A CONCEPTUAL ARTICULATION OF TEAM TRUST ON TEAM PERFORMANCE IN UNIVERSITY SCIENTIFIC RESEARCH TEAMS IN JIANGSU PROVINCE, CHINA

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Abstract:
The aim of this paper is to establish a conceptual articulation of team confidence in team success in scientific research teams at universities in the province of Jiangsu, China. Many universities have set up scientific research teams in order to produce further scientific research achievements and to promote progress. The study goals of this research are knowledge-based university science research teams. Fundamentally, the main objective of the analysis is to examine the effect of team confidence on team success in scientific research teams at universities in the province of Jiangsu, China. As this is a philosophical paper, to explain the conclusions, this analysis focuses on the empirical and theoretical articulations. Therefore, to achieve the research purpose, current research uses descriptive design as the most suitable study design. The findings indicate that the process variables have continuously attracted the attention of researchers to influence team performance; the relationship between team confidence and team performance has only begun to be explored. Team trust helps team members master team activities, minimise errors and delays, and enhance strategies to accomplish team goals, and develop creative problem-solving skills to better understand key task domains. Even, as successes in scientific research are placed into practical development. It hopes to bring tremendous economic benefits to businesses and the country.

JEL: I20; I25

Keywords: team trust, team performance, university scientific research team, Jiangsu Province, China

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1. Introduction

The growing awareness that teamwork is a critical component of organisational performance has resulted in the almost ubiquitous existence of team studies in the organisation (Phungsoonthorn & Charoensukmongkol, 2018; Azam and Moha Asri, 2015; Tham et al., 2017; Udriyah et al., 2019). Taking advantage of the various skills of the team members to deliver creative and effective results, it is important for the teams to succeed. Recent research has focused on team member interactions and team interaction structures as a primary predictor of team performance (de Wit, Greer, & Jehn, 1995). In recent years, universities have paid considerable attention to scientific study. The degree and intensity of scientific research is now one of the key points for assessing the overall quality of a university or college. Many universities therefore set up scientific research teams in order to improve the quality of research, to improve the capacity of innovation, to increase integrated productivity, to generate more scientific research achievements and to promote growth. Scientific research achievements usually play a prominent role among innovations and creations (Duan & Frazier, 2019). Teamwork is increasingly used in universities to supplement team members’ tools, to share insightful ideas and heterogeneous information (Liu, 2016; Rachmawati et al., 2019; Azam and Yusoff, 2020; Azam et al., 2020). The degree and intensity of scientific research is now one of the key points for assessing the overall quality of a university or college. In the latest literature on university scientific research teams, it is also of great interest for the University of Science. Much of the studies concentrate on team building and team management. Intensely few studies have studied team confidence and its effect on team success. In addition, recent research (Liang, Sun & Fonseka, 2019) shows that team confidence has a positive impact on team success. Team trust helps team members master team tasks, reduce errors and delays. In addition, team trust helps team members to strengthen approaches to achieving team goals and to develop new problem-solving skills. The goals of this analysis are the scientific research teams of the universities, which are knowledge-based. Team trust is of great importance to such organisations. The lack of team confidence will reduce the efficiency of the team. The main objective of the analysis is therefore to examine the effect of team confidence on team success in the university science research teams in Jiangsu Province, China.

2. Literature Review

In today’s fast-changing, hyper-competitive environment, teamwork and co-operative working enhance the organisation’s adaptive capability. The team, rather than the individual, is increasingly seen as the building block of organisations and a vital source of competitive advantage. Trust influences all relationships between groups of individuals; trust is essential to the successful operation of groups or teams inside organisations (Costa, 2003). Team tasks are extensive and can involve the allocation of roles, the preparation and organising of plans, decision-making on goods and facilities,
the development of innovative strategies and the resolution of problems. Trust is an organisational concept (Costa, 2003; Azam et al., 2014; Haur et al., 2017; Katukurunda et al., 2019) focused on the partnership between an entity and another person or group of persons. Researchers also explored the trust of individuals, associations and organisations (Costa, 2003), because teamwork is often seen as the best way to deliver superior performance (Liu, 2016; Duan & Frazier, 2019). Teamwork offers the possibility of achieving outcomes that could not be achieved by individuals working in isolation. Proposed organisational benefits of teams include enhanced productivity at work, improved quality of service, reduced management structure, lower absenteeism and reduced turnover of employees and increased organisational efficiency (Greer, & Jehn, 1995). Team efficiency can be measured against a range of metrics, such as error avoidance, continuous improvement in production consistency, improved profitability, or consumer loyalty. Group loyalty analysis suggests that confidence enhances the willingness of community leaders to work together, with higher rates of commitment resulting in improved team results, top team happiness, high engagement (Costa, 2003; Dewi et al., 2019; Nguyen et al., 2019). Developing high-performance teams that can fulfil their demanding and dynamic responsibilities is only possible where there is a high level of cooperation between team members. But the co-operation desired in teamwork should be continuous, intensive and should be habitual behaviour for team members. This can only be achieved, providing that trust comes to be the primary value of the team culture. Trust also provides an atmosphere of psychological safety for team members, and only in such an atmosphere can members accept criticisms easily, discuss mistakes and express their thoughts freely so that they can increase synergy (Edmondson, 2001b).

Ability is a collection of talents, competencies and characteristics that enable a party to have an impact within a particular domain. The field of competence is unique as the trustee will have a substantial degree of expertise in any professional region, providing the individual with faith in the activities relating to that field. However, the trustee can have no aptitude, knowledge or expertise in specific areas, such as oral contact. While such an individual may be trusted to conduct analytical tasks relating to his or her professional field, the individual may not be trusted to establish communication with a significant consumer. Several theorists have discussed similar constructions that affect trust, using several synonyms. Cook and Wall (1980), Deutsch (1960), Jones, James, and Bruni (1975), and Sitkin and Roth (1993) all found ability to be an integral aspect of confidence. Others (e.g., Butler, 1991; Butler & Cantrell, 1984; Kee & Knox, 1970; Lieberman, 1981; Mishra, Rosen & Jerdee, 1977) used the word competence to define a similar construction. Throughout the Yale studies mentioned above, presumed ability was described as a vital attribute of the trustee. Likewise, Giffin (1967) suggested that expertise should be a factor that leads to trust.

Finally, Giffin (1967) identified nine trust bases, including functional/specific competence, interpersonal competence, business sense and judgment. All of these are similar to the capabilities of the current conceptualisation. Whereas concepts such as ability and expertise represent a collection of skills common to a particular, defined area
(e.g. Giffin’s interpersonal competence), capability illustrates the task-and situation-specific complexity of the framework in the current model. Benevolence is the degree of which the trustee is supposed of wish to do something to the client, aside from an egocentric benefit motive. Benevolence implies that the trustee has a clear connection to the trustee. The partnership between a counsellor (trustee) and a guardian (trustee) is an indication of this connection. The mentor wants to help protect, even though the mentor is not required to be helpful, and there is no extrinsic reward for the mentor. Benevolence is a feeling of the trustee’s optimistic attitude towards the trustee. A variety of scholars have provided traits close to benevolence as a foundation for confidence. Jones and his colleagues (1975) identified the trustworthiness of the trustee’s incentive to lie. Several scholars used the term benevolence in their study of trust, concentrating on a particular partnership with the trustee (Larzelere & Huston, 1980; Solomon, 1960). Some regarded actions or motivations as necessary to trust. While these scholars reflect the view that the trustee’s orientation towards the trustee is significant, the words actions and reasons that have broader meanings than the direction towards the trustee (e.g. benefit motives of the trustee). Benevolence is a moral character that is an integral part of the suggested paradigm.

The trustor understands and analysis of the partnership history can influence both the need for confidence and the determination of trustworthiness. A robust organisational control structure may hinder the creation of trust, as the behaviour of the trustee could be perceived as a reaction to that control rather than a sign of trustworthiness. A good sense of trust for the trustee includes knowing how the meaning influences the expectations of trustworthiness.

2.1 Theory of Performance
Theory of Performance suggested by Don Elger, claims that six components have an impact on the level of performance: level of knowledge, skills levels, personal factors, context, level of identity, and fixed factors. The level of performance improves with the increase in the breadth and depth of knowledge. Individuals or groups can acquire knowledge involving information, theories, and concepts, principles via learning or experience. Learning is beneficial to enhance performance (Dean & Elegwa, 2015; Maghfuriyah et al., 2019; De Silva et al., 2017; Kuruwitaarachchi et al., 2019; Pambreni et al., 2019). Theory of Performance provides theoretical support for this study to predict that there is the impact of team trust on team performance.

Chen (2013) established a model, which considered task conflict, relationship conflict as independent variables, team trust as mediator, team performance as dependent variable with the study subject of technology enterprises. Chen Jingqi (2013) found that relationship conflict was negative associated with performance. Moreover, task conflict was positive associated with performance when it was in low level. But when task conflict was in high level, it was negative associated with performance. Besides, team trust was mediator in the association between relationship conflict and performance.
However, team trust didn’t play the mediating role in the relationship between task conflict and performance.

This model centers on analysing the effects of task conflict and relationship conflict on performance. Other types of team conflict are ignored. As can be seen from conflict theory, conflict centers on the struggle of groups in society over finite resources. Hence, conflict type which is related to personal interests can be researched in-depth in future studies.

2.2 Team Performance
In current literature, a wide range of definitions of team performance can be found. Team performance has been defined by Lenny, Ahmad (2018) as how well a team can accomplish its output objectives, for instance, reliability and quality of team outputs, team members’ expectations, efficiency, co-operative ability, innovation ability and so on. According to Lenny, Ahmad (2018), team performance refers to a multi-level process that occurs when members within a team work on managing not only their individual but also teamwork process and team work level.

Although some scholars treat team performance as a unitary construct (Wageman & Hackman, 2005; Ma, 2018), many researchers suggest using varied indicators to measure team performance. For instance, Chen (2013) used innovation, effectiveness and efficiency as indicators to measure team performance. Anderson (1996) defined innovation as the intended introduction and application of new products, ideas, procedures or processes, which are devised to enhance team performance. Ma (2018) suggested that effectiveness can be defined as an absolute level of achievement of expectations and goals. The view of Lenny, Ahmad (2018) has been supported by many scholars, for example, Lenny, Ahmad (2018) also pointed out that team performance can be evaluated in terms of efficiency, effectiveness as well as innovation.

Although a wide range of definitions of the term team trust have been put forward, this paper will use the definition first suggested by Willenbrock (2017) who saw team trust as activities that members within a team seek to acquire, refine, share, or combine knowledge which is relevant to tasks through mutual communication. The definition showed a significant hallmark of team trust, which is aiming at compiling knowledge. Team trust enables team members to find effective and innovative solutions for team tasks (Timmermans, Elseviers and Denekens, 2011). It also allows team members adapt to the environmental changes, complete tasks and actualise goals swiftly (Ma, 2013).

3. Materials and Methods
The current study is using the descriptive design as the most appropriate study design for this kind of study. The research approach of this study is very important to achieve the research goal. Since this is a conceptual paper, this study focuses on the empirical and theoretical articulations to justify the findings.
4. Findings

Although the process variables affect team performance has constantly attracted the attention of researchers, the relationship between team trust and team performance has only begun to be examined (Timmermans, Elseviers and Denekens, 2011). Most researchers (Van Offenbeek 2001; Chan & Keasberry 2003; Ma 2018; Liang, Sun & Fonseka, 2019) indicated that team trust had a positive impact on team performance. Team trust helps team members to master team tasks, reduce mistakes and delays (Ma, 2013; Chun et al., 2019; Yang et al., 2019). Moreover, team trust enables team members to improve approaches to achieve team goals, to develop creative problem-solving skills (Hargadon, 1999), to better understand key task domains (Liang, Moreland & Argote, 1995), and to use fund of knowledge to shift task requirements (Han and Williams, 2008), thereby, enhancing team performance (Sun & Fonseka, 2019). Hargadon (1999) classified team trust into team exploratory learning and team exploitative learning.

In addition, when scientific research achievements are put into practical production. This hopes to bring enormous economic benefits to the enterprises and to the country (Ma, 2013). Generally, Chinese University Scientific Research Team consists of teachers, doctor and master students. The knowledge, skills and research experiences of team members are closely related and complement each other. Leadership style as well as management is creating severe problems with the team in developing trust and group cohesion. This has negatively impacting the team’s ability to establish effective communication and coordination processes to successfully complete the project (Jang, 2017; Thompson, 2011). The lack of trust between team members created emotional conflict, which affected team performance and team-member satisfaction (Lee et al., 2015). The strong emotional discontent produced strong hostility bias and created a situation in which task-based suggestions from the research members were met with antagonism and rejection from the fellow research members (Fong et al., 2018).

The team structure is too big and adding more team members will not resolve the conflict. In fact, it will cause more problems such as distorting communication and slowing down processes (Cox, 2019; Thompson, 2011). Adding sub-team sponsors at this point would definitely affect the team’s decision making process. A sub-team becomes another layer within the team that information needs to be communicated to. By adding this layer, the increase for miscommunications is present as the original message can be lost as this further goes down the chain. Also, conflicts within the core group can trickle down and impact the subgroups since knowledge cannot be effectively shared (Duan & Frazier, 2019; Sheng & Yeh, 2009). This was present in the case. Currently, the team is dominated by the project manager, which is negatively impacting the team’s performance.
5. Conclusion and Discussion

The acceptability question precludes the claim that a party devoted exclusively to the profit-seeking principle at all costs will be deemed to be strong in honesty (unless that principle is appropriate to the trustee). Issues such as the consistency of the previous actions of the group, the accurate communication of the trustee with different sources, the presumption that the trustee has a reasonable sense of justice, and the extent to which the conduct of the group is consistent with its terms, also affect the degree to which the party is deemed to be trustworthy. Integrity or, rather, unique constructions have been addressed as an antecedent to the trust of a number of theories. Lieberman (1981) referred to integrity as an integral aspect of trust on its own. Sitkin and Roth’s (1993: 368) approach uses a particular but more limited value congruence, defined as the “compatibility of the employee’s beliefs and values with the institutional values of the institution.” Their methodology compares the trustee’s values with those of the corporate referent, rather than the acceptability of the trustee’s values to the trustee. Integrity and accuracy were the deciding criteria for confidence in the Butler and Cantrell (1984) models. Butler (1991) also referred to integrity, fairness and justice as trust standards. Integrity in the proposed model is well grounded in previous confidence approaches. It is clear from the previous discussion that the three factors of capacity, benevolence and honesty are similar to all of the previous trust work. Previous trust antecedent models either did not integrate the three variables or evolved into a substantially larger set of antecedents (e.g., Butler, 1991). These three variables appear to illustrate, in succinct terms, the variance of trust within the trust for others.

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