success of an otherwise well-thought-out system. Academic research and practitioner-oriented scholarship have begun to focus on ways in which managers' implementation of HR practices (which would include aspects of total rewards over which they have discretion) deviates from or adds to what is intended by the organization (e.g., Kehoe & Han 2020, Fulmer et al. 2021). This may not be totally undesirable if it creates personalized benefits that meet employees' needs in ways that the formal HR system does not, such as when a manager allows an employee to have a flexibility i-deal related to his/her daily work hours, for example. But, to the degree that managers'

flexibility i-deal related to his/her daily work hours, for example. But, to the degree that managers' informal practices in their workgroups deviate from the organization's strategic intent for its formal total rewards program, or when managers are biased in the degree to which they allow some employees to have flexibility but not other similarly situated employees, these implementation deviations can create problems by confusing employees about the organization's strategic goals and creating perceptions of unfairness. Having a strategically oriented implementation plan that is aligned with the broader total rewards objectives, and spells out, for example, the types of i-deals that can be granted and an approval or review process for them, could provide useful guidance for managers as they respond to employee-requested exceptions or additions to standard HR policies.

Similarly, organizations' communications about pay and about the processes by which pay is determined affect not only employees' knowledge level but also their perceptions that those processes are fair, as well as their trust in the organization (Day 2012, Montag-Smit & Smit 2021), findings that we expect would also extend to communication about benefits and total rewards. And, in practice, communication about the processes by which key components of total rewards (pay and benefits) are determined is more common than communication about detailed outcome information such as pay levels (Arnold et al. 2018), although the latter is becoming more common. In light of emerging research that suggests that not all employees desire specific information about others' pay levels (e.g., Scott et al 2015, Smit & Montag-Smit 2019), we urge managers to think carefully about what the focus of pay communication should be in their own organizations. Also, given that line managers are among the top sources from whom employees receive information, ensuring that managers are knowledgeable and able to explain the processes by which total rewards are determined is a critical aspect of this communication process (Fulmer & Arnold 2020).

CONCLUSION

In tackling an article reviewing the vast compensation and benefits literature, we were under no illusions that in the space allotted we would be able to be completely comprehensive. What we have aimed for instead is a more modest ambition: to point out a few of the interesting landmarks in the recent compensation, benefits, and total rewards landscape as we see them through our unique bird's-eye perspective. We hope that this review sparks fresh ideas and renewed attention from scholars and helps to begin to address calls for more compensation and benefits [and dare we say it, total rewards(!)] research that aligns better, both in volume and relevance, with the needs and interests of HR professionals, managers, and organizations.

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LITERATURE CITED

Abdulsalam D, Maltarich MA, Nyberg AJ, Reilly G, Martin M. 2021. Individualized pay-for-performance arrangements: peer reactions and consequences. *J. Appl. Psychol.* 106(8):1202–23

Allen TD, Johnson RC, Kiburz KM, Shockley KM. 2013. Work-family conflict and flexible work arrangements: deconstructing flexibility. Pers. Psychol. 66(2):345–76

Amabile TM. 1983. The social psychology of creativity: a componential conceptualization. J. Personal. Soc. Psychol. 45(2):357–77

Amabile TM. 1996. Creativity in Context: Update to the Social Psychology of Creativity. Boulder, CO: Westview Arnold A, Fulmer IS. 2019. Pay transparency. In The Routledge Companion to Reward Management, ed. SJ Perkins, pp. 87–96. London: Routledge

- Arnold A, Fulmer IS, Sender A, Allen DG, Staffelbach B, Perkins SJ. 2018. International study on compensation and pay transparency practices. Rep., Cent. Hum. Resour. Manag., Univ. Lucerne, Lucerne, Switz. https://www.unilu.ch/fileadmin/fakultaeten/wf/institute/hrm/dok/Forschung/PayTransparency_IntReport.pdf
- Baeten X. 2014. Shaping the future research agenda for compensation and benefits management: some thoughts based on a stakeholder inquiry. *Hum. Resour. Manag. Rev.* 24(1):31–40
- Bal PM, Jansen PGW. 2016. Workplace flexibility across the lifespan. *Res. Pers. Hum. Resour. Manag.* 34:43–99 Balkin DB, Roussel P, Werner S. 2015. Performance contingent pay and autonomy: implications for facilitating extra-role creativity. *Hum. Resour. Manag. Rev.* 25(4):384–95
- Bamberger P, Belogolovsky E. 2010. The impact of pay secrecy on individual task performance. *Pers. Psychol.* 63(4):965–96
- Bamberger P, Belogolovsky E. 2017. The dark side of transparency: how and when pay administration practices affect employee helping. *J. Appl. Psychol.* 102(4):658–71
- Barringer MW, Milkovich GT. 1998. A theoretical exploration of the adoption and design of flexible benefit plans: a case of human resource innovation. *Acad. Manag. J.* 23(2):305–24
- Bartlett L, Martin A, Neil AL, Memish K, Otahal P, Kilpatrick M, et al. 2019. A systematic review and meta-analysis of workplace mindfulness training randomized controlled trials. *J. Occup. Health Psychol.* 24(1):108–26
- Beaumont PB, Harris RID. 2003. Internal wage structures and organizational performance. *Br. J. Ind. Relat.* 41(1):53–70
- Bentley FS, Fulmer IS, Kehoe RR. 2019. Payoffs for layoffs? An examination of CEO relative pay and firm performance surrounding layoff announcements. *Pers. Psychol.* 72(1):81–106
- Berkowitz SA, Gold R, Domino ME, Basu S. 2021. Health insurance coverage and self-employment. *Health Serv. Res.* 56(2):247–55
- Bloom M. 1999. The performance effects of pay dispersion on individuals and organizations. *Acad. Manag. J.* 42(1):25–40
- Bloom M, Michel JG. 2002. The relationships among organizational context, pay dispersion, and managerial turnover. *Acad. Manag.* 7. 45(1):33–42
- Bloom N, Kretschmer T, Van Reenen J. 2011. Are family-friendly workplace practices a valuable firm resource? Strateg. Manag. J. 32(4):343–67
- Bowles HR, Thomason B, Bear JB. 2019. Reconceptualizing what and how women negotiate for career advancement. *Acad. Manag. J.* 62(6):1645–71
- Brown MP, Sturman MC, Simmering MJ. 2003. Compensation policy and organizational performance: the efficiency, operational, and financial implications of pay levels and pay structure. *Acad. Manag. J.* 46(6):752–62
- Bureau of Labor Statistics. 2017. Labor Force Statistics from the Current Population Survey, Electronically mediated employment, Table 4 Percent distribution of total employed and electronically mediated workers, by selected characteristics. Washington, DC: Bureau of Labor Statistics, May 2017. https://www.bls.gov/cps/lfcharacteristics.htm#eme
- Bureau of Labor Statistics. 2021. Employer costs for employee compensation. Rep. USDL-21-0437, Bur. Labor Stat., Washington, DC
- Byron K, Khazanchi S. 2012. Rewards and creative performance: a meta-analytic test of theoretically derived hypotheses. *Psychol. Bull.* 138(4):809–30
- Cable DM, Judge TA. 1994. Pay preferences and job search decisions: a person-organization fit perspective. Pers. Psychol. 47(2):317–48
- Cameron J, Pierce W. 1994. Reinforcement, reward, and intrinsic motivation: a meta-analysis. *Rev. Educ. Res.* 64(3):363–423
- Card D, Mas A, Moretti E, Saez E. 2012. Inequality at work: the effect of peer salaries on job satisfaction. Am. Econ. Rev. 102(6):2981–3003
- Cascio W, Boudreau J, Fink A. 2019. Investing in People: Financial Impact of Human Resource Initiatives. Alexandria, VA: Soc. Hum. Resour. Manag., 3rd ed.
- Castilla EJ. 2015. Accounting for the gap: a firm study manipulating organizational accountability and transparency in pay decisions. *Organ. Sci.* 26(2):311–33

- Cerasoli CP, Nicklin JM, Ford MT. 2014. Intrinsic motivation and extrinsic incentives jointly predict performance: a 40-year meta-analysis. Psychol. Bull. 140(4):980–1008
- Chamberlain A, Tian G. 2016. How 50+ benefits correlate with employee satisfaction. *Glassdoor Economics Research*, June 10. https://www.glassdoor.com/research/how-50-benefits-correlate-with-employee-satisfaction/
- Chi W, Liao H, Wang L, Zhao R, Ye Q. 2019. Incentives to move up: effects of pay gaps between levels on employee performance. *Hum. Resour: Manag.* 7. 29(2):238–53
- Cobb JA, Keller JR, Nuromahamed S. 2021. How do I compare? The effects of work-unit demographics on reactions to pay inequality. *Ind. Labor Relat. Rev.* https://doi.org/10.1177/00197939211001874. In press
- Colella A, Paetzold RL, Zardkoohi A, Wesson MJ. 2007. Exposing pay secrecy. Acad. Manag. Rev. 32(1):55–71
 Conroy SA, Gupta N. 2019. Disentangling horizontal pay dispersion: experimental evidence. J. Organ. Behav.
 40(3):248–63
- Conroy SA, Gupta N, Shaw JD, Park T-Y. 2014. A multilevel approach to the effects of pay variation. In *Research in Personnel and Human Resources Management*, Vol. 32, ed. MR Buckley, JRB Halbesleben, AR Wheeler, pp. 1–64. Bingley, UK: Emerald Group
- Cowherd DM, Levine DI. 1992. Product quality and pay equity between lower-level employees and top management: an investigation of distributive justice theory. *Adm. Sci. Q.* 37:302–20
- Dahl MS, Pierce L. 2020. Pay-for-performance and employee mental health: large sample evidence using employee prescription drug usage. Acad. Manag. Discov. 6(1):12–38
- Day NE. 2012. Pay equity as a mediator of the relationships among attitudes and communication about pay level determination and pay secrecy. *J. Leadersh. Organ. Stud.* 19(4):462–76
- Day NE. 2019. How well do pay and nonfinancial rewards attract applicant to jobs? J. Total Rewards 28(1):6-17
- Deadrick DL, Gibson PA. 2007. An examination of the research-practice gap in HR: comparing topics of interest to HR academics and HR professionals. *Hum. Resour. Manag. Rev.* 17(2):131–9
- Deci EL, Ryan RM. 1985. Intrinsic Motivation and Self-Determination in Human Behavior. New York: Plenum
- Dencker JC, Joshi A, Martocchio JJ. 2007. Employee benefits as context for intergenerational conflict. Hum. Resour. Manag. Rev. 17(2):208–20
- Devaro J, Heywood JS. 2017. Performance pay and work-related health problems: a longitudinal study of establishments. *Ind. Labor Relat. Rev.* 70(3):670–703
- Ding DZ, Akhtar S, Ge GL. 2009. Effects of inter- and intra-hierarchy wage dispersions on firm performance in Chinese enterprises. Int. J. Hum. Resour. Manag. 20(11):2370–81
- Donaldson-Feilder E, Lewis R, Yarker J. 2019. What outcomes have mindfulness and meditation interventions for managers and leaders achieved? A systematic review. Eur. 7. Work Organ. Psychol. 28(1):11–29
- Downes PE, Choi D. 2014. Employee reactions to pay dispersion: a typology of existing research. *Hum. Resour. Manag. Rev.* 24(1):53–66
- Dulebohn JH. 2002. An investigation of the determinants of investment risk behavior in employer-sponsored retirement plans. *J. Manag.* 28(1):3–26
- Dulebohn JH, Molloy JC, Pichler SM, Murray B. 2009. Employee benefits: literature review and emerging issues. Hum. Resour. Manag. Rev. 19(2):86–103
- Dulebohn JH, Murray B, Sun M. 2000. Selection among employer-sponsored pension plans: the role of individual differences. Pers. Psychol. 53(2):405–32
- Dulebohn JH, Werling SE. 2007. Compensation research past, present, and future. Hum. Resour. Manag. Rev. 17(2):191–207
- Eriksson T, Kristensen N. 2014. Wages or fringes? Some evidence on trade-offs and sorting. *J. Labor Econ.* 32(4):899–923
- Ezzamel M, Watson R. 1998. Market comparison earnings and the bidding-up of executive cash compensation: evidence from the United Kingdom. *Acad. Manag.* 7. 41(2):221–31
- Fang M, Gerhart B. 2012. Does pay for performance diminish intrinsic interest? Int. J. Hum. Resour. Manag. 23(6):1176–96
- Fickess J. 2021. From the editor: Another giant step forward. 7. Total Rewards 30(1):7
- Fong EA. 2010. Relative CEO underpayment and CEO behavior towards R&D spending. J. Manag. Stud. 47(6):1095–122

- Fong EA, Misangyi VF, Tosi HL. 2010. The effect of CEO pay deviations on CEO withdrawal, firm size, and firm profits. *Strateg. Manag.* 7, 31(6):629–51
- Fulmer IS. 2009. The elephant in the room: labor market influences on CEO compensation. *Pers. Psychol.* 62(4):659–95
- Fulmer IS, Arnold A. 2020. Pay communication: a global look at practices and preferences. *J. Total Rewards* 29(4):25–35
- Fulmer IS, Chen Y. 2014. How communication affects employee knowledge of and reactions to compensation systems. In *Meeting the Challenge of Human Resource Management: A Communication Perspective*, ed. VD Miller, ME Gordon, pp. 167–78. New York: Routledge/Taylor & Francis
- Fulmer IS, Chen Y, Li J. 2021. Strategic idiosyncratic deals (i-deals) policy: individually negotiated arrangements as an alternative approach for delivering customized benefits. *J. Total Rewards* 30(1):45–54
- Fulmer IS, Shaw JD. 2018. Person-based differences in pay reactions: a compensation-activation theory and integrative conceptual review. *J. Appl. Psychol.* 103(9):939–58
- Gajendran RS, Harrison DA. 2007. The good, the bad, and the unknown about telecommuting: meta-analysis of psychological mediators and individual consequences. J. Appl. Psychol. 92(6):1524–41
- Gale WG, Holmes SE, John DC. 2020. Retirement plans for contingent workers: issues and options. J. Pension Econ. Finance 19(2):185–97
- Garbers Y, Konradt U. 2014. The effect of financial incentives on performance: a quantitative review of individual and team-based financial incentives. J. Occup. Organ. Psychol. 87(1):102–37
- Gartenberg C, Wulf J. 2020. Competition and pay inequality within and between firms. *Manag. Sci.* 66(12):5925–43
- Gerhart B, Fang M. 2014. Pay for (individual) performance: issues, claims, evidence, and the role of sorting effects. *Hum. Resour. Manag. Rev.* 24(1):41–52
- Gerhart B, Fang M. 2015. Pay, intrinsic motivation, extrinsic motivation, performance, and creativity in the workplace: revisiting long-held beliefs. *Annu. Rev. Organ. Psychol. Organ. Behav.* 2:489–521
- Gerhart B, Milkovich GT. 1990. Organizational differences in managerial compensation and financial performance. Acad. Manag. 7, 33(4):663–91
- Gerhart B, Newman J. 2020. Compensation. New York: McGraw Hill. 13th ed.
- Gerhart B, Rynes SL. 2003. Compensation: Theory, Evidence, and Strategic Implications. Thousand Oaks, CA: Sage Gerhart B, Rynes SL, Fulmer IS. 2009. Pay and performance: individuals, groups, and executives. Acad. Manag.
- Ann. 3(1):251–315
- Gibbs M. 2016. Past, present, and future compensation research: economist perspectives. *Compens. Benefits Rev.* 48(1–2):3–16
- Glass J. 2004. Blessing or curse? Work-family policies and mother's wage growth over time. Work Occup. 31(3):367–94
- Gubler T, Larkin I, Pierce L. 2018. Doing well by making well: the impact of corporate wellness programs on employee productivity. *Manag. Sci.* 64(11):4967–87
- Gupta N, Conroy SA, Delery JE. 2012. The many faces of pay variation. Hum. Resour. Manag. Rev. 22(2):100–15
- Hallock KF, Jin X, Barrington L. 2014. Estimating pay gaps for workers with disabilities: implications from broadening definitions and datasets. *Rebabil. Res. Policy Educ.* 28(4):264–90
- Hammer LB, Neal MB, Newsom JT, Brockwood KJ, Colton CL. 2005. A longitudinal study of the effects of dual-earner couples' utilization of family-friendly workplace supports on work and family outcomes. *7. Appl. Psychol.* 90(4):799–810
- Ho VT, Tekleab AG. 2016. A model of idiosyncratic deal-making and attitudinal outcomes. *J. Manag. Psychol.* 31(3):642–56
- Hollenbeck JR, Ilgen DR, Ostroff C, Vancouver JB. 1987. Sex differences in occupational choice, pay, and worth: a supply-side approach to understanding the male-female wage gap. *Pers. Psychol.* 40(4):715–43
- Igalens J, Roussel P. 1999. A study of the relationships between compensation package, work motivation and job satisfaction. *J. Organ. Behav.* 20(7):1003–25
- Jenkins GD Jr., Mitra A, Gupta N, Shaw JD. 1998. Are financial incentives related to performance? A metaanalytic review of empirical research. 7. Appl. Psychol. 83(5):777–87

- Kehoe RR, Han JH. 2020. An expanded conceptualization of line managers' involvement in human resource management. 7. Appl. Psychol. 55(6):1264–94
- Kepes S, Delery J, Gupta N. 2009. Contingencies in the effects of pay range on organizational effectiveness. Pers. Psychol. 62(3):497–531
- Konrad AM, Mangel R. 2000. The impact of work-life programs on firm productivity. Strateg. Manag. J. 21(12):1225–37
- Kosanovich K. 2018. A look at contingent workers. *Bureau of Labor Statistics*. Washington, DC: Bureau of Labor Statistics, retrieved Aug. 10, 2021. https://www.bls.gov/spotlight/2018/contingent-workers/home.htm
- Kossek EE, Su R, Wu L. 2017. "Opting out" or "pushed out"? Integrating perspectives on women's career equality for gender inclusion and interventions. J. Manag. 43(1):228–54
- Larkin I, Pierce L, Gino F. 2012. The psychological costs of pay-for-performance: implications for the strategic compensation of employees. Strateg. Manag. 7, 33(10):1194–214
- Lee BY, DeVoe SE. 2012. Flextime and profitability. Ind. Relat. 7. Econ. Soc. 51(2):298-316
- Lepak DP, Snell SA. 1999. The human resource architecture: toward a theory of human capital allocation and development. *Acad. Manag. Rev.* 24(1):31–48
- Leslie LM, Manchester CF, Park TY, Mehng SA. 2012. Flexible work practices: a source of career premiums or penalties? Acad. Manag. 7. 55(6):1407–28
- Lomas T, Medina JC, Ivtzan I, Rupprecht S, Eiroa-Orosa FJ. 2018. A systematic review of the impact of mindfulness on the well-being of healthcare professionals. J. Clin. Psychol. 74(3):319–55
- Maltarich MA, Nyberg AJ, Reilly G, Abdulsalam D, Martin M. 2017. Pay-for-performance, sometimes: an interdisciplinary approach to integrating economic rationality with psychological emotion to predict individual performance. Acad. Manag. 7. 60(6):2155–74
- Marasi S, Bennett RJ. 2016. Pay communication: Where do we go from here? *Hum. Resour. Manag. Rev.* 26(1):50-58
- Markoulli MP, Lee CISG, Byington E, Felps WA. 2017. Mapping human resource management: reviewing the field and charting future directions. *Hum. Resour. Manag. Rev.* 27(3):367–96
- Martin TN, Ottemann R. 2016. Generational workforce demographic trends and total organizational rewards which might attract and retain different generational employees. *J. Behav. Appl. Manag.* 16(2):91–115
- Martin WM. 2020. One size fits all: do dual-income couples and families require different benefits? *Compens. Benefits Rev.* 52(2):53–63
- Masterson C, Sugiyama K, Ladge J. 2021. The value of 21st century work-family supports: review and cross-level path forward. *J. Organ. Behav.* 42(2):118–38
- Merritt-Hawkins. 2020. 2020 Review of Physician and Advanced Practitioner Recruiting Incentives and the Impact of COVID-19. Dallas, TX: Merritt-Hawkins. 27th ed. https://www.merritthawkins.com/uploadedfiles/merritthawkins_2020_incentive_review.pdf
- Milliken FJ, Martins LL, Morgan H. 1998. Explaining organizational responsiveness to work-family issues: the role of human executives as issue interpreters. *Acad. Manag. J.* 41(5):580–92
- Mitchell OS, Moore JF. 1998. Can Americans afford to retire? New evidence on retirement saving adequacy. 7. Risk Insur: 65(3):371–400
- Mondello M, Maxcy J. 2009. The impact of salary dispersion and performance bonuses in NFL organizations. Manag. Decis. 47(1):110–23
- Montag-Smit TA, Smit BW. 2021. What are you hiding? Employee attributions for pay secrecy policies. *Hum. Resour. Manag. J.* 31(3):704–28
- Mosley K, Miller P. 2019. Physician recruiting incentives: salaries, signing bonuses, value-based pay and benefits. Manag. Healthcare 4(1):49–56
- Murray B, Dulebohn JH. 2021. Strategic benefits management: what we think, what we know and what we need to know. *J. Total Rewards* 30(1):23–35
- Nickerson JA, Zenger TR. 2008. Envy, comparison costs, and the economic theory of the firm. *Strateg. Manag. 7.* 29(13):1429–49
- Nyberg AJ, Maltarich MA, Abdulsalam D, Essman SM, Cragun O. 2018. Collective pay for performance: a cross-disciplinary review and meta-analysis. *J. Manag.* 44(6):2433–72

- Nyberg AJ, Maltarich MA, Abdulsalam D, Essman SM, Cragun O. 2018. Collective pay for performance: a cross-disciplinary review and meta-analysis. 7. Manag. 44(6):2433–72
- Nyberg AJ, Moliterno TP, Hale D Jr., Lepak DP. 2014. Resource-based perspectives on unit-level human capital: a review and integration. *J. Manag.* 40(1):316–46
- Obloj T, Zenger T. 2017. Organization design, proximity, and productivity responses to upward social comparison. *Organ. Sci.* 28(1):1–18
- Osterman P. 1995. Work/family programs and the employment relationship. Adm. Sci. Q. 40(4):681-700
- Oswald FL, Behrend TS, Putka DJ, Sinar E. 2020. Big data in industrial-organizational psychology and human resource management: forward progress for organizational research and practice. *Annu. Rev. Organ. Psychol. Organ. Behav.* 7:505–33
- Pailhé A, Solaz A. 2019. Is there a wage cost for employees in family-friendly workplaces? The effect of different employer policies. Gend. Work Organ. 26(5):688–721
- Parker SL, Bell K, Gagné M, Carey K, Hilpert T. 2019. Collateral damage associated with performance-based pay: the role of stress appraisals. *Eur. J. Work Organ. Psychol.* 28(5):691–707
- Parks KM, Steelman LA. 2008. Organizational wellness programs: a meta-analysis. J. Occup. Health Psychol. 13(1):58–68
- Pfeffer J, Langton N. 1993. The effect of wage dispersion on satisfaction, productivity, and working collaboratively: evidence from college and university faculty. *Adm. Sci. Q.* 38(3):382–407
- Pfeffer J, Witters D, Agrawal S, Harter JK. 2020. Magnitude and effects of "sludge" in benefits administration: how health insurance hassles burden workers and cost employers. *Acad. Manag. Discov.* 6(3):325–40
- Ployhart RE, Moliterno TP. 2011. Emergence of the human capital resource: a multilevel model. *Acad. Manag. Rev.* 36(1):127–50
- Pohler D, Schmidt JA. 2016. Does pay-for-performance strain the employment relationship? The effect of manager bonus eligibility on non-management employee turnover. *Pers. Psychol.* 69(2):395–429
- Richardson KM, Rothstein HR. 2008. Effects of occupational stress management intervention programs: a meta-analysis. *7. Occup. Health Psychol.* 13(1):69–93
- Ridge JW, Hill AD, Aime F. 2017. Implications of multiple concurrent pay comparisons for top-team turnover. 7. Manag. 43(3):671–90
- Rosen CC, Slater DJ, Chang CH, Johnson RE. 2013. Let's make a deal: development and validation of the ex-post i-deals scale. *J. Manag.* 39(3):709–42
- Rousseau DM, Ho VT, Greenberg J. 2006. I-deals: idiosyncratic terms in employment relationships. *Acad. Manag. Rev.* 31(4):977–94
- Rynes SL, Barber AE. 1990. Applicant attraction strategies: an organizational perspective. *Acad. Manag. Rev.* 15(2):286–310
- Rynes SL, Gerhart B, Parks L. 2005. Personnel psychology: performance evaluation and pay for performance. Annu. Rev. Psychol. 56:571–600
- Salin D, Notelaers G. 2020. Friend or foe? The impact of high-performance work practices on workplace bullying. *Hum. Resour. Manag. J.* 30(2):312–26
- Sammer J. 2018. Welcome, Generation Z: Here's your benefits package. SHRM, July 6. https://www.shrm.org/resourcesandtools/hr-topics/benefits/pages/generation-z-benefits-package.aspx?_ga=2. 105377091.1960666964.1625412330-1819316159.1625412330
- Samnani A, Singh P. 2014. Performance-enhancing compensation practices and employee productivity: the role of workplace bullying. Hum. Resour. Manag. Rev. 24(1):5–16
- Scott D, Brown M, Shields J, Long RJ, Antoni CH, et al. 2015. A global study of pay preferences and employee characteristics. *Compens. Benefits Rev.* 47(2):60–70
- Seo J, Gamache DL, Devers CE, Carpenter MA. 2015. The role of CEO relative standing in acquisition behavior and CEO pay. Strateg. Manag. J. 36(12):1877–94
- Shaw JD. 2014. Pay dispersion. Annu. Rev. Organ. Psychol. Organ. Behav. 1:521-44
- Shaw JD, Gupta N. 2007. Pay system characteristics and quit patterns of good, average, and poor performers. Pers. Psychol. 60(4):903–28
- Shaw JD, Gupta N. 2015. Let the evidence speak again! Financial incentives are more effective than we thought. *Hum. Resour. Manag. 7.* 25(3):281–93

- Shaw JD, Gupta N, Delery JE. 2002. Pay dispersion and workforce performance: moderating effects of incentives and interdependence. Strateg. Manag. 7, 23(6):491–512
- Shaw JD, Zhou X. 2021. Explained pay dispersion: a 20-year review of human resource management research and beyond. Res. Pers. Hum. Resour. Manag. 39:47–69
- SimanTov-Nachlieli I, Bamberger P. 2021. Pay communication, justice, and affect: the asymmetric effects of process and outcome pay transparency on counterproductive workplace behavior. J. Appl. Psychol. 106(2):230–49
- Simmons R, Berri DJ. 2011. Mixing the princes and the paupers: pay and performance in the National Basketball Association. *Labour Econ.* 18(3):381–88
- Smit BW, Montag-Smit T. 2018. The role of pay secrecy policies and employee secrecy preferences in shaping job attitudes. *Hum. Resour. Manag.* 7, 28(2):304–24
- Smit BW, Montag-Smit T. 2019. The pay transparency dilemma: development and validation of the pay information exchange preferences scale. *J. Appl. Psychol.* 104(4):537–58
- Society for Human Resource Management. 2019. Employee benefits executive summary. Rep., Soc. Hum. Resour. Manag., Alexandria, VA. https://shrm.org/hr-today/trends-and-forecasting/research-and-surveys/Pages/Benefits19.aspx?_ga=2.103754432.1960666964.1625412330-1819316159. 1625412330
- Tetrick LE, Weathington BL, Da Silva N, Hutcheson JM. 2010. Individual differences in attractiveness of jobs based on compensation package components. *Empl. Responsib. Rights* 7. 22(3):195–211
- Trevor CO, Reilly G, Gerhart B. 2012. Reconsidering pay dispersion's effect on the performance of interdependent work: reconciling sorting and pay inequality. *Acad. Manag.* 7, 55(3):585–610
- Uggerslev KL, Fassina NE, Kraichy D. 2012. Recruiting through the stages: a meta-analytic test of predictors of applicant attraction at different stages of the recruiting process. *Pers. Psychol.* 65(3):597–660
- van der Klink JJ, Blonk RW, Schene AH, van Dijk FJ 2001. The benefits of interventions for work-related stress. Am. 7. Public Health 91(2):270-76
- Warren T. 2021. Work-life balance and gig work: 'where are we now' and 'where to next' with the work-life balance agenda? *J. Ind. Relat.* 63(4):522–45
- Weeden KA. 2005. Is there a flexiglass ceiling? Flexible work arrangements and wages in the United States. Soc. Sci. Res. 34(2):454–82
- Werner S, Balkin DB. 2021. Strategic benefits: how employee benefits can create a sustainable competitive advantage. *J. Total Rewards* 30(1):8–22
- Werner S, Kuiate CS, Noland TR, Francia AJ. 2016. Benefits and strategic outcomes: Are supplemental retirement plans and safer driving related in the U.S. trucking industry? *Hum. Resour. Manag.* 55(5):885–900
- Yanadori Y, Cui V. 2013. Creating incentives for innovation? The relationship between pay dispersion in R&D groups and firm innovation performance. *Strateg. Manag.* 7, 34:1502–11
- Yang H, Klaas BS. 2011. Pay dispersion and the financial performance of the firm: evidence from Korea. Int. 7. Hum. Resour. Manag. 22(10):2147–66