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Review Article

Discrimination, Harassment, Abuse, and Bullying in the Workplace: Contribution of Workplace Injustice to Occupational Health Disparities

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Background: *This paper synthesizes research on the contribution of workplace injustices to occupational health disparities.*
Methods: *We conducted a broad review of research and other reports on the impact of workplace discrimination, harassment, and bullying on workers' health and on family and job outcomes.*
Results: *Members of demographic minority groups are more likely to be victims of workplace injustice and suffer more adverse outcomes when exposed to workplace injustice compared to demographic majority groups. A growing body of research links workplace injustice to poor psychological and physical health, and a smaller body of evidence links workplace injustice to unhealthy behaviors. Although not as well studied, studies show that workplace injustice can influence workers' health through effects on workers' family life and job-related outcomes.*
Conclusion: *Injustice is a key contributor to occupational health injustice and prospective studies with oversample of disadvantaged workers and refinement of methods for characterizing workplace injustices are needed.* Am. J. Ind. Med. 57:573–586, 2014.

KEY WORDS: workplace abuse; discrimination; health disparities; bullying; sexual harassment

INTRODUCTION

The aim of this paper was to synthesize and evaluate research demonstrating how workplace injustice—discrimination, harassment, abuse, and bullying—may contribute to occupational health disparities. Reflecting historical and current societal power imbalances, forces within and outside workplaces can result in the mistreatment of workers (individually or as a group) through unjust practices [Jones, 2000; Turney, 2003; Hodson et al., 2006; Lopez et al., 2009]. We theorize that mistreatment of workers in the workplace may exacerbate health disparities between groups of workers. We reviewed the peer-reviewed literature reporting direct and indirect associations of workplace injustices with health outcomes. The extant literature contains a diffuse body of work on workplace injustice from different

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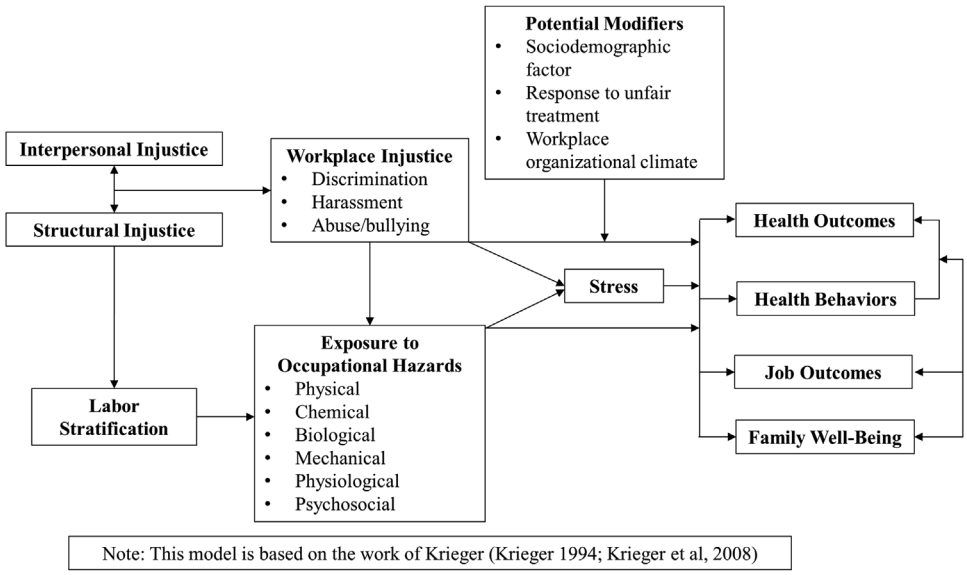

FIGURE 1. A model for understanding the contribution of workplace injustice to occupational health disparities.

disciplines; many of which are unrelated to health. Our synthesis is limited to papers that present evidence of the contribution of workplace injustice to occupational health disparities. Our review led us to propose a conceptual framework (Fig. 1) to illustrate the various relationships suggested by research studies. To complement conceptual models that illustrate relationships between other workplace factors and health, this model illustrates pathways between workplace injustices and health outcomes that are supported by the extant scientific literature. Our starting point for a conceptual framework for the contributions of work to health disparities is the Ecosocial approach advanced by Krieger [Krieger, 1994; Krieger et al., 2008].

In summarizing this evidence, we acknowledge the vast literature on workplace/organizational justice that describes employees' perceptions of equity between workers' input and workplace procedures, interactions and outcomes [Elovainio et al., 2002]. Although this literature is relevant to the health of workers, our discussion does not extend to this topic.

Workplace Injustices: Definitions and Scope

Definitions and scope of workplace injustice(s) differ according to the discipline and body of literature reviewed. The United States Equal Employment Opportunity Commission [EEOC, 2011] protects workers from injustice based on age, disability, gender/sex, genetic information, national origin, pregnancy, race/color, or religion. Though excluded from this EEOC definition, other federal agencies and some state and local laws also protect workers from workplace injustice based on sexual orientation and gender identity. For the purposes of this paper, we defined workplace injustice as workplace-related discrimination, harassment, abuse or bullying. We considered how these injustices, including bullying which is usually status-blind, might differentially impact workers who are socially disadvantaged. Perpetration of workplace injustice can occur at the institutional or interpersonal level.

Institutional or structural injustice

Jones' [2000] characterization of institutional racism as structurally constructed differential access to societal opportunities, goods and services can be applied to the characterization of institutional workplace injustice. This injustice is "normative, sometimes legalized" and "structural, having been codified in our institutions of custom, practice, and law, so there need not be an identifiable perpetrator" (p. 1212). Institutional injustice can persist even after levels of individual injustice have lessened in a society [Williams and Mohammed, 2009].

Interpersonal injustice

At the individual/interpersonal level, workplace injustice can be intentional or unintentional and encompasses acts of commission and omission. Studies have documented a range of such unfair practices faced by vulnerable workers, from isolating or excluding socially/economically disadvantaged workers from workplace events and activities to subjecting them to overtly hostile actions and behaviors (e.g., being subjected to insults and jokes related to one's race/ethnicity). Studies suggest that African American and other racial/ethnic

minority workers are more likely to report being targets of derogatory comments and having their work duties and activities made difficult by others [Alleyne, 2004; Raver and Nishii, 2010].

Types of Workplace Injustice

Workplace discrimination refers to actions of institutions and/or individuals within them, setting unfair terms and conditions that systematically impair the ability of members of a group to work [Rospenda et al., 2009]. Often, it is motivated by beliefs of inferiority of a disadvantaged outgroup compared to a dominant group [Roberts et al., 2004]. Racism, or discrimination based on race, justifies the mistreatment and dominance of members of a particular racial or ethnic group due to beliefs of their genetic and/or cultural inferiority; it also carries a history of societal power relationships between races [Williams, 1997]. Discrimination can also occur between disadvantaged groups themselves. For example, de Castro et al. [2006] found that some ethnic groups were favored over others among immigrant worker groups. This favoritism was initiated and perpetuated by both coworkers and employers/supervisors alike [de Castro et al., 2006]. Latino indigenous-speaking farm workers in Oregon reported differentially distributed hazardous work conditions, including lack of educational materials in languages they understood, between themselves and Spanish-speaking workers; they also reported that these conditions were often perpetrated by Spanish-speaking Latino former farmworkers who had risen through the ranks to become supervisors [Farquhar et al., 2008]. Similarly, in a study of 356 African American workers, 43% of the 219 workers who reported workplace discrimination reported that the perpetrators included fellow African Americans [Din-Dzietham et al., 2004].

Discrimination against workers with disabilities, younger and older workers, and gender persists, as well. Studies have shown that discrimination against workers with disabilities has both societal and historical influences and persists despite being prohibited by the Americans with Disabilities Act [Scheid, 2005; Stuart, 2006; Snyder et al., 2010; Moore et al., 2011]. Ageism, discrimination based on age, has been shown to have a curvilinear life course trajectory whereby it disproportionately impacts younger workers in their 20s and older workers above 50 [Gee et al., 2007].

Workplace harassment differs from discrimination because it involves negative actions toward a worker due to attributes, such as race/ethnicity, gender, etc., that lead to a hostile workplace whereas discrimination involves unequal treatment or limiting of opportunities due to these attributes [Rospenda et al., 2009]. Harassment must target workers' protected EEOC status in order to meet the U.S. legal definition [Ehrenreich, 1999; Carbo, 2008]. Sexual harassment is a type of workplace harassment that is typically characterized along gender/sex lines [Pina et al., 2009]. Fitzgerald et al. [1999] delineated four types of sexual harassment—sexist behavior, sexual hostility, unwanted sexual attention, and sexual coercion. Sexist behaviors describe actions in which one's gender or sex is the primary target of discrimination. This overlap in definition can make distinguishing between gender discrimination versus harassment difficult. The other three describe experiences that are more physical and sexual in nature.

Workplace bullying or abuse involves actions that offend or socially exclude a worker or group of workers, or actions that have a negative effect on the person or group's work tasks [Grubb et al., 2004]. These actions are often status-blind and occur repeatedly and regularly over a period of time [Grubb et al., 2004]. The actions taken and workers' sensitivity to them can vary according to culture [Cassitto et al., 2003].

PATHWAYS: FROM INJUSTICE TO HEALTH DISPARITIES

Conceptual Framework

Using Ecosocial theory of disease distribution as a basis [Krieger, 1994; Krieger et al., 2008], we present a working model (Fig. 1) to illustrate potential pathways linking workplace injustice exposures and health disparities. In the following section, we define components of our model and discuss evidence from the literature to support the pathways between them. Our model is not a causal diagram; presence of arrows between components in the model does not imply that causal analyses have been conducted.

Labor stratification into hazardous positions

Our conceptual model (Fig. 1) shows labor stratification, in which minority and other disadvantaged workers are systematically hired into certain (usually lower power) positions [Landsbergis et al., 2012]. Labor stratification has been documented to occur upstream, before entry into the labor force, through unfair access to or denial of employment opportunities. Experimental studies have documented employers responding negatively to job applicants based on age, gender, race, and sexual orientation, thereby discriminating against or preferentially hiring applicants for certain types of jobs [Crow et al., 1998; Hebl et al., 2002; Horvath and Ryan, 2003; Pager, 2003; Bertrand and Mullainathan, 2004; Pager et al., 2009]. Other studies, based on self-report, have also found discrimination and bias in hiring and/or promotion based on sexual orientation and age of applicants [Johnson and Neumark, 1996; Badgett et al., 2007]. An analysis of court cases showed that, in some fields, women may encounter a "maternal wall," whereby they are denied

employment and/or promotion due to pregnancy or childbirth [Williams and Westfall, 2006].

The occupational health literature supports the observation that racial/ethnic minorities and immigrants are often over-represented in jobs with poorer working conditions [Frumkin et al., 1999; Murray, 2003; Berdahl, 2008; Agudelo-Suarez et al., 2009]. Among African Americans, Haggerty and Johnson [1995] point out that labor stratification is part of broader societal level injustices, notably poor educational systems thereby predisposing African American workers to limited, hazardous, poor-quality job opportunities in adulthood [Haggerty and Johnson, 1995].

Differential assignment to hazardous duties

Even when workers are in the same occupational position, some workers are directly exposed to more occupational hazards through assignment of the most hazardous duties to socially and economically disadvantaged populations, thus increasing their risk for work-related injury or illness [Murray, 2003; de Castro et al., 2006; Farquhar et al., 2008; Delp et al., 2009; Shannon et al., 2009]. An early documented example is that of the Gauley Bridge/Hawk's Nest tunnel disaster in 1930 [Cherniack, 1986]. Although various explanations for disproportionate incidence of pneumoconiosis and associated death among African American compared to White workers were posited, an examination of job placement of workers in the mine revealed race-based job assignment as the root cause. African American workers were de facto assigned to the deepest, dustiest parts of the tunnel, while White workers were more likely to be assigned to work outside.

Available evidence suggests that, after controlling for differences in education and experience, African American and Hispanic workers are consistently more likely to be employed in occupations where serious injuries and illnesses are more likely to occur [Robinson, 1984, 1987; Loomis and Richardson, 1998; Shannon et al., 2009]. However, the social forces behind disproportionate exposures of minority worker groups to occupational hazards may be complex. An analysis of illnesses and injury rates over a 10-year period showed that disparities were dynamic and sometimes disappear when researchers control for job characteristics such as work schedule, union representation, health insurance and job hours [Berdahl, 2008].

A U.S. study of a unionized, multi-ethnic working class sample found that 85% of workers reported high exposure to at least one occupational hazard [Quinn et al., 2007]. A similar proportion of this same group of workers was exposed to one of three workplace injustices (bullying, sexual harassment, or racial discrimination) [Krieger et al., 2006]. Analyses of the same sample showed that exposure to occupational hazards was unevenly distributed based on race and gender: being a minority in any way increased workers' chances of being exposed to hazards [Krieger et al., 2005, 2006, 2008, 2010; Barbeau et al., 2007].

Though empirical evidence is limited, some researchers have suggested that differential enforcement of occupational health and safety regulations or policies in industries and occupations where minority workers predominate may be another mechanism for disparities. One example is the OSHA exemption for farms with less than ten employees. Somervell and Conway [2011] showed that worker fatality rates in states that observe this exemption were higher than in states that do not. U.S. farm workers are largely immigrant, Latino workers [Farquhar et al., 2008; Somervell and Conway, 2011]. Other researchers have noted that a majority of the workers impacted by the suspension of both prevailing wage policies and enforcement of occupational safety and health regulations during the Hurricane Katrina and Rita cleanup process were Hispanic day laborers [Pastor et al., 2006; Delp et al., 2009]. A more thorough analysis of the policies and decisions surrounding disaster cleanup events is needed to determine whether or not policies and decisions differentially impact minority workers.

The extent to which occupational factors contribute to overall health is inadequately described, but we hypothesize, based on our review of literature, that it is possible that differential exposure to occupational hazards among minority workers may be a significant contributor to the overall experience of health disparities. Several studies have explored the relative importance of work exposures to overall health, and the findings are intriguing. For example, a recent examination of government employees in a European city found that physical conditions at work explained most of the observed occupational class inequalities in health [Kaikkonen et al., 2009]. Likewise, a French study found a social gradient in exposure to physical, ergonomic and chemical hazards in addition to a gradient in experiences of workplace bullying, in which managers and professionals were less likely to be exposed to any hazard compared to associate professionals/technicians, clerks/service workers, and blue-collar workers [Niedhammer et al., 2008]. Similar studies with U.S. samples could not be found. More research studies, in cohorts for which detailed occupation information is available, must be conducted to help explain observed differences in health outcomes.

PATHWAYS FROM EXPOSURE TO OUTCOME

Potential Modifiers

Some studies have identified factors that appear to modify observed effects of workplace injustices on health and

other outcomes. In Figure 1, these factors are represented as potential modifiers. Workplace injustice may further contribute to health disparities by having differential effects on disadvantaged populations compared to dominant groups. For example, racial/ethnic minorities have been reported to have increased risks of the post-traumatic stress disorder (PTSD)-related effects when exposed to workplace bullying [Rodríguez-Muñoz et al., 2010]. Similarly, in another study, even though experiences of workplace bullying were significantly associated with negative emotional reactions for all targets, African Americans reported significantly higher emotional response to racial/ethnic bullying compared to other groups [Fox and Stallworth, 2005]. Also, generalized bullying has been associated with higher numbers of psychological symptoms and increases in drinking to intoxication for women compared to men [Rospenda et al., 2009]. In contrast, an Italian study found that men were more likely to develop depressive disorder with increasing severity of bullying [Nolfe et al., 2010].

A study by Krieger [1990] demonstrated how keeping quiet about experiences of discrimination may take a toll on health. African American women who did not tell others about the unfair treatment they received were four times more likely to report high blood pressure than women who told others (a similar association was not significant for White women) [Krieger, 1990]. Likewise, one study found that while lack of equality was associated with poorer self-reported health for both men and women, women's health was influenced when inequality existed for men and/or women whereas men's was only affected when men were the victims of inequality [Bildt, 2005].

Stress-Mediated Pathway

In Figure 1, the main pathway linking exposures to workplace injustice and health outcomes is via stress. Evidence for this pathway in the model is derived from the psychological literature supporting the "stressor-stress-strain" framework. According to work by Lazarus and Folkman [1984], negative health effects result when an individual perceives situational demands as stressful and this stress experience exceeds their capacity to cope [Lazarus and Folkman, 1984]. Experiences of discrimination, harassment, and bullying in the workplace can operate as stressors provoking a psychological and/or physiological stress response. There is strong empirical evidence that psychological stress can affect biological host resistance through the activation of neuroendocrinological and immunological responses [Cohen et al., 2007]. The activation of these responses can include disturbances in the circadian cortisol profile, which several studies have found among targets of workplace injustice [Kudielka and Kern, 2004; Huebner and Davis, 2005; Hansen et al., 2006; Townsend et al., 2011]. These types of disruptions in cortisol have been shown to lead to a multitude of chronic negative health conditions [Cohen et al., 2007]. More studies are needed to directly and clearly show the link from exposure to workplace injustice to physiological responses and, in turn, to negative health outcomes.

OUTCOMES: CONTRIBUTIONS OF INJUSTICE TO HEALTH DISPARITES

Health Outcomes

The broader literature on stress and health has established links between experiences of discrimination and harassment and adverse health outcomes. Workplace injustices have been directly associated with three types of outcomes: psychological and physical health, health behaviors, and job outcomes. There is a small but suggestive body of evidence suggesting a fourth outcome—family well-being. These outcomes can be seen on the right-hand side of our model (Fig. 1).

Several cross-sectional studies have found evidence of symptoms and diagnosis of PTSD among workers exposed to workplace bullying and sexual harassment [Leymann and Gustafsson, 1996; Schneider et al., 1997; Mikkelsen and Einarsen, 2002; Matthiesen and Einarsen, 2004; Tehrani, 2004; Willness et al., 2007; Buchanan and Fitzgerald, 2008; Larsen and Fitzgerald, 2010; Rodríguez-Muñoz et al., 2010]. In explaining how bullying may lead to PTSD, Einarsen et al. [2003] posit that although the experience of workplace injustice is often not life-threatening, the experience threatens the inner world of the target by shattering basic cognitive schema about fairness and justice and negatively influences one's social and personal identity leading to PTSD.

A meta-analysis of the antecedents and consequences of sexual harassment found evidence for the association of sexual harassment with general poor mental health [Willness et al., 2007]. Although anxiety and depression were the most prevalent conditions, the strongest evidence of effect was found for PTSD [Willness et al., 2007]. These symptoms may be worsened for minorities through an interactive effect of sexual and racial/ethnic harassment [Buchanan and Fitzgerald, 2008]. Another mechanism through which minority workers might experience more severe outcomes is through attribution. A study, which included a meta-analysis, showed that social context (e.g., gender or racial composition of workplace) influenced workers' attribution of their experiences of injustice; attribution in turn impacted the severity of outcomes with internal and personal attribution leading to worse health outcomes [Hershcovis and Barling, 2010]. An association between workplace bullying and short- and long-term change in psychological distress and depression has been shown with both cross-sectional and longitudinal studies [Kivimäki et al., 2003; Hogh et al., 2005; Nolfe et al., 2010]. One longitudinal study suggested the

possibility of a cyclical relationship in which developing depression increased the risk of workers becoming targets of bullying, which then increased depressive symptoms [Kivimäki et al., 2000]. However, worker inputs to injustice exposures are not represented on our conceptual model and are beyond the scope of this review.

Evidence from cross-sectional studies suggests that workers who experience racial/ethnic discrimination in the workplace suffer a range of negative psychological health outcomes, such as more days of poor mental health [Roberts et al., 2004], psychological distress [Eaton, 2003; Krieger et al., 2010], anxiety and depression [Bhui et al., 2005; Agudelo-Suarez et al., 2009; Hammond et al., 2010; Raver and Nishii, 2010], negative emotions [Fox and Stallworth, 2005], and emotional trauma [Alleyne, 2004]. Although these studies utilized self-report of discrimination, experimental research has provided added evidence for the influence of work-related racial discrimination on mental health [Salvatore and Shelton, 2007]. Workplace ageism has been linked to psychological distress among older workers [Yuan, 2007]. This might particularly impact older women [Encel and Studencki, 1997; Handy and Davy, 2007; Walker et al., 2007]. A review of literature elucidated how ageism and sexism may operate concomitantly to negatively influence the health of older working women [Payne and Doyal, 2010] (Table I).

Other studies suggest somatic health effects of workplace injustice. An experimental study found that working under an unfavorable supervisor (whose actions included bullying) led to clinically significant increases in workers' blood pressure [Wager et al., 2003]. Cross-sectional studies provide other evidence of an association between workplace injustice and somatic health. Those who experience racial discrimination may be at increased risk for work-related injury or illness [Murray, 2003; de Castro et al., 2006; Farquhar et al., 2008; Delp et al., 2009; Shannon et al., 2009]. Racial/ethnic discrimination, sexual harassment, and bullying have been negatively associated with self-rated health and unhealthy days [Krieger, 1999; Nazroo, 2003; Gunnarsdottir et al., 2006; Fujishiro, 2009; de Castro et al., 2010] while racial discrimination and workplace bullying were associated with bodily pain [Burgess et al., 2009; Saastamoinen et al., 2009]. Sexual harassment has also been linked to a host of physical health symptoms, including headaches, stomach aches and disrupted sleep [Gutek and Koss, 1993; Goldenhar et al., 1998; Magley et al., 1999; Wasti et al., 2000; Willness et al., 2007].

Non-targeted witnesses of workplace injustice may also be at risk for adverse health outcomes. Non-bullied witnesses to workplace bullying reported more anxiety [Hansen et al., 2006], and, workers who witnessed repeated bullying in their workplace were almost twice more likely to report acute pain than those who did not witness it [Saastamoinen et al., 2009]. A U.S. study found that bullying witnesses

TABLE I. Evidence for the Influence of Workplace Injustices on Health Outcomes

Health outcome	PTSD	General poor mental health	Psychological distress	Anxiety	Depression	Poor self-rated health	Pain and symptoms	Increased blood pressure	Work-related injury/illness	Health behaviors	Job outcomes	Family well-being
Injustice												
Workplace discrimination												
Workplace racial/ethnic discrimination		x	x	x	x	x	x		x		x	
Workplace ageism			x									
Workplace harassment												
Workplace sexual harassment	x	x		x	x	x	x				x	
Workplace bullying /abuse	x		x		x	x	x	x			x	x
Bystanders				x		x	x					

reported better outcomes (work quality and health) than bullying victims; however, witnesses' outcomes were worse than those of non-witnesses [Lutgen-Sandvik et al., 2007]. Among a sample of female employees in a public utility and food processing plant, Glomb et al. [1997] found that observing sexual harassment was linked to lower psychological well-being, similar to individuals who experienced the harassment directly [Glomb et al., 1997]. Another study found that observing the mistreatment was linked to poor psychological well-being, even after controlling for one's own experiences [Miner-Rubino and Cortina, 2004; Miner-Rubino and Cortina, 2007]. Researchers have posited that the influence on bystander health is partly because bystanders develop a fear of becoming a target [Hoel et al., 2004]. Yet to be evaluated is whether bystander effects are worse when the witnesses are members of the same disadvantaged group as the target.

Health Behaviors

Experiencing workplace injustice may lead to unhealthy behaviors that likely operate as maladaptive coping mechanisms. Evidence from the stress and health literature suggests that stress influences health through changes in health behavior [Steptoe et al., 1998; Droomers et al., 1999; Epel et al., 2000; Ng and Jeffery, 2003]. Recent research suggests similar processes with workplace injustice. For example, workplace racial discrimination has been associated with smoking [Okechukwu et al., 2010], and heavy alcohol use has been linked to sexual harassment among women [Gradus et al., 2008] and to workplace bullying [Rospenda et al., 2009].

Job Outcomes

As illustrated in Figure 1, negative job outcome is a potential outcome of workplace injustices. Workplace racial discrimination and bullying have been linked to both self-reported and medically certified sickness absence, although the strongest associations were between bullying and medically certified sickness absence [Kivimäki et al., 2000; Alleyne, 2004]. A cross-sectional study found that sexual harassment explained the greater risk for sickness absence among female metal workers in male-dominated worksites compared to those in female-dominated worksites [Hensing and Alexanderson, 2004]. An important feature of bullying and discrimination includes restriction of information or services related to advancement [Alexis and Vydelingum, 2004]. With exposure to workplace injustice, targets may become socially isolated and/or ostracized [Zapf et al., 1996; Lutgen-Sandvik et al., 2007], and, might engage in higher levels of counterproductive work behaviors (e.g., tardiness) and reduced productivity, and/or withdraw from seeking promotions, thus lessening their credibility and value at work [Spratlen-Price, 1995; Day and Schoenrade, 1997; Caver and Livers, 2002; Fox and Stallworth, 2005; Allan et al., 2009].

Career advancement has also been shown to be hindered by workplace injustices leading directly to premature exit from the workforce, particularly among socially disadvantaged workers, or indirectly via sickness absence and other health consequences [Alexis and Vydelingum, 2004; Giga et al., 2008]. This premature exit may also result from behavioral hints encouraging them to quit their job, which disadvantaged workers may already be more likely to encounter in the workplace [Giga et al., 2008].

Income has been linked to both physical and mental health [Pappas et al., 1993; Marmot, 2002]. Thus, workplace injustice could influence health disparities by reducing wages available to socially and economically disadvantaged groups. White men in the U.S. still earn considerably more than equally qualified women and men of other races/ethnicities [IWPR, 2010]. Although the Equal Pay Act of 1963 prohibits employers from paying men and women who perform equal tasks at different pay rates, a gender wage gap persists [IWPR, 2010; US Dept of Commerce, 2011]. In some organizations, men are still promoted to management positions over their equal female counterparts [Blau and DeVaro, 2007]. Also, many women encounter a "glass ceiling," unable to move up the corporate ladder despite their achievements [Williams, 2001]. A wage penalty between 9% and 18% per child has been noted among mothers [Gangl and Ziefle, 2009]. In contrast, men seem to benefit in career advancement from having families [Friedman and Greenhaus, 2000]. Studies have found that leaves of absence are associated with fewer promotions and smaller salary increases [Poppleton et al., 2008], and that women are more affected than men because of they usually have heavier caregiving burdens [Kelly, 2005]. The wage penalty based on sexual orientation, though, is more complicated. A review of nine studies found that gay and bisexual men earned 10–32% less than heterosexual men [Badgett et al., 2007]. However, the review also found no statistically significant difference in earnings by sexual orientation among male workers in California, demonstrating, in this case, that context at the state-level mattered. The results regarding wage differentials by sexual orientation among women is more equivocal with some studies finding that lesbians earned more while other studies found that they earned less than heterosexual women [Badgett, 1995; Black et al., 2003; Badgett et al., 2007].

Family Well-Being

In Figure 1, family well-being is the final component that may be linked to exposure to workplace injustice. From a family systems perspective, family members are linked, and, thus, what happens to one member can influence others

through their interactions and communications [Cox and Paley, 1997]. As such, health outcomes of workplace injustice can extend beyond the worker via family interactions. One pathway, characterized as the "kick the dog" phenomenon by Hoobler and Brass [2006], occurs when an abused worker acts abusively towards family members. In one study, family members of workers who experienced bullying reported that the workers engaged in family undermining when they got home [Hoobler et al., 2010]. Furthermore, the stress and well-being of the victim of injustice may cross over and influence family members' well-being [Westman, 2001]. For example, among Mexican-American families, Crouter et al. [2006] found that men's reports of workplace racism were associated with depressive symptoms for them and their wives. This effect was moderated by acculturation: the more workplace racism fathers in less acculturated families experienced, the more depressive symptoms family members reported. This association was not apparent in families with higher levels of acculturation [Crouter et al., 2006]. Thus, workplace injustice may affect family members directly, due to lack of resources from deserved pay and promotions for example, or indirectly due to the disadvantaged workers' distress or health.

MEASUREMENT AND METHODOLOGICAL CONSIDERATIONS

Qualitative studies have provided rich perspectives from workers to explain how workplace injustice plays out in the labor market, within their jobs, and at worksites [de Castro et al., 2006; Baillien et al., 2008; Bowleg et al., 2008; Farquhar et al., 2008; Agudelo-Suarez et al., 2009; Allan et al., 2009; Delp et al., 2009; van Heugten, 2010]. Some studies have taken a grounded theory approach to allow for the emergence of themes explicitly or implicitly indicative of workplace injustice. Some of these qualitative studies did not necessarily have a predetermined aim of documenting the occurrence of a particular injustice, but rather initially set out to examine physical and/or psychosocial working conditions of a particular racial/ethnic minority group or groups. For example, de Castro et al. [2006] reviewed worker complaints received at a community-based workers' rights center. The authors discovered that many complaints about working conditions and arrangements were tinged with experiences of discrimination based on workers' race or ethnicity.

Other studies have quantified workplace injustices using either a self-labeling or operational method through surveys [Bond et al., 2007]. With self-labeling, study participants indicate whether they have been exposed to a pre-defined type of injustice. The operational method commonly involves study participants indicating whether or not they have experienced different events in a list of acts within a specified period. The number and frequency of experienced acts is then used to classify whether one has or has not experienced a particular workplace injustice. Studies using both methods have shown that prevalence is consistently lower in the self-labeling versus operational method [Mikkelsen and Einarsen, 2001; Krieger et al., 2005; Lutgen-Sandvik et al., 2007; Chan, 2008; Hogh et al., 2011].

An important issue for both methods relates to timing, duration, and severity of the experience, which are often not measured [Rospenda et al., 2005; Badgett et al., 2007; Bond et al., 2007; Saunders et al., 2007; Williams et al., 2008; Estrada et al., 2011]. Some measures have a wide window for capturing the timing of the injustice. For example, the widely used measure of sexual harassment (SEQ) has a 24-month reference period [see Gutek et al., 2004 for a critique]. One-time assessments do not capture the ebb and flow of emotions and experiences related to workplace injustice occurring over time. Sampling and the timing of study participant recruitment poses a barrier to elucidating injustice-health linkages.

Other limitations of studies linking workplace injustices and health outcomes are inconsistencies in measuring different exposures and their outcomes. Currently, no authoritative definitions of the various types of workplace injustice exist. As a result, studies have measured discrimination, harassment, bullying, and abuse using different definitions; with some strictly employing legal definitions whereas others use more inclusive definitions. Also, some assessments consist of a one-item measure (e.g., whether a person has been ever discriminated/harassed/abused against at work because of race, religion, sex, age, marital status, nationality, disability, or for any other reason). A key finding in the literature on stress and health is that such failure to develop measures for and comprehensively assess stressful experiences has the end result of understating the impact of stress on health [Thoits, 2010].

Additionally, the majority of studies on workplace injustice have been cross-sectional. Although cross-sectional studies provide information about the distribution of disease and can suggest associations between exposures and health outcomes, they do not provide evidence of causality. Furthermore, cross-sectional designs provide little information in terms of temporality, severity of the injustice event(s), or predictability for worker health and organizational outcomes. Cross-sectional studies are valuable for describing the experience of specific worker groups at one point in time, but longitudinal study designs are needed to better understand the unfolding relationship of workplace injustice and health.

An added issue for occupational-related studies is that most samples are drawn from white-collar settings where fewer minority workers work [Harris et al., 2011]. Few studies of workplace injustice have targeted workers in service settings and even fewer have been of blue-collar workers. Further, studies often fail to consider contextual and historical contributions to workplace injustices such as the

historical and current ratio of men to women in the workplace and the race, age, sexual orientation, and gender of supervisors. For example, men might become targets of bullying and sexual harassment in occupations that are historically female. This has been found among nursing assistants where one study found that male nursing assistants reported prevalence of bullying that was twice the prevalence reported by female nursing assistants [Eriksen and Einarsen, 2004].

More studies utilizing multiple reporters, such as manager, coworkers, and family members, are also needed. Experiencing injustice in the workplace may "ripple" beyond the parties involved through the work context and into the family and other contexts. Including a diverse sample of reporter perspectives could provide evidence of the extent to which incidents of workplace injustice occur, and, offer insight into possible interventions. Depending on the nature of the workplace injustice, obtaining multiple reports from others at work is not always feasible.

Studies examining interactions of more than one type of workplace injustice are needed. How much do workplace injustices co-occur and what are the health implications of concomitant exposures? One methodological obstacle to such studies is that distinguishing between exposures (e.g., bullying of racial minorities vs. racial discrimination) can be difficult. Being a minority appears to increase the likelihood of being a target of injustice and both bullying and sexual harassment occur in racialized forms [Alexis and Vydelingum, 2004; Woods et al., 2009; Fielden et al., 2010]. A study examining discrimination exposure among job applicants found that African American male homosexual job candidates were the most likely target of discrimination while White female heterosexual candidates were the least likely to experience discrimination [Crow et al., 1998]. Several studies addressing the additive influence of minority and immigration status on health are suggestive. A Danish study of the intersection of race/ethnicity and immigration status found that Western immigrants reported the same level of bullying as Danish workers while non-Western immigrants had 85% higher risk of experiencing workplace bullying than Danish workers [Hogh et al., 2011].

One study suggested only a minimal additive effect of ethnic harassment, gender harassment, and generalized workplace harassment on mental and physical health [Raver and Nishii, 2010]. The investigators theorized that workers adapt, thus further harassment does not yield significantly higher negative effects. This is a premise of the adaptation level theory, which posits that people subconsciously adjust to exposure to one form of workplace injustice by using coping strategies that buffer them from further harm [Raver and Nishii, 2010]. However, other studies use comparisons of exposure to injustice to exposure to trauma to conclude that exposure to multiple injustices is associated with much greater distress (thus potentially more health harming) than exposure to one injustice [Yoder and Aniakudo, 1995; Bowleg et al., 2003; Krupnick et al., 2004; Buchanan and Fitzgerald, 2008]. These discrepant findings could be due to the timing, severity, and/or type of injustices experienced. The magnitude of additive or multiplicative effect of exposure to multiple workplace injustice is a question that can be answered empirically through more studies, particularly if designed longitudinally and informed by a lifecourse perspective. Studies could also incorporate recruitment strategies that allow the recruitment of study participants who have been exposed to the multiple exposures under study.

These study design issues may, in part, reflect the difficulties researchers face in gathering data on workplace injustice. As noted by Badgett et al. [2007], employers do not easily cooperate with research on workplace injustice compared to other types of workplace studies (e.g., worksite health promotion), and findings from such studies could have legal and financial implications and/or cause damage to employer's image.

CONCLUSIONS AND RECOMMENDATIONS

The extant literature describes the phenomena of discrimination, harassment, abuse, and bullying in the workplace and the potential outcomes of these exposures. Although there are exceptions, these unjust experiences are most often described as affecting workers in non-dominant and/or disadvantaged worker groups. Our review pointed out that these same worker groups often hold more hazardous jobs and have been shown to experience poorer general health. We explored how various forms of workplace injustice have been shown to operate and contribute to disparate health among these workers. Additionally, we suggested a conceptual model informed by current evidence to illustrate pathways between workplace injustice experiences and health disparities. The model is offered as a starting point for researchers to build upon in exploring the potential mechanisms between these exposures and health disparities and under what conditions these disparities occur. The intent of this conceptual model is to contribute to the "unpacking" of the complex contributions of workplace injustices to health disparities.

Prospective studies and refinement of methods for characterizing and quantifying workplace injustices are needed to establish causative roles and to disentangle the contributions of various exposures. Future studies should employ representative samples and oversample disadvantaged worker groups. The literature on workplace ageism and its health effects are lacking; as the workforce ages and workers delay retirement, this is a timely area for study.

Though the body of literature directly linking workplace injustice and health is small, we believe that our conceptual

model is a working model that incorporates the evidence to date. While more research should be done to characterize the relationship between workplace injustice and health, the current evidence supports the pathways in this model and points to a potentially important role for workplace injustice in the health status of working people and likely their families.

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