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The Role of Team Communication, Team Leadership, and Team Time Management on SAR Team Performance in Malaysia

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Abstract

Teamwork is a cooperative process that encourages personnel to achieve specific aims, whereby the members work together to achieve shared goals. The practice of teamwork is vital in any organization. One of many organizations that utilize teamwork is the Fire and Rescue Department of Malaysia (FRDM). FRDM'S most prominent activities involve Search and Rescue (SAR) teams. A SAR team refers to a group of individuals with the necessary skills and knowledge to find people in distress due to natural disasters or getting into difficulty in distress mountainous or desert regions. Several studies suggested that the SAR team's main issue is poor communication between the leader and members, leading to problems tracing accidents, team movements, and the incident location. There is still a lack of study focus on team performance, specifically in the SAR team context. Most of the previous scholars addressing team performance in military and business organizations. This study proposes to examine the relationship between team communication, team leadership, and team time management on the team performance of SAR teams. A total of 100 SAR team members from nine selected states in Peninsular Malaysia participated in this study. Data was collected using a set of questionnaires which were distributed to the SAR team of FRDM. The hypotheses were analyzed using Partial Least Squares (PLS) and the Statistical Package for the Social Sciences (SPSS). The results indicated a significant and positive relationship between communication, leadership, and time management towards team performance. This study would provide valuable inputs for the team, especially the search and rescue squad.

***Keywords**:* Team communication; Team leadership; Team time management; Team performance; SAR

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INTRODUCTION

Team performance is the accumulation of experience and effort of an organized body to achieve specific goals (Idris, Idris & Adi, 2019). It reflects the collective work product that comprises its members' joint and real contribution, involving their engagement in tasks and teamwork processes through collective integration, synthesis, and sharing of information to complete the task. Al-Jedaia and Mehrez (2020) defined a team as a goal-directed process drawn from team members. The definition includes the

process of task work, teamwork, and other team-level activities to deliver end products and services. Throughout this study, the term refers to the collective work done by the SAR Teams, one of the essential action teams in Malaysia, vital in search and rescue missions nationwide.

Team performance in SAR refers to the engagement of effort between a group of rescue personals that could lead them to achieve their shared goals and objectives, one of which is to save the lives of victims during SAR missions. Rescue unit covers all the missions and operations that are formally carried out that could impact the goal accomplishment (Suhaimi, Marzuki & Mustaffa, 2014). There are certain critical elements in building performance among aid teams. The first element is establishing urgency. Most cases handled by the rescue teams are urgent and require fast action to be taken. The first 72 hours is a critical period for teams to act after a disaster occurred to avoid loss of life (Suhaimi et al., 2014). The next element is demanding performance standards. Search and recovery teams need to follow their established Standard Operating Procedures (SOP) to fulfill the performance standards. For instance, one of the SOPs that is the search and rescue of people in distress cannot be carried out at night since it can be dangerous for the team (Hasbi, 2018). Besides, the group performance is also dependent on the orders given. The leaders' directions and instructions are very crucial in saving lives. Clear directions can determine the operation's success by following the intended team directions (Suhaimi et al., 2014). Above all, team performance requires the SAR squad to have skillful members, clear rules of behavior, new information to challenge the team, feedback, and recognition (Bogue, 2019).

THEORETICAL FRAMEWORK

The research framework is adopted and adapted from the study of Boies, Fiset, and Gill (2015) where they focus on the roles of team characteristics on team performance achievement. Team communication is one of the initial vehicles for interaction between the individual in teams. Communication data provide a rich record that assists with understanding cognition (Ayala et al., 2020). Team communication is crucial in the accomplishment of tasks because it leads to a high team performance. Besides that, team leadership too, has been acknowledged as one of the critical elements of team performance (Lai, Hsu, & Li, 2018). Team leadership refers to the leader's ability to motivate team members towards the final team goal. All these variables, when

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incorporated, influence team's performance intensity and their direction towards mission accomplishment. In addition, Adams, Schmidt, Newgard, Federiuk, Christie, Scorvo, and DeFreest (2007) stressed that it is essential for the team, especially the aid and recovery unit, to have an adequate time arrangement as it gives a significant impact on their performance. Hence, this research has included team time management in the framework to understand how it can impact the performance of the search and recovery team.

SAR Teams in Malaysia

SAR refers to activities and efforts to search for, assist, and save lost or missing people. Several types of SAR missions: water rescue, forest rescue, collapsed and confined buildings, and SAR following a flood or landslide disaster. The mission is carried out regardless of the area or district, which may occur in challenging areas such as forests, mountains, the sea, rivers, and deserts but are also conducted in urban areas. Besides, rescue missions are also carried out after aviation incidents such as aircraft crashes or dangerous landings and after incidents involving water vessels such as ships or boats being sunk, burned, or damaged (Suhaimi et al., 2014). A SAR team refers to individuals with the necessary skills and knowledge to find persons in distress due to natural disasters or rescue people in difficulty in the mountains or deserts (Zailan, Alsagoff, Awang & Mohd, 2013). In Malaysia, SAR missions are often reliant on the Fire and Rescue Department of Malaysia (FRDM). Furthermore, SAR teams form the primary units that handle aid missions after natural disasters (Daniel, 2018). There are four principles required when dealing with disaster management: mitigation, preparedness, response, and recovery (Bogue, 2019).

Rescue missions can only be carried out by qualified teams, which are well trained in rescue missions. Besides, the team also needs to have rescue skills and techniques that ensure both firefighters and victims are in a safe condition during the operations. Rescue missions involve many security agencies such as the army, the police, firefighters, public security bodies, and health officers. The responsible institutions for the rescue mission in every country are aligned with incidents that frequently happen in each country (Bogue, 2019). For example, in Malaysia, agencies that are involved in SAR missions are the Fire and Rescue Department of Malaysia (FRDM), the Royal Malaysia Police (PDRM), Malaysian Military Armed Forces

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(ATM), Department of Public Defense (JPAM), and Red Cross Association (PBSM) (Official Website National Security Council, 2019).

This paper focuses on the missions of SAR conducted by the FRDM. SAR teams of the FRDM were established under the National Security Council in 1994 with specific units (Official Website FRDM, 2019). The first unit of the FRDM SAR Division is the Special Unit of Tactical Operation and Rescue Team of Malaysia (STORM), which usually deals with SAR operations at night, large-scale or high-altitude operations, rescue operations in the forest, rescue operations in water, and those concerning aircraft (including helicopters). Another unit is the K9 Unit (Mustaffa, 2020), specializing in using dogs to assist in their operations. Besides STORM and K9 Unit, the SAR FRDM Division also has the Hazardous Material Unit Team (HAZMAT). HAZMAT deals with hazardous chemical spills, radiation leaks, hazardous chemical elements, and incidents involving Chemical, Biological, and nuclear exposure (CBRNe) (Yahya, 2021).

Furthermore, the Rapid Intervention Motorcycle (RIM) unit was established in 1999 to handle rescue operations in areas with high traffic levels. It involves motorcycles equipped with rescue equipment and basic equipment to extinguish small and medium-scale fires. The RIM Unit is also able to deal with road traffic. The Emergency Medical Rescue Services (EMRS) unit is an organized team specializing e in providing special treatment to victims during SAR operations and any accident cases. Finally, Water Rescue Teams (WRT) are responsible for handling SAR operations involving water (Official Website FRDM, 2019).

Previous studies have uncovered various factors that influence team performance. In this paper, several factors are discussed relating to SAR team performance. The factors are team communication, team leadership, and team time management.

Internal Factors of SAR Team Performance

Internal factors refer to anything within the team and under the team's control (D'Innocenzo, Mathieu, & Kukenberger, 2016), usually including the inner strength and weakness of the units. Internal factors affect work tasks, and goal orientation. In the SAR team performance study, internal factors that usually affect team performance are team communication, team leadership, and team time management. Good team

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performance depends on the communication practices where teams and team leaders communicate freely and often to improve results (Liu, Vashdi, Cross, Bamberger & Erez, 2020). Besides, the internal factor that affects team performance is team leadership, where the team leader plays an essential role in influencing team members and giving direction to establish goals. The third internal factor of team performance is team time management, which is crucial as they need to act fast, in life-saving.

Team Communication

Team communication is the interaction between one individual and another in a team (Liu et al., 2020). Team communication includes emails, conversations, body language, and nonverbal signals. The success of the communication within a team depends on its communication. Different ways of communicating give different results to organizations. Good team communication results in high team performance. When the SAR team can understand the instructions given by their leader, instructions can be followed effectively (Huo, Dong, Lu, Xu & Yuen, 2018.) For instance, SAR teams must have a clear understanding of the information that the team leaders give. Such information includes details of the physical condition of the victims, the time before the victim was found, and the possible routes that the victim might have used. Knowing this information, therefore, the percentage for the rescue team to find the victim is high.

In large missions, people cannot work independently. They need to collaborate with other team members since the task will be divided based on their expertise and skills (Luis, Lucy & Travis, 2004). For instance, for water rescue, the team that needs to handle this operation will be the water expert, such as the diver's team from WRT. Therefore, everyone in the team needs to be responsible to ensure the teams can make a rational decision. When teams can utilize good communication, it will lead to better performance since they can clearly understand the information they receive. Hence, based on the above discussions on team communication, we developed the following hypothesis:

Hypothesis 1: There is a significantly positive relationship between team communication and SAR team performance.

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Team Leadership

Team leadership represents the second characteristic of effective team performance. Most teams contain specific individuals responsible for defining team goals and developing and structuring the team to accomplish SAR missions. These roles exist even in self-managing teams (Lai et al., 2018), although leadership roles in such teams vary considerably from similar roles in more traditional teams. However, the leader's success in defining team directions and organizing the team to maximize progress according to such directions contributes significantly to team effectiveness. Leadership is about facilitating the squads' learning needs sufficiently, excellently establish their skills and abilities (Adi, 2019). In short, leadership refers to the division of authority by empowering team circle based on trust, abilities, willingness, guiding and developing aspirant creativity, paying attention to team member strategic problem solving, in turn, will lead to the improvement of the team performance (Adi, 2019).

Furthermore, team headship is relational and processual and not about an individual but should be seen as a mutual accomplishment among multiple actors (Horila & Siitonen, 2020). So, the failures or successes of the directorship that affect team performance do not depend on individual leaders or their competencies, but it comprises reflexive practices and co-created realities, which means they grow together by learning from each other (Horila & Siitonen, 2020; Ruben & Gigliotti, 2016). In short, team mastery is not about individual abilities, traits, or behaviors. Nevertheless, team leadership is the emergent processes of effective leadership that are built through the endless interactions in all relationship not only leaders and members, but it also included the relationship with the team, organization, culture, and time and in return it will lead to team performance (Fairhurst & Connaughton, 2014; Horila & Siitonen, 2020).

Leaders are a vital element in the success of performance management (Lai et al., 2018). They can improve team performance and team effectiveness by assigning tasks based on their skills, knowledge, and abilities to perform their functions to their best. The role of the leader is to establish clear goals and objectives and ensure that all members have a clear understanding of these (Banks, McCauley, Gardner & Guler, 2016). For instance, in SAR missions, leaders establish a clear goal to save the victim's life within the targeted time. The leader needs to ensure that all members of the team have a clear understanding of that mission. Hence, when team members can understand

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the goals through their leaders, they will use all their skills, knowledge, and expertise to find the victim to achieve the goals. Hence, based on the above discussions on team leadership, we developed the following hypothesis:

Hypothesis 2: There is a significantly positive relationship between team leadership and SAR team performance.

Team Time Management

Team time management is when the team identifies needs, establishes goals to fulfill those needs, and plans and prioritizes the necessary tasks to achieve the set goals (Yener, Arslan, & Kilinc, 2020). Hence, in simple terms, the team schedule is the team's technique in managing their plan. These techniques of executing a plan of action include effective hour use, in which the teams can utilize the allocation of an hour to complete a particular task. They can plan and allocate time effectively and efficiently, and the extent to which the teams can make a structured and purposeful way of plan (Ma, Kerulis, Wang, & Sachdev, 2020).

The squad schedule is technically different from individual time arrangements. Team circle duration highlights the organizational rhythm, which focuses on groups of people working together instead of performing as individuals. In a team, the practice of teamwork is critical (Taslimi, Sherafat, & Ershadifar, 2014). The SAR team needs to be aware of the period consumed in carrying out SAR missions. SAR teams need to race against hour in carrying out SAR missions. They need to be as fast as possible to reduce the loss of life (Taslimi et al., 2014).

Besides, the team circle schedule reflects the team's ability to manage their schedule by prioritizing and organizing tasks that allow a team to improve their duration in completing the master plan and achieve their goals (Ma et al., 2019). It is also supported by Rapp, Bachrach, and Rapp (2013). Team squad arrangement reflects a group of behaviors toward an effective allocation of an hour to complete the task and achieve the goal. Teams with practical time management skills can manage time resources (such as tight schedules and urgent or emergency tasks) and plan progress successfully than those with insufficient time-motion (Ma et al., 2020; Rapp et al., 2013).

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Team performance can be increased when the team can manage the time wisely. (Häfner and Stock (2010) asserted that group time arrangement is an established procedure that helps the team accomplish its goals. Moreover, a team schedule is an approach for the teams to differentiate the importance of tasks that must be performed first and prioritize the most critical task, such as an urgent or emergency task (Häfner & Stock, 2010). Hence, based on the above discussions on team time management, we developed the following hypothesis:

Hypothesis 3: There is a significantly positive relationship between team time management and SAR team performance.

Based on the discussion mentioned above, this study proposed the conceptual model as depicted in Figure 1. This paper intends to investigate the relationship between team communication, team leadership, and team time management on SAR team performance.

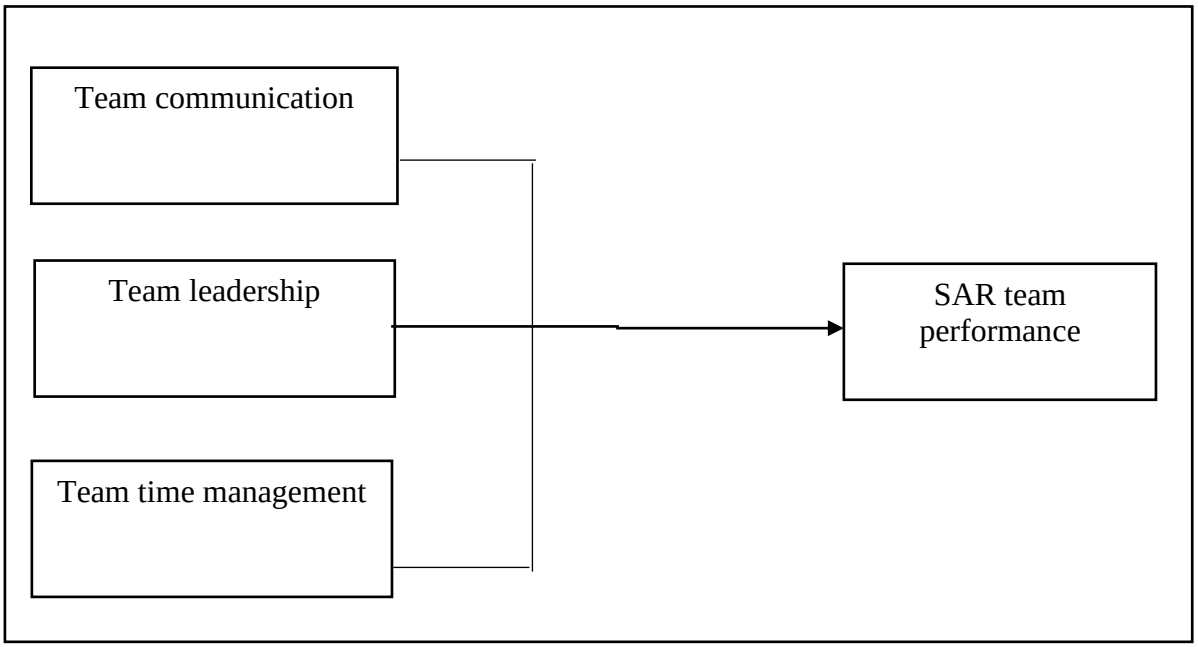

Figure 1: *Research Model*

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METHODOLOGY

This research aims to examine the links between team communication, team leadership, and team time management on SAR team performance. FRDM rescue teams were chosen because they are the most active, elite, skilled, and equipped SAR units in Malaysia (Official Website of Majlis Keselamatan Negara, 2019). Data were collected at the team level, and aggregation of the score was conducted. The quantitative method was used, in which data was collected cross-sectional at the individual level. Self-administered questionnaires were distributed to 100 rescue team members in a non-fixed setting. This study involved a rescue team in one of the FRDM stations in Peninsular Malaysia. 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 (100 team members).

This research used the purposive sampling technique. According to Sekaran and Bougie (2016), purposive sampling obtains information from a specific target group itself instead of getting information from those who are conveniently available. This sampling technique was selected because it only focused on the target group, i.e., SAR teams that carry out SAR missions. Therefore, only SAR teams were involved in this sampling technique. The unit of analysis was the team. SAR teams usually rotate based on a 12-hours rotating plan. The 12-hours rotating plan provides 24/7 coverage by using three teams and 12-hours shifts with a day off (PgKB II Ashrul Riezal Asbar, personal communication, January 13, 2020).

Measurements

Team performance consisted of 14 items and was adapted from Morgeson et al. (2005). The team communication scale consisted of seven items and was adapted from Kinsey (2019). The team time management scale consisted of six items adapted from Griffiths (2003), team leadership scale was adapted from (Gruman & Saks, 2011) consists of ten items. Team leadership was measured via a seven-point Likert scale ranging from (1) strongly disagree to (7) strongly agree, while evaluation for team performance, team communication, and team leadership were conducted via a five-point Likert scale ranging from (1) strongly disagree to (5) strongly agree, respectively. The reliability of each measurement is listed in Table 1.

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Table 1: *Reliability analysis of research instruments*

Instruments	Reliability	Source
Team performance	0.91	Morgeson et al. (2005)
Team communication	0.61	Liu et al. (2020)
Team leadership	0.90	Gruman and Saks (2011)
Team time management	0.87	Griffiths (2003)

DATA ANALYSIS

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). The model's strength was also evaluated via R^2 and Q^2 statistics following Cohen (1988) and Chin (1998).

RESULTS

Demographic Profile

Most respondents were between 31-40 years old and represented 41.0% of 100 team members. This was followed by members within the age range 20 to 30 years old, representing 35.0% of the total number of team members. Following this were team members aged 41 to 50, representing 16.0% of the total number of respondents. Finally, 8% were team members aged 51 to 60. The majority of the team members were male, 99.0% of the total number. Meanwhile, only 1.0% of the team members were female. Most of the team members were male because firefighters deal with heavy equipment that exceeds 20 kilograms and above (Subramaniam, Zin & Nadir, 2013). Most of the respondents were Malays, 92.0% out of the total, and the other races amounted to only 8.0%. Based on data from 2014-2018, 79.45% interested in joining public service in Malaysia were Malays. In terms of position, most SAR team personals were from Fire Officers, 67.0% of the total, followed by Senior Fire Officer II at 19.0% and Assistant Fire Superintendent at 14.0%. 84.0% of them were team members, and the other 16.0% were team leaders. Fire Officers monopolize the position because every year, the intake

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for Fire Officers is more than the other position (Department of Statistics Malaysia, 2021).

Assessment of Measurement Model

To assess the measurement model, the convergent validity was examined. The examination included indicator loadings, average variance extracted (AVE), and composite reliability (CR). Based on the results presented in Table 2, 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 (2016) except for team communication. Even though the AVE for team communication is below 0.5, the CR is higher than 0.6, the construct's convergent validity is still adequate (Fornell & Larcker, 1981). Meanwhile, the items used for team leadership, team time management, and team performance had an acceptable level of convergent validity.

Table 2: *Outer loading values, composite reliability (CR), and average variance extracted (AVE) of team communication, team leadership, team time management, and SAR team performance*

Construct	Item	Loading	CR	AVE
Team communication	C1_team_communication	0.653	0.871	0.496
	C2_team_communication	0.812		
	C3_team_communication	0.598		
	C4_team_communication	0.812		
	C5_team_communication	0.824		
	C6_team_communication	0.579		
	C7_team_communication	0.597		
Team leadership	D1_team_leadership	0.912	0.981	0.772
	D2_team_leadership	0.838		
	D3_team_leadership	0.921		
	D4_team_leadership	0.826		
	D5_team_leadership	0.777		
	D6_team_leadership	0.896		
	D7_team_leadership	0.801		
	D8_team_leadership	0.861		
	D9_team_leadership	0.875		
	D10_team_leadership	0.919		
	D11_team_leadership	0.902		
	D12_team_leadership	0.916		
	D13_team_leadership	0.893		

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	D14_team_leadership	0.909		
	D15_team_leadership	0.916		
Team time management	E1_team_time_management	0.630	0.907	0.621
	E2_team_time_management	0.854		
	E3_team_time_management	0.858		
	E4_team_time_management	0.716		
	E5_team_time_management	0.846		
	E6_team_time_management	0.799		
Team performance	B1_team_performance	0.888	0.962	0.649
	B2_team_performance	0.860		
	B3_team_performance	0.894		
	B4_team_performance	0.870		
	B5_team_performance	0.766		
	B6_team_performance	0.786		
	B7_team_performance	0.824		
	B8_team_performance	0.754		
	B9_team_performance	0.841		
	B10_team_performance	0.569		
	B11_team_performance	0.795		
	B12_team_performance	0.810		
	B13_team_performance	0.731		
	B14_team_performance	0.834		

Following the examination of convergent validity, the discriminant validity of the measurement model was tested. Discriminant validity was examined to ensure that each construct was unique and different from the others. Hence, the variables could measure what was intended. 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 3 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 3: *Correlation values for team communication, team leadership, team time management, and SAR team performance*

	Team communication	Team leadership	SAR Team performance	Team time management
Team communication	**0.704**			
Team leadership	0.602	**0.879**		
SAR Team performance	0.647	0.549	**0.806**	

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Team time management	0.665	0.522	0.654	**0.788**

Hypothesis Testing

The relationships between the independent variables (exogenous variables) and the dependent variables (endogenous variables) were determined. Table 4 exhibits the path coefficient values between the independent variables and dependent variables. The nonparametric bootstrapping method was used to test the path coefficients for significance. In SmartPLS Version 3, T-values come with P-value. T > 1.96 is equivalent to P < 0.05. T-values were acquired and are presented in Table 3. Team communication had a positive and significant relationship with SAR team performance in which T-value = 2.569 so T >1.96, and P-value= 0.005, which is P<0.05. Thus, hypothesis 1 was accepted. Meanwhile, team leadership and team performance also had a positive significant relationship with SAR team performance even though T-value = 1.700 so T <1.96, but this is significant because P-value= 0.045, P <0.05. Thus, hypothesis 2 was supported. Next, team time management also had a positive and significant relationship with SAR team performance in which T-value = 3.519 so T>1.96, and P-value= 0.000, which is P<0.05. Hence, hypothesis 3 was accepted. Therefore, it can be concluded that hypotheses 1, 2, and 3 were accepted and supported.

Table 4: *Path Coefficient for team communication, team leadership, team time management, and SAR team performance*

Relationship	T-value	P-value
Team communication → SAR team performance	2.569	0.005
Team leadership → SAR team performance	1.700	0.045
Team time management → SAR team performance	3.519	0.000

DISCUSSION

This study produced a significant positive relationship between team communication, team leadership, team time management, and team performance. The analysis revealed that team communication had a positive and significant relationship with SAR team performance in which T-value = 2.569 so T >1.96, and P-value= 0.005, which is P<0.05. Schulze et al. (2017) and Hoch and Kozlowski (2014) supported the finding of this research that effective communication in action teams is a solid key to

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performance because proper communication assists in avoiding misunderstandings and crises. A previous study from Rajhans (2012) also constructed that team communication had a positive relationship between team communication and team performance. The results indicated that clear communication helps to encourage and strengthen the relationship between team members and team leaders, which can help teams reach high team performance. Besides, Casey (2010) stressed that the mission mastermind must ensure that communication difficulties do not become a barrier to effective team circle expedition. Communicative hardship in the team has been found to erect poor performance (Charlier et al., 2016). A rescue squad that succeeds in coping with communication issues will be more effective (Piccoli et al., 2004). In rescue units in Malaysia, verbal and non-verbal communication play an important role in enhancing team performance. Verbal communication was frequently used by the team leaders to transfer information related to SAR operations. Meanwhile, the teams always employ non-verbal communication, such as signs and symbols, to ensure that rescue missions were conducted successfully, which directly improved team performance.

Meanwhile, team leadership and team performance also significantly affected SAR team performance when P-value= 0.045. This result indicates that the team members acknowledged that leaders are needed for mission success as leaders aspire members to accomplish assignments effectively. In rescue squads, leaders play an essential role in improving team performance because the leaders' nature and behavior are embellished in leadership patterns. By leadership, the team members have trust, pride, loyalty, and respect. They are motivated to go beyond than expected. The findings also were supported by Horila and Siitonen (2020), Ruben and Gigliotti (2016), Rao, Srinivasa, Abdul, & Waheed Kareem (2015), and Cole, Michael, Bedeian, Bruch, Heike (2011) that there is a strong effect between team leadership and team performance. In a hectic working environment like rescue teams, the relationship between members and their leaders might be based on operation orientation, indicating that the head group members play a significant contributor to guiding and influencing the team circle to affect the group's performance.

Finally, the result of this research for team time management revealed a positive and significant relationship with SAR team performance in which T-value = 3.519 so T>1.96, and P-value= 0.000, which is P<0.05. 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

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can manage time wisely can improve their team performance. Team time management plays a vital role in determining the victim's survival. Adams et al. (2007) found that the first 51 hours of the search time increase 1% of the probability for the victim to found alive. Hence, the team must act fast to reduce the loss of life. The significance of team time management in team performance is when the team found the victim within the allocated time and is considered the mission is successfully conducted. In the context of SAR team performance, team time management plays an important role in achieving a high level of team performance. For example, in one incident, a rescue team successfully saved some lives just by arriving a few minutes early at an incident location. Quick actions and an effective time management enabled the team to efficiently complete their mission. The faster the team can save a victim, the fewer lives are lost (Suhaimi et al., 2014).

CONCLUSION

This research intended to investigate factors that lead to team performance among SAR teams in Malaysia. This study determined several factors (team communication, team leadership, and team time management) that affected team performance. SAR team performance refers to the collective work comprising effort, skills, knowledge, and experience to ensure the rescue mission. Thus, the master key of team performance was team communication. Clear communication was important because proper information transfer helps avoid conflicts and strengthen the relationship between team fellows and commanders. Besides, leaders need to implement an appropriate direction and guidance since the followers built trust, pride, loyalty, and respect, thus directly motivating them to exceed expectations. For search recovery squad that always work in hectic and emergency, effective time arrangement is fundamental to reducing life loss.

This present research has depended generally on the sample drawn pointedly from the SAR team in FRDM. Hence, it is not unsure whether the results can be discovered to other teams in other industries such as education, logistic, tourism or hospitality, banking, and service sectors. Besides, there is a lack of study addressing team performance in the human resources field, particularly on aid teams. Most of the past scholars studied team performance in the military or private organizations. Finally,

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there is a limited model of team performance developed in studies on search and recovery teams.

The findings from this study contribute to the existing body of knowledge by expanding the understanding of the importance of team communication, team leadership, and team time management as predictors of SAR team performance. This study aims to have a deep understanding of team performance factors that likely can lead to better performance. Few related areas can be improved or considered for future research. Firstly, future research must identify the external factor of SAR team performance, such as work environment, technology compatibility, and relational boundary. Besides, it is needed for additional studies related to SAR team performance in other countries because their work might be different in Asia, Europe, and American. Finally, following Salas-Vallina et al.'s (2020) suggestions, more models of team performance need to be developed and examined primarily in the aid unit setting to increase team performance literature. In terms of methodological contribution, this study incorporates structural analysis to explain team behaviours, which is still limited in Malaysia.

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