THE SIGNIFICANCE OF TEAM TIME MANAGEMENT AND WORKPLACE ENVIRONMENT ON RESCUE TEAM PERFORMANCE DURING COVID-19 PANDEMIC

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1. INTRODUCTION

The world has been hit with a strange and dangerous epidemic since the end of 2019. The pandemic started in Wuhan, China, and spread to the rest of the world, including Malaysia. The pandemic is known as Corona Virus (after that labeled as COVID-19). The first COVID-19 case in Malaysia was confirmed on 25 January 2020, involving tourists from China arriving in Johor via Singapore (BH Online, 2020). The reported cases remained low and primarily limited to imported cases until several local clusters emerged in March 2020. The largest cluster at the time was associated with the Tabligh Congregational religious gathering held in Sri Petaling, Kuala Lumpur, in late February and early March, which led to a massive increase in local cases as well as the export of cases to neighboring countries (Yusmizal Dolah Aling & Hafidzul Hilmi Mohd Noor, 2021). Therefore, the Malaysian government, led by Tan Sri Muhyiddin Yassin, has implemented the Movement Control Order (MCO), which started on 18 March 2020 to reduce the spread of COVID-19 through social incarceration. To date, the total number of COVID-19 cases has exceeded 1 million cases (Official Website, Malaysian Ministry of Health, 2021).

1.1 Team Performance

Even though rescue teams faced many problems and obstacles during COVID-19, they still need to manage their performance. Team performance is the ability of the team to achieve its objective by putting in effort, skills, and experience (Idris, Idris, & Adi, 2019). In the context of this paper, it refers to the ability of the rescue teams to achieve their mission by using related skills, knowledge, experience, and utilize resources within targeted time. Besides that, team performance refers to all the missions and operations formally carried out by the teams that could impact the teams' goal accomplishment.

1.2 Team Time Management

Team time management is about planning and organizing time in practical ways (Rapp, Bachrach, & Rapp, 2013). Before conducting the SAR operation, SAR team leaders should ensure that every team member knows exactly what the mission is and why it is necessary. Every team member should be involved in the planning process. During the COVID-19 pandemic, the rescue teams were involved in public sanitation, which requires strict procedures and high risks. The Malaysian National Security Council decided for the rescue teams to

conduct public sanitation based on COVID-19 cases found in designated localities. Information about COVID-19 cases and the necessity of public sanitation is based on District Health Office (MKN, 2020) and has become another risky and ad-hoc task that rescue teams must endure.

1.3 Work Environment

Besides team time management, the work environment also plays an essential role in determining team performance. A work environment includes a safe environment in the workplace. In the context of this study, teams deal with an unsafe environment (OSHA, 2020). Rescue teams have a higher tendency to suffer injury and death during tasks (Su & Seok, 2021). During the COVID-19 pandemic, rescue teams frequently deal with people who might be in close contact with COVID-19 patients. This risk must be borne by the team. Teams also work for extended periods and unpredictable hours (from 12-hours rotating change to 24 hours rotating shift) and in non-conducive working environments, such as wearing Personal Protective Equipment (PPE) which are and hard to work in (*Edaran Garis Panduan Pentadbiran dan Pengurusan Balai Bomba dan Penyelamat, Pusat Gerakan Operasi, dan Pusat Pengurusan Operasi, 2020*). Hence, teams are likely to feel quickly tired while working due to the increasing burden of risky work. Hence, based on the discussion above, the hypotheses were developed:

Hypothesis 1: There is a significantly positive relationship between team time management and rescue team performance.

Hypothesis 2: There is a significantly positive relationship between work environment and rescue team performance.

2. METHODOLOGY

This study examines the linkage between team time management and works environment on rescue team performance during the COVID-19 pandemic. The quantitative method was used in which data will be collected cross-sectional at the individual level. Self-administered questionnaires were distributed to team leaders and their respective members in a non-fixed setting. The population of this study was 1000 rescue team members. By referring to Gay (1992) and Hill (1998), the sample size could be 10% of the population. Hence, the sample size in this study was 100 rescue team members involved in the COVID-19 operation. This research used the purposive sampling technique where the information obtained from a specific target group itself instead of getting information from those who are conveniently available. Therefore, only rescue team members were involved in this sampling technique.

The research instrument in this study was a design where team performance consisted of 14 items and was adapted from Morgeson et al. (2005). The team time management scale consisted of six items adapted from Griffiths (2003). Meanwhile, the work environment scale consisted of 5 items and was adapted from Chanderasekar (2011). Respondents' demographics and descriptive data such as percentages and frequencies were analyzed using the Statistical Package for Social Sciences (SPSS) Version 24 software for Windows. For deeper analysis and hypothesis testing, data in this research was analyzed using the Structural Equation Modelling (SEM) technique using partial least square analysis by SmartPLS Version 3 (Ringle et al., 2005).

3. RESULTS
3.1 Demographic Profile

Most respondents are between 31-40 years old and represented 41.0% of 100 team members. Most of the team members were male, which amounted to 99.0% of the total number. Most of the respondents were Malays (92.0%), and the other races amounted to only 8.0%. In terms of position, most SAR team personals were Fire Officers (67.0%). 84.0% of them were team members, and the other 16.0% were team leaders.

3.2 Assessment of Measurement Model

To assess the measurement model, convergent validity was first examined. The examination included evaluation of the indicator loadings, average variance extracted (AVE), and composite reliability (CR). Most outer loadings of each construct were accepted at above 0.50, as suggested by Fornell and Larcker (1981). The AVE of each construct exceeds the 0.50 cut-off value as recommended by Fornell and Larcker (1981) and supported by Hair, Hult, Ringle, and Sarstedt (2014). Hence, the items used for team time management, work environment, and team performance were deemed to have an acceptable level of convergent validity.

Following the examination of convergent validity, the discriminant validity of the measurement model was tested. The discriminant validity was established by examining the correlation among the constructs. It was found that each construct was smaller than its AVE square rooted. Table 1 presents these values. The square root values of AVE are shown in the diagonal. Besides, cross-loading of each indicator was examined to ensure that the loading of each indicator was the highest for the constructs.

Table 1: Correlation Values for Team Time Management, Work Environment, and Team Performance

	Team performance	Team time management	Work Environment
Team performance	**0.806**		
Team time management	0.662	**0.805**	
Work environment	0.680	0.557	**0.802**

3.3 Hypothesis testing

The relationships between the independent variables (exogenous variables) and the dependent variables (endogenous variables) were determined. In SmartPLS Version 3, T-values come with P-value. T > 1.96 is equivalent to P < 0.05. Team time management also had a positive and significant relationship with team performance in which T-value = 5.943 so T>1.96, and P-value= 0.000, which is P<0.05. Hence, hypothesis 1 was accepted. Work environment had a positive and significant relationship with team performance in which T-value = 6.795 so T >1.96, and P-value= 0.005, which is P<0.05. Thus, hypothesis 2 was accepted.

4. DISCUSSION

The first objective of this research was to identify the positive relationship between team time management and team performance. The result of this research revealed a positive and significant relationship between team time management and team performance. The study from Rapp et al. (2013) also found a similar result in which there is a significant positive relationship

between team time management and team performance. The results outlined that team members who can manage time wisely can improve their team performance. During COVID-19, it is vital for the team to effectively schedule their time to ensure all tasks can be completed, even though the burden of work increases due to COVID-19.

The second objective of this study was to examine the positive relationship between work environment and team performance. The result indicated that the work environment had a positive and significant relationship with rescue team performance. The previous study also supports a significant positive relationship between work environment and team performance even though rescue teams work in unsafe environments. (Subramaniam et al., 2013). They are well trained and prepared even though aid units work in a hectic environment and are exhausted, especially during COVID-19. Since rescue teams are front-line, they are vaccinated to ensure that they are protected from COVID-19 and complete their task successfully.

5. CONCLUSION

This study aims to investigate factors that lead to team performance among the rescue teams in FRDM. This study determined that team time management and work environment affected team performance. Team performance refers to the collective work comprising effort, skills, knowledge, and experience to ensure the rescue mission. For rescue teams that always work in a hectic and emergent situation, effective time arrangement is fundamental to protect themselves and other people from danger. The division of tasks must be done effectively to ensure that tasks can be completed. Rescue teams also had to face risks when working in an unsafe and challenging work environment. Despite their taxing and risky conditions, they must find ways to deliver their tasks successfully.

6. ACKNOWLEDGMENT

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