

18. Safety Climate in the Federal Fire Management Community: Influences of Organizational, Environmental, Group and Individual Characteristics

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This study examined the effects of organizational, environmental, group and individual characteristics on five components of safety climate in the US federal fire management community (HRO Practices, Leadership, Group Culture, Learning Orientation and Mission Clarity). Multiple analyses of variance revealed that all types of characteristics had a significant effect on one or more of the five components. Of particular interest was the effect of agency affiliation (an organizational characteristic), in that respondents from the National Park Service (NPS) scored significantly lower than respondents from the Forest Service (USFS) or Bureau of Land Management (BLM) with respect to four of the five components. Chi-square comparisons between agency affiliation and all other characteristics suggested that this trend may be driven, in large part, by the different hierarchical position levels of respondents from each agency. Representing the NPS, there were significantly more respondents in low-scoring positions, relatively lower hierarchical positions (e.g., Single Resource) and significantly fewer respondents in high-scoring, relatively higher hierarchical positions (e.g., FFT1). The observed trend between agencies did not appear to be related to any other variables measured in this study, with the exception that respondents from the NPS had significantly fewer years of experience in fire management than those in the USFS. These results suggest that, while other factors are important, efforts to improve safety climate in the US federal fire management community should seek to understand what it is about different incident positions that so significantly effects perceptions of safety culture, whether it be training, external factors impacting team interactions, and/or different sub-climates that may exist within different hierarchical or functional levels on a fire.

Brooke McBride is a post-doctoral research associate with the College of Forestry and Conservation at The University of Montana. During her Ph.D. program, Brooke became involved with the University's K-12 outreach program, ECOS: Ecologists, Educators and Schools. As a fellow in the ECOS program, Brooke worked in close partnerships with local school teachers, to design and implement inquiry-based ecology lessons, using their schoolyards as outdoor laboratories (No Child Left Indoors!). Her dissertation research focused on the Ecological Literacy Initiative, an effort to conceptually define and set educational standards for ecological literacy.