

Humanitarian Competencies for Disaster Management: A Conceptual Framework

¹ Dr.D.Srinivasa Rao, Professor ,

² Mrs.S. Jyothi Kannipamula, Research Scholar,

Koneru Lakshmaiah Education Foundation, Vaddeswaram.

Abstract

In recent years natural disasters are striking with increasing frequency and intensity which mandated Governments across the globe to focus on disaster management. With a 7,516 kms long coastline India is prone to floods and cyclones; 68% of the agricultural land is prone to droughts while 12% is prone to river erosion. When a disaster strikes the response is different depending on the nature and intensity of disaster. Effectiveness of humanitarian assistance often depends on the effectiveness of the resources utilized such as predictive logic, relief partners, logistics technology and relief personnel.

Analysis of the most recent yet more vulnerable disasters have pointed out that the relief workers often created a difference. Academic research has however focussed more on the decision making technologies and all other critical points of the relief supply chain and the behavioural issues are always laid back.. Lack of appropriate access to standardized models to train the relief workers has created a need to develop a competency model which can further be validated with the relief organizations to create a

standard. The current study aims to develop and test an operational model that proposes a relationship between the competencies of the emergency relief workers, their job performance and job satisfaction through empirical analysis of primary data gathered from agencies involved in disaster management. The study is expected to come up with recommendations through the key findings of the gaps in existing competencies of relief workers to be able to improve their efficiency in their relief operations.

Key Words

Humanitarian Competency Disaster Management Capacity Building Competency Mapping Conceptual Frame work Content Analysis Financial Efficiency Relief Worker Competency Clusters

1. Introduction

Ever since the Indian Ocean Tsunami in 2005, disaster management research has increased its pace and multiple areas like logistics, supply chain of resources, preventive preparation etc. are analysed in depth. But research related to human resources involved in the relief operations are yet to be done. The increasing intensity of the disasters today have

involved organizations, sometimes, across borders in the relief operations. Irrespective of the size of the disaster, it is the relief worker who alters the 'tours of duty' according to the nature of the disaster site and provides relief to the vulnerable.

Recent studies in this area points to the need for a competency-based capacity building initiative as it is found that majority of the relief workers who participated in disaster relief operations need professional training and few of them had access to such training programs and those who had access were trained differently as per the knowledge and convenience of the trainers. As of now there is no competency model specific to relief workers engaged in disaster management which is a cause of concern.

Hence, it is imperative to develop a standard set of skills and abilities required for the relief worker so that the training can be standardized. To address challenges, such as these, competency researchers have defined a comprehensive competency mapping and modelling process so as to create a standard of expectations for a specific job. The current study attempts to define and execute a competency mapping process for the emergency relief workers who have to adapt according to the nature and complexity of the disasters yet perform to the best of their skills

2. Review of Literature

The seminal work of McClelland (1973) in the area of competency has been frequently researched and accepted as the 'underlying characteristic of an individual that determines

the extent of performance on a given job or task' (Boyatzis, 1982; Quinn et.al, 1990; Spencer and Spencer,1993; Hoffmann, 1999; Cardy, R.L & Selvarajan, T.T;2006

Competency based capacity building initiatives are supported by McCall &Salama (1999), Chang (2005), Kovács &Tatham (2010), Kovács et. al (2012)). The study conducted by Thomas & Mizushima (2005) felt the need for professional training to enhance competencies for disaster management professionals.

Comprehensive competency mapping and modelling process to create a standard of expectations for a specific job was proposed by (Draganidis & Mentzas, 2006; Naqvi, 2009; Uddin et. Al. 2012).

Relief Work is unique and as per the irregular demand and unusual challenges and is observed that it frequently exceeds the existing capabilities (Beamon & Kotleba, 2006). A disaster of any kind attracts huge donations of money, goods, groceries etc. But the major requirement of personnel sort and distribute these donations is the real requirement (Majewski et. al, 2010). Jahre & Heigh (2008) highlight the poor quality and competencies of personnel in emergency relief though the numbers have increased at a rate of 77% between 1997 to 2005 (Borton, 2009). According to (Cottrill, 2013) in high risk environments, decisions are made not only through facts and figures but also using the much 'fuzzier' influence of emotions and attitudes.

Cozzolina(2012) opines that even though the corporate logistics organizations form one of the actors in emergency relief, their models cannot be used because their primary focus is on saving costs not human lives and they operate more in a controlled communication networks. The grounded theoretical research of Fan et. al (2015) listed the critical decision points in the early hours of disaster relief and categorized the resources into structural and infrastructural

The disaster profile of India made the Indian Planning Commission to focus on the pre disaster preparedness along with response and relief phases during the 10th Five Year Plan(2002). The Planning Commission called for 'developing capabilities at all levels for emergency and disaster prevention and management and allocated Rs.20,000 crores for disaster management(2002). Indian Government enacted the Disaster Management Act in the year 2005 to plan, organize, coordinate the implementation of measures to prevent, mitigate the natural disasters. Relief workers are one of the key component that determines the efficiency of relief operations(Diwan,2005).

India, because of its geographic location is prone to natural disasters such as earthquakes, cyclones, floods and drought. Every year hundreds of deaths and loss of property is reported due to these disasters. Government of India is focussing on pre disaster preparedness along with the response and relief operations. Effectiveness of disaster management often depends on the effectiveness of resource utilised such as predictive logic, relief partners, logistics

technology and relief personnel. Studies of most recent disasters have highlighted that relief workers often made a difference but most of them are lacking in competencies that are specific to disaster management.

3. Research Gap

Ever since the seminal work of McClelland (1973), the area of competency has been frequently researched and accepted as the 'underlying characteristic of an individual that determines the extent of performance on a given job or task' (Boyatzis, 1982; Quinn et.al, 1990; Spencer and Spencer,1993; Hoffmann, 1999; Cardy, R.L & Selvarajan, T.T;2006). Good number of organizations also transformed themselves into competency-based organizations acknowledging the fact about the importance of competent workforce. Increase number of people centric service organizations only supported this further. However, extremely people oriented humanitarian organizations whose performance often depends on the first responders on the field are yet to explore the competency research. Ever since the Indian Ocean Tsunami in 2005, the disaster management research has increased its pace and multiple areas like logistics, supply chain of resources, preventive preparation etc. are analysed in depth. But the research related to human resources involved in the relief operations are yet to be studied. Lack of appropriate access to standardized models to train the relief workers has created a need to develop a competency model which can further be validated with the relief organizations to create a standard. Hence,

it is imperative to develop a standard set of skills and abilities of the relief worker so that their training can be standardized. The present study aims to fill this gap.

The study proposes mixed methods research to develop a competency model specific to relief workers. An extensive literature review is proposed to bring together the competencies identified by earlier researchers for emergency relief workers. The literature shall be collected through books, scholarly journals and research data bases like ProQuest, Emerald Insight etc.

To identify the differences in the competencies identified from the literature and the competencies required by the organisations involved in disaster management in India content analysis of job advertisements of these organisations on different e-recruitment sites shall be collected. Independent coders shall be employed to identify the competencies from the job advertisements. The reliability of the content analysis is validated by Krippendorff's alpha.

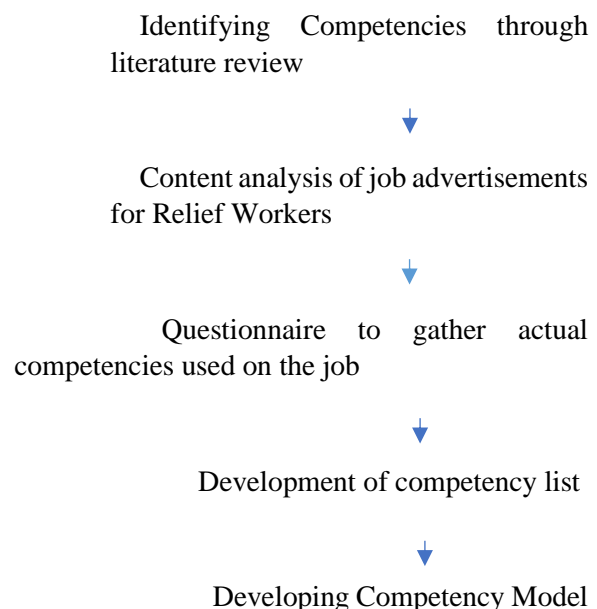
The competencies identified from review of literature and content analysis of the job advertisement are then grouped based on the similarity of the ability of the individual that are defined by the competencies.

To understand which amongst the identified competency clusters are preferred by the relief workers a behavioural questionnaire shall be developed using Likert's scale. An expected behavioural indicator shall be

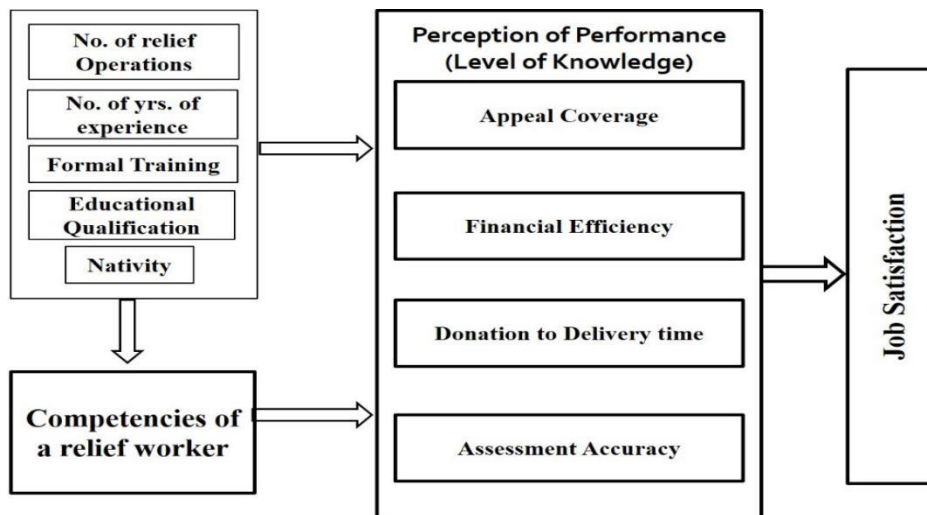
developed for each competency to fit into the scale of their frequency of usage during the relief operations shall be captured.

A stratified random sample of 600 relief personnel from NDRF, CRPF and Special Police shall be considered for administering the questionnaire. The test-retest method shall be used to evaluate the reliability of the data collected through research scale. Friedman's non parametric ANOVA shall be used to understand which are the most preferred competencies by the relief workers. The data collected shall be analysed using the open source software R. After the analysis of data the most preferred competencies of the relief workers shall be identified leading to the development of competency list.

4. Research Methodology



5. Theoretical Frame-Work for the Study



competency clusters which forms the solid base on top of which the ground level opinions were considered. This approach definitely deviates from the existing paradigms on competency. By doing so it is hoped

6. Research Gaps Expected to Filled By the Study

The present study aims to develop the key competencies required by the emergency relief personnel who play a crucial role in preventing deaths and loss of property during the natural disasters in India. As of now there is no competency model specific to relief personnel which is a cause of concern. In this context mixed methods research is proposed. This method is innovative in that it takes into account both qualitative and quantitative data which is suitable for understanding the complexities of competencies required for emergency relief workers. Using both theory and practice the present research want to develop the competency model for relief personal enabling them to perform better in disaster management.

7. Expected Outcomes from the Study

The proposed study will bring out the preferred competencies specific to disaster management involving primary respondents which is not done in earlier studies. Also, both literature review and content analysis of job advertisements specific to relief operations were utilised to build the

that suitable training programmes can be developed for relief workers which can make a difference in the success of emergency relief operations. Indian Government's policy on disaster management (2005) clearly focuses on developing competencies of emergency personal but no specific list of competencies are mentioned. The present study will pave the way for recognising those required competencies.

The present study aims at compiling an exhaustive list of competencies required for emergency relief workers using existing theoretical models and through content analysis of job advertisements for relief personnel. The compiled list of competencies is cross verified through the opinions of those who actually participate in relief works. Further the study explores the relationship between the competencies and , performance indicators of the relief workers and their job satisfaction. In this process research papers are expected, taking into account the various issues involved. The study can also serve as a background report for identifying the specific competencies which play an active role in improving the performance of

the relief operations in India. Primary data generated through this study is expected to generate some insights which may trigger new studies that throw new light in competencies of relief workers. A data base on competencies for relief workers may likely to emerge.

8. Policy Implications of the Study

Disaster management is an important concern for Indian Government as India is suffering a lot both in terms of loss of human lives and property every year. Indian Planning Commission decide to focus on the pre disaster preparedness along with response and relief phases during the 10th Five Year Plan(2002). The Planning Commission called for 'developing capabilities at all levels for emergency and disaster prevention and management and allocated Rs.20,000 crores for disaster management(2002). Indian Government enacted the Disaster Management Act in the year 2005 to plan, organize, coordinate the implementation of measures to prevent, mitigate the natural disasters. Well trained relief workers play a crucial role in disaster management.

Academic research has however focussed more on the decision making technologies and all other critical points of the relief supply chain and the behavioural issues are always laid back. The current study aims at bridging this gap. It is supposed to identify those competencies which play a significant role in the success of relief operations and their linkage to performance indicators leading to job satisfaction of relief workers. Identifying and quantifying these

linkages are crucial for creating a standard model of relief operations. Once a standard model is created, policies can be designed for making the model to perform on the ground. Thus, the present study is a humble effort in helping the government to formulate appropriate policies aimed at improving the effectiveness of humanitarian assistance in disaster management through agencies like NDRF, CRPF and Special Police.

References

1. McClelland, D. C. (1973) 'Testing for Competency rather than for Intelligence' 28 (1), 1-14.
2. Boyatzis, R. (1982). *The Competent Manager*. New York: John Wiley.
3. Quinn, E. R, Faerman, R. S., Thompson, P. M., & McGrath, R. M. (1990). *Becoming a master manager: A competency framework*. New York: John Wiles & Sons.
4. Spencer, L., & Spencer, S. (1993). *Competence at work: Models for superior performance*. New York: John Wiley and Sons.
5. Hoffman T. (1999). The Meaning of Competency. *Journal of European Industrial Training*, 23(6): 25-286.
6. Cardy, R. L., & Selvarajan, T. T. (2006). Competencies: Alternative frameworks for competitive advantage. *Business Horizons*, 49(3), 235-245.
7. McCall, M., & Salama, P. (1999). Selection, training, and support of relief workers: an occupational health issue. *British Medical Journal*, 318(7176), 113-116.
8. Chang, W. W. (2005). Expatriate training in international nongovernmental organizations: A model for research. *Human Resource Development Review*, 4(4), 440-461.
9. Kovács, G., & Tatham, P. (2010, January). What is special about a

- humanitarian logistician? A survey of logistic skills and performance. In Supply Chain Forum: An International Journal (Vol. 11, No. 3, pp. 32-41). Taylor & Francis.
10. Kovács, G., Tatham, P., & Larson, P. D. (2012). What skills are needed to be a humanitarian logistician?. *Journal of Business Logistics*, 33(3), 245-258
 11. Thomas, A. And Mizushima, M. (2005), "Logistics Training: Necessity Or Luxury?", *Forced Migration Review*, Volume 22.60-61
 12. Martinez, A. J. P., Hasija, S.; Van Wassenhove, L. (2010). An Operational mechanism design for fleet management coordination in humanitarian operations. Working Paper Series, INSEAD
 13. Majewski, B., Navangul, K. A., & Heigh, I. (2010, September). A peek into the future of humanitarian logistics: forewarned is forearmed. In Supply Chain Forum: An International Journal (Vol. 11, No. 3, pp. 4-19). KEDGE Business School.
 14. Talewar, RA; Mahamuda, S; Rao, AS; Joshi, CP; Moharil, SV, Sensitization of Nd³⁺ by 4f-5d transition of Ce³⁺ in Ba₂Y(BO₃)₂Cl phosphor for the prospective NIR applications, *JOURNAL OF LUMINESCENCE*, oct-2018, 10.1016/j.jlumin.2018.05.035
 15. Swain, G, Very High Capacity Image Steganography Technique Using Quotient Value Differencing and LSB Substitution, *ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING*, Apr-2019, 10.1007/s13369-018-3372-2
 16. Dutta, Pratip Kumar; Sen, Subhabrata, (Benz)Imidazole-Directed Cobalt(III)-Catalyzed C-H Activation of Arenes: A Facile Strategy to Access Polyheteroarenes by Oxidative Annulation, *EUROPEAN JOURNAL OF ORGANIC CHEMISTRY*, Nov-2018, vol-40,5512-5519, 10.1002/ejoc.201801056
 17. Nagasantoshi, P.; Reddy, G. V. Ramana; Reddy, M. Gnaneswara; Padma, P., Heat and Mass Transfer of Non-Newtonian Nanofluid Flow Over a Stretching Sheet with Non-Uniform Heat Source and Variable Viscosity, *JOURNAL OF NANOFLOUIDS*, oct-2018, vol-7, issue-5, 821-832, 10.1166/jon.2018.1517

Authors

Author 1: Dr. D.Srinivasa Rao is a professor and Incharge for centre for data analytics in KL Business school, KL University, Guntur and his area of expertise is statistical methods, R programming, machine learning.

Author 2: Mrs. S Jyothi Kannipamula is a Research Scholar in KL Business School, KL University, Guntur and her area of research is Information Systems and organisational learning.