

Requirements of crisis situations -an action psychology perspective

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Abstract

Crisis situations in different domains demand varying types of reactions, depending on the type of work, the situational dynamics, risk, etc. In addition, organisational and cultural contexts define the conditions under which individuals will act intuitively and based on their “best-practice” experiences. On the other hand, the sources of human error seem to be similar in different complex work environments. Therefore, we argue that more substantial knowledge of basic characteristics of (dynamic) crisis situations and of the “human condition” will contribute to more appropriate action. Complex problem-solving, effective decision-making and taking command in crisis situations are influenced by emotional and physical conditions and by basic psychological mechanisms of self-regulation and action. At the same time, these mechanisms are the sources for “human-error”. The aim of this paper is to explain basic psychological requirements of crisis situations. Situational requirements meeting psychological and cognitive human characteristics are presented as a main source of insufficient behaviour. We illustrate our arguments with observations of behaviour in critical situations in the domain of public transportation, as found in the federal German research project OrGaMIR.

What is human error and (how) can it be prevented?

“Human Factors: a system view of human, technology and organisation” was the central theme of the 2009 Annual Meeting of the HFES Europe Chapter in Linköping, Sweden. In the keynote: “In the systems view of Human Factors: Who is accountable for failure and success?” Sidney Dekker highlighted the complex interactions and relationships of human individuals and machines. He also referred to critical incidents, which are most often the trigger for investigations of responsibility and causes of failure.

The human being is but one element in a complex system of many interdependent factors, but it is arguably one of the more versatile, which could potentially compensate system weaknesses if enabled to do so. Most often large sums of money are spent on technical response capability or on the development of emergency

In D. de Waard, A. Axelsson, M. Berglund, B. Peters, and C. Weikert (Eds.) (2010). *Human Factors: A system view of human, technology and organisation* (pp. 167 - 176). Maastricht, the Netherlands: Shaker Publishing.