

SELECTION OF EMERGENCY MANAGEMENT PERSONNEL: A PSYCHOLOGICAL PERSPECTIVE

Najib Ahmad Marzuki
School of Social Development
Universiti Utara Malaysia
06010 Sintok, Kedah
MALAYSIA
najib320@webmail.uum.edu.my

Keywords: interview, personality, personnel, psychology, selection

Abstract

The importance of selecting effective emergency management personnel is not to be taken lightly. Natural catastrophes such as drought, earthquakes, floods or fires and disasters with man-made cause such as accidents aboard passengers carrying airplanes, railroads, ships, the collapse of building, bridges, tunnels, mines and industrial accidents require delicate selection methods to ensure that people who are dealing with these catastrophes have not only expert skills but also the necessary psychological skills. Psychological skills are vital since these people will be dealing with other people who are the victims of disasters and catastrophes. This paper will address the issue of selecting personnel with high psychological tolerance skills to deal with anticipated and non-anticipated disasters. Emotional and personality factors are two important factors that should be taken into account in selecting these personnel. Through thorough interview screening or special assessments conducted in the selection interview process, relevant and suitable personnel could be identified. The selection interview should be paneled by those people who are expert in interviews and have the skills to determine whether specific psychological criteria have been fulfilled. A comprehensive structured interview (CSI) that includes both the patterned behaviour description interview (PBDI) and the situational interview (SI) can be applied for this purpose. It is imperative to have personnel with high psychological tolerance to avoid problems such as 'emotional breakdown' and 'post-event trauma'. This can reduce 'after event' psychological effects and will cut down psychological cost needed to alleviate problems arise from consequences and sufferings by emergency management personnel.

Introduction

Emergency management personnel are important entity in the case of any natural catastrophes or man-made disasters. They play a crucial role either as front line search and rescue team or secondary recovery team. In either role, the task burden of these

personnel is heavy and important. Psychological and physiological effects of a disaster or post-disaster events (Barling, Bluen & Fain, 1987) are not only experienced by victims of such disasters but also by these personnel (Solomon & Green, 1992). For example, not only did the direct victims of catastrophes experienced psychological trauma or after event psychological effects such as behavioural changes (Carson, Butcher & Mineka, 1998); stress, chronic depression or personality disorders but it is also felt by personnel who involve directly in the event.

According to Bell (1995), when a disaster strikes, the victims include emergency management personnel. Some may need help to maintain their functional efficiency during rescue operation and to cope with subsequent psychological effects. Physical and psychological sufferings, visions of death and, near-death experiences of victims they rescue may remain on for months, even years. Length of recovery often varies according to specific factors such as the intensity of traumatic experience, individual personality, psychological and emotional tolerance and the vulnerability to stress (Ursano, 1997). These are considered psychological tolerance during catastrophes and disasters.

To avoid unnecessary cost in recovering the psychological trauma experienced by these personnel, the selection process for recruiting these personnel needs to be planned well. Emergency management personnel are considered as high-risk and stressful occupations. The characteristic common to these kinds of jobs lies in the possibility of severe damage to physical as well as psychological self. Therefore, only personnel with high psychological tolerance should be accepted and involved in any rescue and recovery operation. As such, apart from the normal physical and other routine criteria, the interview process could be the most important event and the final ground in making sure that the personnel selected for the search and rescue team have a high psychological skills which include suitable personality and stress tolerance.

The aim of this paper is to highlight the importance of selecting emergency management personnel through valid and proper selection interview. It is also aim at understanding how psychological factors of the personnel could influence the selection process.

Selection Interview For Emergency Management Personnel

Since the interview is so commonplace and because many interviewers have full confidence in their decision making abilities, there is a tendency to underestimate the skills needed to perform successful selection interviews. Key in developing a good selection interview is to be well prepared and to get organized. As such, this requires top management commitment and full support from various levels of people. These include professional in search and rescue operation, trained interviewer and psychologist. The strength and accuracy of any interviews rely on how job relevant the content of the interview actually is. If done poorly, interviews can be misleading and irrelevant.

The interview constitutes an opportunity for the interviewee to interact personally with the interviewer. It is a face-to-face exchange of job relevant information between organizational representatives and an applicant with the overall goal of attracting,

selecting and retaining a highly competent work force (Eder, Kacmar & Ferris, 1989). It is suggested that a systematically constructed structured interviews be used. A structured interview is merely a set of specific, job-relevant questions that tap into critical aspects of the job.

In order for the interview to be valid and reliable, other factors such as the used of questions based on job analysis, the training of interviewers and the use of panels of interviewers are strongly recommended to ensure that the interview will be handled by professional both in the area of disaster management and psychological skills. In job analysis; key characteristics, skills and abilities are identified and a set of structured questions are then written to address these areas. The responses to the questions can then be evaluated and scored using a specially designed rating scale.

Types of Structured Interview

There are three types of structured interviews: i) the patterned behaviour description interview (PBDI) (Janz, 1982; Janz, Hellervik & Gilmore, 1986), ii) the situational interview (SI) (Latham, Saari, Pursell & Campion, 1980; Latham & Saari, 1984) and iii) the comprehensive structured interview (SI) (Pursell, Campion & Gaylord, 1980).

The questions asked in the PBDI are based on the critical incidents analysis. Interviewees are asked to recall from their recent past an incident similar to the situation described in one of the critical incidents and to explain how they reacted to that situation. Job analysis is undertaken to establish critical incidents of on the job behaviour. It actually comprises a series of questions to assess past behaviour in various situations with the assumption that the best predictor of future behaviour is the past behaviour (Janz et al., 1986). This approach seeks examples of past actual behaviour rather than hypothetical responses. It asks for behaviour in relation to defined job competencies rather than particular situations. It is more personal in nature since it allows interviewees to discuss their own experience in detail. In addition, it allows more thorough probing and elaboration.

The SI also involves the critical incidents methods whereby interviewees are asked to indicate how they would behave in a given job situations. The focus is on what the interviewee would do in a particular situation and is based on a goal-setting theory, which is based on the assumption that intentions are related to actual behaviour (Latham, 1989). It also focuses on future oriented behaviour and asks interviewee about their anticipated behaviour in hypothetical situations. ("What would you do if?"). Responses are then compared with a set of predetermined 'standards' to produce a score for each answer. Situational interviews are based on the premises that a person's stated intentions are related to subsequent actual behaviour (Barclay, 1999).

The broadest structured approach in interviews is the CSI. It may contain four types of questions: situational, job knowledge, job simulation and worker requirements. Apart from questions on job knowledge, job simulation and worker requirements, the situational questions are similar to those used in SI.

Looking at the many types of structured interviews available, it seems that the comprehensive structured interview (CSI) is the most suitable approach for selecting emergency management personnel. However, if the patterned behaviour description interview (PBDI) is combined with the CSI, it would produce better validity and reliability.

The traditional interview fails because it often focuses on 'here and now', how the interviewee responds to the stresses and demand of the interview itself, which is too narrow a focus. Interviewers may not have a clear picture of the qualities required for successful job performance, which involved not only physical but also psychological skills. Even when interviewers do have a clear picture of what is required and seek to assess an interviewee's technical competence and ability to work with victims and under stressful conditions, research suggests that what they actually do in interviews has little relationship to the job requirements (Janz, 1989).

Structure improves interviews since it makes interviewers focus more on the job and makes the questions asked more likely to be job related. A strong relationship between the content of the job and the content of the selection method improves the validity of the selection method (Smith & George, 1994). So structured interviews 'work' because they force attention on a job relevant variables, rather than irrelevant variables. Behavioural interviewing zeros in on what interviewees have accomplished (or failed to accomplish) and how they went doing it in situations similar to ones they will face on the job.

The personal characteristics of employee management personnel needed to cope with high-risk situations in disasters and catastrophes can be categorized into four headings: perceptual ability, mental ability, physical ability and personality/emotional stability (Smith, 1992).

With exception to physical ability; perceptual, mental and personality/emotional stability can be identified through a well-structured selection interview. The types of interview will determine the extent of information extracted from the interviewee. Perceptual, mental and personality/emotional stability are interrelated. However, discussion will focus on psychological factor, which is the personality and emotional stability factor.

Personality and Emotional Stability

In the selection process of emergency management personnel, one cannot deny that personality and emotional stability are required from these personnel at all times. Personality can be referred as a person's distinctive interpersonal characteristics, described by people who have seen the person in a variety of situations. Personality has also been regarded by personality theorists as a set of characteristics, which may be said to exist within the individual causing his or her to behave in a certain ways (Hampson, 1984). As such, there appear to be quite clear requirements in terms of the personality of people in high-risks occupation such as emergency management personnel. On the one hand, they need to be sufficiently sensitive to appreciate the dangers they face. On the other hand, they should not be so sensitive that they are overwhelmed by the

emotional onslaught they may experience in crisis. Moreover, they should be able to absorb emotional disturbances and have high tolerance to negative situations. How would selection process assess the personality and emotional stability of these personnel?

Personality questionnaires and inventories are among the most frequently used tools of selection. Managers, personnel officers and psychologists acknowledge the critical importance of personal attributes such as emotional stability, achievement motivation and leadership style for success on employees in their jobs.

There are several personality inventories available to be used as guidelines and criteria for personnel selection. Among them is the Big-Five Personality Inventory or the NEO-PI by Costa & McCrae (1992). The big-five measured five dimensions of individual personality as follows:

- 1) Extraversion (the extent to which a person is sociable and outgoing) and covers aspects of human nature reflecting traits such as gregarious, assertive, talkative and active, together with ambition, expressiveness and impetuosity.
- 2) Neuroticism (the extent to which a person is emotionally stable) which covers aspects such as anxiety, anger, worry, insecurity, together with independent and resilience thought.
- 3) Openness to Experience (the extent to which a person is imaginative and flexible with a positive, open-minded response to new experiences) covers curious, imaginative, broad-minded traits as well as 'intelligence'.
- 4) Conscientiousness (the extent to which a person is well-organized, planful and concerned about achieving goal and deadlines) covers aspects such as hard working, persevering, careful, organized, and preferences for rules and procedures or spontaneity and creativity.
- 5) Agreeableness (the extent to which a person is good natured, warm and compassionate with others) covers aspects such as courteous, flexible, co-operative, forgiving, softhearted, tolerant, trusting or cynical.

It is important to understand that none of the personality dimensions are in themselves good or bad, or have good or bad ends to their scales. In fact, they are merely differences, which make some personalities more suitable for certain activities or jobs than others. The combination of factors is a very important consideration.

If the personality profile of the interviewee can be gathered earlier before the interview, the content of the interview could be geared and tailored in accordance with the individual personality. For example, if the interviewee has been found to be neurotic in their personality dimension, then situational questions can be asked to determine how the person will react in a given hypothetical situations. However, the interpretation of the personality profile should only be done by professional psychologist. Misinterpretation of

individual profile might jeopardize the selection process and nullify the effectiveness and validity of the interview.

Introverts, for example, seem suited to hazardous occupations where the onset of danger is insidious, since they have a greater tendency to pay close attention to detail and maintain a high standard of precisions over the long periods (Smith, 1992). In introverts, the mechanisms, which block the passage of messages in some nerves, are weak. Extroverts, on the other hand, have strong blocking mechanisms where smaller proportion of messages is received. It would follow that introverts would be better at detecting the first, tentative indications that all is not well and consequently they would be best in hazardous occupations or, in another word, during disasters and catastrophes.

The ability to withstand 'shocks' may be viewed as the inverse of neuroticism. This can be referred as emotional stability. A stable person is able to cope with distractions and is rarely lethargic and lacking in energy. Interestingly, there is some evidence that stable people tend to have better perceptual abilities, especially night vision (Smith, 1992). Emotional stability comprises of three components: emotional detachment, self-assurance and the absence of tension. During disasters and catastrophes, emotional detachment would be an asset since it implies a resistance to pressure and a calm, mature and resilient approach. Self-assurance and the absence of tension could indicate someone who is resilient and who does not over-react or get disorganized.

Apart from that, the conscientiousness and openness to experience personality dimensions could also be the deciding factors in selecting personnel. In openness to experience dimension, an imaginative person who is preoccupied with his or her own thoughts may be oblivious to, or may shy away from, facing the facts of a difficult situation. In contrast, a tough-minded, practical and well organized, and perhaps conventional person will have the capacity for tolerating routine periods of non-excitement and stressful conditions which are encountered in emergency management personnel. These are reflections of people with high conscientiousness dimension as well.

Dimension of Stress in Disasters and Catastrophes

Studies have found that an increase on symptoms of psychological distress following any disasters or catastrophes could include 'post-event trauma' such as stress, anxiety, helplessness and depression. Significant increase in physical ailments and increase frequency of visits to hospital are also sign of effects on bodily health (McFarlane, 1988). These are experienced both by victims and emergency management personnel.

The dimension of stress includes 'entity likely to suffer'. Three types of entity are worthy of distinction. First, there is damage to the person performing the job and his or her immediate team. Second, there is damage to other people, especially the victim that is to be rescued. Third, the presence of threat. In a search and rescue mission, threat such as the possibility of explosion and collapse of buildings may impose certain effect that leads to stress.

Individual personality dimensions may provide some indicator of the level of stress they can endure in any situation. High neurotic individual, for example, may have less psychological tolerance to stress compared to people with low neurotic level. The consequence of high neurotic level may be in the form of emotional breakdown and the inability to perform the job well. Psychological effects that follow suit could be more severe including visions of death and near-death experiences that may haunt them for a longer period of time (Bell, 1995).

Therefore, interviews should also look into stress factor, asking situational and behavioural questions regarding their response to conditions in stress situations.

Conclusion

Disasters and catastrophes may be predicted or may be not. Whatever the outcomes, emergency management personnel will play a vital role in the search and rescue mission. Personnel with both mental and physical ability are needed. The selection method devised must be in accordance with the demand of the job itself. Therefore, thorough and well-prepared selection techniques are important. By having a well-structured selection interview, the selection criteria may be enhanced and personnel will be screened according to the required specifications.

The responsibility of the interviewer is to plan the interview in advance based upon personal details already submitted by applicant. It should take into account the results of any personality test/profile, if available, to elicit relevant and comprehensive information about the applicants and to interpret this information correctly using cognitive information processing skills and scoring of the interview. Professional and trained interviewers are key elements in this process.

Personality and emotional stability could be identified before the interview. Thus, by having all the personality information of the personnel, will support the interview process. Questions could be geared and tailored towards asking specific questions. The comprehensive structured interview (CSI) is one of the best types of structured interview available in interviewing emergency management personnel. Hypothetical, behavioural and situational questions could be asked and probed in order to determine the best personnel for the job. People with high psychological tolerance could be identified and chosen. It is hoped that the 'post-event trauma' experienced by emergency management will be minimized in order to produce a high-level professional emergency management personnel.

References

Baclay, J. M. (1999) Employee selection: A question of structure. *Personnel Review*, 28, 134-151.

Barling, J., Bluen, S. D. & Fain, R. (1987). Psychological functioning following an acute disaster. *Journal of Applied Psychology*, 72, 683-690.

Bell, J. L. (1995). Traumatic event debriefing: Service delivery designs and the role of social work. *Social Work*, 40, 36-43.

Carson, R. C., Butcher, J. N. & Mineka, S. (1998). *Abnormal Psychology and Modern Life*. New York: Longman.

Costa, P. T. Jr. & McCrae, R. R. (1992). *The NEO Personality Inventory (NEO-PI) and NEO Five-Factor (NEO-FFI) inventory professional manual*. Odessa, Florida: Psychological Assessment Resources.

Eder, R. W., Kacmar, K. M. & Ferris, G. R. (1989). Employment interview research: History and synthesis. In R. W. Eder & Ferris, G. R. (eds), *The Employment Interview: Theory, Research and Practice* (pp. 17-31). Newbury Park, California: Sage Publications.

Hampson, S. E. (1984). Personality traits: In the eye of the beholder or the personality of the perceived. In M. Cook (ed), *Issues in Person Perception* (pp. 28-47). London: Methuen.

Janz, T. (1982). Initial comparisons of patterned behavior description interviews versus unstructured interviews. *Journal of Applied Psychology*, 67, 577-580.

Janz, T. (1989). The patterned behaviour description interview: The best prophet of the future is the past. In R. W. Eder and Ferris, G. W. (eds), *The Employment Interview: Theory, Research and Practice*. Newbury Park, California: Sage Publications.

Janz, T., Hellervik, L. & Gilmore, D. C. (1986). *Behavior Description Interviewing*. Boston: Allyn & Bacon.

Latham, G. P. (1989). The reliability, validity and practicality of the situational interview. In R. W. Eder & G. R. Ferris (eds), *The Employment Interview: Theory, Research and Practice* (pp. 169-182). Newbury Park, California: Sage Publications.

Latham, G. P. & Saari, L. M. (1984). Do people do what they say? Further studies on the situational interview. *Journal of Applied Psychology*, 69, 569-573.

Latham, G. P., Saari, L. M., Pursell, E. D. & Campion, M. A. (1980). The situational interview. *Journal of Applied Psychology*, 65, 569-573.

McFarlane, A. C. (1988). The longitudinal course of posttraumatic morbidity: The range of outcomes and their predictors. *Journal of Nervous and Mental Disorder*, 176, 30-39.

Pursell, E. D., Campion, M. A. & Gaylord, S. R. (1980). Structured interviewing: Avoiding selection problem. *Personnel Journal*, 59, 907-912.

Smith, M. (1992). Selection in high-risk and stressful occupations. In P. Herriot (ed), *Assessment and Selection on Organizations: Methods and Practice for Recruitment and Appraisal* (pp 557-575). West Sussex: John Wiley & Sons.

Smith, M. & George, D. (1994). Selection methods. In C. L. Cooper & I. T. Robertson (eds), *Key Reviews In Managerial Psychology*. Chichester: Wiley.

Solomon, S. D. & Green, B. L. (1992). Mental health effects of natural and human-made disasters. *PTSD Research Quaterly*, 3, 1-7.

Ursano, R. J. (1997). *Role of Psychiatrists in Disaster*. Springfield, Virginia: National Technical Information Service.

Author Biography

Najib A. Marzuki, PhD is an Associate Professor at the School of Social Development, Universiti Utara Malaysia. He obtained his doctorate degree in Psychology from the University of Nottingham, England. His main area of interest includes personnel selection and recruitment, selection interview, training, stress and personnel development.