

## Occupational Health and Safety<sup>12</sup>

Occupational health and safety (OHS) is the main focus of occupational health psychology—an emerging, interdisciplinary field—that is often housed within industrial and organizational psychology. OHS scholars develop sound theory and practice for protecting and promoting worker safety, health, and well-being. Occupational health research centers on understanding the processes of workplace stress leading to health outcomes. Work stress concerns negative person-environment interactions in which workers react negatively to demands from the work environment due to inadequate resources or abilities to handle such demands (Lazarus & Folkman, 1984). Work stress, then, is a process that involves stressors (work environment) and strains (workers' negative reactions). Occupational safety concerns understanding of how the interactions between workers' physical capabilities and work conditions may present a limit to workers' job performance and bring about positive and/or negative effects on workers' personal safety (e.g., injuries). The goal of this overview is to demonstrate the breadth of occupational health and safety research through providing a summary of representative, empirical findings, as well as to offer insights on future trends of the field.

There are many commonly studied predictors of work stress (i.e., stressors) including workload, organizational constraints, and lack of control (Spector, 2012). Workplace role stressors that often arise from ineffective organizational structures (e.g., role ambiguity and role conflict including conflict between work and family demands) are related to negative outcomes like sleep problems (Olson et al., 2015) and poor job performance (Eatough et al., 2012). Interpersonal interactions at work can also be a source of employee stress, as various forms of mistreatment ranging from the relatively mild (e.g., rudeness) to the severe (e.g., physical violence) can result in negative health outcomes (e.g., Bowling & Beehr, 2006). The results of the studies above not only show the myriad of work stressors, but also the many kinds of strains which are either indicators of occupational health or precursors of occupational health problems. Research on *physiological* strains includes high blood pressure (Weidner et al., 1997) and cortisol reactivity (Yang et al., 2014) in response to work stressors. Additionally, there is evidence for a relationship between work stressors and psychosomatic symptoms including back pain (Kerr et al., 2001). Chronic job stress can lead to burnout, a commonly studied *psychological* strain which is linked to many negative health outcomes (Shirom, 2011). The consequences of work stress are not only physiological or psychological, but can also be *behavioral*, such as lowered productivity, and increased absenteeism and turnover (Robbins & Judge, 2012). However, stressors do not always lead to strains. Strains are largely determined by our cognitive evaluation of environmental stimuli (Lazarus & Folkman, 1984), and often buffered by the way we cope with stressors (Wright et al., 2015). Researchers have also focused on social support as buffers of strains or the stressor-strain relationships (Häusser et al., 2010). And, some individuals, like those with high negative affectivity (Spector et al., 2000) may be prone to responding to stress more negatively than others. Organizational factors, such as positive organizational climate, have also been shown to buffer the stress process (Yang et al., 2014).

In terms of occupational safety, a multitude of research has contributed to understandings of how physical and psychological work environment account for important safety outcomes including worker safety behavior and safety outcomes like accidents, near-misses and injuries (Nahrgang et al., 2011). For instance, Nahrgang et al.'s (2011) meta-analytical review indicates that various job demands (e.g., risks and hazards, physical demands) and job resources (e.g., job autonomy) account for workers' levels of burnout and engagement (e.g., safety compliance), which then contribute to safety outcomes (e.g., accidents and injuries). Indeed, many of the work stressors (in the physical and psychosocial environment) are linked to not only strains and occupational health, but also occupational safety outcomes.

To promote occupational health and safety, scholars have made targeted efforts to design and test organizational interventions (O'Shea et al., 2016). For example, the mechanisms through which work stress interventions affect change vary as a function of the type of the intervention; namely, emotion-focused interventions help individuals accept undesirable thoughts and feelings whereas problem-focused interventions reduce strains by teaching individuals to modify stressors (Bond & Bunce, 2000). With regard to interventions aimed to promote occupational safety, there has been very positive progress made by occupational safety scholars (e.g., Zohar & Polachek, 2014). For instance, Zohar and Polachek (2014) found strong evidence that units receiving a supervisory feedback intervention on safety and productivity related issues had significantly more improvement in occupational safety, work stress and teamwork.

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**Author Contact:** [textbook@siop.org](mailto:textbook@siop.org)

<sup>2</sup> Please cite as: Occupational Health and Safety. (2018, August 28). Retrieved from <https://www.siop.org/Events-Education/Educators/Incorporating-I-O>

In summary, OHS research has produced a myriad of evidences that can inform managerial practices aimed at promoting quality of working life including worker safety, health and well-being. However, there are two notable trends in the OHS field: 1) the changing landscape of workplaces due to technology—a double-edged sword for employee productivity and well-being (Allen et al., 2015)—has profound influence on OHS research; 2) the influence of economic situations on the OSH field has manifested in many ways; for instance, the process of globalization has brought to the forefront the increasing need for OHS research and practices in developing countries (Kortum et al., 2011) where workers constitute 80% of the global workforce (Rosenstock et al., 2006).

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