Content and trend analysis of articles published in a key journal on human factors and ergonomics during 2005-2014

Narmin Hassanzadeh Rangi[1], Yahya Khosravi[2*]

Abstract

Introduction: The introduction of a thematic framework is necessary for the field of ergonomics and human factors. Content analysis is a useful tool for the trend analysis and distribution of published articles; however, reports on the content analysis of ergonomics journals are rare. The present study was conducted to identify research trends in the journal of Human Factors through a content analysis of its recent articles published over the past ten years (2005-2014).

Materials and Methods: The present study used the directed content analysis method. Two analysis experts classified 741 articles based on their thematic codes. A conceptual framework was used to perform the content analysis. EXCEL 2007 and SPSS-19 were used for the data preparation, theme distribution and trend analysis of the published themes.

Results: From the total of 21 themes extracted, six themes defined over 50% of the variance in the published articles, including "Biomechanics, Anthropometry and Work Physiology", "Display and Control Design", "Surface Transportation Systems", "Cognitive Processes", "Attentional Processes" and "Sensory, Perceptual and Psychomotor Processes". The journal had a special focus on "Biomechanics, Anthropometry and Work Physiology" (about 12%).

Conclusion: The thematic framework and distribution pattern noticed in this study can be used for planning education and research on human factors and ergonomics in universities, research centers and related organizations.

Keywords: Human factors, Ergonomics, Trend analysis, Article content, Journal

1. PhD Student in Occupational Health Engineering, Student Research Committee, Shahid Beheshti University of Medical Sciences, Tehran, Iran
2. *(Corresponding Author) Assistant Professor, Department of Occupational Health Engineering, Alborz University of Medical Sciences, Karaj, Iran; Email: yakhosravi@yahoo.com