they initially wanted to become teachers but now planned to pursue alternative careers. The remaining preservice teachers were noncommittal: 18% (n = 45) said they will probably switch careers after teaching for 5 to 10 years, and 16% (n = 42) said they intend to try teaching for one year before making any long-term career plans.

Additional analyses are currently underway. These include between-group comparisons (within the preservice teacher sample data and against national estimates) and predictive modeling for preservice teacher health and career outcomes. Results of these analyses will be available for presentation at the conference.

CONCLUSIONS. This study adds to the school health literature by investigating work stress and stress-related outcomes in preservice teachers. Preliminary results provide evidence that the onset of teacher stress occurs early in the career lifecycle. When compared to findings from longitudinal studies conducted by the National Center for Education Statistics (Alt et al., 2007; Gray et al., 2015), the preliminary results of the current study also suggest U.S. teacher retention rates have not improved in the past 25 years. The conclusions shared in this presentation have utility for the design, implementation, and evaluation of stress prevention and career retention interventions for teachers.

Independence Ballroom CD

CEP

Strategies to Improve Workers' Perceptions and Performance on the Job

PAPER SESSION

Let's talk about it: What factors influence workers' willingness to report physical and psychosocial hazards?

Robert Sinclair (Clemson University)

Employees are well-positioned to identify and report hazards, but may be hesitant to do so; as many as 81% of physical safety incidents go unreported (Probst et al., 2008). Underreporting of psychosocial hazards is not well understood and systems for reporting psychosocial hazards are not well established. In light of these concerns, our research investigated antecedents of employees' willingness to report physical and psychosocial hazards.

We tested parallel models of physical and psychosocial hazard reporting by (1) developing measures of physical/psychosocial hazard reporting (2) identifying antecedents of safety reporting behaviors, and (3) developing parallel versions of those antecedents to predict willingness to report psychosocial hazards (i.e., stressors). The antecedents included climate perceptions, supportive leadership, destructive leadership, knowledge, and motivation. We expected employees would be more likely to report physical hazards when they had more positive safety climate perceptions, more supportive and less destructive leaders, higher levels of safety knowledge and stronger safety motivation. Similarly, we predicted that employees' willingness to report psychosocial hazards would be stronger when they had stronger perceptions of stress climate, more supportive and less destructive leadership, and higher levels of stress knowledge and motivation.

Method. Participants were recruited through Amazon's Mechanical Turk (MTurk). MTurk has gained popularity as a platform for data collection (Sheehan & Pittman, 2016) in part because it offers an ethnically and socioeconomically diverse pool of participants (Casler, Bickel, & Hackett, 2013). Labor characteristics of MTurk workers are representative of the labor market (Michel, O'Neill, Hartman, & Lorys, 2018).

We used a pre-qualification screening survey to limit our sample to participants exposed to at least some physical hazards at work. Participants used a 5-point scale to indicate frequency (1 = "Never" to 5 = "Most days") that they had experienced 21 physical hazards at work over the last three months. We then summed the item scores to create an overall hazard score. Participants who worked 30 hour or more week, reported to a direct supervisor, and had an overall hazard score of 33 or higher were retained for the present study. Of 1,366 participants, 770 participants completed the survey at Time 1 and passed all four attention checks. Of these, 410 participants completed a second survey and passed four attention checks again. The average age of the sample was 37.1 years old and their average organizational tenure was 6.7 years. Participants came from a wide range of industries included healthcare, mining, manufacturing, and construction.

We measured Supportive Safety Leadership with 11 items (alpha = .95) from Foundations for Safety Leadership measure by the Center for Construction Research and Training (cwpr.com). These items reflected safety-specific content related to leading by example, engaging team members, and recognizing team members. We measured supportive stress leadership with 11 parallel items (alpha = .96). We measured destructive leadership with six items (alpha = .93) developed for this study based on pre-study focus groups with employees from a construction company concerning leader behaviors that negatively influence their health at work. We measured safety climate with 12 items (alpha = .94) from Lee et al. (2014) that captured employees' perceptions of the extent to which their supervisor and organization prioritized safety. We measured stress climate with 12 parallel items (alpha = .94) focusing on health/well-being concerns. We measured safety knowledge (3 items, alpha = .90) and safety motivation (4 items, alpha = .92) with items from Neal et al. (2000) and developed parallel items of stress knowledge (alpha = .88) and motivation (alpha = .90). Finally, we developed a measure of willingness to report 21 safety hazards (alpha = .93) and 30 psychosocial hazards (alpha = .96).

Results. Table 1 shows the cross sectional regression results predicting willingness to report physical hazards with all measures from Time 1 (total R2 = .22). Employees who were more willing to report physical hazards also had more supportive leaders, perceived a more favorable safety climate, and reported higher levels of safety knowledge. Table 2 shows the prospective results, predicting the Time 2 outcome from the Time 1 measures (R2 = 16). Supportive leadership still predicted willingness to report hazards, but none of the other predictors were significant.

Table 3 shows the cross sectional regression results predicting willingness to report psychosocial hazards (total R2 = .27). Stress climate and stress knowledge were significant predictors. Table 4 shows the prospective results in which, although the predictors explained less variance in willingness to report (R2 = .16), stress climate and stress reporting knowledge were once again significant predictors.

Discussion. Focusing on factors that influence employees' willingness to report hazards, encourages a preventative perspective rather than focusing on problems that transpire when hazards are left unchecked. Our research demonstrating the importance of supportive leadership, organizational climate, and employee knowledge as predictors of willingness to report hazards. These findings suggest the importance of interventions targeting these factors.

Total Worker Health: strategies, climate, and employee motivation

Natalie Schwatka (CU Anschutz Medical Campus/University of Denver)

Employee engagement is a critical component of how a business develops and implements Total Worker Health (TWH) strategies, including policies and programs. Safety and health climates (perceptions of company commitment through consistency between espoused vs. enacted strategies) is also an important engagement factor. Organizational resources, defined in the present study as both business safety/health strategies and safety/health climates, are fundamental to TWH. Through organizational resources, businesses aim to facilitate the engagement that is necessary to produce desired outcomes of better health, safety, and well-being.

Employee motivation is an indicator of engagement. Previous research indicates that safety/health strategies and climates are key motivation factors. However, Gagne et al. argue that it is important to differentiate between autonomous and controlled types of motivations, as opposed to total motivation, as each differentially impact performance and well-being. In the present study we evaluate three kinds of motivation – intrinsic, identified regulation, and external motivation.

Understanding how TWH strategies and climate are related to different types of motivations is novel. We assess how both health protection and health promotion constructs can contribute to a stated need to better understand the benefits of a TWH approach. Additionally, we assess multiple climates as well as the combined effect of strategies and climate on motivation.

Methods. We measured safety (e.g., hazard control) and health (e.g., stress management program) strategies with the online Health Links™ Healthy Workplace Assessment. An individual from the represented organization including executives, human resource professionals, health and safety professionals, and other administrators completed the assessment. Employee data was collected through a health and safety culture survey. This survey used Lee et al.'s safety climate measure, Zweber et al.'s health climate measure, and an adapted Conchie et al.'s safety motivations measure that assessed the three kinds of safety motivations and the three kinds of health motivations.

We used linear mixed models with a random intercept for organization to test the hypothesized relationships between strategies, climates, and motivations. Our outcome variables were the three safety motivations and the three health motivations. We first evaluated the associations between safety climate and the three safety motivations independently (H1a) as well health climate and the three health motivations independently (H1b). Second, we evaluated the associations between safety strategies and the three safety motivations independently (H2a) as well as health strategies and the three health motivations independently (H2b). Next, we evaluated the associations between both safety climate and safety strategies (H3a) and health climate and health strategies (H3b) with each of the three safety and three health motivations independently using multivariable models. To test the synergistic effect of climate and strategies, we included an interaction term. We controlled for tenure, management role, organizational size, and industry. Due to the number of multiple comparisons, we set our significance level to 0.001. All data analyses were performed using SAS Software Version 9.4.

Results. Our study sample represented 1,052 workers from 36 businesses. Half worked in the service industry (53%). Respondents were on average 40 years old, college educated (63%), non-Hispanic white (79%), female (64%), and 42% had supervisor duties.

Safety motivation. We observed that safety climate was related to all three types of safety motivation (H1a). For example, every one-point increase in safety climate resulted in safety intrinsic motivation increasing by 0.27 points on a five-point scale, 95% CI [0.21, 0.33]. The magnitude of the coefficients was not practically different by type of motivation. Safety strategies were not significantly related to safety motivations as hypothesized (H2a). Additionally, the addition of the interaction term between safety climate and safety strategies was not statistically significant (H3a).

Health motivation. We observed that health climate was related to all three types of health motivation (H1b). For example, for every one-point increase in health climate, health intrinsic motivation increased by 0.26 points on a five-point scale, 95% CI [0.20, 0.31]. The magnitude of the coefficients was not practically different by type of motivation. Health strategies were not associated with health motivation as hypothesized (H2b). Additionally, the addition of the interaction term between health climate and health strategies was not statistically significant (H3b).

Conclusions/practical implications. Our study indicates that safety/health climates are associated with multiple types of motivation to participate in TWH strategies, which is consistent with safety climate research. However, strategies were not related to motivation indicating that what organizations are doing to engage employees are not directly associated with how motivated employees are to participate. Future research should investigate the ways in which strategies are measured as well as the quality of strategies. Next steps could also include an investigation of the interaction between health and safety (e.g., do safety/health climates interact to influence safety/health motivations?). In practice, our findings suggest that businesses can increase employee safety/health motivations through consistently communicating the importance of TWH to employees and ensuring TWH policies are used in practice.

Being Present in Enhancing Safety: Examining the Effects of Workplace Mindfulness, Safety Behaviors, and Safety Climate on Safety Outcomes

Candice Thomas (Saint Louis University)

The significant health and financial implications of safety (e.g., ILO, 2015) necessitate that the trait predictors of accidents and injuries and the influence of person-situation interactions on safety be examined. We therefore focus on trait mindfulness—a key target for trait research due to the efficacy of interventions in improving mindfulness (e.g., Carmody et al., 2008; Chambers, Lo, & Allen, 2008)—as a predictor of accidents and injuries and assess the mediating mechanism, safety performance, through which mindfulness is related to employee safety outcomes.

Trait mindfulness refers to disposition-based differences in the quality of consciousness and is defined as "a receptive attention to and awareness of present events and experience" (Brown & Ryan, 2003). Although trait mindfulness is related to safety (e.g, Dierynck et al., 2017; Zhang & Wu, 2014), we have limited understanding of the mechanisms and moderators underlying this relationship. To address this gap, we examine the indirect relationship of trait mindfulness with injuries, through safety performance (compliance and participation), and the role of group-level safety climate as a contextual moderator.

Hierarchically nested data (i.e., employees nested within teams with a supervisor) were collected, via surveys, from employees within a large petroleum distribution company in the U.S. 706 employees (84% response rate), representing 142 work teams, responded. Each group had an average of 8.69 employees. The majority of the participant were

PHILADELPHIA, PA | NOVEMBER 6–9

Work, Stress and Health 2019

FULL PROGRAM

AMERICAN PSYCHOLOGICAL ASSOCIATION

Society for Occupational Health Psychology

National Institute for Occupational Safety and Health NIOSH