ABSTRACT

Decision making for professionals in crisis situations can be highly stressful and mission critical. It is a kind of naturalistic decision making (NDM), characterized by highly fluid situations under great stress and uncertainty and involving interprofessional teams. A major challenge to the effective handling of crisis situations is the tendency for the personnel involved to ignore alternatives and make irrational decisions, a phenomenon referred to as Groupthink. This chapter reports on a case study of the application of a set of design principles for an online role play simulation (RPS) in addressing Groupthink in crisis management professional training. The training effectiveness on participants’ Groupthink tendency was investigated using Bale’s interaction process analysis (IPA). The design principles underpinning the RPS training system is discussed in light of the findings.
INTRODUCTION

In general, a crisis is a major event, which can bring damaging effects to individuals, groups, organisations and even society. Crisis management is a process for an organisation to deal with such critical events. However, there is no official or agreed definition for crisis among researchers. According to Oxford English Dictionary, crisis is a state of change, uncertainty, which can either become better or worse. Hermann (1963) states that there are three conditions for the occurrence of crisis: there exists a severe danger to the organisation’s survival, there is a very short period of time to act, and the situation will become worse if the further development of the situation is not correctly anticipated. A fundamental characteristic of crisis is its ill-structuredness. Billings, Milburn, and Schaalman (1980) also point out that crisis can be disruptive, and no one can be fully prepared for a crisis because of its unpredictability. Coombs (2007) summarises four key characteristics of crisis from previous research. First, crises are low-probability events and are thus hard for decision-makers to even have the motivation to plan for them. Therefore, management will normally start planning only when the organisation has been hit by a severe crisis. Second, crises can induce severe damage or loss. The extent of the damage may go far beyond an organisation or even a country, such as in case of natural disasters like earthquakes and tsunamis. Third, the cause-effect relationships of crises are generally not easily identifiable. Because of this ambiguity, it is not easy to pinpoint even if the cause of the crisis is due to negligence. Fourth, crisis management requires quick and effective decision-making. If the organisation cannot respond with a quick and effective decision-making process, the crisis may rapidly intensify, resulting in significant damage and loss.

Crisis management poses great challenges for professionals who have to handle crisis situations due to their inherent uncertainty, as both problems and consequences are not well understood, at least at the time of occurrence. If crisis decision-makers are not well prepared both mentally and organisationally, the consequences could be chaos management rather than crisis management (Boin,’t Hart, Stern and Sundelius, 2005). Since each crisis has its own specific context and conditions, there is no single or predefined solution even for the same kind of problem. Therefore, decision-makers have to be mentally prepared through previous experience or training. Under such circumstance, previous crisis experience can offer lessons for learning, but not as solutions to be modelled (Flin, 1996). In other words, crisis personnel should learn something from previous crisis experience, but observations alone have little value in handling crisis. There is a difference between procedural operations in crisis management training and strategic level crisis decision-making. For example, it is essential for a fire-fighter to practise and learn how to extinguish a fire through step-by-step instructions, which are usually well-defined and relatively routine. This
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