Abstract

Slip and fall incidents at work remain an important class of injury and fatality causing mechanisms. An extensive body of safety research has accumulated on this topic. This article presents an analysis of this research domain. Two bibliometric visualization tools are applied: VOSviewer and HistCite. Samples of 618 slip and fall related articles are obtained from the Web of Science database. Networks of institutions, authors, terms, and chronological citation relationships are established. Collaboration and research activities of the slip and fall research community show that most contributors are from the United States, with the (now closed) Liberty Mutual Research Institute for Safety the most influential research organization. The results of a term clustering analysis show that the slip and fall research can be grouped into three sub-domains: epidemiology, gait/biomechanics, and tribology. Of these, early research focused mainly on tribology, whereas research on gait/biomechanics and epidemiological studies are relatively more recent. Psychological aspects of slip and fall incident occurrence represent a relatively under-investigated research topic, in which future contributions may provide new insights and safety improvements. Better linking of this research domain with other principles and methods in safety science,
such as safety management and resilience, may also present valuable future development paths.

Keyword: slip and fall; bibliometric analysis; knowledge mapping; citation network; VOSviewer; HistCite