

The International Encyclopedia of Health Communication

Article Template

Article title: Health and Safety at Work

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Word Count

2,617 words (main text, cross-reference list, references, and further readings)

Abstract

The study of health and safety at work focuses on mitigating and managing the hazards of work and making workplaces more conducive to physical and mental health. Health communication scholarship in this domain can be clustered into research on (a) organized efforts such as workplace health promotion and employee assistance programs, (b) the effectiveness of communication for influencing health and safety outcomes, and (c) the implementation of communication processes to prevent errors and cultivate resilient, reliable, and safe organizing. Topics of health communication research focused on health and safety at work include persuasive and informative messaging, communication strategies, workplace health promotion, health and risk information seeking, hazardous occupations, and organizing for resilience and reliability.

Keywords

safety, reliability, resilience, workplace health promotion, normal accidents theory, high reliability organizing, high reliability theory

Main text

The workplace is an important site for the study and practice of health communication. The U.S. Centers for Disease Control and Prevention (CDC) Workplace Health Promotion program and the World Health Organization (WHO) Global Plan of Action for Workers' Health both predicate their efforts on the reasoning that because most people work and because most workers spend a third or more of their time at work, the workplace shapes the health of workers and, by extension, public health in general. As such, the CDC and the WHO efforts focus on making work and workplaces less hazardous and on health promotion at work. The study of health and safety at work likewise focuses on the workplace as a site of health promotion, the communication involved in making workplaces safer, and communication strategies for encouraging health and safety at work.

[A] Workplace Health Promotion

Workplace health promotion focuses on organizational efforts to promote the health of workers. As such, WHP may be reasonably considered a special case of efforts such as health information campaigns and social marketing initiatives, but with a focus on efforts organized by workers and managers. Interest among communication scholars in health interventions intersects with health and safety at work research because the workplace is an important site for reaching people akin to community centers, religious organizations, and clinics and hospitals (Harrison et al., 2011). Geist-Martin and Scarduzio (2011) argued for a broad conceptualization of WHP, contending that its scope should include “the social and environmental conditions that promote the well-being of the whole person in the context of his or her workplace through effective communicative practices” (p. 117). Evidence supports the efficacy of promotion efforts aimed at improving workers’ health literacy, addressing the physical and mental health needs of workers, mitigating health problems such as heart disease and alcoholism, and improving the provision of social support at work. Not surprisingly, managers value such initiatives not only for their value for the health of workers, but also because poor health degrades the productivity and satisfaction of workers and contributes directly to increased costs. For instance, employee assistance programs are a common feature of the human resources function of most large organizations, and they aim to help workers with health problems that affect work as well as encouraging wellness, improving the quality of work-life, and bolstering worker engagement.

Workplace power dynamics complicate WHP, distinguishing it from the larger, related body of work on health promotion and health campaigns. Power imbalances can make the attainment of health more difficult for workers on their own terms while making it difficult for them to opt out of WHP efforts. Health communication scholars have studied the organizational strategies that make WHP effective in terms of employee compliance and identification with the workplace through such initiatives, and also the power dynamics inherent to WHP. For example, James and Zoller (2018) studied the implementation of an “evangelical,” cult-like fitness program at FitCo, which involved building gyms, changing the offerings at the cafeteria, requiring attendance at orientation to the program, promoting daily fitness classes, posting personal statistics on an employee leaderboard, and subsidizing the cost of the program but not completely. Their study documented how employees embraced, resisted, and renegotiated the program. It revealed how participation in the program interacted with what it meant to be a member of this organization and how such programs can valorize and stigmatize identity constructs related to health and career. They also found that employee resistance influenced how the program emerged and demonstrated that paternalistic managerial goals for such initiatives can backfire. At the same time, they still documented how such programs can nonetheless extend and reinforce managerial control. Although most WHP tends to be initiated and directed by management, research in this space has started to consider the health and organizational communication associated with worker-driven WHP.

[A] Worker and Workplace Safety as an Outcome of Communication

Whereas WHP research tends to focus on health-focused organizational programs, a second robust domain of health communication scholarship focuses specifically on the design of messages and campaigns as well as the implementation of communication strategies to cultivate the health and safety of workers. For example, health communication scholars have studied issues of safety in medicine in terms of communication-related medical error, patient safety, and provider stress and burnout. Worker safety is also of particular importance in hazardous workplaces such as complex industrial systems like oil plants, military organizations, nuclear power plants, and toxic waste storage facilities, and disaster and first-responder organizations. Hazards include increased stress, burnout, and trauma associated with the work as well as industrial physical, chemical, radioactive hazards. For example, studies of “dirty-work” document the communication difficulties and health dangers associated with work understood as physically, socially, or morally objectionable (Malvini Redden & Scarduzio, 2018; Rivera, 2015).

Organizational and individual factors affect workplace safety outcomes through communication processes. Lee and colleagues (2020) conducted an extensive review of the quantitative scholarship on workplace safety. They documented important outcomes in this scholarship including safety awareness and safety risk. They defined safety awareness as “workers’ safety literacy and knowledge on how to conduct their work in a safe manner in order to mitigate potential risks such as securing a safety harness—performing safety checks before operating machinery and knowing what to do in the event of emergencies and accidents” and safety risk as “actual (e.g., fall from heights, exposure to harmful materials) and perceptual risks (e.g., how susceptible and vulnerable they are to certain work hazards) that workers may face” (p. 2). They catalogued and organized factors thought to affect worker safety outcomes. Those factors included management commitment, management support, organizational safety communication, safety management systems, the physical work environment, the organizational environment, interpersonal support, and organizational culture, as well as individuals’ perceptions of safety, safety motivation, safety attitudes, and safety behaviors. Furthermore, they criticized the worker safety literature as tending to focus either on (a) particular industries or (b) particular factors, without treating the phenomena holistically. Last, they found that the preponderance of the literature focused on the global north and especially the United States to the exclusion of other contexts despite the importance of cultural norms in workplace safety.

No single holistic account of all factors that contribute to or undermine safety exists. That shortcoming may reflect the difficulty of defining “safety” itself. Safety may be understood as the absence of errors and accidents, the processes that exist to prevent them, or the legal definitions of safe operation that apply in particular industries. Reason (2000) argued that safety is paradoxical. It is paradoxical in part because it is measured by the absence rather than the presence of phenomena, meaning that the absence of errors or accidents may still not mean a workplace is safe. Safety is also paradoxical because the processes meant to cultivate safe operations can themselves encourage errors and accidents. Standardization to reduce errors is seen as key to

safety, and yet flexibility and adaptation are key to making systems safe. Safety professionals have to hold on to the contradictory ideas that failure is a real and ever-present possibility and that preventing failure can nonetheless be realized.

To account for these complexities, health communication research focused on health and safety at work draws on multiple, rich theoretical traditions. This research tends to examine (a) the effectiveness of messaging strategies for improving safety outcomes by changing individuals' perceptions of safety, safety motivation, safety attitudes, and safety behaviors and (b) the communication processes involved cultivating safety systems. As such, the workplace safety literature is dominated by theories of message effects and risk beliefs such as social cognitive theory (SCT), the theory of planned behavior (TPB), the extended parallel process model (EPPM), and the planned risk information seeking model (PRISM), and theories of hazardous, high-risk organizing such as normal accidents theory (NAT) and high reliability organizing theory (HRT). Put another way, this research tends to focus on individuals' safety-related attitudes, beliefs, and behaviors that in the aggregate should make for safer organizations or on the communication processes in organizing that may make for safer organizations.

[B] Promoting Individual Health and Safety Attitudes, Beliefs, and Behaviors

Individual-focused research includes experimental tests of message effects and survey research focused on relationships among workers' existing safety-related beliefs, attitudes, and behaviors. For example, Basil and colleagues (2013) applied the extended parallel process model (EPPM) to test the utility of gory safety appeals. They first conducted a content analysis of English-language safety materials documenting the presence of messaging focused on the severity of a safety risk, the susceptibility of workers to the risk, their self-efficacy as individuals for mitigating that risk, and response efficacy, meaning the usefulness of the strategies available for dealing with the hazard. They found that combining these message elements could produce more supportive attitudes toward the advertisement exhorting the safety behavior and greater intentions to enact the safety behavior. Promoting information seeking related to risks and risk mitigation is a key outcome of interest to health communication researchers (Ford & Stephens, 2018), and this study exemplifies efforts to understand workers' safety behaviors in high hazard contexts.

[B] Communication and Organizing for Health and Safety

Health communication research also examines how interaction in teams, organizations, and industries can encourage organizational reliability, resilience, and safety. For example, Barbour and Gill (2017) examined how asking questions, as a key communicative work practice, influenced the organization of the safety oversight of nuclear power plants. They compared and contrasted NAT and HRT accounts of the work practice in complex industrial systems. They argued that "NAT emphasizes the inevitable fragility and inadequacy of communication in these systems, and that "[high reliability organizations focus on preventing error (an attainable goal per HRT), but the intermediate communicative goals that must be enacted to do so multiply, confound,

and confuse (NAT)" (p. 484). They argued that safety professionals had to grapple with the tensions and contradictions between the "pessimistic/realistic NAT" and "optimistic/ideal-model HRT views" of safety. Whereas Barbour and Gill focused on questioning as a sort of interaction constitutive of organizing, researchers have also focused on the cultivation of overarching communication patterns that may contribute to organizational reliability and thus safety.

Much of this scholarship has focused on understanding the communication involved in cultivating organizational safety. Reason (2000) defined safety culture as "a continuing respect for its operational hazards, the will to combat hazards in a variety of ways and a commitment to achieving organisational resilience" (p. 13) and likened it to a "a state of grace," and "a product of continual striving" (p. 4). Scott and Trethewey's (2008) study of firefighters found that how they talked about hazards with each other shaped their protective actions. That talk constituted their safety culture, and their safety behaviors reflected not just that culture but also their construction of their occupational identity—what it meant to be a good firefighter. Echoing the concerns of NAT, they found that power differences inherent to the organization of firefighting meant that the risks fell unequally on workers in different positions. They argued that "discourse—and the cultural values and practices it shapes—cuts both ways, both amplifying and attenuating hazard perceptions with a variety of potential consequences—functional and dysfunctional, enabling and constraining, safe and dangerous" (p. 312). Jahn and Black (2017) found that managers could encourage employees to communicate in ways that enact sort of high reliability organizing envisioned in HRT. Managers did so by encouraging input and the surfacing of problems and by looking for potential problems not just in their own work but also in the work of their subordinates providing support or cross-level facilitation. The focus of this research was to understand how to cultivate interaction that encourages more reliability but that may be inconsistent with traditional bureaucratic operations. To encourage reliability and thus safety, HRT holds that communicators should talk about mistakes and what might be done to prevent them, draw on the right skills and specialized knowledge regardless of leadership role, discuss alternative ways of working, and highlight vulnerable activities and processes. Health communication researchers have also focused on the structuring of communication for the health and safety of workers, for example, in the rules and policies of organizations and in the design of the workplace itself.

[A] Future Directions

Future health communication scholarship focused on health and safety at work will need to grapple with changing workplaces while still addressing fundamental communication difficulties. For example, emerging health communication scholarship must make sense of humans and robots working in close proximity and human and machine agents working together. Health communication scholarship must also contend with the near soaring levels of stress and burnout endemic to today's workplaces, and the distinctive stressors experienced by marginalized workers. At the same time, improving technologies may affect but will likely not remove the difficulties associated with human error and communicating for safety. Communication

scholarship's distinctive advantage in addressing these research challenges is the focus on messaging and interaction as the site and means for intervention.

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Contributor Bio

Joshua B. Barbour is an associate professor of communication studies in the Moody College of Communication at the University of Texas at Austin. His research centers on the confluence of the macromorphic and communicative in organizational life. He studies the design and disciplining of communication to solve organizational problems. For example, his safety-focused scholarship has focused on nuclear power plants and other hazardous workplaces. His work has appeared in *Communication Monographs*, *Management Communication Quarterly*, the *Journal of Applied Communication Research*, *Health Communication*, and the *Journal of Health Communication*.

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