CHAMPIONING A TEAM: REVIEWING THE ROLE OF TEAM COMPOSITION, CONTEXT AND TRUST ON NURSING TEAM PERFORMANCE

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ABSTRACT

High performing nursing teams deliver quality safe care that is valuable to a country. In order to successfully perform tasks, there needs to be a proper mix of team composition in terms of team knowledge and team skills. Also, the team must work in a good surrounding through a positive team context. Team context, in the form of team identification and team support, provides the necessary work environment that is needed for the team to function. Although multiple researches have been undertaken on team performance, studies that examine the role of team composition and team context on nursing team performance are still scarce. Furthermore, investigations on the role of team trust as a moderator are also limited. Therefore, this paper aims to provide an integrated review of the role of team composition and team context on team performance among Malaysian nursing teams. In addition, team trust is explored as a plausible moderator in the above-mentioned linkage.

JEL Classifications: D23, I19, J24, O15
Keywords: team composition, team context, team skills, team knowledge, team identification, team support, team performance, nursing teams, Malaysia.

INTRODUCTION

The nursing industry in Malaysia plays an active role in ensuring positive health outcomes of the nation. Nurses are the strength of healthcare as nurses exercise great effort when they work interdependently. In Malaysia, nurses make up 2 to 3% of the female workforce (Barnett, Namasivayam & Narudin 2010). In fact, according to a health review report by the World Health Organization (WHO) (2013), nurses represent 54% of the total number of health professionals in Malaysia, amounting up to over 75,500 nurses, making them the largest group of health professionals in the country (World Health Organization [WHO] 2013).

Nurses face numerous challenges including increasing pressures on the public healthcare system, increasing workload in government hospitals, and higher expectations of public on the quality of healthcare (Economic Planning Unit 2010). Public hospitals in Malaysia are over-utilized, causing an increase in nursing responsibilities (Hazilah 2009). Medical staffs especially nurses, have been receiving constant pressures even though they are already expanded to their full capacity (Barnett et al. 2010). Therefore, nurses must come together and increase the quality of teamwork in nursing care for the benefit of the patients, and the overall healthcare system.

There is a constant urge to increase the quality of human resources in healthcare in order to promote better service quality to the patients. In the context of nursing, this means that nurses have to work smarter, more precise, and with significantly reduced mistakes (Leufer & Cleary-Holdforth 2013). To accommodate patients’ demands, nurses are always advised to work in teams. Team nursing allows better communication and enhances accuracy in decision-making processes (Kalisch & Schoville 2012). The utilization of teams, especially in healthcare sector is advantageous as tasks are becoming highly interdependent and unpredictable (Bleakley 2013). As a result, the study of teams has caught the interests of many scholars as teams are becoming essential in task accomplishments.

A team is referred to as a small number of people with complementary skills who are committed to a common purpose, performance goals, and mutual accountability (Katzenbach 1997). Members of a team will decide collectively on an issue or situation. Teams are useful in situations where tasks are complex and intricate. This is because they provide the energy and strategic means for individual members to work and engage in assigned projects in an effective manner (Salas, Cooke & Rosen 2008). Nursing teams in particular, are active and they work based on specified knowledge of the patient care delivery. This makes their tasks critical and important to the healthcare sector.

Team performance reflects shared understanding and support between team members (Katzenbach & Smith 1993). It represents the team’s ability to make certain decisions collectively by integrating knowledge and effort
(Salas et al. 2008). In ensuring high performance, team composition is important. The composition of a team will ensure that team members possess the right knowledge and skills needed for the tasks at hand (Somech & Drach-Zahavy 2013). Since the nursing profession is becoming more specialized, nurses must be equipped with the knowledge and skills to handle new changes in their routines (Tunlid, Granström & Engrström 2014). Among the routine tasks performed by nurses include medication administration, patients’ documentation, patients’ health assessment, and team supervision (Al-Kandari & Thomas 2009; Farquharson et al. 2013; Leufer & Cleary-Holdforth 2013). Besides team composition, nursing teams must also be surrounded by positive team context. Team context plays an important role in shaping positive team surroundings in order to maximize team performance (Giammanco, Buchler, Moyers & Handel 2010; Hu & Liden 2013). According to Hu and Liden (2013), team context is the internal aspects of a team’s environment, often containing members’ supportive behaviors and members’ exposure to leaders’ behaviors.

Realizing this, the purpose of this paper is to review the extant literature and subsequently propose a linkage between team composition, team context, and team performance among nursing teams in Malaysian public hospitals. In addition, given the fact that teams with higher level of trust perform better as opposed to teams with lower trust (Gill, Boies, Finegan & McNally 2005; Mayer & Gavin 2005), team trust has been identified as a potential moderator in the proposed relationship.

METHOD

This paper is a conceptual review, written based on available literature in the context of team performance. To develop focus, outstanding literature on nursing team performance was also analyzed.

TEAM PERFORMANCE

Team performance is the accomplishment of specific goals through accumulation of experience and effort of team members (Morgeson, Reider & Campion 2005; Morgeson, Lindoerfer & Loring 2010). It refers to the quality of interpersonal relationships, often represented as a teamwork process-based construct (Dionne, Yammarino, Atwater & Sprangler 2004). Team performance is a result of team members’ engagement in task work and teamwork processes that involve activities in completing a task, through collective integration, synthesis, and sharing of information (Salas et al. 2008). In the context of nursing, team performance is highly critical as nurses have to work interdependently with other members, and their daily tasks require them to create strategic synergy through shared efforts (Sherman & McLean 2009).

Factors of team performance

The study of team performance is widely expanding and a review of the extant literature indicates that in general, team performance factors can be categorized into four main categories: team task, team composition, team context, and team process (Ganesh & Gupta 2010; Garg & Rastogi 2005; Katz-Navon & Erez 2005; Senior & Swailes 2004; Tannenbaum, Mathieu, Salas & Cohen 2012; Hu & Liden 2013; Schippers, West & Dawson 2012; Tuuli & Rowlinson 2010).

Of these four categories, team composition (namely team knowledge and team skills) and team context (namely team identification and team process) plays a big part in determining consistency in a team’s performance achievement. Team composition consists of demographic composites, personality traits, knowledge and skills, and a blend of team members’ ability (Barrick, Stewart, Neubert & Mount 1998; Halffhill, Sundstrom, Lahner, Calderone & Nielsen 2005; Hollenbeck, DeRue & Guzzo 2004; Savelbergh, van der Heijden & Poell 2010). In the context of nursing teams, members’ knowledge and skills are important to ensure that tasks are carried out successfully. Similarly, teams will function well when their context is favorable. Team context comprises team members’ supportive behaviors, leaders’ behaviors, common goals, interdependent work, stable membership, and team members’ interdependence (Hu & Liden 2013; Schippers et al. 2010). Of these, team context that promotes leader and member relationship has received exceptional attention in the existing literature (Tuuli, Rowlinson, Fellows & Liu 2012; Tuuli & Rowlinson 2010).

Thus, based on the basic idea that team composition (in the form of team knowledge and team skills) and team context (in the form of team identification and team support) positively relate to team performance, this paper aims to propose a model linking these two variables with team performance. Subsequently, team trust will be introduced as a plausible moderator in the proposed linkage.

TEAM COMPOSITION

Team composition is a direct result of the socialization process that shapes team behavior (Kozlowski & Bell 2001). Team composition indicates that individual variability influences team performance as it maximizes team members’ set of knowledge and skills (Somech & Drach-Zahavy 2013). The right mixture of members’ composition is needed for team performance especially as work gets more complex and highly interdependent (Hollenbeck et al. 2004). In the context of nursing teams, team knowledge and team skills are components of
team composition that are highly critical to ensure tasks’ success. As such, this paper will focus on these two variables (team knowledge and team skills) as possible predictors of nursing team performance.

**Team knowledge**

Team knowledge is members’ collective knowledge, often blended with members’ expertise and ideas, and is vital to task accomplishment. Through deep understanding towards the task and situation in hand, team members will combine task and team-related knowledge to ensure successful task implementations (Espinosa & Clerk 2014). Huang and Cummings (2011) asserted that team members are tied by the knowledge they share. This shared knowledge originates from individual knowledge, and it represents available individual knowledge in teams (Wildman, Thayer, Rosen, Salas, Mathieu & Rayne 2012; Griffith & Sawyer 2010). At the individual level, knowledge are categorized into tacit and explicit knowledge where tacit knowledge learned by experience, and enriched through socialization and discussion, while explicit knowledge is codified knowledge, and supplemented through tools and technology (Tiwana 2000; Griffith & Sawyer 2010). To become knowledge, individual tacit and explicit knowledge must be shared within the team through knowledge sharing activities (Griffith & Sawyer 2010).

During task implementation, team members who possess high knowledge will compensate for others’ lack of knowledge (Griffith & Sawyer 2010). This will create a balance of knowledge among team members which will benefit the team as a whole. Team knowledge is linked to higher team performance through knowledge sharing and knowledge application practices in task execution (Choi, Lee & Yoo 2010). When knowledge sharing occurs, members will agree and affirm to each other’s expertise and become highly motivated (Grutterink, Van der Vegt, Molleman & Jhn 2013). Sufficient knowledge on assigned tasks will allow less duplication of efforts and more efficient utilization of resources, which may lead to greater team performance (Majmudar, Jain, Chaudry & Schwartz 2010).

In nursing teams, meaningful knowledge shared among members will help reduce medical errors and possible negligence (Miller, Riley & Davis 2009). Team knowledge is essential for nursing teams as nurses are constantly required to share experience, thoughts, and expertise in their daily nursing chores (Huang & Cummings 2011). Yaakup, Eng and Shah (2014) posited that nursing teams with greater clinical knowledge will have better awareness and understanding of their patients’ conditions This will allow nursing teams to better understand their patients’ pain condition and help members of the team to be prepared in dealing with them (Yaakup et al. 2014). According to Sandvik, Eriksson and Hlli (2014) advocated that, in order for team performance to be enhanced, knowledge is a fundamental team asset especially in the development of nursing ethics. Team knowledge will enrich collaboration and teamwork (McComb & Simpson 2014), and assists nursing teams reduce medication errors, such as in drug therapy (Ferreira, Dantas, de Oliveira 2014). Based on the works of previous scholars (Yaakup et al. 2014; Sandvik et al. 2014; Ferreira et al. 2013), team members’ knowledge is expected to be positively related to team performance. Hence, our first proposition is as follows:

**Proposition 1:** Team knowledge will be positively related to team performance.

**Team skills**

Team skills are the blend of collective knowledge, combined talents, and cumulative experience of the team members (Wageman et al. 2005). The combination of skills by team members will allow effective task coordination and ensure greater team performance. Team skills often includes interpersonal skills (Wageman et al. 2005), social skills (Morgeson et al. 2005), and cognitive skills (Kozlowski & Bell 2001). There needs to be a correct mixture of these skills in teams to ensure that task objectives are achieved successfully, especially when the task is complex and highly interdependent (Hollenbeck et al. 2004).

The composition of members’ skills affects the attainment of team performance and determines the progression towards team success (Somech & Drach-Zahavy 2013; Wageman et al. 2005). Skills must include team members’ technical skills and not simply focusing on individual-level skills. Baker and Salas (1992) professed that it is crucial for team members and their leaders to be responsive towards the team’s skills development as members’ skills are not stagnant but it will continue to develop and evolve. The technical skills of members, alongside with their cognitive skills and interpersonal skills must always be strategically maintained and updated so as to ensure better team performance (Wageman et al. 2005; Morgeson et al. 2005; Kozlowski & Bell 2001).

In the context of nursing, team skills will cover various aspects of clinical skills such as interaction skills, functional skills, and patient education skills (Lipponen, Kyngäs & Kanste 2013). Nurses must also be able to advise patients on self-care and home-care (Lipponen et al. 2013). Also, each team members must be able to coordinate, direct and supervise care (American Nurses’ Association [ANA], 2014). Nurse members must also be capable to initiate and integrate teamwork even more in life or death situations (Registered Nurses’ Association of Ontario [RNAO], 2006). In handling daily tasks, nurse members will integrate their skills to

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deliver the best safe care to patients. Nursing teams spend most of their time executing tasks that involve direct and indirect patient care, medication administration, document management, professional communication, ward-related tasks, and supervision tasks (Farquharson et al. 2013). Other tasks that will require effective coordination of skills include catheterization, patient bathing, patient transporting, and communication with patients, their family and also other medical personnel (Farquharson et al. 2013). During the implementation of these tasks, team members must not only be skillful, but also resourceful and accurate. Effective integration of skills that allow efficient completion of tasks will result in high quality patient care (Al-Kandari & Thomas 2009), and ultimately lead to increased performance. Thus, based on the preceding discussion that team skills have an influence on team performance (Somech & Drach-Zahavy 2013; Wageman et al. 2005; Wageman et al. 2005; Morgeson et al. 2005; Kozlowski & Bell 2001), we offer the following:

**Proposition 2: Team skills will be positively related to team performance.**

**TEAM CONTEXT**

Team context depicts the key features of team functioning, and is critical to the successful accomplishment of a team’s mission. A review of the extant literature revealed that team context produces healthy team surroundings, which in turn improves team performance and other team outcomes (Giammanco et al. 2010; Tuuli et al. 2012). Team context that promotes leader and member relationship has received a significant amount of attention in the literature (Hu & Liden 2013; Tuuli et al. 2012; Tuuli & Rowlinson 2010). Among the elements of team context that has an impact on nursing team performance are team identification and team support. Team identification focuses on the psychological unity of team members (Tanghe, Wisse & Van Der Flier 2010). Meanwhile, team support refers to degree to which employees believe that the team values their contribution and cares for their well-being (Bishop, Scott & Burroughs 2005).

**Team identification**

Team identification is a unification of identity that team members generate based on their team membership (Tanghe et al. 2010; Solansky 2011). It refers to the sense of belonging of team members, which are developed based on similar values and norms shared by the team (Solansky 2011). The concept of team identification is drawn from the underlying assumptions of social identity theory (thereafter labeled as SIT) by Tajfel (1982). SIT is the core of a team’s psychological state (Sluss & Ashforth 2007). Team identification as laid out by SIT is based on the idea that members of a particular team will generate similarities in terms of behavior and norms, in which these similarities will provide comfort and confidence to the team members to deliver performance (Tajfel 1982; Sluss & Ashforth 2007). In a team, members tend to share similar behavior that mirrors their acceptance towards the team’s norms (Solansky 2010). Replication of similar behaviors will lead to stereotypes among team members, which will give them comfort and confidence to execute tasks. Tanghe et al. (2010) asserted that, when members identify themselves to the team, they will create a state of ‘psychological oneness’ that allow team members to communicate better with other members of the same team. This unified psychological perception will strengthen the performance of the team.

Team identification will enhance positive feelings and motivation towards the team (Han & Harms 2009). These positive feelings will drive the team members to deliver high quality work (Garg & Rastogi 2006) and enhance their pursuit for greater performance. Nursing teams gain collective understanding of others’ strengths and weaknesses through team identification (Kalisch, Weaver & Salas 2009). By identifying themselves to each other and the team, nurse members will have the confidence and encouragement to perform better in tasks (Kalisch et al. 2009; Cook & Hyrkäs 2010). Nurses who can familiarize themselves with other team members will function more effectively than those who do not (Cook & Hyrkäs 2010). This is due to the fact that, when team identification is high, team members will identify themselves with one another, which helps prevent duplication of efforts and promote effective utilization of resources in task implementation. Hence, following the idea purported by previous scholars on team identification (Tanghe et al. 2010; Solansky 2010; Sluss & Ashforth 2007), our proposition goes as follows:

**Proposition 3: Team identification will be positively related to team performance.**

**Team support**

Team support is the extent to which team members believe that the team values their contribution and cares for their well-being (Bishop et al. 2000). Team support increases satisfaction, raises respect and commitment, and increases positive outcomes for the team (Brunetto, Farr-Wharton & Shacklock 2011; Tourangeau, Cranley, Spence, Laschinger & Pachis, 2010). A supportive environment reflects members’ perception that they have higher chances of getting support from other members, thus escalating the urge to achieve superior performance (Drach-Zahavy 2004). Mutual support by team members has proven to affect team performance especially in
time of uncertainties (Griffin, Neal & Parker 2007). Effective teams usually receive adequate amount of support from their employers and in turn, will direct support to their respective teammates (Howes, Cropanzano, Grandey & Mohler 2000). When team members perceive that other teammates are ready to provide support and back-up, members will experience greater sense of belonging to the team which increases their motivation to perform. It is indeed imperative for team members to feel that they are significant to the team, as this will allow members to further confirm their membership to the team, which will in turn, increase performance.

In the context of nursing teams, a supportive environment facilitates the accomplishment of successful tasks and increases quality care (Drach-Zahavy 2004). Brunetto et al. (2011) specifically suggested three elements of well-being that needs to be supported by the team. The elements are (1) psychological well-being (attitudes and feelings about work environment), (2) physical well-being (health outcomes of work activities), and (3) social well-being (positive social surroundings which include perception of fairness and equity) (Brunetto et al. 2011). Nurse members gain support through mutual contribution and cooperation to team tasks. When their contribution is valued by other members and the leaders, members will tend to reciprocate support to others through greater work efforts. Due to the fact that team support positively relates to team performance (Brunetto et al. 2011; Tourangeau et al. 2010; Drach-Zahavy 2004), we postulated that:

**Proposition 4:** Team support will be positively related to team performance.

**TEAM TRUST AS A MODERATOR IN THE RELATIONSHIPS BETWEEN TEAM COMPOSITION, TEAM CONTEXT, AND TEAM PERFORMANCE**

Team trust is a shared perception that team members will take required actions whenever necessary for the benefit of the team, so that the team can reach its goals and objectives (Kalisch, Lee & Salas 2010). Team trust is linked to motivation to cooperate and is significant to team performance’s behaviors (Den Hartog 2003). In teams, members who exhibit higher sense of trust will usually perform better than members who have lower sense of trust (Sheng, Tian & Chen 2010). Zhu, Newman, Miao and Hooke (2013) found that team trust improves leader-follower relationships and is essential for performance. Since team performance varies according to the level of trusts experienced by members of the team (Hartog 2003; Kalisch et al. 2010; Sheng et al. 2010; Zhu et al. 2013), team trust may serve as a potential moderator in the relationship between team composition (team knowledge and team skills), team context (team identification and team support), and team performance. Therefore, our final proposition is as follows:

**Proposition 5:** The relationship between team composition (team knowledge and team skills) and team context (team identification and team support) with team performance would be stronger for teams with higher level of trust than for teams with lower level of trust.

**PROPOSED CONCEPTUAL FRAMEWORK**

Following the works of previous scholars on the role of team composition and team context on team performance (Somech & Drach-Zahavy 2013; Giammanco et al. 2010; Tuuli et al. 2012; Hollenbeck et al. 2004), our research model is proposed in Figure 1. Team composition (in the form of team knowledge and team skills), and team context (in the form of team identification and team support) are posited to predict team performance, with team trust serving as a moderator in the proposed relationship.

**FIGURE 1. PROPOSED MODEL**
From the proposed model, team composition (consisting of team knowledge and team skills) are expected to have positive and significant relationship with team performance. Team composition is often associated with team performance as it combines the characteristics that build a team (Barrick et al., 1998). An extensive literature has shown that team composition and team performance are significantly related (Bell 2007; Kozlowski & Bell 2001; Pearson et al. 2006; Somech & Drach-Zahavy 2013). However, not all links are found to be positive (Russo 2012; Schippers et al. 2003). Besides team composition, the model also proposes a positive and significant relationship between team context and team performance. Team context comprises team identification and team support. An extant literature has shown that a positive team context will bring a team to high performance and vice versa (Giammanco et al. 2010; Schippers et al. 2003; Tuuli & Rowlinson 2010). Within team context, individual team members will develop their self-worth and produce behaviors that are relevant to their team context which in turn will magnify team performance (Narayan & Steele-Johnson 2012). Apart from the relationships between team composition, team context and team performance, the model exhibits the proposed role of team trust as a moderator. In work teams, trust often produce favorable outcomes and is viewed as a positive psychological state that is needed to deal with the uncertainties and vulnerability in handling team tasks (Costa 2003). Usually, team trust intensifies team cooperation, and reinforces cooperation in working relationships (Gill et al. 2005).

DISCUSSION AND CONCLUSION
Nursing teams are the pillar of healthcare and nurse members play a crucial role in ensuring better health quality of a country. In ensuring performance, team members must be able to bring out the best in each other and complement each other’s strength. In other words, the composition and context of the team must be ideal. On a more specific note, to ensure high team performance, the composition of the team in terms of its members’ knowledge and skills must fit the team’s objectives. A right blend of knowledge and skills of team members are important in ensuring satisfied patients and reduced mistakes in task implementation. Team members must be able to integrate their knowledge, execute tasks, and achieve higher performance together. Besides team composition, a team context is crucial since team members will perform better when they are able to work in a favorable environment. Team context, through team identification and team support, will allow a healthy exchange of ideas, promotes better teamwork, and boosts team performance. Previous studies indicated that both team composition and team context are positive predictors of team performance (Yaakup et al. 2014, Sandvik et al. 2014; Ferreira et al. 2013; Drach-Zahavy 2013; Brunetto et al. 2011; Tanghe et al. 2010; Solansky 2010; Tourangeau et al. 2010; Sluss & Ashforth 2007; Wageman et al. 2005; Morgeson et al. 2005; Drach-Zahavy 2004; Kozlowski & Bell 2001). In addition, team trust, which reflects the shared perception that team members are willing to take the necessary actions for the benefit of the team, has been posited as a potential moderator in the relationships between team composition, team context, and team performance. It is believed that, with the right composition and context, teams with higher level of trust will perform better and vice versa (Kalisch et al. 2010; Sheng et al. 2010; Zhu et al. 2013).

REFERENCES


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