The Journal of Social Sciences Research



ISSN(e): 2411-9458, ISSN(p): 2413-6670 Vol. 5, Issue. 1, pp: 159-165, 2019

URL: https://arpgweb.com/journal/journal/7
DOI: https://doi.org/10.32861/jssr.51.159.165



Original Research Open Access

Morale, Training, Commitment and Safety of Malaysian Army Infantry Officers during Flood Disaster Response Missions

Rayyan Cheong Tian Ming

Department of Defence Human Resource Management, Faculty of Defence Studies and Management, National Defence University of Malaysia, Kuala Lumpur, Malaysia

Nur Hidayah Roslan

Department of Defence Human Resource Management, Faculty of Defence Studies and Management, National Defence University of Malaysia, Kuala Lumpur, Malaysia

Haslinda Abdullah

Department of Defence Human Resource Management, Faculty of Defence Studies and Management, National Defence University of Malaysia, Kuala Lumpur, Malaysia

Rosmah Mohamed*

Department of Management and Marketing, Faculty of Economics and Management, Universiti Putra Malaysia, Selangor, Malaysia

Abstract

An effective disaster response is crucial to any organizations. When a disaster happens, the response must be fast, coordinated and appropriate so that it will minimize the human and economic cost of disaster. In Malaysia, several states of the Peninsular are frequently affected by flooding during the monsoon season. The military has played a crucial role in disaster management and relief. The Malaysian Army are well trained in terms of combat. However, little is known about their effectiveness in handling disaster operations. The objective of this research is to examine Malaysian Army Infantry Officers' morale, training, safety and commitment to disaster responses in the context of flood disasters in Malaysia. This research found that training, commitment, morale and safety are the critical factors that influence effective disaster responses in the Malaysian Army. This study's methodology is descriptive and exploratory, using qualitative methods. Data collection was carried out through conducting interviews and focus groups with Malaysian Army Infantry Officers located in the Central region, Northern region, Southern region and East Coast who have been involved in flood disaster operations for the past three years. Data collected were transcribed, categorized and grouped into themes. This research found that even without specific training in disaster relief, the Malaysian Army Infantry officers are inspired, positive and ever ready to take up the responsibilities given, and that they execute them wholehearted during disaster responses. In addition, in terms of safety, the Malaysian Army has safety guidelines and protocols to protect its soldiers during disaster missions.

Keywords: Training; Commitment; Morale; Safety; Disaster response; Malaysian army infantry.

@ <u>@</u>

CC BY: Creative Commons Attribution License 4.0

1. Introduction

Since Independence, Malaysia has progressed and developed at an unprecedented rate and has transformed itself from an agrarian to an industrialised nation. Despite moving towards the status of a developed nation, Malaysia is increasingly finding itself exposed to disaster due to the rapid development of unplanned settlements and the uncontrolled construction of buildings. A disaster, as defined by Dorasamy *et al.* (2010) is an incident that occurs suddenly and is complex in nature, resulting in the loss of lives and damage to property as well as affecting the daily activities of the local community. There are two main types of disaster: natural and man-made. Natural disasters are beyond human control and it is difficult to accurately predict when they will occur. Major disasters, especially floods, result in threats to human life and loss of property; they also affect infrastructure, agriculture and the environment. According to a survey conducted by Kunreuther and Linnerooth-Bayer (2003) human and economic losses due to flooding have increased dramatically across the globe. The researcher believes that the most important aspect of effective disaster management is to minimize loss of human life and damage. Based on the Asian Disaster Reduction Center (ADRC) country report, floods are one of the natural disasters that are likely to affect Malaysia. Some major flood disasters that hit Malaysia in recent year are shown in Table 1:

Table-1. Flood disaster that hit Malaysia in recent years

Year	State	Killed	Injured	Total No of People Affected	Damage cost ('000 US\$)
2015	Pahang, Perak ,Sabah, Sarawak			1,421	
2014	Kelantan, Pahang, and Terengganu	17		230,000	284,000.00
2013	Pahang, Terengganu, Johor	4		75,000	
2012	Kelantan, Pahang, and Terengganu	2		14,000	
2011	Johor	5		24,000	
2010	Kedah and Perlis	4			8,480.00
2008	Johor			10,210	21,190.00
2007	Johor	33		158,000	225,000.00
2006	Johor	19		138,000	343,000.00
2005	Kedah and Perlis	17		100,000	66,000.00
2004	Kelantan, Pahang, and Terengganu	13		15,000	
2004	Tsunami	80	767	5,063	14,600.00

Source: ADRC Natural Disaster Data Book 2008-2015, ADRC Country Report 2006 and 2008, Chan (2015)

It is pertinent that in managing disaster, the human resources of the Malaysian Army should be well managed. To achieve an effective disaster response, the Malaysian Army Infantry Officers should have high morale and strong commitment and should be provided with good training, and at the same time, safety must be addressed. The leader of the Malaysian Army should also be present to provide support and encouragement and boost the morale of the personnel managing the disaster response. However, in managing flood disasters, several issues have been identified, such as lack of skills and competencies in, for example, personnel safety, questionable commitment and low morale. As a consequence of lack of proper training, low morale, lack of commitment and poor safety in disaster management will result in severe negative economic and social consequences for the populations they affect, often including physical injury, loss of life, property damage and loss, physical and emotional hardship, destruction of physical infrastructure, and failure of administrative and operational systems. Therefore, due to these serious consequences, this research is timely. Its objective is to examine Malaysian Army Infantry Officers' morale, training, safety and commitment to disaster response management. Through achieving these objectives, this research is significant in the creation of a suitably designed and effective disaster response, which is crucial to minimize damage and loss of life, and also better human resource management in the context of disaster relief by the Malaysian Army.

2. Literature Review

Maslow's hierarchy of needs is a model proposed by Abraham Maslow in his seminal work *A Theory of Human Motivation* (1943). His theories focused on describing the stages of growth in human psychology. Maslow's hierarchy of needs is often displayed in the shape of pyramid, with the largest and most fundamental level of needs at the bottom, and the need for self-actualization at the top (Steere, 1988). To achieve an effective disaster response, Maslow's theory insists that deficiency in physiological needs, safety, love and esteem should be met before reaching the secondary or higher-level needs of self-actualization (Goble, 1970).

According to Maslow's theory of needs, the fundamental level needs take priority and people want to satisfy them before addressing upper level needs (Daft, 2011). However, several criticisms have been levelled at Maslow's hierarchy. Various researchers have found that there is little evidence for the ranking of needs (Wahba and Bridwell, 1976) and Max-Neef (1991) stated that there is no hierarchical order for fundamental human needs. This can be demonstrated in the event of a disaster: people may prioritise safety or social needs even before physiological needs. Also, the priority of needs will differ depending on the situation. Further, some people may deprive lower level needs to achieve self-actualization needs. Some people may sacrifice their own safety in order to secure someone else's safety (Daft, 2011).

Floods are common natural disasters that occur in most parts of the world (Khan, 2014). Flooding can be explained as any high water flow that dominates the natural or artificial bank in any part of the river system (Diya *et al.*, 2014). Arguably, floods are the most constant threat and bring the greatest damage annually in Malaysia (Chan, 2015). Military participation in humanitarian aid operations in the context of conflict or natural disaster is not a new phenomenon (Heaslip and Barber, 2014). The military plays an important role in providing support during disasters due to their strength in logistical and organisational structure (Apte, 2009; Barber, 2011).

2.1. Disaster Response

Disaster management involves four stages, namely mitigation, preparedness, response and recovery. According to Coppola (2011); disaster response is the most complicated when it is conducted during times of very great stress, in a highly time-constrained environment and with restricted information. A slight delay will cause tragedy and destruction. Disaster response is centred upon information and coordination. The elements of disaster response are

the emergency response, pre-disaster recognition actions, –post-disaster recognition, volunteer management and coordination (Coppola, 2011). By referring to the British Government's Emergency Response and Recovery guidance, disaster response refers to decisions and actions taken in accordance with the strategic, tactical and operational objectives defined by emergency responders. At a high level, these will be to protect life, contain and mitigate the impacts of the emergency and create the conditions for a return to normality (British Cabinet Office, 2013).

During disaster response operations, first responders are often confronted with unfamiliar and often hostile work environments such as huge and distributed areas, unpredictable and dynamic work demands and work under high time pressure and stressful conditions (Son *et al.*, 2008). There is often failure to develop a depth of understanding of the situation that would allow the responders to make absolute decisions and respond in a correct manner (Son and Pena-Mora, 2006).

2.2. Training

The importance of training is recognised by everyone. Training is created to provide human beings with the knowledge and skills needed for their present job (Fitzgerald, 1992) because few people come to the job with the required knowledge, skills, competencies and experience to perform their assigned role. According to Heide (2006); the problems that are experienced during the planning stage as well as the response stage are recurring issues in disaster after disaster. This finding is in line with the research carried out to investigate the extent to which training affect disaster response in Malaysian Infantry Officers.

Training is a major pillar in disaster response (Keeney, 2004; Lai *et al.*, 2009; McMahon, 2007). This is because at the scene of the disaster, the responders will be the first to help and carry out search and rescue operations (Thomas, 2006); (Lai *et al.*, 2009). Training is a critical factor in disaster response: this is because well-trained disaster response personnel can save more lives (Thomas, 2006); (Lai *et al.*, 2009). However, in contrast, training has been criticised as faddish or too expensive (Kraiger *et al.*, 2005; Salas and Cannon-Bowers, 2000) and there is an increasing scepticism about the practice and theoretical underpinning of linking training with organisations' performance (Alliger *et al.*, 1997; Wright and Geroy, 2001).

2.3. Morale

Dealing with disaster is like fighting a war. Good morale is vital in disaster response. Morale is defined as the total satisfaction that a person derives from his job, the prevailing atmosphere and the factors that appeal to his individual propensities (Vasantham, 2014). In every successful war, soldiers with high morale represent the key element in winning the war, as stated by General (1948). Without well-motivated and dedicated soldiers, the most sophisticated weapon system is useless. This concurs with General George C. Marshall, who states that even if the necessary equipment is provided for a war, but without soldier morale, the war effort may not be successful (Fitton, 1990).

The key element of a soldier's morale is his attitude to the army, himself, his companions, and his leader. Another key element of morale is defined as a unit's *esprit de corps*. This is a reflection of the collective morale of a unit's soldiers and is a natural progression built on the foundations of morale and discipline. *Esprit de corps* is the "relating of needs, feelings and attitudes of a unit's men to the accomplishment of the mission, [which] fosters faith, loyalty, pride, confidence, unity and even a feeling of invincibility—a feeling of oneness". While all of the above have been discussed as elements of *esprit de corps*, they are also, individually and collectively, directly related to morale (Australian Army, 1993).

Baynes (1988) stated that morale is a state or quality of mind, involving courage and determination, and it is seen as an individual's readiness to accept his fate willingly even to the point of death. Cronin (2003) defines group morale as "the mental fitness and motivation of the group and its individuals".

2.4. Commitment

Commitment can be defined as a means by which individuals shape their personal identity and self-esteem (Anderson, 1993). The importance of commitment in work was initially recognized and conceptualized by sociologists, notably Selznick (1957) and Etzioni (1975). Selznick argued that commitment is fostered by values of service and that the task of leadership is to give shape to these values. Etzioni somewhat similarly argued that high levels of commitment are only possible when individuals and organizations have an altruistic mission, as in the case of religious, educational or healthcare institutions. There has been substantial review of the organizational commitment literature, from the approach proposed by Becker (1960) through Meyer and Allen (1997) to Somers (2009). Employee commitment still remains one of the most intriguing and challenging concepts in the fields of management, organizational behaviour and Human Resource Management (Cohen, 2003; Cooper-Hakim and Viswesvaran, 2005). Organizational commitment is a core predictor of employees' attitude to the organization and is a strong indicator of turnover behaviour, withdrawal tendency and organizational citizenship behaviour (Mathieu and Zajac, 1990; Morrow, 1993).

2.5. Safety

Good safety practice is vital in handling disasters. Safety has often been treated as a regulatory requirement rather than a flexible process adapted to a unit's unique needs. Throughout the world, with few exceptions, armies represent professional, highly structured, hierarchal organizations characterized by high levels of discipline and

motivation. By virtue of their function and training, soldiers are trained to operate in life-threatening situations while leading others to achieve common and individual goals. Soldiers learn to operate in a risky environment. They learn as much as possible about the environment, and based on their knowledge, they take calculated risks; they minimize risk-taking to ensure safety. The safety culture of an organization has an impact on its members' behaviour at work and is usually reflected in the contingency between reward systems and safety performance (Weigman *et al.*, 2002).

According to Beer (1980) organizations are social structures and processes designed to achieve certain purposes while fulfilling the needs of their members. Safety within the organization will improve when the organization bases its program on the assumption that safety is enhanced when the needs, values, and expectations of the employees are met. The Army has earned the reputation of being a highly hazardous profession because of the nature of its work, especially when soldiers operate deadly weapon systems or conduct operations in unfavourable conditions, regardless of terrain, weather and conditions. However, safety is a non-negotiable attribute in the Army. It is the cornerstone of any military operation and is expected by soldiers, governments, and the public in general. Military commanders' primary goal is to safeguard, proactively, the safety of military operations during peacetime or conflict (Syed Aziz, 2012).

3. Method

This research is exploratory and descriptive in design (Sekaran and Bougie, 2013). According to Sekaran and Bougie (2013) a descriptive study is designed to describe the characteristics of some problem situation, while exploratory research is used when the topic is not well known or when no information is available on the problem or research question. As a result, it is necessary to conduct inclusive interviews with many people to get a handle on the situation and understand the phenomena. The research method of this research is limited to qualitative design using interviews and focus group discussions. The scope of this research is focused on the peninsular of Malaysia, which is divided into four regions: the east coast, northern region, southern region, and central region. Each focus group consisted of ten to twelve participants with a moderator leading the discussions. The sessions were conducted to obtain the infantry personnel's experience and effort during flood disaster response missions. In addition, interviews were organized with the higher management officers who lead each region during a flood disaster response. The aim of the interviews was to gain additional and precise information on their experience during flood disasters.

According to Sekaran and Bougie (2013) the population refers to the entire group, events, or things of interest that the researcher wishes to look into. A purposive sampling technique was used to identify Malaysian Infantry officers who had experience of flood disaster responses. The target group for this research was Malaysian Army Infantry Officers located in the Peninsular of Malaysia. Out of the total population of 700 officers, the sample size for the focus group and interview respondents comprised 50 Malaysian Army Infantry Officers. The Malaysian Infantry includes three regiments, namely the Royal Malay Regiment, the Royal Ranger Regiment and the Border Regiment.

Generally, a reliability test is conducted to verify that the instrument used in the study has stability and consistency and helps to assess the goodness of the measure (Sekaran and Bougie, 2013); (Bryman and Bell, 2007). The concept of validity is defined by various terms in qualitative studies (Golafshani, 2004). This is not a single, fixed or universal concept, but "rather a contingent construct, inescapably grounded in the processes and intensions of particular research methodologies and projects" (Winter, 2000). Triangulation was used in this research: after every interview and focus group discussion, a summary was made and presented to the participants for confirmation.

Research ethics were emphasised in this research, which followed ethical principles, including respecting the rights of respondents, gaining informed consent, explaining the objective of the research to the respondents, assuring confidentiality and anonymity of respondents and gaining respondents' participation without coercion. All the information gathered by the respondents was treated with confidentiality and anonymity. Only generalized findings were released for report writing. Tape recorders were used with permission from the respondents and the data were interpreted and analysed using open, axial and selective coding techniques. The data were subsequently analysed and grouped into themes focusing on major issues pertaining to effective disaster response.

4. Findings

4.1. Morale

The finding of the research indicates that the soldiers are inspired to achieve the goal of the organisation. This is seen through their ready attitude to take up the responsibilities given and to take on new responsibilities. In accordance to the infantry officers' primary responsibilities, supporting disaster responses is a secondary task and is part of their social responsibilities in assisting the community during disaster. However, although disaster relief is not one of their primary responsibilities, the infantry officers still try their utmost to complete the tasks assigned wholeheartedly and with full commitment. It is no surprise that they have this inspiration where the organisation takes care of the soldiers' welfare and that of their family members. This welfare and support has indeed influenced the level of the infantry officers' morale. In addition, the superiors of the Malaysian Army give moral support as well as logistic support during disaster response missions. The Malaysian Army Infantry Officers also have the motivation to work with other agencies as well as with the community. Generally, the Malaysian Army officers have high morale and are positive in any situation during disaster responses.

4.2. Training

The findings of this research show that training specifically for disasters is not conducted by the Malaysian Army and its Infantry officers; however, they are given military training, which can be adapted not only in war but also for disaster responses. Proper disaster training would help them to gain more knowledge, skills and competencies. However, being in the Infantry and being exposed to survival training and other military training, most of the skills required to assist in disaster responses have been adapted from these training courses. In addition, they are always deployed in crises and other disaster missions, and these experiences provide them with the skills needed during flood disaster responses. These missions have indeed provided good experiences and understanding of disaster situations and enabled them to perform more efficiently during disaster response missions.

As well as being deployed for missions, the Infantry officers undergo regular Military and Disaster Exercises at both a Regional and an International level. These exercises are conducted with other countries' armed forces, including the Indonesian Army (MALINDO) and the Royal Brunei Armed Forces (MALBRU). Such bilateral training in disaster relief is necessary for the Malaysian Army, which is the backbone of the country and is always the first to be deployed into the scene of disasters, even though MKN 20 states that the Malaysian Armed Forces play only a supporting role in the disaster response.

4.3. Commitment

The findings of this research demonstrate that soldiers are committed in implementing their role in performing disaster responses. They are committed to fulfilling the tasks assigned to them. The soldiers feel that they play an important role in protecting their country from all kinds of disaster, and they try their best to do whatever they can to reduce deaths and damage during disaster response missions. For example, when a disaster occurred in Kelantan, the soldiers were still committed to being deployed even though their own homes were submerged and their families were flood victims too. However, they trusted that their colleagues at the individually assigned areas where their families were located could save their families while they were fully committed to performing their duty in their own assigned areas. The Malaysian Army Infantry officers are loyal to their organisation and their country, and are available and ready to work and collaborate with other agencies such as the Fire Department, the Police, the Department of Civil Defence and NGOs such as the Red Cross and Mercy during disasters. This commitment is clearly seen because being in the military has trained them to cooperate not only with the community but with all agencies and NGOs. Generally, the Malaysian Army Infantry officers are committed to handling any disaster response responsibilities.

4.4. Safety

Safety of employees is of prime importance in any workplace, irrespective of whether it is a utility, manufacturing, construction or military organization. The importance of safety at work cannot be overemphasised. In this research, it is mostly felt in the army when soldiers are exposed to risk in disaster operations: for example, in floods, they risk drowning. Compliance with safety procedures during disasters not only ensures the safety the soldiers but also of their families. In this context, Malaysian Army has a Standard of Operation (S.O.P) protocol and outline for soldiers who are involved in disaster operations. Moreover, the senior officers emphasise the importance of soldiers' safety during operations, not only in war but also in disaster response. The Malaysian Army Infantry officers who are involved in disaster response missions are aware of and familiar with the S.O.P. and the disaster protocol.

5. Conclusion

Malaysian Army Infantry officers face multiple challenges in managing disaster responses. Although they do not receive proper training in disasters, Malaysian Army officers who are involved in flood disaster operations are committed and ever ready to take up their responsibilities in providing aid to disaster victims and perform their duties wholeheartedly despite the challenges that they face during disasters. Consequently, they have the inspiration to achieve the organisation's goals during disaster response operations. The Malaysian Army emphasises good safety protocols during disaster relief missions. However, the lack of correct and suitable training can slow down or impede the response and rescue time during disaster responses. This suggests that the Malaysian Army should have specific disaster training and more joint exercises and simulations with other agencies, not only on a regional but also on an international scale.

A limitation of this research is that it focuses only on qualitative research and on the Malaysian Army, involving Malaysian Army Officers. It is recommended that a quantitative study be conducted in future and also that future research should include all personnel in the Military, including other ranks. Furthermore, future research should involve all parties and NGOs that are involved, direct or indirectly, in disaster response missions.

Acknowledgement

This research was funded by the Ministry of Higher Education (Malaysian Government) and National Defence University Malaysia (NRGS/2013/UPNM/PK/P2/).

References

- Alliger, G. M., Tannenbaum, S. I., Bennett, W., Traver, H. and Shortland, A. (1997). A meta-analysis on the relations among training criteria. *Personnel Psychology*, 50(2): 341-58.
- Anderson, E. (1993). Value in ethics and economics. Harvard University Press: London.
- Apte, A. (2009). Humanitarian logistics: a new field of research and action. Foundations and trends in technology. *Information and Operations Management*, 3(1): 475-93.
- Australian Army (1993). Leadership Theory and Practice. Australian Army: Canberra.
- Barber, E. (2011). Military involvement in humanitarian supply chains. In Kovacs, G., Spens, K. M. Relief Supply Chain Management for Disaster: Humanitarian Aid and Emergency Logistics. IGI Global Hershey, PA.
- Baynes, J. (1988). Morale: A Study of Men and Courage. Avery Publishing Group: London.
- Becker, H. S. (1960). Notes on the Concept of Commitment. The American Journal of Sociology, 66(1): 32-40.
- Beer, M. (1980). Organization Change and Development: A Systems View. Goodyear: Santa Monica, CA.
- British Cabinet Office (2013). *Emergency Response and Recovery. Non Statutory Guidance Accompanying the Civil Contingencies Act.* Britain HM Government: London.
- Bryman, A. and Bell, E. (2007). Business research methods. Oxford University Press: USA.
- Chan, N. W. (2015). Impact of disasters and disaster risk management in malaysia: The case of floods. In aldrich d., oum, s., sawada, y. Resilience and recovery in asian disasters. Risk, governance and society, 18. Springer: Tokyo.
- Cohen, A. (2003). *Multiple Commitments in the Workplace: An Integrative Approach*. Lawrence Erlbaum Associates: Mahwah: New Jersey.
- Cooper-Hakim, A. and Viswesvaran, C. (2005). The Construct of Work Commitment: Testing An Integrative Framework. *Psychological Bulletin*, 131(2): 241–59.
- Coppola, D. R. (2011). Introduction to International Disaster Management 2nd Ed. Butterworth-Heinemann:

 Boston
- Cronin, C. (2003). Military Psychology: An Introduction 2nd Ed. Pearson Education: New York.
- Daft, R. D. (2011). Principles of Management. South Western Cengage Learning, India: Mason Ohio.
- Diya, S. G., Muhd, B., Toriman, M. E. and Abdullahi, M. G. (2014). Floods in Malaysia Historical Reviews, Causes, Effects and Mitigations Approach. *International Journal of Interdisciplinary Research and Innovations*, 2(4): 59-65.
- Dorasamy, M., Kaliannan, M. and Raman, M., 2010. "Disaster Preparedness in Malaysia: An Exploratory Study." In *Proceedings of 4th WSEAS Marketing and Management Conference*.
- Etzioni, A. (1975). Comparative Analysis of Complex Organizations, Revised and Enlarged. Free Press: New York.
- Fitton, R. A., 1990. "Leadership: Quotations from the Military Tradition." In Westview Press. San Francisco, CA.
- Fitzgerald, W. (1992). Training versus development. Training and Development, 46(5): 81-84.
- General, D. D. E. (1948). Crusade in Europe. Heinemann Press: London.
- Goble, F. G. (1970). The Third Force. Grossman: New York.
- Golafshani, N. (2004). Understanding Reliability and Validity in Qualitative Research. The Qualitative Report, 8(4):
- Heaslip, G. and Barber, E. (2014). Using the military in disaster relief: systemising challenges and opportunities. Journal of Humanitarian Logistics and Supply Chain Management, 4(1): 60-81.
- Heide, A. D. (2006). The Importance of Evidence-Based Disaster Planning. *Annals of Emergency Medicine*, 4(1): 34-49.
- Keeney, G. B. (2004). Disaster preparedness: What do we do now. *Journal of Midwifery and Women's Health*, 49(4): 2-6.
- Khan, M. M. A. (2014). Flood impact assessment in Kota Bharu, Malaysia: A statistical analysis. *World Applied Sciences Journal*, 4(32): 626-34.
- Kraiger, K., McLinden, D. and Casper, W. J. (2005). Collaborative planning for training impact. *Human Resource Management*, 43(4): 337-51.
- Kunreuther, H. C. and Linnerooth-Bayer, J. (2003). The financial management of catastrophic flood risks in emerging-economy countries. *Risk Analysis*, 23(3): 627-39.
- Lai, A. Y., He, J. A., Tan, T. B. and Phua, K. H. (2009). A proposed ASEAN disaster response, training and logistics centre enhancing regional governance in disaster management. *Journal of Transition Studies Review*, 16(2): 299-315.
- Mathieu, J. E. and Zajac, D. M. (1990). A Review and Meta-Analysis of the Antecedents, Correlates and Consequences of Organizational Commitment. *Psychological Bulletin*, 108(2): 171–94.
- Max-Neef, M. A. (1991). *Human scale development: conception, application and further reflections.* The Apex Press: New York.
- McMahon, M. M. (2007). Disasters and Poverty. Disaster Management and Response, 5(4): 95-97.
- Meyer, P. J. and Allen, J. N. (1997). *Commitment in the Workplace: Theory, Research, and Application*. Sage Publications: Thousand Oaks, CA.
- Morrow, P. C. (1993). The Theory and Measurement of Work Commitment. CT: Jai Press Inc: Greenwich.
- Salas, E. and Cannon-Bowers, J. A. (2000). The anatomy of team training. In S. Tobias & D. Fletcher (2000). Training and Retraining: A Handbook for Business, Industry, Government and the Military\. Farmington Hills, MI: Macmillan Library Reference.
- Sekaran, U. and Bougie, R. (2013). *Research Methods for Business: A Skill-Building Approach 6th Ed.* John Wiley & Sons: West Sussex: United Kingdom.

- Selznick, P. (1957). Leadership in Administration: A sociological Interpretation. Harper & Row: New York.
- Somers, M. J. (2009). The Combined Influence of Affective, Continuance and Normative Commitment on Employee Withdraw. *Journal of Vocational Behavior*, 74(1): 75-81.
- Son, J. and Pena-Mora, F., 2006. "Improvement of collaboration among first responders including civil engineers during disaster response in urban areas." In *Conference paper in the Joint International Conference on Computing and Decision Making in Civil and Building Engineering, ICCCB-XE, Montreal.* Canada. pp. 14-16.
- Son, J., Aziz, Z. and Pena-Mora, F. (2008). Supporting Disaster Response and Recovery through Improved Situation Awareness. *Structural Survey*, 26(5): 411-25.
- Steere, B. F., 1988. "Becoming an effective classroom manager: A resource for teachers." In *State University of New York Press*. Albany.
- Syed Aziz, S. H. (2012). Factor influencing safety behaviour in Malaysia Army. *Master Thesis Universiti Utara Malaysia*.:
- Thomas, A. (2006). The changing tide of aid provision. Georgetown Journal of International Affairs, 7(2): 83-89.
- Vasantham, S. T. (2014). Employee Morale and Employee Retention. *International Journal of Management*, 2(11): 1-2.
- Wahba, A. and Bridwell, L. (1976). Maslow Reconsidered: A Review of Research on the Need Hierarchy Theory. *Organizational Behavior and Human Performance*, 15: 212-40.
- Weigman, D. A., Zang, H., Von, T. T., Sharma, G. and Mitchell, A. (2002). *Safety Culture: A Review*. Aviation Research Lab: Illinois.
- Winter, G. (2000). A comparative discussion of the notion of validity in qualitative and quantitative research. *The Qualitative Report*, 4(3/4): 1-4.
- Wright, P. C. and Geroy, G. D. (2001). Changing the Mindset. *International Journal of Human Resource Management*, 12(4): 586-600.