

UNIVERSITI TEKNOLOGI MARA

**THE IMPACT OF INTERNAL AND
EXTERNAL TEAM FACTORS ON
SEARCH AND RESCUE TEAM
PERFORMANCE: THE MEDIATING
ROLE OF TEAM MOTIVATION**

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Thesis submitted in fulfillment
of the requirements for the degree of
Master of Administrative Science

**Faculty of Administrative Science and Policy
Studies**

July 2022

ABSTRACT

This study examined the internal team factors (team communication, team leadership, and team time management) and external team factors (work environment, technology compatibility, relational boundary) that affect Search and Rescue (SAR) team performance via the mediating role of team motivation. This study was conducted because SAR team in Malaysia faced various challenges such as poor communication, poor improvements of the overall SAR process and procedures, speed to reach at the incident location, geographical condition, technological challenges, and new prevalence of task due to COVID-19 pandemic. Data were collected using self-administered questionnaires consisting of nine sections; demographic data of respondents, SAR team performance, team communication, team leadership, team time management, work environment, technology compatibility, relational boundary, and team motivation. The data collection involves nine selected Fire and Rescue stations such as Pahang, Terengganu, Kelantan, Selangor, Kuala Lumpur, Cyberjaya/Putrajaya, Negeri Sembilan, Penang, and Kedah, which consists of 850 rescue personnel. The aggregation of data was done from 850 rescue personnel become only 209 teams. Purposive sampling was used as the sampling technique. The data were analyzed using Statistical Package for Social Sciences (SPSS) Version 26 software for Windows and Structural Equation Modelling (SEM) technique using partial least square analysis by SmartPLS Version 3.0. The results indicated that team communication, team time management, and relational boundary have a direct relationship with SAR team performance. Team communication ($\beta = 0.206$, $p < 0.01$), team time management ($\beta = 0.293$, $p < 0.001$), and relational boundary ($\beta = 0.184$, $p < 0.01$) has a positive and significant relationship with SAR team performance. Besides, team leadership ($\beta = 0.203$), team time management ($\beta = 0.145$), and relational boundary ($\beta = 0.419$) have an indirect relationship with SAR team performance via the mediating role of team motivation. This study also provided two implications of the study, which are theoretical and practical implications. This finding of this study contributed to the existing literature for Social Exchange Theory (SET). Besides, the results from this study found that the internal team factors and external team factors have direct and indirect effects on SAR team performance via the mediating role of team motivation. Therefore, a few recommendations are suggested to the FRDM to improve the SAR team performance. A few suggestions have been suggested for future studies such as future studies may include a spacious field of rescuers from other related agencies, expand the study in the bigger context, which include Sabah and Sarawak, including other aspects of team factor that may affect team performance and involve this study in longitudinal.

Keywords: SAR team performance, team communication, team leadership, team time management, work environment, technology compatibility, relational boundary, team motivation.

ACKNOWLEDGEMENT

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

In the name of Allah the Most Merciful and The Most Gracious, my highest praises and gratitude to Allah SWT who has bestowed upon me His blessings and love throughout this journey.

First of all, I would like to convey my deep appreciation to my supervisor Dr. Azlyn Ahmad Zawawi for her valuable and constructive teachings, support and guidance during the learning and teaching processes during the planning and development of this research work. Her willingness to give her time so generously is greatly appreciated.

Special thanks should be given to Dr. Nur Zafifa Kamarunzaman, my second supervisor, for always supporting and guiding me. Her willingness to impart her knowledge is also hugely appreciated.

My sincere appreciation also goes to the Fire and Rescue Department of Malaysia, specifically Pusat Penyelidikan Kebombaan (PUSPEK), Fire and Rescue Department of Malaysia, Dato' Yusof Bin Sidek, Directors of PUSPEK, PgKB II Ashrul Riezal Bin Asbar, and all Fire and Rescue Stations who have helped in this research work.

I would like to thank Universiti Teknologi MARA (UiTM) especially my faculty, the Faculty of Administrative Science and Policy Studies (UiTM Shah Alam and Kedah), Associate Professor Dr. Nor Hafizah Binti Mohamed Harith, the Dean of the Faculty, Dr. Asiyah Binti Kasim, the Head of the Faculty, Dr. Sarina Binti Othman, the Coordinator, and all the lecturers for giving me the chance to enroll in this Master of Administrative Science (AM780) programme, and for their support, assistance and guidance.

My utmost gratitude too goes to my parents Haji Ab Halim Bin Ahmad and Hajah Norlia Binti Ismail for their undivided support and encouragement during my entire study life which has pushed me to this level today. To my siblings, Mohamad Syahir Bin Ab Halim, Muhammad Syahiran Bin Ab Halim and Norsyahirah Binti Ab Halim, and my fiancé, Muhammad Adie Putra Bin Muhammad Izzudin, your presence and support have made each day better and worthy of living. Next, I extend my sincerest thanks to ALL my friends who have helped me so much in becoming a better student and a better person. May Allah bless you all the way till Jannah.

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