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## **Evaluating coordination in emergency response team by using fuzzy logic through social network analysis**

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### **Abstract**

Emergency management will not achieve in its goals unless it prepares members in the emergency response team. Achievement of sufficient preparedness requires effective coordination among all team members. This study aimed to use the fuzzy approach and social network analysis for the evaluation of the coordination level as the most important stage in preparedness of emergency management. The evaluation of coordination with fuzzy approach was conducted by using the findings of density indicator of social network analysis and a standard questionnaire. The density indicator was used in order to evaluate the cohesion of coordination through trust and information interchange measures. Also, a standard questionnaire was applied to evaluate the involvement of members in issues related to emergency management. The findings showed that there was a low level of coordination among the whole team members and slightly related to be coordinated for confronting emergencies. Finally, this article argues that it is necessary to turn into a predictive approach in order to provide a suitable relationship for increasing coordination through creative planning and programming in order to have an ideal emergency management.

**Keywords:** Evaluation; coordination; fuzzy logic; social network analysis.