

Constituents of Effective Teamwork in School

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ABSTRACT

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Teams are widely used in all types of organizations aiming for achieving better results. Understanding constituent premises of teamwork in the school is a complicated issue that the present study investigates. Although there have been different studies on the topic of team, there is not much evidence about the characteristics that affect teams. This study aims at specifying how team efficacy manifests as collective performance and the challenging issues teams experienced in the case school.

A Web-based questionnaire (a modified questionnaire) based on 'Dimension of Learning Questionnaire' (Marsick & Watkins, 2003) is used to understand the constituents of effective teamwork in the school. 15 participants participated in this study. A qualitative approach in format of the case study is used in the study.

Shared visions, capability and collaboration, autonomy, results of the team, and school supporting system are recognized as constituents of effective teamwork. Collective performance is understood as the continuous interaction between teams and school that bring 'efficacy' to teams.

The study concludes communication, learning, the low level of autonomy in teams, and lack of school supporting system as challenges to teamwork in the case school. Shared coordinated structures are recognized between teams and the school to achieve efficacy. Teamwork is understood as a capacity through which school and teams learn and unite as a professional learning community.

Keywords: Effective teamwork, teams, teamwork, collaboration, collective performance

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1 INTRODUCTION

In this chapter, the subject, importance of study, and aims of the study will be introduced respectively. A quick presentation on what the following chapters include come at the end of this chapter.

Effective teamwork premises in the educational context i.e. school, its dynamic procedures, and their interaction make the subject of the present study. A team, in essence, is based on cooperation among a number of individuals to achieve a goal or goals, collectively. It is believed that a higher level of thinking is achieved by doing tasks in teams compared to other traditional ways. Teamwork happens through collaboration of team members. Collaborative teamwork is an end that efficacious teamwork achieve. Moreover, collaborative teamwork has a pivotal role in sustainable learning that is the goal of organizational learning.

The wide use and importance of applying collaborative effort in learning contexts are the reasons why a team and its teamwork in the educational context are important and interesting topic of the study. Although the subject of my study is not on relationships between collaborative teamwork and its results on student achievement, I want to pinpoint the fact that collaborative teams also improve student performance. Numerous studies (Hellinger & Heck, 2011; Goddard, Goddard, Sook Kim, & Miller, 2015; Tschannen-Moran & Barr, 2004) show that collaborative teams improve students' performance (for example, in Math and reading).

There are abundant studies done on teams in different contexts and from different dimensions, for example, features of teams, team characteristics, and team variables in order to achieve higher performances. Yet, there is no widely agreed model showing how team effectiveness is reached at. Even a more difficult issue is to clarify how team dynamics interact together to achieve efficacy. Henderson and Walkinshaw, 2002 (qtd. in Sharif & Nahas, 2013, p. 142) state "a single and universally acceptable model of team effectiveness is not yet visible in literature".

A number of studies have continued to focus on identifying characteristics of teams and how they are linked with team effectiveness (McGrath, 1984; Driskell, Hogan, & Salas, 1987; Tannenbaum, Beard, & Salas, 1992; Klimoski & Jones 1995; Blendell, Henderson, Molloy, & Pascual, 2001). McGrath, 1984, and Hackman, 1987 explained team effectiveness using three components: input, process (or throughput), and output (or outcome). Rasker, van Vliet, van Den Broek and Essens (2001) worked on the operational context for the team and listed a number of components as determining factors of team effectiveness, e.g., organizational, team, individual, and task factors. The issue of effectiveness in teams will be discussed elaborately in the second chapter.

The aim of my study is to understand the constituents of teamwork and the premises of effective teamwork. The study also investigates the collective performance in the case school. Collective performance in the school happens through teams and it is viewed from a team perspective in this study.

The importance of the study is that although there have been different studies on the topic of the collaborative team, there is not much evidence about the characteristics and attitudes that affect learning and collaboration in teams. In the present study, I want to know if there exists any relationship between learning, collaboration and the team's efficacy.

How the team members really learn in teams, and what procedures happen inside teams so that the team would learn are issues that the study will consider. Based on what the present study finds as constituents of a team efficacy, how the efficiency is experienced in the teams and what issues the teams face as difficulties in their teamwork in the case school. Another issue to consider is the collective performance in school. What the collective performance is in the school context and the possible relationship between teamwork and collective performance in the school are the issues that the study will consider.

In order to find answers to concerning issues of the study, the principal and teachers of the case school are involved in this study, at least 15 subjects answer the questions. The aim of this study is to develop an understanding of what constitutes an efficacious teamwork in an educational context i.e. school

and to find out about dynamics of efficient teamwork to experience collective performance in the case school.

Here, I mention a quick review of the contents of next chapters. In the second chapter of the study, teamwork and issues regarding efficacy in teams are introduced. A review of previous works in the fields of teams, team's efficacy and its criteria plus previous studies findings on these issues are presented. In addition, the theoretical framework of the study is discussed in the second chapter. The third chapter of the study presents research questions. The two research questions of the study are presented in the third chapter. The Fourth chapter of study is the implementation of the study. How the study is implemented, subjects and the study context, the method of gathering and phases in analysing data are discussed in implementation chapter of the study. The fifth chapter of the study is the result of the study. Questions of this study are answered in the result section. Answers to questions of the study are based both on data gathered according to the questionnaire and the theoretical framework of the study. Chapter six of the study is the discussion. Discussion of the study provides a quick review of results of the study and then talks about the relationship between different constituent premises of the effective teamwork. Teams' efficacy and collective performance and relationships between them and their constituents are discussed in discussion chapter. Discussion chapter also considers the challenges that the teams face in case school.

2 EFFECTIVE TEAMWORK

This chapter first introduces certain concepts related to shared leadership and their key role in collective performance. After considering shared leadership, teamwork shall be treated. Thereafter, team cohesion and variables that play key roles in teamwork will be discussed. Such issues will be highlighted as what makes a team efficient, what are the models for team effectiveness, and what procedures take place within a team. These are the subjects that finally lead us to team efficiency, team effectiveness models, and team procedures respectively.

2.1 Role of Shared Leadership in Improving Collective Performance

Studying the phenomenon of leadership in teams in terms of shared leadership, especially in educational settings, has been welcomed by researchers in the field in the past years. Although, I am not doing research on shared leadership but I am talking about 'shared leadership approach' as the framework of collective performance. Due to the ambiguity of the concept of distributed leadership, I will use here the more general term of shared leadership if the original source does not use systematically the concept of distributed leadership.

Mehra, Smith, Dixon, and Robertson (2006, p. 233) suggest "Leadership in teams is a shared, distributed phenomenon in which there can be several (formally appointed or emergent) leaders". According to Mehra et al., (2006, p. 234) existence of multiple leaders within a group "enhances participation and information sharing among team members". Mehra et al., (2006) suggest distributed coordinated leadership pattern means recognition and effective communication of formal and informal or emergent leaders within a group who "synchronize their leadership efforts so that decision-making and action are more effectively channeled within the group" (Mehra et al., 2006, p. 235).

Harris (2008) points out in the review of distributed leadership literature that distributed leadership is not necessarily useful in any circumstances and in any form. The usefulness of this shared leadership style, like other forms of leadership, can be influenced by several factors.

Spillane, Halverson, and Diamond, (2004) mention composition of the team members, the cultural characteristics of the work environment, the rules and patterns, or the degree of stability and environmental sustainability, are the underlying features that have effects on the shared leadership process. These concepts in the present research in detail are such as being open to collaborative learning, sharing future goals, helping other members of group, having resources allocation such financials and time to learn. Further concepts in this quest are considering problems to trigger learning, being rewarded for learning, receiving honest and open feedback, building trust, authentic listening. Features such as asking other members' points of views, flexibility in adapting toward goals, asking without considering ranks, respecting other members of group, and being treated equally are other elements of the quest. Finally, adequate level of task cohesion plus group cohesion, revising thinking based on group discussion or information collected, rewarding team achievements and having confidence that the organization acts upon recommendations are the other aspects to be considered.

Shared leadership style in the framework of improving collective performance can happen by enhancing learning capacity in the school (Sebastian & Allensworth, 2012). Shared leadership in the format of team plays as an essential in improving collective performance of school as evidenced in schools experiencing rapid growth (Hallinger & Heck, 2011; Scribner et al., 2007).

Shared leadership perspective is largely concerned addressing the challenges of the team, devising a shared understanding, and exploring effective ways to address the challenges. Next, I will concentrate on teamwork and its effectiveness as a framework for collective performance.

2.2 Definitions of Team and Teamwork

In this thesis, the two terms of 'team' and 'group' are used interchangeably although there are differences in definitions and functions between team and group. From now onwards, I will use the terms of 'team' and 'group' interchangeably if they indicate the same phenomenon. The same is true about other noun compounds such as 'team cohesion' and 'group cohesion' and so on.

Each person, long before he may have a conception of a "team" in his mind or even before they hear the term, is a member of one or more teams. For example, family is the most basic form of a team in human life. In addition, many people in their childhood and their adulthood form teams with friends and neighbors to play up or play sports. That is to say, a team is not an unfamiliar concept for human beings. But, as time passes, team membership always brings about complexities which require cooperation to overcome possible challenges and problems. In today's societies, one person cannot act effectively alone. Teams are needed in order to operate efficiently and reach desirable results. These concepts lead us to define the term 'team'.

Friedlander (1987, p. 302) says that: "Team is realized by few people who are interdependent to some degree of social, structural and technical aspects with each other and toward larger organizations trying to achieve a common goal". One classical definition of the term features that "a team is a small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they are mutually accountable." (Katzenbach & Smith, 1993, p. 45). Salas, Dickinson, Converse, and Tannenbaum (1992, p. 4) define a team as "two or more individuals who have specific roles, perform interdependent tasks, are adaptable and share a common goal".

Next, teamwork is defined. Teamwork is sharing structures in a team among team members in order to achieve efficacy collectively. The term 'teamwork' is a one that is heard in many studies including industry, business, medical profession, and education. The concept of teamwork as a reproduction of tradition-

al mass units of work is the main characteristic of today's modern management theories and approaches. Teamwork is one of the key elements of the success of organizations. Teamwork helps to increase the organization's ability to overcome environmental challenges. Therefore, neglecting the need for the effective implementation of teamwork leads to a failure to realize organizational goals and team building.

Teamwork happens at a wide range of different organizations, yet it shows enjoying the following common features: 1) Commitment to shared goals, 2) Active participation of all members toward visions and missions, 3) Open efficient communication, 4) Collaborative decision-making, 5) Regular-based frequent (face-to-face, online or offline meetings), 6) Providing inputs for organizational decisions, and 7) Numerous opportunities to advance skills and know-how among members.

2.3 Advantages of Teamwork

Evidence indicates that when different views are needed, a team works better and more efficiently than separated individuals. When comparing team and traditional organized structures, a team shows more flexibility and acts faster toward changing phenomena. Motivational aspects as well as increased employee involvement are also important features for teamwork.

Teamwork advantages can be divided into two categories: 1. Individual advantages and 2. Organizational advantages. Hoover (2002, pp. 8-9) explains that "individual advantages of teamwork comprise growing sense of belonging, feeling of control or 'work ownership,' and enhancement of self-esteem".

Organizational advantages include product, process, and personnel. Product advantages include enhancing product or service quality, reduction in cost, and minimizing waste. Process advantage works in the way that by establishing teamwork, organizations can make sure that teams adapt to rapid changes' needs. Process advantages include more rapid work pace, an establishment of

learning culture inside the organization and less needed management efforts resulted from more effective coordination across the organization. Finally, personnel advantages consist of motivated, responsible, committed, knowledgeable and confident employees who cooperate in teamwork (ibid).

2.4 Team Cohesion and Variables

The issue of team cohesion is defined in two forms of people's willingness to stay in the team or group resistance against the disturbing factors affecting their workflow (Zaccaro, Rittman, & Marks, 2001). Both approaches, focused on the tasks or social dimensions of the group (or both at the same time), may define team cohesion. The inescapability of the team members that is proposed for the first approach is consistent with the second approach, the group's resistance to external disturbance factors. The result of the latter feature means the survival of the team despite numerous external barriers and problems.

Fisher and Ellis (1990) and Stokes (1983) explain that in each team, there is a bond and commitment in order to achieve certain goals and to keep the group together. The power of this connection and commitment indicates cohesion. Cohesion can be categorized in two dimensions: task cohesion (degree of commitment to common goals or tasks) and group cohesion that is also called as social cohesion (attraction group, to the satisfaction of the interest of each member and others in the group).

Variables related to group cohesion include stabilization of the members of a group, group size, external threats, status and personality similarity between members, consent of the members of each other's and success. Gully, Incalcaterra, Joshi, and Beaubien (2002) show that team cohesion is positively related to team performance. Krech, Crutchfield, and Ballachey (1962) identify variables that affect team cohesion: they either fortify or weaken it. These variables (Krech et al., (1962)) can be summarized as follows:

1. **The intensity of relationships:** As the relationships between the members of the group expand, there will become a more cohesive

group. As people spend more time together, the relationships become stronger and more coherent. Relations are usually based on emotions and people can pass easily from their personal interests. It should be noted that if there is a conflict within the team, the integrity of the team and the intensity of the relationships will be reduced based on the conflict frequency.

2. **Group success:** The more the group achieves success, the more cohesion is found in the group. In the case of sequential fails, group cohesiveness is reduced.
3. **Group size:** The smaller the group size is, the more there will be integration and cohesion of the team. In small groups, members know each other better and have mutual cognition toward other group members. However, in large groups, members know each other less, and they have less opportunity to interact with each other. The diversity of views is larger and group satisfaction decreases. Although cohesion in large groups can be created, in smaller groups creating cohesion is more convenient. In large groups, there might be a lack of coherence in the group; that is because people do not use all of their capabilities and the lack of adequate opportunities for participation in group activities decreases job satisfaction and reduces efficiency.
4. **Group diversity:** The more members share features, the greater will be group cohesion. The combination of demographic (age, gender, education), work experience, ability, skill, class, language, culture, occupation, and religion affect cohesion. Non-homogenous groups have diverse expertise and can potentially act more efficiently, but the effectiveness is overshadowed by intergroup conflicts. There is an inverse relationship between conflict and cohesion and the high contrasts result in less cohesion. In other words, homogenous groups are far more coherent and more effective compared with heterogeneous groups.

5. **Physical setting:** In a small physical setting in which people work together, group cohesiveness is high. In other words, in smaller environments opportunities to interact and establish friendly relations further are higher.
6. **Inside and outside group conditions:** As conditions for group work gets harder, group cohesion increases. Also, external threats and common enemy enhance solidarity of the group.
7. **Physical setting:** In a small physical setting in which people work together, group cohesiveness is high. In other words, in smaller environments opportunities to interact and establish friendly relations further are higher.

Bandura (1997) suggests that a group has an impact in the sense how individuals set their objectives, how much effort will be taken to accomplish those goals, and how members will continue even in facing troubles. Productivity and sense of satisfaction among group members increase along with the higher degree of group cohesion. The emphasis on group cohesion is not only effective in improving interpersonal relationships in the team, but it considers team relationships with outside world, as well as developing its social identity and its status.

2.5 Team and Goals

Many scholars (e.g. Hallinger, 2003; Hallinger, 2005; Hallinger & Heck, 2011; Larson & LaFasto, 1989; Leithwood, Louis, Anderson & Wahlstrom, 2004; Louis, 1998; Supovitz, Sirinides, & May, 2010; Sebastian & Allensworth, 2012; Stepan, Thompson & Buchanan, 2002) have found that there is a need for a team to have clear objectives and to be able to adapt to new objectives or priorities according to new inputs. Team productivity highly correlates with team objectives and that team productivity is affected by team's ability to adjust and adapt to new objectives or priorities according to new information attained.

In an event that members have differences regarding the goals set by the leader, the issues could be debated, providing an environment to create a shared understanding of the objectives to be attained. These debates effectively help individuals to exchange ideas on the topic (Stepans et al., 2002).

Moreover, Stepans et al., (2002) suggest goal orientation informs the team about external communication activities through examining of elements such as feedback on ideas and solutions, as opposed to primarily focusing on performance. In this case, feedback encompasses activities such as searching for information, exploring how ideas could be harnessed, as well as coming up with the problem-solving approach (ibid). All these activities are important in aligning the team to the right path.

2.6 Team and Trust

The concept of trust has increasingly become the focus of research in organizations over the past few years. Today, the importance of trust in organizations is well recognized, since communication and the realization of cooperation among individuals require trust. At the era when relationships between individuals and groups become more fragile and rapidly changing, trust that is largely based on inferences and interpretations of the motives and personality of others is a central issue for organizations to guarantee their growth and life. Trust is essential because the understanding of this factor makes it possible to create effective cooperation in teams and organizations.

Tyler (2003) says that trust is a key factor in creating cooperation. Trust can lead to sharing information and team members' empowerment, as empowerment program for school members and team members are doomed to failure without trust. The first step to empower employees is to share and distribute information across the organization. Conditions for achieving this means high level of inter-organization trust. Without mutual trust between managers and their staff as well as trust of staff members to their colleagues, the organization will not achieve its goals. McAllister, (1995) specifies for the success of organi-

zations, trust is crucial because it ensures human resource collaboration to implement organizational strategies.

Trust can be reinforced by shared leadership practices through engaging team members oriented toward mission and objectives in the school (Sebastien & Allensworth, 2012; Byrk, Sebring, Allensworth, Easton, & Luppescu, 2010). Research has shown the importance of trust in teamwork. For example, research findings by Rawlings (2000) suggests that higher level of trust result in more participation.

Cazier, Shao, and Louis (2007) indicate increased performance in groups with higher levels of trust. Møller and Eggen, (2005) emphasize that for effective interactions in a team mutual trust should be cultivated. Trust is considered as a facilitator of cooperation (Erturk, 2008; Møller & Eggen, 2005). During another study it was found that trust in colleagues was positively related to collective efficacy (Goddard, Hoy & Hoy, 2000).

Building mutual trust play an important role in improving collective performance in schools (Møller and Eggen, 2005; Scribner et al., 2007). Trust creates and protects the spirit of a team. In sum, trust directly and indirectly affect the team and organization achievements.

2.7 Team Efficacy as Collective Efficacy

Efficacy can be manifested in two categories: 1. Self-efficacy and 2. Collective-efficacy. Bandura (1986) propose the terms “collective efficacy” and “self-efficacy”. Bandura defines the concept of collective efficacy as “a group shared belief in their conjoint capabilities to organize and executes courses of action required to produce given levels of attainments” (Bandura, 1997, p. 476).

Bandura (2000) expands the concept of “collective efficacy”. Social-cognitive theory was based on human agency (Bandura, 1986). In his later works, Bandura considers collective efficacy as another layer of human agency. Bandura (2000) puts emphasize on ‘interdependence’ among group of people with

shared beliefs about their capability to produce the desired effects through collective action. This is what is understood as 'collective agency'.

Bandura (2000, p. 75) mentions that 'collective efficacy' plays a key role in mobilizing a group toward actions and collaboration, keeping them united even through difficulties to accomplish their goals. The key role that Bandura (2000) mentions as the effect of collective efficacy is in alignment with findings of other studies as fruits of perceived collective efficacy (Bandura, 1997; Goddard et al., 2000). Bandura considers 'collective efficacy' as "coordinative and interactive aspects" of working in a group (Bandura, 2000, p. 76).

Based on what we mentioned, one may conclude the term 'collective efficacy' can be channelized through the concept of a team constituting 'team efficacy'. It conveys the same meaning just that the latter is used more specifically to a team. Therefore, in this thesis, both terms are used as they indicate the same phenomenon.

Goddard et al., (2000) extend collective efficacy to another level which is organizational level and they investigate it specifically in school context. Goddard et al. (2000) find efficacy to be 'context-based'; that means according to particular circumstances, efficacy perceptions vary (for example, among teachers).

Collective efficacy is considered as 'multilevel phenomenon' (Goddard et al., 2000). High collective efficacy not only increases efficaciousness (among teachers) in school but also, it makes an influence on the structure of shared beliefs among members of the organization. Collective efficacy shapes a norm that influence the actions and achievements of schools (ibid).

2.7.1 Team Efficacy and Teamwork Effectiveness

Team processes are procedures or measures that are done regularly by a team in order to achieve goals and accomplish tasks. Mikan and Rodger, (2000, p. 202) mention factors in team processes as follows: 1) Coordination, 2) Communication, 3) Cohesion, 4) Decision-making, 5) Conflict management, 6) Social

relationships, and 7) Performance feedback. Here, we look at these processes one by one: First, coordination is to make sure that all team members know about roles and responsibilities of other team members. It is the know-how and measures done in order to accomplish a task within a group. Second, communication is a method of exchanging information and ideas whether verbally or nonverbally, whether face to face or indirectly. Third, cohesion indicates team members remaining together as a whole team to do tasks. Fourth, conflict management indicates how to manage disputes regarding differences of ideas on how to perform a task inside a team. According to Gully et al., (2002) conflict management strategies affect team efficacy's growth. Likewise, team efficacy influences decision-making. The sixth process is social relationship. By social relationships, the team member implies the feeling toward other members of a team that has effects on the team. Finally, performance feedback is the feeling – whether positive or negative- that each member provides or receives inside a team the understanding about how well they achieve tasks. Figure 2 shows these factors in team processes:



Figure 2. Characteristics of Effective Teamwork (Mickan and Rodger, 2000, p.202)

2.7.2 Team Effectiveness Models and Criteria

Another important point to bear in mind is that how team effectiveness is defined through the time. There are two main categories in this regard. First, one group of scholars define subjective criteria like how satisfied team members are and another scholar group bases their definition on how successfully the team achieves the task (task performance).

There have been many models of team effectiveness suggested since 1977. However, as Mathieu, Maynard, Rapp, and Gilson (2008) mention that team effectiveness is traditionally considered as IPO (Input-Process-Output) model that is shown in Figure 3.

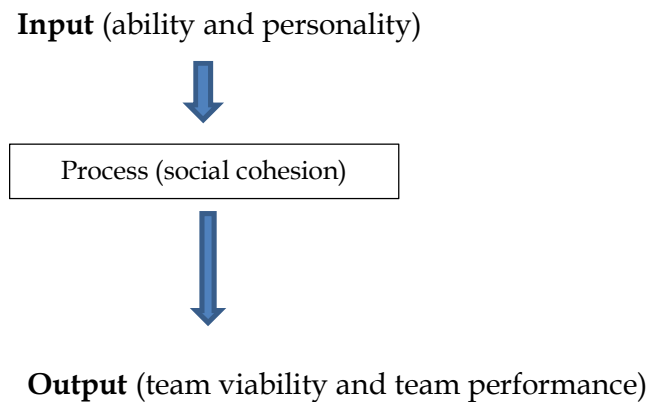


Figure 3. Input-process-output model of team effectiveness

IPO model assesses that team effectiveness composing of team viability and team performance. However, there has been some criticism against this model. Lack of regular repeating feedback-loop is one. Another shortcoming of IPO model is its unilateral nature and that there are no two-way interactions between different parts. Finally, there are multiple types of processes that need to be considered (Mathieu et al., 2008). During the time, an upgraded version of the IPO model appeared as IMO model (Input-Mediators-Outcomes-Input). IMO model is shown in Figure 4.

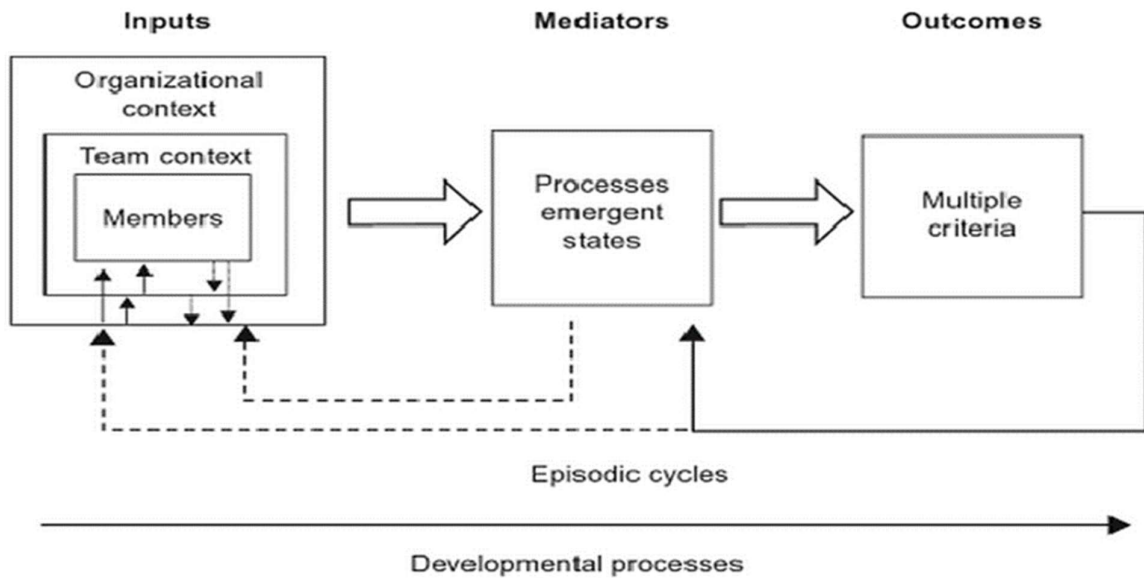


FIGURE 4. Input-Mediators-Outcomes-Input model of team effectiveness (Mathieu et al., 2008)

Salas, Cooke, and Rosen (2008) suggest that team performance is a dynamic entity and a multilevel process. Cohen and Bailey (1997) categorized team effectiveness as three-component category: performance, attitudes, and behaviors. Kozlowski and Ilgen (2006, p. 90) found team efficacy as “shared beliefs in group’s collective capability to produce given levels of goal attainment”.

Higgs, Plewnia, and Ploch (2005) suggests that team composition and task complexity have greatest impacts on its performance and output. According to Higgs et al., heterogeneous team composition in case of complex work and homogeneous team composition in case of routine and simple work create positive impacts on performance. However, there have been numerous other ways to measure team performance. As Guzzo and Dickson (1996, p. 309) have noted, “there is no singular, uniform measure of performance effectiveness in groups”. Mehra et al., (2006) mention team performance as measures categorized in two aspects: first, objective measures such as team sales in a workplace and, second, attitudinal measures like team satisfaction.

Hackman (1990) suggests three aspects of team effectiveness assessment: 1. Output of team, the extent that output satisfies the needs and expectations of customers (specification such as quality and quantity), 2. Process of team, the extent that team members' ability to work together in the future develops, and 3. Attitude of team, the extent that team members achieve personal goals or gain satisfaction. Sundstrom, McIntyre, Halfhill, and Richards, (2000) mention a fourth aspect that is satisfaction. This criterion for team efficiency includes team members' satisfaction and well-being. Whether team members have learned something from working together and how is their ability to work better together, are the two main points (ibid).

Stepans et al., (2000) mention satisfaction of the team as a whole is a factor in determining team effectiveness. Sometimes teams achieve their goals, but the relationship among members is so fragile that it does not allow any further fruitful work together in the future. The importance of team satisfaction is due to team's future viability. If the team is scheduled to occur only once, the maximum satisfaction may not be enough. However, the majority of the teams that are created, for example, in education will be maintained for a significant period of time. Therefore, in the case that team members are not satisfied with working together, long-term performance will be impacted. When members have a desire to work with the team, the team will be successful.

In addition to the performance of the team as a whole, Stepans et al., (2002) also mention the importance of improving the satisfaction of individual members in the team. Therefore, one overall measure of team success is personal growth. In other words, teams must create growth opportunities and contexts for individual needs; the needs of team members must be satisfied by teamwork experience.

The issue of how learning happens in teams is in relation with team efficacy as well. Alexander and Van Knippenberg (2014) notes the importance of learning and the role that it plays in teams' efficacy. Learning orientation aspect encourages teams to make the most out of experiment and learn from mistakes.

Here, mistakes are viewed as growth and development opportunities. Individuals in these teams are encouraged to come up with challenging goals. The innovative ideas emanate from a discussion, where of the available alternatives are evaluated, with the ultimate decision prioritizing a specific idea. The efficacious learning oriented team views failure as a path to success, given lessons the team draws from failure.

Another criterion of teamwork effectiveness that is organizational revenue (Stepans et al., 2002). The question is whether organization gains any benefit from teamwork or whether the team is enough involved in its own interests. The latter case concerns more about teams with high degrees of independence. At the heart of this issue lies integration. That is to say, teams need to be integrated with other organizational units (ibid).

3 RESEARCH QUESTIONS

In this chapter, the main research questions are introduced.

3.1 Research Questions of the Study

Numerous studies and researches have been done on teams and teamwork in different contexts, organizations, and companies. Literature in the context of the dynamics of the team consists of field researches that have been carried out to advance knowledge about the team, team development, and the transformation of mutual relations of members within teams.

Yet, the issue is that so far there has been no collective agreement among researchers regarding the key factors affecting team performance. The main reasons are as follows:

- Teams are inherently complex social systems. Therefore, the interdependence of the effective factors makes them complex subjects for research.
- Teams have different organizational backgrounds that affect their behaviors. This issue limits the validity of teamwork experiments performed in controlled environments
- Teams are developed in complex ways. As a result, theoretical frameworks should consider the dynamics of team development on the variables that affect performance.
- Teams are open systems in relation to information, ideas and external influences. Therefore, researchers should consider the patterns of these effects continuously.

In particular, in the context of a school as an educational organization, there is lack of enough studies showing dynamics of effective teamwork on a collective level. Therefore, the research purpose of this study is to investigate interactions

of team dynamic features on teamwork. The way teamwork patterns interact and their result as collective performance in the school form sub-questions of this study. Based on this aim, the main research questions are formed as follows:

1. What are the constituents of team efficacy in order to result in collective performance in school context?
2. What are the challenging factors of teamwork in the school case?

4 IMPLEMENTATION OF THE STUDY

This chapter looks at the research approach, data collection, and data analysis. There were four phases in analysing the data that resulted into first-, second-, third- and fourth-order results. These will be introduced in Results section of the study.

4.1 Subject and Approach

In the present research, the qualitative methodology was utilized as the main approach to find out essential features about teamwork in educational context. This study is a qualitative study led by online questionnaire and carried out in Western Finland. The processes and dynamic elements of teamwork were investigated as a case study by analysing teamwork at a junior high school. Data was collected by a virtual questionnaire from teachers who work in team format. A structured questionnaire with Likert scale of six alternatives was used.

Creswell and Poth (2018, p. 326) defines qualitative study as “an inquiry process of understanding based on a distinct methodological approach to inquiry that explores a social or human problem. The researcher builds a complex, holistic picture; conducting the study in a natural setting.”

According to Creswell and Poth (2018, pp. 42-44), qualitative study is characterized by:

- Assumptions and use of interpretative or theoretical frameworks to study problems of research
- Qualitative approach to inquiry entails data collection sensitive to people under study and it includes inductive/deductive data analysis in natural setting
- Final reports present voices of participants, researcher’s reflection by complex description and interpretation of problem, contributing to literature and ask for change.

One of the approaches to qualitative study is case study. Case study is used in human and social sciences. According to Creswell and Poth (2018, pp. 96-97) case study is defined as “an approach that explores a real-life, contemporary bounded system (a case) over time through detailed, in-depth data collection involving different sources of information (e.g. observation, interviews, audio-visual material, documents, and reports) to report a description or case themes”. The benefits of case study (Yin, 2014) are that it investigates a case in real life, and that a concrete entity such as small group or an organization can be studied. At a less concrete level it can be about a defined entity, such as relationship or decision process. Therefore, case study as an approach to describe the phenomenon of effective educational teamwork in school context is considered the best choice for the present research. In this research, an online survey was chosen as the measurement to analyse a case group in western Finland, as analysing the case was a reliable approach to deepen the understanding towards the unique context of the school.

4.2 The Participants and the Research Process

The research was conducted among the teachers of the particular school. The participants come from different positions in the school. The research context is a junior high school in the Western Finland. The situation was unique in a sense that one year before the start of the study, the school principle changed the structure of the school from a hierarchical to a team-based one. Before, a very different way of managing school was prevalent as strongly hierarchical. In other words, the new principal changed the culture of cooperating as well as the structure of teacher cooperation. When the principal took the initiative of introducing and practicing teamwork, the teachers accepted it. The school started teamwork in 2016 and 2017 was the second year of practicing the teamwork. When the new principal emphasised teacher-cooperation, it was explained by the principal as a very new phenomenon and working way. This changed situa-

tion for my thesis, as the teachers did not have any previous experiences of teamwork.

The junior high school teachers consisted of 39 sub-teachers, 1 special teacher, 3 special class teachers, 2 student guidance teachers and 5 student assistants. The junior high school had 480 students with range age of 12 to 15 years old in 2017 (the executing year of my study). I did not ask the respondents' personal identification information, such as age, gender, and experience because these issues went beyond the task of my research. Background information about the whole teacher staff in the junior high school is seen in Figure 5.

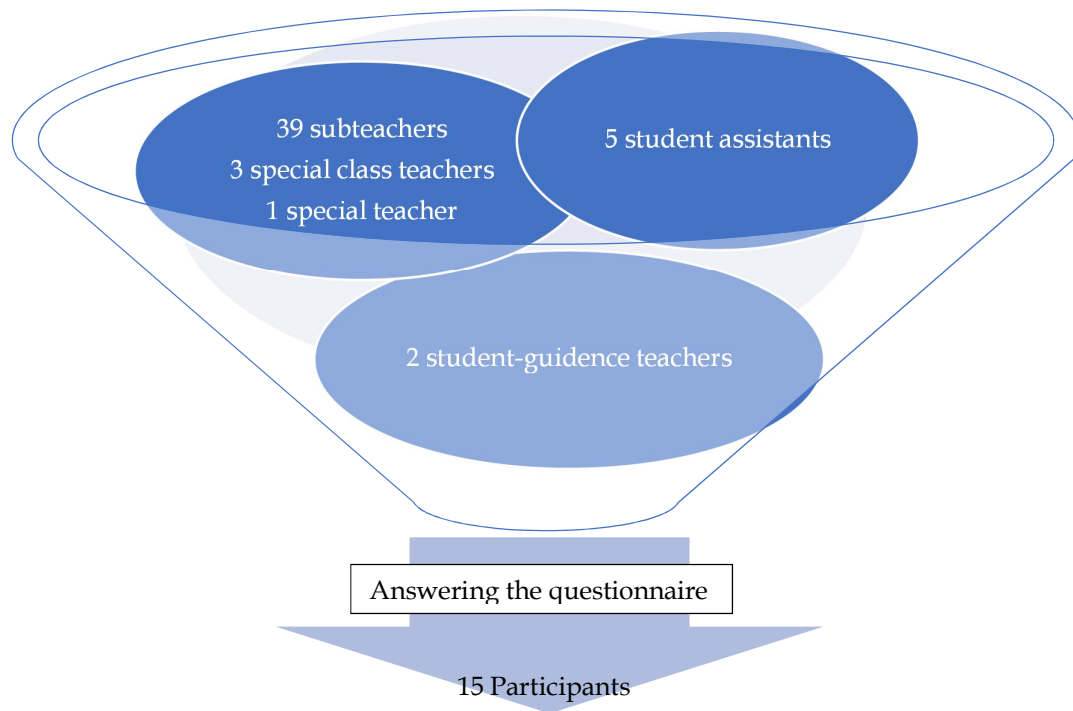


FIGURE 5. Background of teachers in the junior high school participating in the study

The reason why only fifteen of the teaching staff answered to the questionnaire might be that not all of them are permanent teachers in this school as this is not a school of class teachers. This means that some subject teachers may teach specific subjects at other schools, too; for example, sport teachers or more rare lan-

guage teachers. These teachers might work in different schools and that means that they are circulating teachers. It might be the case that the case school is not their home school and that they stand with no answering to the questionnaire. Consequently, it can be supposed that the participants in my research were mainly among the permanent teachers in the school.

The research procedure could be classified according to the following stages:

Stage 1: Preparation of research. My research interest was inspired by the visit and shadow visits, i.e. practicum course of educational leadership at the Jyvaskyla University, during which students find the chance to go a specific school and have in-depth observation on the principal practices in a Finnish school context. I witnessed the principal and teachers teams having regular meetings and collaborating through teamwork. Effective teamwork then emerged as the topic for research during courses of research proposal I and II as focus of my study and finally, it narrowed down to dynamics of effective teamwork in educational context, i.e. in a school. I got the permission to conduct the study from the Institute of Educational Leadership to collect information for the master thesis study.

Stage 2: Seeking the sample. My supervisor advised the school to me and provided me the email address of the principal. In order to get the sample for study, I contacted the principal of the junior high school through email asking for principal's permission to collect samples from teachers in answering the questionnaire. The letter that was sent to the principal to ask for permission to conduct the study is attached in Appendix 1. Thereafter, the principal informed me through emails that I am allowed to conduct the study, in accordance with the approval of the supervisor of the region. Finally, the principal gave the permission to collect information from the school after mentioning to the staff the importance of the study subject and possible implications that it might have for the school itself. A public link in Webropol format was created and then sent to principal who shared the link with teachers. Webropol is an internet-based platform for creating questionnaires and conducting studies which is free for

university staff members as well as for students. Moreover, Webropol is a protected platform. More information about that can be found by referring to www.webropol.jyu.fi.

However, in order to have more answers to the questionnaire and with the aim of having two cases and in order to compare and contrast cases I intended originally to collect answers to the questionnaire from two schools. In fact, I connected the principal of another school shortly after contacting the junior high school principal. The principal of the junior high school gave me the email address of the second school. However, the person in charge was too busy and I did not get any answer from this another school. The result was that I had to confine my study to one school and that the number of answers that I received to use in my study did not increase more than 15.

Stage 3: Measurement of study. The statements of the online survey used in this thesis were designed by Watkins and Marsick mentioned in their books (Watkins & Marsick, 1993; Watkins & Marsick, 1996; Marsick & Watkins, 1999). Later, Marsick and Watkins (2003) published an article based on their previous works creating 'Dimensions of Learning Organization' as a self-scoring questionnaire. In the present study, I use Marsick and Watkins model of DLOQ (2003) as measurement of study. A Likert scale of six is used in the present study the same way as it was proposed by Marsick and Watkins. There are several reasons behind choosing the 'Dimensions of Learning Organization Questionnaire' (Marsick & Watkins, 2003) as the measurement of my study. First reason is that the questionnaire emphasizes on *learning*. Learning is a capacity that can be enhanced in organizations including schools. Second reason is that the specifications such as gender, age, and race do not have any effect on this measurement instrument. Third reason is that 'Dimensions of the Learning Organization Questionnaire' model is tested, proved, and accepted in publications. The model of DLOQ (Marsick & Watkins, 2003) is peer-reviewed and numerous published articles have been based on that. The reliability of the DLOQ is high as it can be repeated again. The DLOQ questionnaire which is used in this study is attached as Appendix 2.

Stage 4: Modifying the questionnaire. The questionnaire of Dimensions of Learning Organization is originally in three levels: individual, team, and organization level. Dimension of Learning Organization Questionnaire (Marsick & Watkins, 2003) is originally composed of 62 statements; statements 1 to 13 is about Individual level learning, statements 14 to 19 is about team level learning, and statements 20 to 43 is about organization level learning. Statements 44 to 62 of Dimension of Learning Organization Questionnaire is focused on 'learning organization'. However, due to the fact that 'learning organization' is not the subject of my study, I ignored the 'learning organization' part completely. Also, I did not use the statements of the questionnaire concerning the organizational level of the questionnaire as it was beyond the task of the research and I only used the parts which are related to individual and team levels. The model of Dimension of Learning Organization Questionnaire used in this study was then composed of 19 statements based on individual and team levels. There were 19 statements in total, 13 statements considered the individual level and 6 statements related to team level.

Stage 5: Collecting the data. After receiving the research permission, the website link was sent to the teachers via Internet. The participants could freely log into the online survey and choose their answers. This was done through Webropol which is a platform for conducting studies highly advised by University of Jyväskylä. The only connection channel between the researcher and participants was the link and the report section of Webropol. By using the Likert scale, participants were asked if they agree or disagree to the premises suggested in each sentence by choosing one option among 6 possibilities. The options ranged from 1 to 6: 1 representing strongly agree, 2 partially disagree, 3 disagree, 4 agree, 5 partially agree, and 6 strongly agree. By using Webropol's statistics option, a table was made showing how many percent of each option was chosen, presenting total of respondents, mean, and median. This procedure applied to all statements of the questionnaire. The tables are shown in data analysis section.

Stage 6: Processing and analysing the data. After collecting the response from participants, I formed the report using the reporting option of the Webropol platform. Next, themes of the statements were compared against the literature review. All collected responses were in English and all the statements in the questionnaire were in English as well. A qualitative content analysis was used to analyse the data. In line with the statements, the data was examined from the perspective of characteristics of collective efficacy as effective team.

4.3 Research Methods

This case study illustrated the constituents of effective educational teamwork and the dynamic process of teamwork resulting into collective efficacy. Through qualitative analysing the data and describing it in a qualitative form from the perspective of literature review, the research examined the teamwork in educational context within the scope of collaborative efficacy as collective performance. Due to the special situation of the research (the researcher and the participants were geographically dispersed), cyber space was used as the main instrument.

Qualitative research data can be analysed by applying different strategies. Creswell and Poth (2000) mentions the metaphor of data analysis spiral to show the non-linear format of activities and strategies of data analysis leading to findings starting from mental map of considering. One of its approaches is case study. Creswell (2018) mentions that case study describes the case and the themes of the case.

4.4 Data Analysis

First phase: By using reporting option in my account in Webropol, the platform provided me with 19 tables, one table per each statement. The tables represent number of participants to each question in my study. Each table also shows the percentage of respondents who chose specific options in each statement. Another issue is that although this study is not a qualitative study, I utilized mean

of answers to the statements in my data analysis. Specifically, I focused on those statements in which the means of the answers seem to be meaningful compared to the means of other answers. Then, under each table, I wrote my interpretation about the addressing issue and how the participants responded to the statements of the questionnaire which ended to first-order result.

Second phase: By using the Insert option in Word, I made a table with three columns showing numbers of statements, the addressing issues, and the statements of the questionnaire. I checked the main addressing issues in all the statements one by one. Next, I looked at them in a way that in a case that similar issues are repeated in more than one statement, I took them as the main themes which ended to second-order result.

Third Phase: In third phase, I specifically focused on themes of those statements which talked about teamwork procedures including statements 14 to 19. Then, I compared them against the theoretical framework of my study to find how they correspond to the theoretical framework. This procedure resulted to third-order result.

Fourth Phase: Based on answers given to the questionnaire, I considered the challenging constituents of team efficacy and to the whole process of collective performance. This procedure ended into fourth-order result.

4.5 Reliability

The measurement instrument of the study DLOQ (Dimensions of the Learning Organization Questionnaire) is a reliable questionnaire as it can be repeated again. It is a peer review questionnaire. It is tested, proved and accepted in publications.

The reliability of the analysis in the present study is high because about half of teachers replied to the questionnaire.

4.6 Ethical Solutions

One of the important challenges that a researcher faces during the data analysis and presentation process is ethical issues about participants of the study (Creswell & Poth, 2018). Therefore, ethical solutions in this regard are strategies that are concerned about protection of people who participate in a study or research. In addition, another issue concerning participants in a research is the right of participants to choose whether to participate or not in a study. The participation of individuals in a research needs to be voluntary and by with the consent of the person. As said researcher should fully respect the privacy and rights of individuals who participate in the study. During this research, I used the following strategies to observe the issue:

- 1) Participants' anonymity: I did not ask for name, gender, or even email addresser of the participants for the study. I am going to send the result of study to the principal. Therefore, anonymity is kept. The anonymity factor was incorporated and customized settings of Webropol in this study. As I did not have the email addresses of participants of the study, I have had no identification detail about my participants.
- 2) Voluntary participation: In my research, I explicitly mentioned that participation in the research is voluntary to all possible participants of study. In the opening section of the questionnaire, their right to choose whether participate or not in study by filling the questionnaire was explicitly mentioned. The questionnaire is attached as appendix and the readers may refer to that concerning the issue.

5 RESULTS

In this chapter, the result of the study will be presented in answering the main research question of what are the constituent premises of effective teamwork. Two sub-questions for this main question were established: (1) What are the constituent premises of effective teamwork in order to result in collective performance in school context? (Collective efficacy that is gained through coordinated collaborative teamwork is understood as collective performance.) (2) What are the challenging factors of teamwork in the case school? In order to answer the sub-questions, I first organized the results analyzing the answers according to the questionnaire. Second, I looked at addressing the categories in the statements of the questionnaire that lead me to certain themes regarding team and teamwork. Thirdly, I specifically focused on the themes regarding the team level issues, according to the theoretical framework. Fourthly, I recognized and discussed the challenging constituents of team efficacy understood as collective efficacy in the case organization, i.e., the junior high school.

5.1 Constituents of Effective Teamwork to Achieve Collective Performance

The first research question to be answered here is as follows:

- 1) What are the constituents of team efficacy in order to result in a collective performance in a school context?

5.1.1 First-order Result: Answers to the Questionnaire

Here, 19 tables will be presented showing the way participants of study answered to statement of the questionnaire. Under each table, I organized my interpretation on how participants answered to the statements.

1. In my organization, people openly discuss mistakes in order to learn from them. Number of respondents: 15

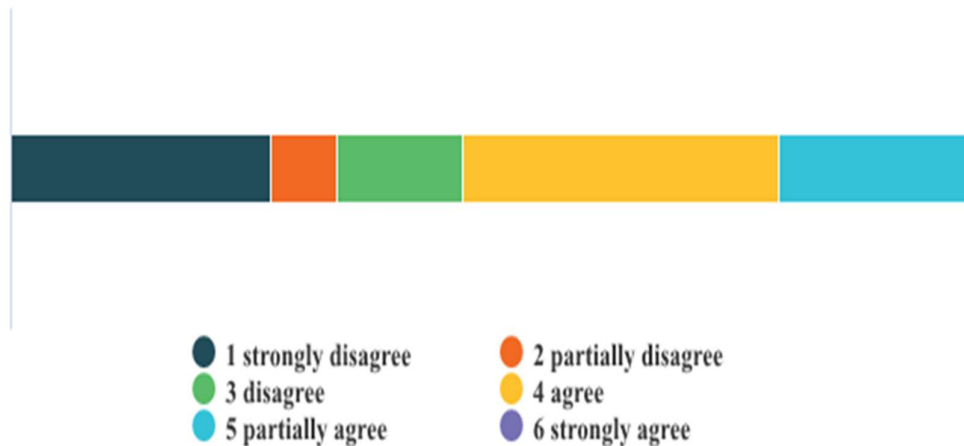


TABLE 1. First-order result showing answers to the first statement of the questionnaire

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree	Total	Mean
4	1	2	5	3	0	15	3.13
26.67%	6.67%	13.33%	33.33%	20%	0%		
4	1	2	5	3	0	15	3.13

The issue in the first statement was **open discussions about mistakes to learn from them**. Regarding the issue of open discussion, respondents choosing negative and positive choices divided nearly in two halves: a little bit more than 46% thought there was not open discussion in the school to learn from mistakes while 53% thought there was open discussion to learn from mistakes. Interestingly, none of the respondents strongly agreed that there were open discussions about mistakes in the school.

2. In my organization, people identify skills they need for future work tasks. Number of respondents: 15

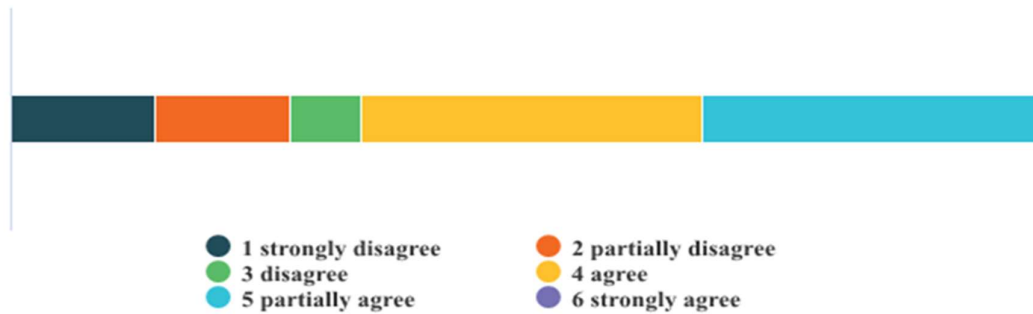


TABLE 2. First-order result showing answers to the second statement of the questionnaire

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree	Total	Mean
2	2	1	5	5	0	15	3.6
13.34%	13.33%	6.67%	33.33%	33.33%	0%		
2	2	1	5	5	0	15	3.6

The issue in the second statement was **skills needed to achieve the shared goals**. Regarding skills needed for the task accomplishment and orientation toward achieving it, one third thought that individuals in the school do not identify the skills needed for the future tasks while two thirds thought members identify skills needed to achieve shared goals in the school.

3. In my organization, people help each other learn. Number of respondents:
15

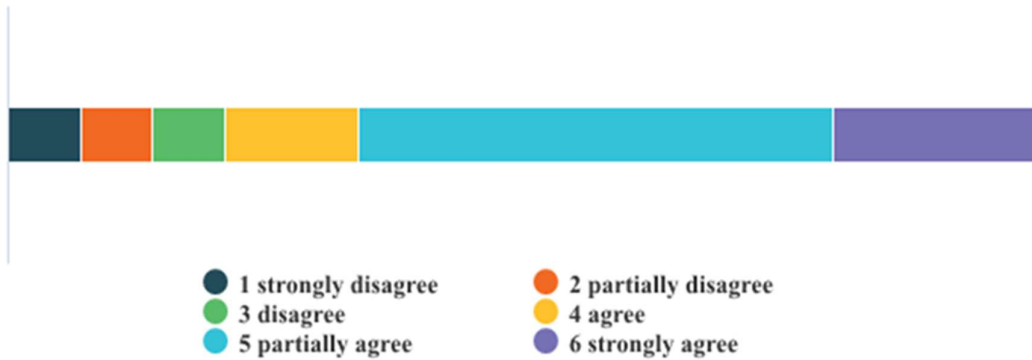
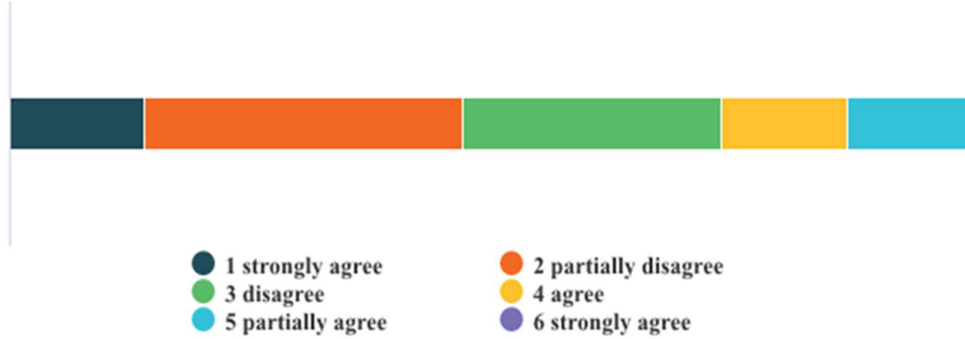


TABLE 3. First-order result showing answers to the third statement of the questionnaire

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree	Total	Mean
1	1	1	2	7	3	15	4.47
6.67%	6.67%	6.67%	13.33%	46.66%	20%		
1	1	1	2	7	3	15	4.47

The issue in the third statement was **helping each other to learn**. When asked about ‘helping other members to learn’, 20% chose negative options while 80% thought the feature of helping other members existed in their school. The mean was quite high standing at 4.47. **The mean in this statement was the highest among the means of other statements and was the only one which stood at 4 or above.**

4. In my organization, people can get money and other resources to support their learning. Number of respondents: 15



The issue in the fourth statement was **financial resources to support learning**. When asked about having access to money provided by school to support learning, a little bit more than 73% thought that there was no allocation or not enough allocation to support learning while 26.66% thought there was enough allocations to support learning in the school.

5. In my organization, people are given time to support learning. Number of respondents: 15

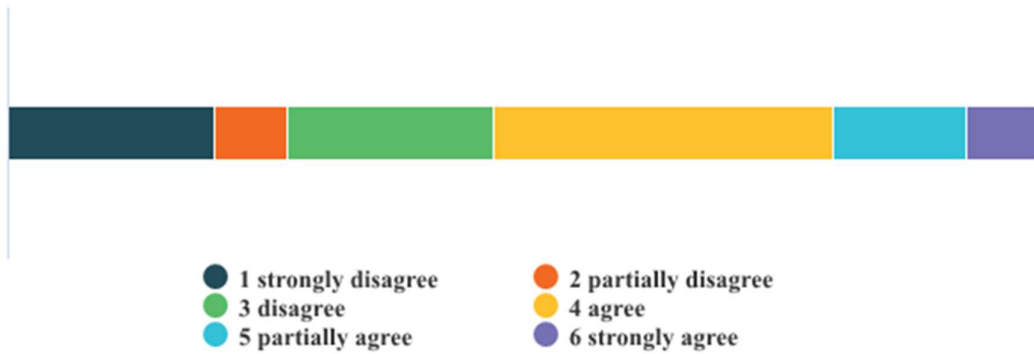


TABLE 5. First-order result showing answers to the fifth statement of the questionnaire

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree	Total	Mean
3	1	3	5	2	1	15	3.33
20%	6.67%	20%	33.33%	13.33%	6.67%		
3	1	3	5	2	1	15	3.33

The issue in the fifth statement was **having enough time in order to learn**. When asked about having enough time to support learning, answered divided into almost two halves: 46% thought that there was no time allocation for learning while 53% thought there was enough time allocation to support learning in the school.

6. In my organization, people view problems in their work as an opportunity to learn. Number of respondents: 15

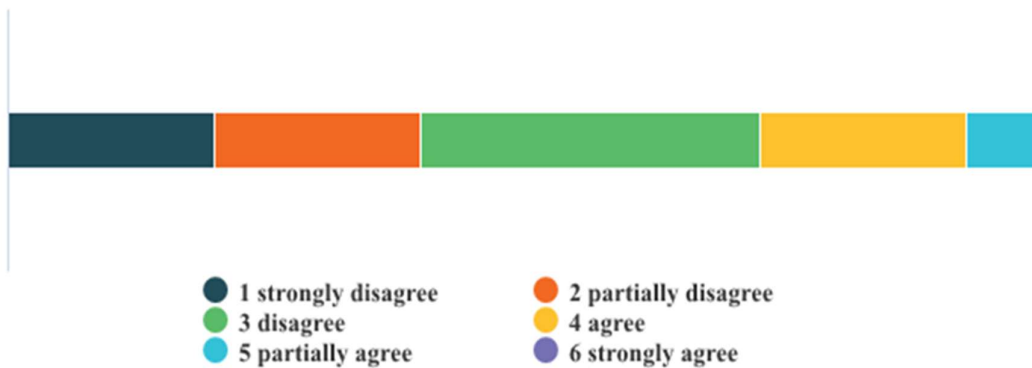


TABLE 6. First-order result showing answers to the sixth statement of the questionnaire

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree	Total	Mean
3	3	5	3	1	0	15	2.73
20%	20%	33.33%	20%	6.67%	0%		
3	3	5	3	1	0	15	2.73

The issue in the sixth statement was **considering problems as learning triggers**. Regarding the issue of viewing problems as bridges toward learning, majority of respondents, more than two thirds thought this was not the attitude in their school while only one third thought there was such a view dominant in the case school. 5 persons disagreed and no one chose strongly agree. The mean was quite low at 2.73

7. In my organization, people are rewarded for learning. Number of respondents: 15

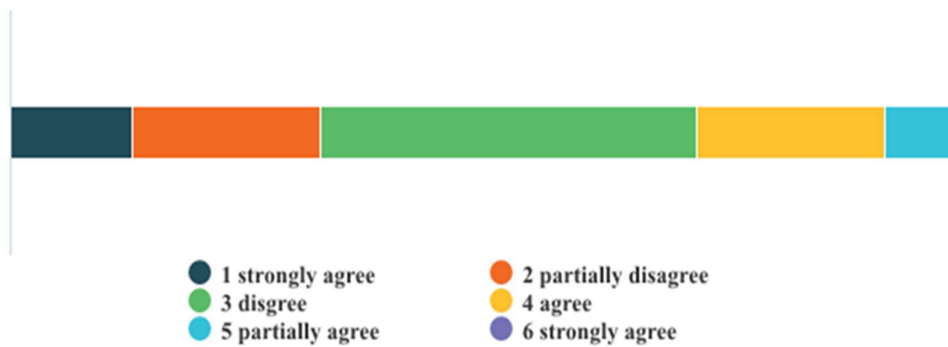


TABLE 7. First-order result showing answers to the seventh statement of the questionnaire

1 strongly agree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree	Total	Mean
0	3	6	3	1	0	15	2.87
0%	20%	40%	20%	6.67%	0%		
0	3	6	3	1	0	15	2.87

The issue in the statement number seven was **being awarded for learning**. Regarding the issue of being rewarded for learning, majority of respondents – more than two thirds - thought they were not rewarded while four respondents thought that individuals were rewarded for learning. Six people chose to disagree and no one even agreed about being rewarded for learning. The mean was low at 2.87.

8. In my organization, people give open and honest feedback to each other.

Number of respondents: 15

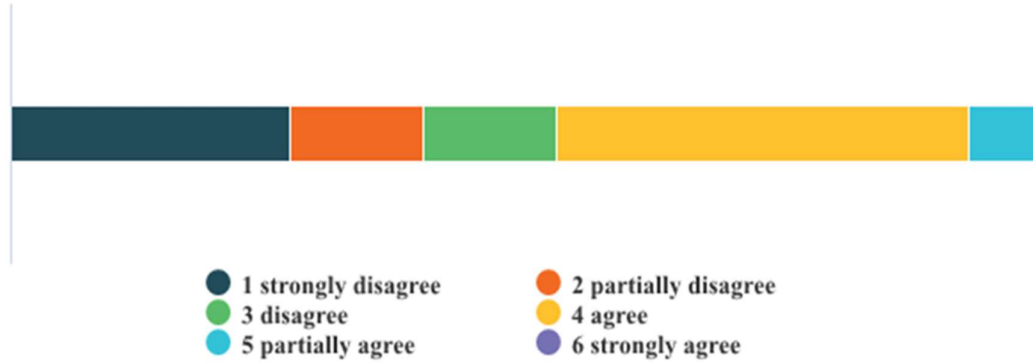


TABLE 8. First-order result showing answers to the eighth statement of the questionnaire

1 strongly agree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree	Total	Mean
4	2	2	6	1	0	15	2.87
26.67%	13.33%	13.33%	40%	6.67%	0%		
4	2	2	6	1	0	15	2.87

The issue in the statement number eight was **giving honest and open feedback**. Regarding the issue giving honest feedback to other individuals in the school, respondents divided in nearly two halves agreeing and disagreeing the issue. The percent of negative answers to the statement was 53.33% while 46.67% of respondents agreed to the statement.

9. In my organization, people listen to others' views before speaking. Number of respondents: 14

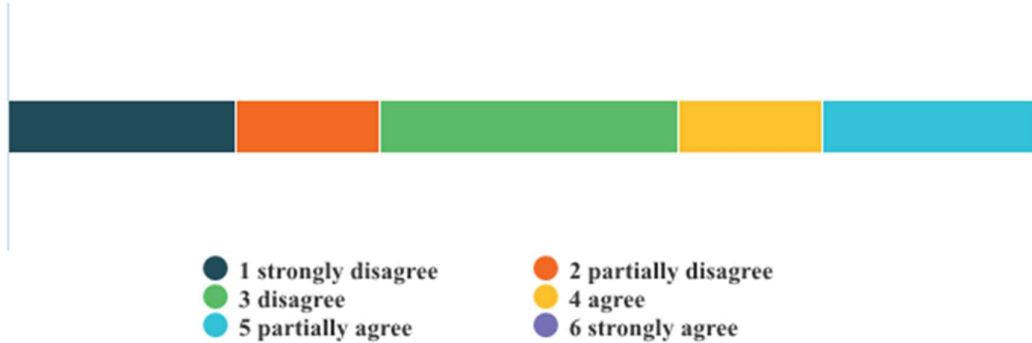


TABLE 9. First-order result showing answers to the ninth statement of the questionnaire

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree	Total	Mean
3	2	4	2	3	0	14	3
21.43%	14.28%	28.57%	14.29%	21.43%	0%		
3	2	4	2	3	0	14	3

The issue in the statement number nine was **authentic listening**. Majority of respondents chose negative answers as 64% meaning that they considered real genuine listening procedure did not happen while 35% of respondents considered the procedure of authentic listening happened. Oddly, 14 people answered to the statement.

10. In my organization, people are encouraged to ask 'why' regardless of rank. Number of respondents: 15

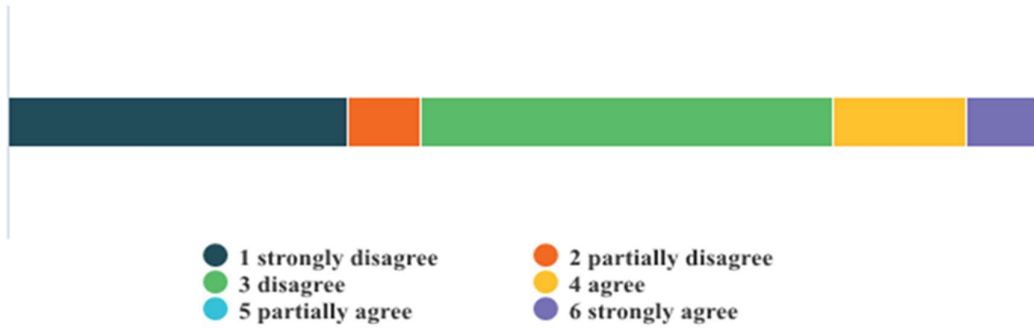


TABLE 10. First-order result showing answers to the tenth statement of the questionnaire

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree	Total	Mean
5	1	6	2	0	1	15	2.6
33.33%	6.67%	40%	13.33%	0%	6.67%		
5	1	6	2	0	1	15	2.6

The issue in the statement number ten was **encouraging individuals to ask questions without considering ranks**. When asked about this procedure, most of respondents chose the negative answers by 80% while just 20% thought such procedure happened in the school. The mean was as low as 2.6.

11. In my organization, people state their view, they also ask what others think. Number of respondents: 15

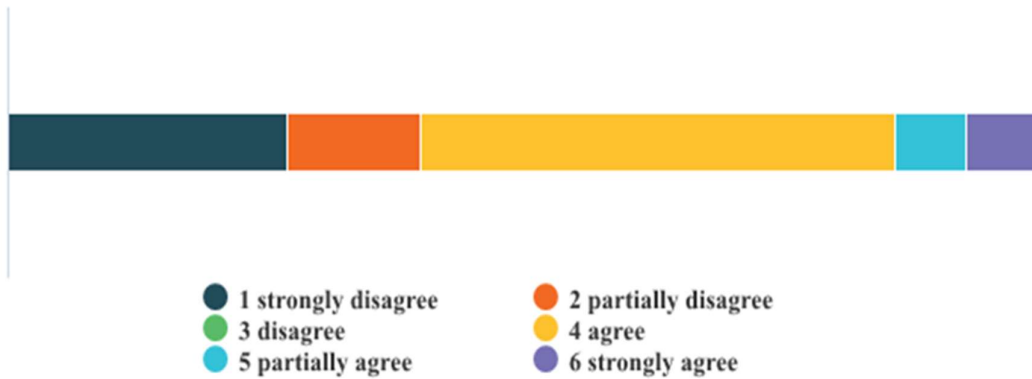


TABLE 11. First-order result showing answers to the eleventh statement of the questionnaire

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree	Total	Mean
4	2	0	7	1	1	15	3.13
26.67%	13.33%	0%	46.66%	6.67%	6.67%		
4	2	0	7	1	1	15	3.13

The issue in the statement number eleven was **asking other's views while asserting one's own views**. When asked about this procedure, 40% of respondents thought that this procedure was not existing in the school while 60% thought that this was the prevalent feature. There was a two-distinct dichotomy in answering this statement, and answers were not distributed regularly.

12. In my organization, people treat each other with respect. Number of respondents: 15

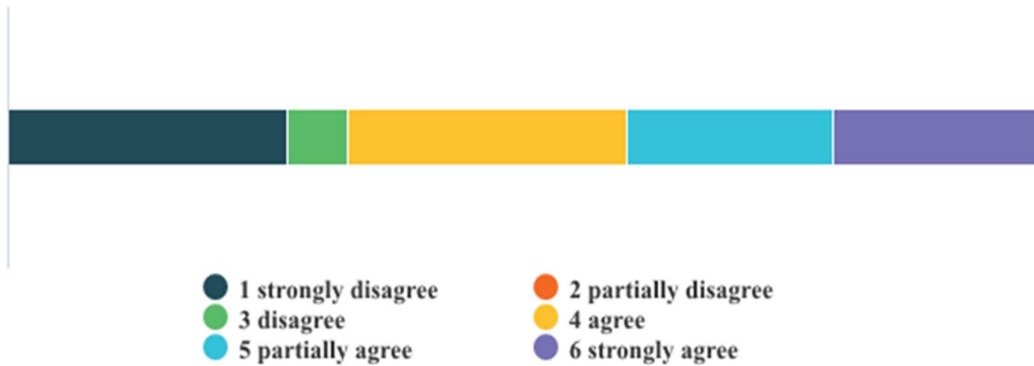


TABLE 12. First-order result showing answers to the twelfth statement of the questionnaire

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree	Total	Mean
4	0	1	4	3	3	15	3.73
26.66%	0%	6.67%	26.67%	20%	20%		
4	0	1	4	3	3	15	3.73

The issue in the statement number twelve was **respecting other members**. Two thirds of respondents thought there was mutual respect in their school while only one third thought this feature not prevalent in the case school. The answers were not distributed evenly in answering the statement.

13. In my organization, people spend time building trust with each other.

Number of respondents: 15

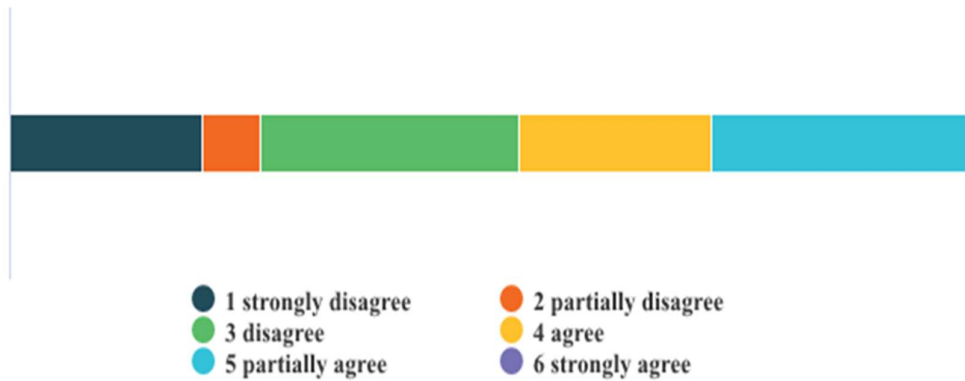


TABLE 13. First-order result showing answers to the thirteenth statement of the questionnaire

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree	Total	Mean
3	1	4	3	4	0	15	3.27
20%	6.67%	26.66%	20%	26.67%	0%		
3	1	4	3	4	0	15	3.27

The issue in the statement number 13 was **building trust**. Regarding this issue, around 47% of respondents thought there was not time spent to build trust within the school while 53% thought time was spent to build trust in their case school. Nevertheless, no one strongly agreed that people spend time to do measures to build trust.

14. In my organization, teams/groups have freedom to adapt their goals as needed. **Number of respondents: 15**

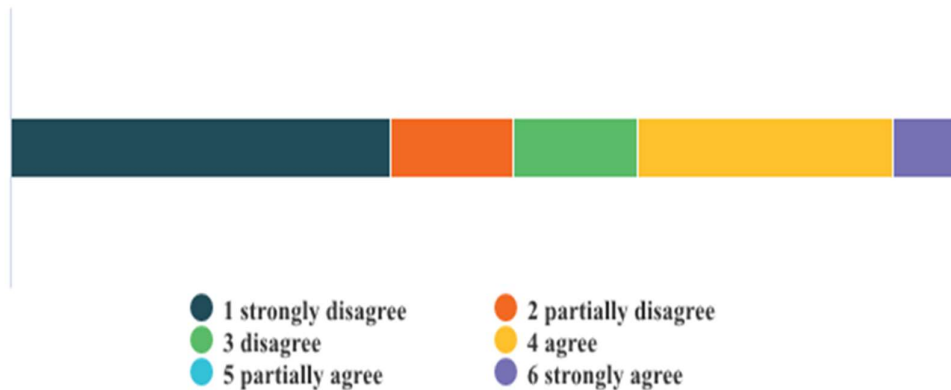


TABLE 14. First-order result showing answers to the fourteenth statement of the questionnaire

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree	Total	Mean
6	2	2	4	0	1	15	2.53
40%	13.33%	13.33%	26.67%	0%	6.67%		
6	2	2	4	0	1	15	2.53

The issue was **having the freedom to adapt the goals in teams**. Regarding this issue, two thirds thought this feature did not exist in their teams while only a minority, one third of respondents thought this was a prevalent feature by in their teams. The mean was low at 2.53.

15. In my organization, teams/groups treat members as equals, regardless of rank, culture, or other differences. Number of respondents: 15

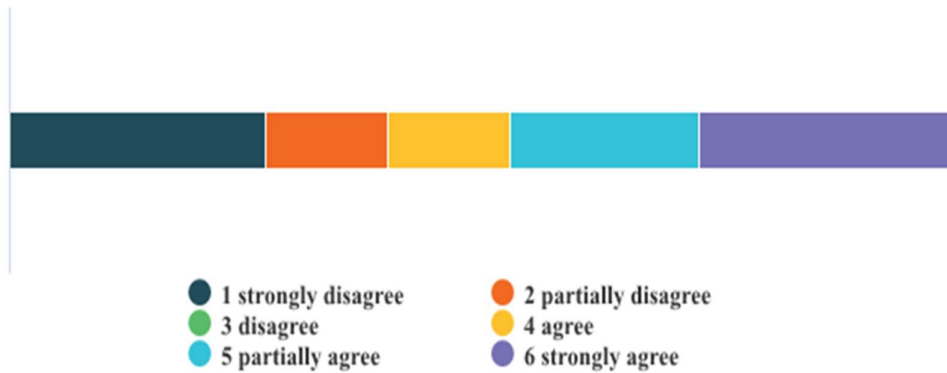


TABLE 15. First-order result showing answers to the fifteenth statement of the questionnaire

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree	Total	Mean
4	2	0	2	3	4	15	3.67
26.67%	13.33%	0%	13.33%	20%	26.67%		
4	2	0	2	3	4	15	3.67

The issue in the statement number fifteen was **treating other team members equally inside the team**. Regarding the issue of being treated as equals and treating other as equals inside the team, majority of respondents thought this was prevalent feature by 60% in their teams while 40% thought this feature did not exist in their teams.

16. In my organization, teams/groups focus both on group's task and on how well the group is working. Number of respondents: 15

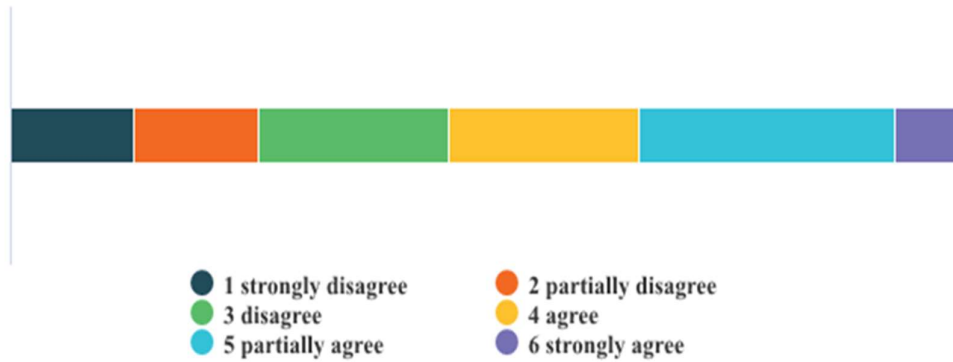


TABLE 16. First-order result showing answers to the sixteenth statement of the questionnaire

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree	Total	Mean
2	2	3	3	4	1	15	3.53
13.33%	13.33%	20%	20%	26.67%	6.67%		
2	2	3	3	4	1	15	3.53

The issue in the statement number sixteen was **focusing on group tasks and cohesion**. When asked about this feature, more than 46% thought this procedure happened in their teams while 53% thought this procedure did not happen in their teams.

17. In my organization, teams/groups revise their thinking as result of group discussions or information collected. Number of respondents: 14

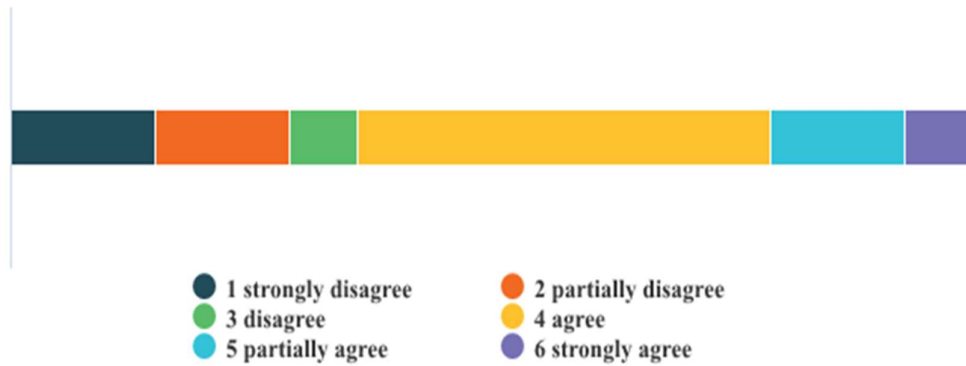


TABLE 17. First-order result showing answers to the seventeenth statement of the questionnaire

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree	Mean
2	2	1	6	2	1	3.5
14.28%	14.29%	7.14%	42.86%	14.29%	7.14%	
2	2	1	6	2	1	3.5

The issue in the statement number seventeen was **revising thinking according to group discussions or information collected**. When asked about such a procedure, majority by 64.29% thought this feature happened in their teams while 35.71% thought this feature did not happen in their teams. This statement was the second statement that 14 respondents answered.

18. In my organization, teams/groups are rewarded for their achievements as a team/group. Number of respondents: 15

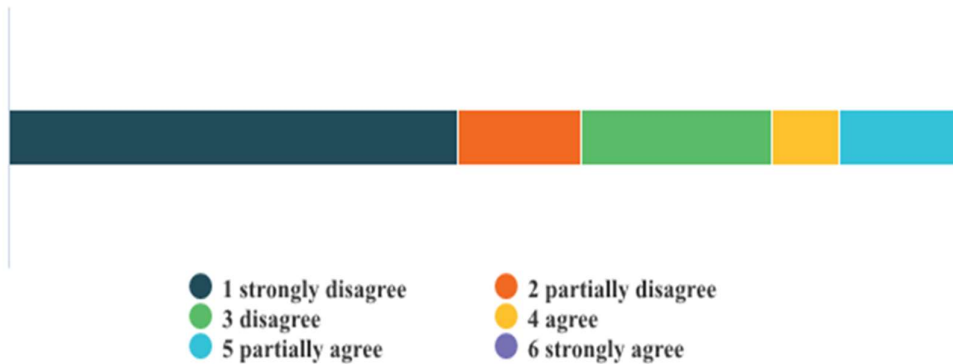
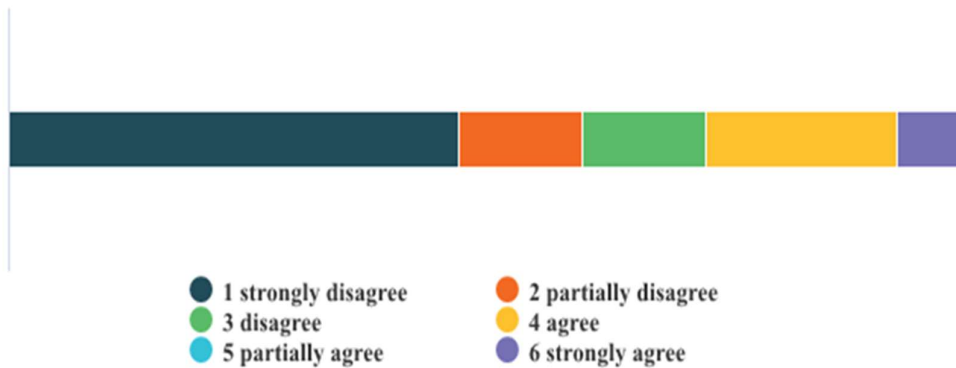


TABLE 18. First-order result showing answers to the eighteenth statement of the questionnaire

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree	Total	Mean
7	2	3	1	2	0	15	2.27
46.67%	13.33%	20%	6.67%	13.33%	0%		
7	2	3	1	2	0	15	2.27

The issue in the statement number eighteen was **rewarding team achievement**. Regarding this pattern, majority of respondents did not think to be rewarded as a whole for their team achievement by 80% while only 20% recognized this pattern prevalent in their school. The mean was 2.27. **This mean was the lowest among all the means.**

19. In my organization, teams/groups are confident that the organization will act on their recommendations. Number of respondents: 15



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TABLE 19. First-order result showing answers to the nineteenth statement of the questionnaire

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree	Total	Mean
7	2	2	3	0	1	15	2.33
46.67%	13.33%	13.33%	20%	0%	6.67%		
7	2	2	3	0	1	15	2.33

The issue in the statement number nineteen was **being confident that the school acts upon team recommendations**. Regarding this issue, 73.33% did not feel the feature present in the school while the rest by 26.67% thought this feature happening in the school. The mean was 2.33. **This mean was quite low standing at the second lowest means among all answers.**

5.1.2 Themes of Team and Teamwork

Second phase: Statements of the questionnaire address certain categories concerning the team and teamwork. In order to recognize them, each statement of the questionnaire was compared and agreed with other statements. Table 20 presents the result of the above-mentioned procedure.

TABLE 20. Addressing categories of team and teamwork in the questionnaire

1	Collaboration to learn	In my organization, <i>people openly discuss mistakes in order to learn from them.</i>
3		In my organization, <i>people help each other learn.</i>
4	Resources for learning provided by organization	In my organization, <i>people can get money and other resources to support their learning.</i>
5		In my organization, <i>people are given time to support learning.</i>
6	Opportunity to learn	In my organization, <i>people view problems in their work as an opportunity to learn.</i>
7	Rewards for learning	In my organization, <i>people are rewarded for learning.</i>
8	Capability and collaboration	In my organization, <i>people give open and honest feedback to each other.</i>
9		In my organization, <i>people listen to others' views before speaking.</i>
10		In my organization, <i>people are encouraged to ask 'why' regardless of rank.</i>
11		In my organization, <i>people state their view, they also ask what others think.</i>
17		In my organization, <i>teams/groups revise their thinking as result of group discussions or information collected.</i>
12	Respect and Equality as values in teams	In my organization, <i>people treat each other with respect.</i>
15		In my organization, <i>team/groups treat members as equals, regardless of rank, culture, or other differences.</i>
13	Spending time to build trust as basis for teams	In my organization, <i>people spend time building trust with each other.</i>
14	Autonomy inside teams	In my organization, <i>teams/groups have freedom to adapt their goals as needed.</i>
16	focus on team's task and team's cohesion in teams	In my organization, <i>teams/groups focus both on group's task and on how well the group is working.</i>
17	Revised thinking in teams as a result of teamwork	In my organization, <i>teams/groups revise their thinking as result of group discussions or information collected.</i>
18	Rewards for achievements as a team	In my organization, <i>teams/groups are rewarded for their achievements as a team/group.</i>
19	Confidence in teams as a result in teams	In my organization, <i>teams/groups are confident that the organization will act on their recommendations.</i>

The categories that are dealt with based on the table are as follows:

Identifying shared goals: the premise in the statement 2 is about ability to identify skill to be learnt for future task. Therefore, team members should be oriented toward team's shared goals to know what skills they need to learn.

Collaboration in teams: the premises in the statements 8, 9, 10, 11, and 17 are giving open honest feedbacks, authentic listening, asking 'why' about issues, discussions, stating one's views and asking other's views, and information collection make collaboration.

Building Trust: the premise in the statement 13 is spending time with each other to build trust. Trust makes the basis for a team.

Collaboration to learn: the premises in the statements 1 and 3 are open discussion on mistakes in order to learn and helping each other to learn. Therefore, both of them share the concept of collaboration to learn.

Values in a team and for team: the premises in the statements 12 and 15 are about showing respect and equality toward others make values in team and for a team. These values are shared in a team.

Opportunity for learning: the premise in the statement 6 is about viewing problems as opportunity to learn.

Resources for learning: the premises in the statements 4 and 5 are allocation of money and time provided by the organization to support learning.

Rewards for learning: the premise in statement 7 are rewards for learning. Revised thinking: the premise in the statement 17 is revised thinking. Revised thinking as the result of teamwork happens through collaboration, i.e. group discussions and information collection inside the team.

Rewards for teamwork: the premises in the statements 18 and 19 are rewards for teamwork. The team is rewarded for its teamwork achievement.

Confidence in teams: the premises in statement 19 is confidence in teams because teams are confident that the organization, i.e. school acts upon teams' recommendations.

When a closer look is taken on the categories, '*learning*' appears to be the key premise that happen inside the team and there are different premises related to

the learning, i.e. collaboration in learning, opportunities for learning, resources for learning, rewards for learning, and result for learning.

Based on what was discussed, the following the main themes about team and teamwork appear as follows: 1. Identifying shared goals, 2. Collaboration in team, 3. Collaboration in learning, 4. Opportunities for learning, 5. Resources for learning, 6. Rewards for learning, 7. Basis for team, 8. Values in team, 9. Rewards in team, and 10. Results in team.

5.1.3 Third-order Results: Constituents of Efficacy in Teamwork

As foci of the study is on constituents and dynamics of effective teamwork, here, the emphasis is put on premises that show what happen inside team. Team level efficacy constituents based on findings of the questionnaire data are presented in Table 21.

TABLE 21. Team level themes

Statement number	Theme of statement	Statement of the questionnaire at team level
14	Autonomy inside team	In my organization, teams/groups have freedom to adapt their goals as needed.
15	Equality as a value among team members	In my organization, teams/groups treat members as equals, regardless of rank, culture, or other differences.
16	Collaboration in team	In my organization, teams/groups focus both on group's task and on how well the group is working.
17	Revised thinking as result of teamwork	In my organization, teams/groups revise their thinking as result of group discussions or information collected.
18	Rewards for teamwork	In my organization, teams/groups are rewarded for their achievements as a team/group.
19	Result of teamwork	In my organization, teams/groups are confident that the organization will act on their recommendations

Constituents of effective teamwork according to analysis of data are recognized at three levels: team members' abilities, team level procedures, and organization support. It appears to be impossible to discuss about effective teamwork

without consideration of members capabilities. Therefore, efficacy constituents of teamwork are discussed in two parts.

Efficacy in Team Members for an Effective Teamwork

At team member efficacy level, certain concepts describe the skills and abilities of members which result in each team member abilities. Team members' capabilities contribute to capability of an effective team. The importance of team members' abilities is that it constitutes the capability of each individual team member for better performance when they are involved in a teamwork.

The constituent premises of individual team member's effectiveness to do an effective teamwork are as follows: 1. Orientation toward shared goal(s), 2. Access to resources (money and time) for learning, 3. Teaming values (respecting others and treating others as equal), 4. Collaborative communication capabilities to be applied in teams (ability to do interactive dialogue, authentic listening, ability to exchange honest feedbacks, and questioning), and 5. Support that each individual team members receives from other members and the organization, i.e. school.

Efficacy in Team Procedures

Before moving to concepts of efficacy in team procedures, it should be mentioned here that 'results in team' and 'rewards for team' overlap with each other. That is the reason why I merge rewards and results as 'results'. From now on, I will use the term 'results' referring to a united concept which denote on both.

At team level, concepts of effective teamwork according to the questionnaire happen in five parts. First, in shared visions part, team members identify shared goals. Second, team has the freedom to adapt its goals according to the situation that is understood as autonomy. Thirdly, in capability and collaboration part, team members focus on the team's tasks and team's cohesion, collaborate to learn, and collaborate in discussions and collect information. Moreover,

team members spend time to build trust and share values such as respect and equality. Fourthly, revised thinking (as a process of continuous learning), rewards for teams' achievements, and confidence in teams happen. Fifthly, and last, the organization supporting system helps and encourages teamwork through providing time and financial resources for learning. Organizational supporting system provides rewards for teams' achievements and acts upon team recommendations.

At teamwork level, findings of the study compared to theoretical framework of the study show the constituent premises of effective teamwork in the following Figure 5.

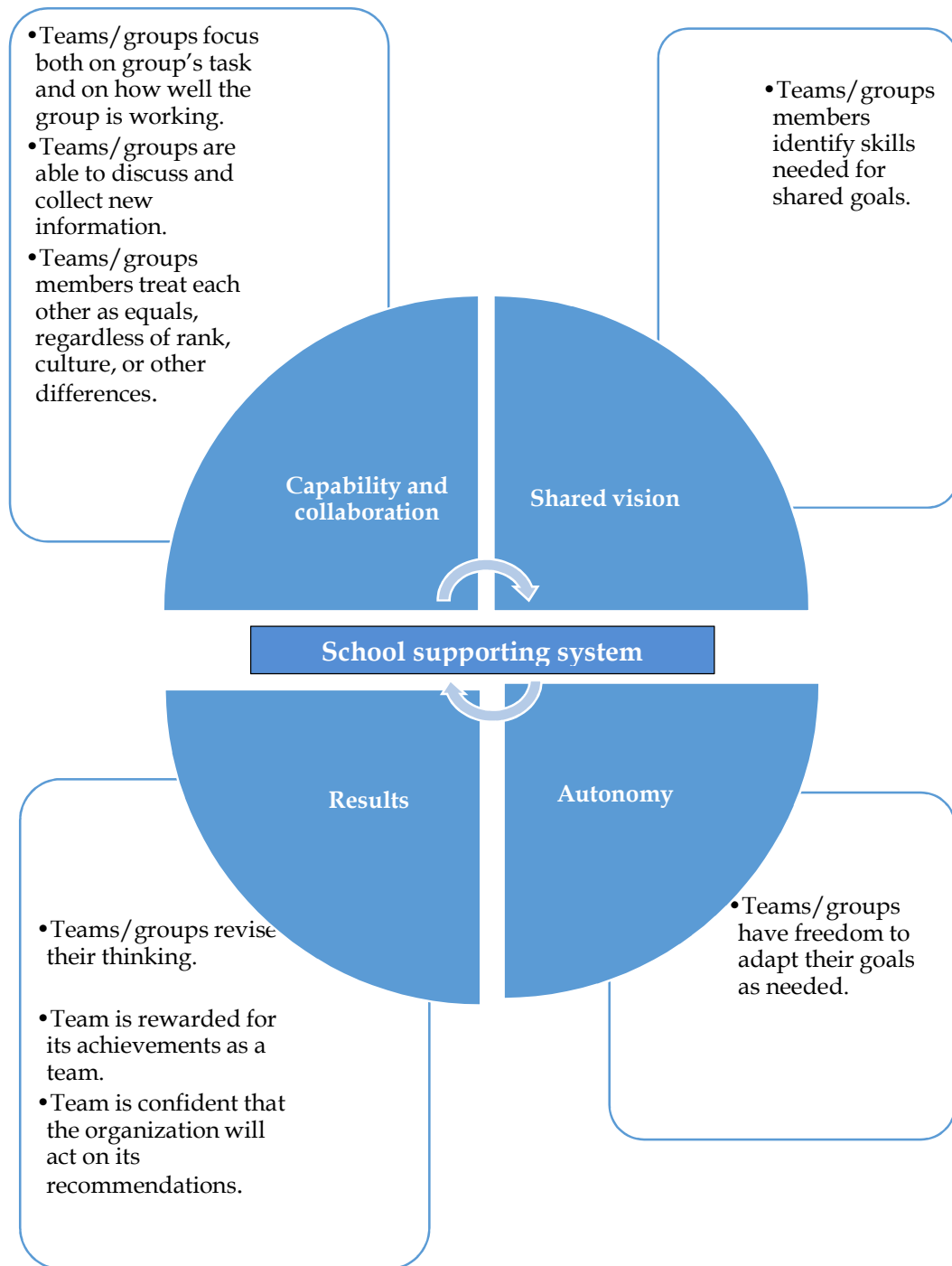


FIGURE 5. Constituents of effective teamwork based on theoretical framework of the study and according to questionnaire data

Capabilities and collaboration, shared visions, autonomy, results, and the organization supporting system make the constituents of team efficacy. Figure 5 also shows the dynamic interplay between constituents of an effective team. In this sense, team effectiveness manifests itself through the coordinated interplay of constituents of effective teamwork.

Capability and collaboration include values that all team members believe in such as respect and equality toward other team members. Trust make the basis for a team. An essential ability in this category is being able to learn by collaboration inside a team. Another fundamental ability that a team operates on is ability to collaborate with other team members. Collaboration within a team manifests through procedures like building trust by spending time with other members, institutionalizing effective communication in teams by the help of the procedures such as questioning, dialogue, listening, providing honest feedbacks, discussion, and collecting new information. Ability to focus on the team's task and the team cohesion makes another part of the team capability that corresponds to team members' commitment. Efficacy constituents can be imaged as features and procedures in five categories that interact with each other to form a whole dynamic procedure. Dynamic constituents of effective teamwork toward collective performance are as follows:

1. **Shared vision:** Shared vision are identifying future shared mission among team members; it is the orientation of team members toward clear precise shared goals and missions. The more oriented the team members would be toward visions, the more they will be united toward achieving them.
2. **Capabilities and Collaboration:** Communication capabilities, asking questions, providing feedback, discuss and collect new information in teams make collaboration and interaction in team effective and purposeful. Through these capabilities, team members collaborate to learn and make decisions.

3. **Autonomy:** A Team is autonomous in the way that it adjusts itself according to task at hand as well as how to achieve it based on new collected information. As it was discussed in second chapter of study, shared leadership practices in the school can give this type of autonomy to teams.
4. **Results:** Collaborative continuous learning, revised thinking, rewards for learning as the result of teamwork, achievements as a whole team, confidence in teams, and bringing possible improvement(s) to school are all results of collective team efficacy.
5. **School supporting system:** School as an organization inside which teams work has its own supporting system to encourage teamwork. Providing time and financial resources for each team member learning, rewarding teams' achievements, and action upon teams' recommendation make the school supporting systems.

Collective Performance

Based on the first-, second-, and third-results, collective performance happens in each part of effective teamwork. Each constituent of 'team efficacy' is a performance achieved collectively through coordinated shared structures in a team. Collective performance is an interaction that happens when all team members cooperate and collaborate in the team. Based on this interpretation, collective performance is understood as a property of the school. Collective performance can happen only inside a supportive organization. School supports teams and teamwork procedures to gain efficacy as an ultimate result.

5.2 Challenging Issues in Teams in the Case School

In this section, I will answer to the second research question of what are the challenging issues of teamwork in the case school. I will focus on issues of challenge which seem important based on first-, second-, -third results.

Regarding the choice for finding challenging issues of teamwork in the case school, it was necessary to examine the values obtained from the respondents' opinions in order to clarify whether their mean averages of responses were equal to three (the middle number of the spectrum) or they were lower than that. The means that were under three indicated challenges experienced teams in the case school. Wherever the means have been over three, they show that the team performance regarding the issue is above the average. Unfortunately, there was only one statement of the questionnaire that its mean stood at 4 and above (See statement number 3).

5.2.1 Learning as a Challenge

One of the vital features in teamwork is learning. Findings of the present study indicate learning as an important element in constituents of collective efficacy and effective teamwork. School is made of members who learn as individuals as well as in teams. Learning is a capacity that is shared both to individuals and to the teams (school also learns from teams by considering teams' recommendation and acting upon them). Learning capacity can be enhanced through team's coordinated structures. Team's coordinated structures do increase learning of individual and teams through sharing goals and through adaptation of the goals according to the needs (i.e. autonomy). Further structures of coordinated structures include enhancing capabilities and collaboration (such as learning and communication) and receiving help and support from the school.

In order to find out if the team members really learn in their teams, means of the answers as regards the learning issues in 'Dimension of Learning Questionnaire' statements are compared here. In order to find how effective the

learning inside teams is, a comparison is made: the mean of all answers regarding individual learning in the organization is calculated and compared against the mean of all learning features as a team. Learning dimension in individual school member was addressed in statements number 1-13 and learning as a team was addressed through statements 14-19. The result is shown in Table 22.

TABLE 22. Comparison of means of two levels of learning at the case school

Levels of Learning	Mean
Individual learning	3.19
Team learning	2.97
Total	3.8

The above-mentioned table shows that learning in teams is below the average level and therefore, it is considered as a challenge.

5.2.2 School Supporting System as a Challenge

Support provided by the school are manifested into four themes: first, resources for learning that are time and money. Second, team and individuals are rewarded for learning or their achievements by the school. Thirdly, teams are confident that their results (teams' recommendations) are used in school. Fourthly, school as an organization acts upon teams' recommendations.

In first-order result Table 4, the mean is over three, so it is not discussed here as challenging issue. However, Table 5 shows that the mean stands at the average of 2.8. Only four of the respondents thought that they were given money or other financial resources to support their learning while 11 of the respondents did not think so by choosing to disagree, disagree partially, and strongly disagree. In addition, no one strongly agreed about receiving financial allocations from the school.

In Table 7, the mean stands at 2.87. Here, again only 4 respondents thought they were awarded for learning while 11 of respondents chose to disagree, disagree partially, and disagree completely. Once more, no one strongly agreed on being rewarded for learning. Moreover, teams did not feel satisfied about being rewarded for their learning in teams or for their achievements as a

team. Table 18 shows the mean of answers standing at 2.27. Only 3 respondents thought they were rewarded for team achievements while 11 of them did not think to be rewarded for the team achievements.

Team members' perception that the school supporting system encourages teamwork causes a positive effect on the team's performance. Based on what was discussed, school supporting system is considered as a challenging issue for teams (as well as for individual members) of the case school. Figure 6 shows how school supporting system influence other constituents of team efficacy.

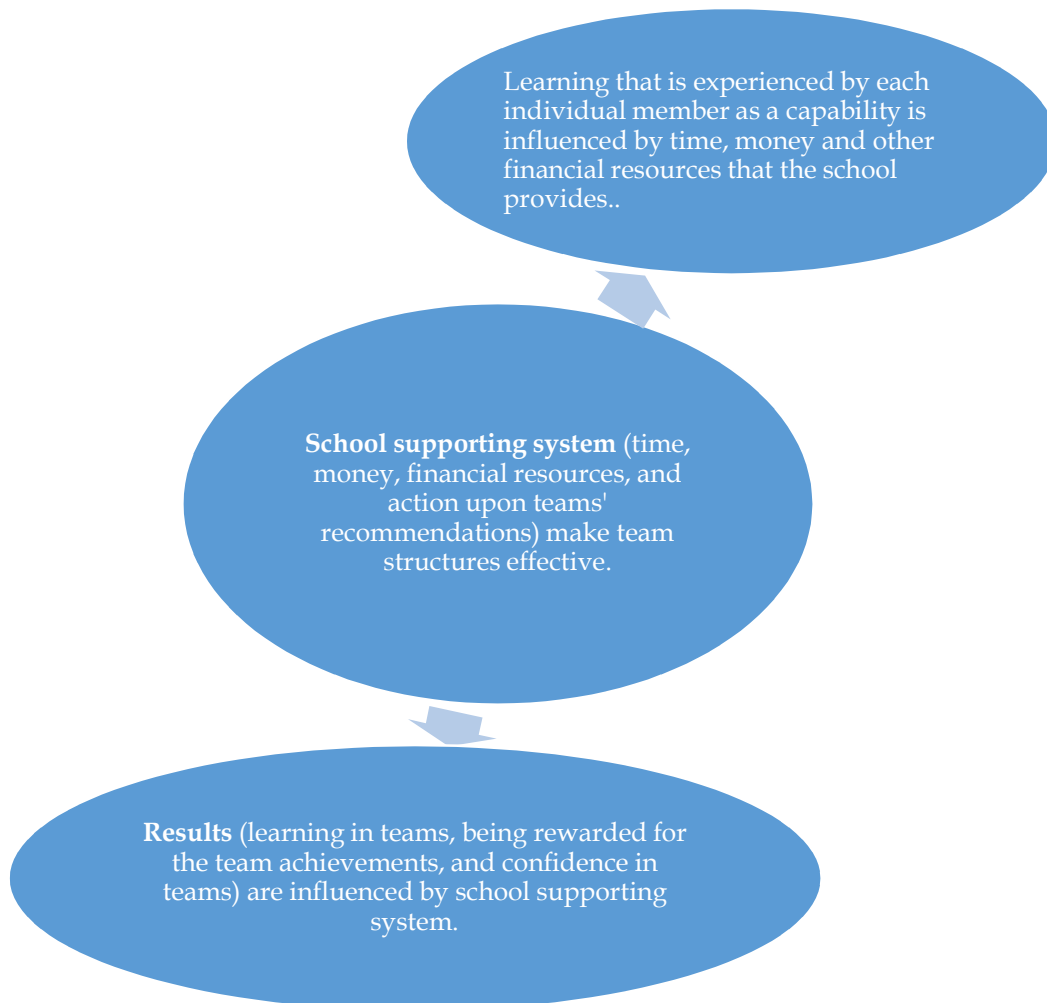


FIGURE 6. School supporting system as a challenge

5.2.3 Autonomy in teams as a challenge

In Table 14, the mean stands at 2.53. Ten people thought they did not have enough freedom to adapt their goals as needed in their teams while five thought they had such freedom inside their teams.

Having autonomy shapes the results of the teamwork because if a team or its members feel that their capabilities do not matter, they feel no need to really collaborate inside their teams.

In the case of lack of autonomy, it is quite probable that team members do not really participate in team procedures such as collaborating to learn. Therefore, team's whole capability as a constituent for collective efficacy will not be used at a maximum level as team members feel that there is no need to tap into their capabilities. This issue can lead to the result that the team members might feel that the goals dictate them and they perceive that they cannot affect the goals anyway. Communication in the team is also affected as there is no need to discuss or ask questions in order to achieve a decision in teams collectively. Based on what was discussed, autonomy is considered as a challenging issue in teams of the case school. Figure 7 shows how autonomy influences other constituents in team efficacy.

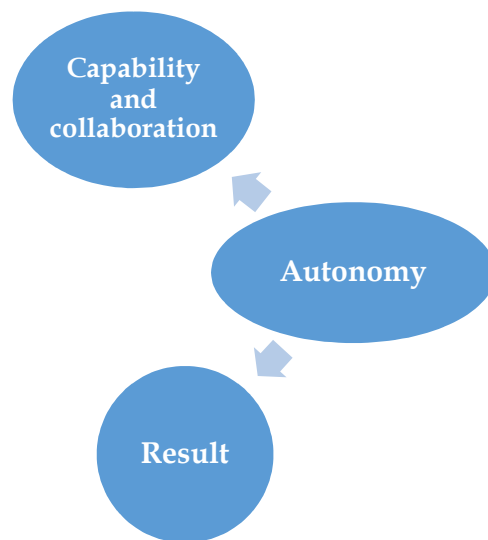


FIGURE 7. Autonomy in teams as a challenge

6 DISCUSSION

The last chapter of the study discusses the summary of the findings of the study, as well as limitation of the study and challenges for future studies.

6.1 A Summary of the Results

Findings of this study on effective teamwork shed light to the recognition of five main constituents toward the team's efficacy in the case school: 1. Shared goals 2. Capabilities and collaboration, 3. Autonomy, 4. Team results, and 5. School supporting system.

Shared goals

In order to achieve efficacy in teamwork, goals and missions need to be clear for all team members. Team members need to be oriented toward goals; the goals are clearly defined and shared by all. In effective teams, members are committed toward the teams' goals and are able to realize those goals. Common goals keeps team and team members united and by doing so, it results in team cohesion.

Capability and collaboration

Capability and collaboration contribute toward the team's efficacy from two different aspects: a) capability to collaborate in the team through communication and b) collaboration in learning and decision-making.

a) Capability to collaborate

Capability to collaborate in a team is materialized through communication. Effective communication in the team include dialogue, authentic listening, asserting one's views as well as asking other team's members opinion, asking why's, giving honest feedbacks and discussions which make the collaboration in the team fruitful.

b) Collaboration in learning and decision-making

Collaboration in learning and decision-making happens inside a team by continuous and purposeful communication. Learning is an inseparable part of the teamwork. All team members actively participate in the team processes so that the team learns. Team members collaborate as a whole and therefore, the team reaches to its goals by collective decision-making. Collective decision-making results in a more cohesive team.

Autonomy

In effective teams, team members have the freedom to adapt to the goals as situations demand. This freedom makes the team able to adapt the goals (to some extent) through collective decision-making.

Results

Revised thinking (as a continuous team learning), being rewarded for team achievements, confidence in teams, and possible change(s) for improvement in school based on the team's recommendations are teams results.

School supporting system

Allocation of time and financial resources are vital parts of the supporting system of a school in order that a team achieves collective efficacy. For achieving an effective teamwork, the team as a whole makes use of the school's supporting system as a backup resource for achieving the results as well as for the whole processes of the team. Rewards for learning, rewards for team achievements, and action upon teams' recommendations by the school make teams use their maximum capacities.

Challenges for teams in the case school

Challenges for teams in the case school as were recognized as learning in teams, the support provided by the school, and the autonomy in teams.

6.2 A Closer Look at the Results

Learning as a capacity for individuals, teams, and the school

Considering the results of the study, 'learning' is understood as a shared capacity in the organization, i.e. school. Learning as a capacity because it can be enhanced at different levels in the organization. Learning happens in three levels in school. First, members of the school learn as individuals. Secondly, members of the school learn through teams in the school. Thirdly, the school also learns by considering teams' recommendations.

School is a professional learning community in which collaboration is emphasized through teams. Collective performance through teams is the key attribute to school as 'a professional learning community'.

Autonomy of teams and shared leadership style

Autonomy is the freedom of the team in the decision-making process. The teams in the case school experienced a low level of freedom to adapt their goals as needed. Unfortunately, the level and the extent that teams can decide inside their teams were not addressed by the questionnaire and hence it cannot be discussed in the present study. Nevertheless, shared leadership style in the school and involving teachers in the leadership team might be a solution to this challenge.

Communication as a challenge for learning, collaboration, and results

Communication in teams is viewed as communication capabilities. The teams in the case school were faced with difficulties in practicing communication

especially in the cases of authentic listening, group discussions, providing feedbacks and discussion about mistakes.

The procedure of giving and receiving honest and open feedback was not so prevalent in the case school according to findings of the study. One of the possible explanations could be that giving and receiving feedback is associated with the perception of problems. Questioning -asking 'why'- was not encouraged in the school according to the answers provided by the participants. The reason could be that the team members were afraid to ask questions. Another possible explanation might be that shared leadership is not perceived or really felt (yet) in the teams. In case if this explanation would be correct, the school would need to invest more in creating a more flat leadership at the school level.

Collaboration in teams happen through communication. When communication is hindered because of lack of capability or because of not shared leadership style, it affects the teams result and the team collective performance as well.

In the case school, the team members thought that they help each other to learn which had the highest rank of scoring among all statements by the mean of 4.47 (the only mean among answers in the questionnaire which stood at 4 or above). At the same time, teams did not recognize giving and receiving feedback as a relevant procedure to collaborate in learning as a team. The mean of answers to this statement was 2.87. These statistics show that members in the case school need to communicate more efficiently in order that learning and collaboration increase at a higher level.

The relationship between communication and the shared leadership style

As mentioned before, communication in four forms (discussions about mistakes, giving honest and open feedback, real listening before speaking, and questioning regardless of rank) did not happen at high levels in the case teams. Non-participation of team members in communication might be because team members were not sure if their voices in teams were heard by the leadership.

The most relevant indicator on such interpretation was *'not being encouraged to ask 'why' regardless of rank'* (See Table 10).

The relationship between shared leadership, autonomy, and efficacy

The procedure of having the freedom to adapt the team's goals requires autonomy and it is in a direct relationship with leadership practices of the entire school. However, the evaluation of whether shared leadership style is happening in the school and the question of how shared leadership practice is materialized among the teams are the issues for the leadership team of the school to reconsider.

Yet, the findings of the present study show the perception of team efficacy as collective efficacy is related to the autonomy of the teams. In other words, one of the constituents of team efficacy as collective efficacy is autonomy that the teams experience.

The relationship between efficacy, the teams' results, and the school

In the case school, the team members contributed to the teams' goals and decision making through recognizing skills needed for future tasks, asserting one's views and asking for others' views. Teams in the case school shared the value of respect (See Table 12) and were oriented toward identification of tasks in teams (See Table 2). Team in the case school also revised their thinking in teams. These attributes contributed to teams' efficacy in the case school.

However, based on the data of the questionnaire, it is understood the teams did not find their achievements belonging to the school as it had the second lowest mean (See Table 19). Also, teams were not rewarded for their achievements as teams (See Table 18) as it had the lowest mean among all answers. Therefore, teams' efficacy in the case school is to some degrees challenged in two parts of 'results' and 'school supporting system'.

Rewards for teams' learning and achievements, and confidence in teams are elements that make the 'result' as a constituent of team efficacy. Confidence in teams is gained when teams are sure that the teams' recommendations (as part of achievements arrived at due to teamwork) are recognized by the school. The case school provided time as a resource for learning in the school. Yet, money and other financial support for learning were not provided by the school. Teams did not feel 'rewarded' by the school for their achievements. The case school did not act upon teams' recommendations.

The attributes of confidence in teams, providing rewards and financial resources for learning would make the team members feel that they belong to the team, make them experience more efficacy and have a great incentive to use their maximum capacity as a team.

Effective collective performance:

Based on the findings of the study, specifications of collective performance in school can be discussed as follows: The main goal shared among the school and teams is to support one another. The same way that there is an interdependence among team members to achieve a collective result, there is an interdependence among teams and the school. School supports teams through enhancing teams' capabilities and teams in return provide schools with practical recommendations. Learning happens in three different layers by individuals, teams, and the school. Learning is a capacity that is enhanced by individuals, team members and the school. These three constructs help each other to revise thinking continuously. Collaboration does not only happen inside teams but also along all layers of the school i.e. among school members, team members, and between teams and the school.

6.3 General Observation for Effective Teamwork

As it was discussed earlier, sense of being rewarded was at the lowest level among all features that the teams experienced at the case school, standing by

the mean of 2.27. The findings of this study indicate that in a school as an organization where teamwork is dominant, organizational systems such as rewards and resource allocation are designed to support activities of the team, thus improving the teams' collective performance. In other words, in a school that has a culture of teamwork, rewarding, allocation of resources, and action upon teams' recommendation support the teams. School supporting system encourages teams to achieve more.

As mentioned earlier, communication was recognized a challenge in teams. For improving collaborative communication skills within the teams, norms of the school could be tuned in a way they include upgrading the teamwork skills such as communication skills. This can be done through training of the individual team members according to their personal specific weak points, as well as supporting the whole team(s). The present study puts forward the following issues in general for consideration:

1) Improving Communication among the teams at school level:

For achieving efficacy, team members are not only able to communicate but also purposefully use verbal communication in teams, such as listening, questioning, discussions, and providing feedback. Team members communicate well with each other to ensure that there are no misunderstandings or hidden issues among team members. Providing free online massaging systems and using it as a regular procedure in the school is one way to make sure communication happens not only when team members meet face to face in teams but also whenever it is necessary.

2) Applying teams' recommendations derived from the teamwork in the school:

Receiving teams' recommendations is essential in a school which operates by teamwork. The ability to provide clear, precise recommendation as a result of the teamwork to the school leadership team is vital in order to maintain efficiency in teams. Actions within a school upon the recommendation by the teams also help by preventing unwanted negative emotions of inefficacy that might be otherwise experienced by teams and team members.

3) Refreshing skills and identifying the needed skills for learning:

Teachers and other school staff who work in teams, as members of the learning community, are faced with the need to update their knowledge and skills. Their professional life should be arranged in such a way as to be able to become more specialized in their specialty. Such an opportunity can be provided by free -to- take courses to promote their professional life.

3) The Rewarding and supporting system at school:

Efficient teamwork is intensified when the sense of accomplishment is achieved. For that to happen, the school needs to take into consideration new information or suggestions that come out of team discussions. This act encourages teams to value the teamwork as they see the results of their performance as a whole are materialized at the school level. For example, the teams could use an electronic platform to submit teams' recommendations. Regular monthly meetings among representative members of teams and the leadership teams is another choice. The result of these meetings and how the school is advanced in applying teams' recommendation could be registered in the same electronic platform to be available to all.

In order to achieve the effectiveness of the teams, school as an organization institutionalizes its supporting system to encourage teamwork. One part of the supporting system is rewarding. Rewarding can happen at two level: individual and team. Interestingly, in the present study, participants had the perception that people were more rewarded as individuals rather than as a team. Allocation of rewards cannot be only based on individual performance, but also in proportion to teamwork behaviors and results from their collective performance. This suggestion is in accordance with the result of the study by Kirkman and Rosen, (1999). According to their findings, when the system of allocation of resources is focused to support teamwork, performance priority shifts on the collective results and overall performance of the teamwork improves.

Allocation of resources also makes improvement in many of the internal processes of the teams, such as members' participation in making decisions, the establishment of team-based communication, team reviewing their perfor-

mance, as well as flexibility in making the necessary changes according to needs. The direct impact of such an organizational system is supporting teamwork and its positive impact on team processes (ibid). The results of Kirkman and Rosen study, (1999) also converge with many previous studies (Gladstein, 1984; Driskell et al., 1987; Cohen & Bailey, 1997; Mathieu et al., 2008).

Research findings (Hatton, 2000) show that resource allocation and reward systems in the organization are two elements of the organizational environment that influence team components such as team decision-making. In this way, resource allocation and reward system influence the effectiveness of teamwork in the organization. Results of the same research (Hatton, 2000) show that improvement of team decision-making processes, participation of members in all affairs of their team, effective communication within the team, team flexibility and periodic review of the team performance improves the effectiveness of the team from the functional, attitudinal and behavioral dimensions, namely, the achievement of team goals, satisfaction of team members, and their willingness to work more in the team.

6.4 Generalizability and Limitations of the study

The context of this school was quite unique as participants of the study did not have experience of working in teams. This fact probably made a difference in the way that they perceived teamwork as a concept as well as the way they answered the questionnaire.

Because of such a context, the results of the study are not as such to be generalized to other contexts and environment, for instance to other schools (researcher of the present study will send results of the study to the junior high school principal for possible applicable use). However, the challenges that the case school is facing might be common in other schools according to the existing studies of effective teamwork

The measurement instrument

Identifying features that lead to the effectiveness of teamwork has been the subject of the present study. The aim has been to understand dynamic con-

stituent premises of teamwork in an attempt to improve the collective performance of teams in the case school. Various models of 'the team' have so far been aimed at identifying the key elements of teamwork in organizations and their relationships with the team's success. Nevertheless, the boundary between various factors affecting the effectiveness of teamwork in organizations and the way these factors operate have been constantly among the limitations of practical researches in this area including the present study.

Learning is a fundamental element that plays a central part in the efficacy of teamwork especially when teamwork is considered to happen in a learning organization, i.e. in a school. In the present study, in order to see how dynamics of effective teamwork work in the school, the instrument of *Dimension of Learning Organization Questionnaire* was used. As mentioned earlier, the DLOQ (Marsick and Watkins, 2003) consists of three parts: individual, team and organizational level. However, investigating the features at organizational level was beyond the focus, task and time of this study. In case that organizational part of the questionnaire had also been studied, it is highly probable that the findings of the study would be more thorough and comprehensive.

Moreover, there are features that can affect the interpretation about the efficacy of teams in the case school which were not addressed by using DLOQ as the only questionnaire in the study. Role definition and ambiguity or nature of tasks that team members had in their teams were not identifiable.

Methodology part of the study

Due to disperse geographical positions of the researcher and the respondents, an online questionnaire was used in the present study. The researcher of the present study was a university student in Jyväskylä in Central Finland. All respondents of this study came from one junior high school in Western Finland, and probably they were mainly teachers. The only method that was applied in the present study was an online questionnaire. I, as the researcher of the study, was able to only collect 15 answers to the Webropol link of the questionnaire as it was discussed in the chapter of implementation of the study.

However, in order to have more answers to the questionnaire and with the aim of having two cases as well as to compare and contrast cases I originally intended to collect answers to the questionnaire from two different schools. I contacted the principal of another school shortly after contacting the junior high school principal. The principal of the junior high school gave me the email address of the second school. However, the person in charge was too busy and I did not get any answer from that school ever. The result was that I had to confine my study to one school and that the number of answers that I received to use in my study did not increase more than 15. The low return rate of answers to the questionnaire was among the limitations of the study.

6.5 Proposed Suggestions for Future studies

A more comprehensive thorough way to do this type of research about a team efficacy and collective performance can be done by using different measures at the same time, i.e. using questionnaire(s) and interviews at the same time, or even considering the performance of teams in the school through times. Such a procedure will result in a more- depth data collection and a more in-depth analysis (Creswell & Poth, 2018).

Using two different questionnaires and comparing and contrasting different elements would make further studies deeper. Such studies could also utilize qualitative methods in analyzing the data obtained from the questionnaire. The researcher of this study acknowledges that according to the literature of teamwork, there are also other team variables that make a difference in efficacy of teamwork and that some of the variables were not addressed through this study. For instance, the number of team members, the intensity of relationships, and team diversity are elements that affect a team based on teamwork literature. It would be practically important to see how these elements are related to the teams' effectiveness in the school, and how they can affect the collective efficacy.

6.6 Patterns for Improving Collective Performance in School Context

Here, I try to explain the links between patterns in the context of schools and improved collective performance. The term 'context' describes the organizational conditions integral in moderating the school capacity.

Schools have been designed in a way that activities take place in teams, thus there is a need for collaboration. The objectives centered on improved collective performance outcomes have to communicate to the responsible parties. Missions and goals of the school can be modified by the help of teams. Communication not only happens through teams but also among teams and the school. These shared coordinated structures promote professional continuous learning for individuals, teams, and the school.

The school encourages collaboration viewed as a direct construct shared to several individuals serving in different roles or functions in a school. All these activities aim at fostering conditions that make it easier for learning to be effective. Improved learning environment both result from and aim toward collective performance. These activities go beyond individual or team member learning and deals with collaboration through school.

Improving collective performance is in direct relationship with improving collaboration in teams. Interaction plays a key role in teams. Interaction in teams and in schools happen through communication, values and goals that are shared.

In the light of the findings mentioned, collective performance is understood as an organizational property which uses teams for learning and collaboration at different levels.

6.7 Conclusion of the Study

Collective performance in the school is experienced through teamwork. Procedures that happen inside the team like having autonomy in teams, sharing

common goals and missions, capability and collaboration (collaboration in teams through effective communication inside teams and collaborating to learn as a team), results of teamwork and having access to the school supportive system constitute efficacy in teams. On the other hand, the procedures of efficient teamwork may repeat between teams and schools so that collective performance is achieved, the only exception here is that support in collective performance becomes a two-way approach. Supporting system happens both by teams to help the school to modify and by the school who supports teams.

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APPENDICES

Appendix 1 Letter of Acknowledgement



25.04.2016

Ref. Ms Shadi Hassanzadeh Khansari's research permit request

LETTER OF ACKNOWLEDGEMENT

This is to certify that Shadi Hassanzadeh Khansari is a full time student in our Master's Degree Programme of Educational Leadership as of autumn 2014 and has completed all the studies as required, cumulatively circa 60 ECTS by the end of spring term 2015.

Shadi Hassanzadeh Khansari is planning to write his/her Master's thesis on the topic "*Dynamics of effective educational teamwork*", for which purpose she is contacting you to gain access to research data in your institution.

The research topic is fully acknowledged by our institution and the thesis is part of the Master's Degree Programme.

Mika Risku
Director

Tel. +358-400-247 420
Email: mika.risku@ju.fi

The permit to pursue data collection for the master's thesis has been given by the 1st advisor of the thesis on ...28.4.2016...



Signed by 1st advisor

Appendix 2 Survey

Dear Participant:

This survey questionnaire is an attempt to gather data for my master thesis on "Dynamics of Effective Educational Teamwork". Your input is an essential element of this study and will be kept strictly confidential. This information will be used for research purpose only. Of course your participation is voluntary. If you decide to participate, you are asked to fill in the questionnaire by choosing and clicking the answer that best corresponds to your view. This will take approximately 20 minutes from your valuable time. I appreciate your time and effort. If you have any questions about this study, please feel free to contact me. If you like to have a summary of the result, please email me at shhassan@student.jyu.fi

Sincerely,

Shadi Hassanzadeh Khansari

- 1. In my organization, people openly discuss mistakes in order to learn from them.**

1	2	3	4	5	6
strongly disagree	partially disagree	disagree	agree	partially agree	strongly agree

- 2. In my organization, people identify skills they need for future tasks.**

1	2	3	4	5	6
strongly disagree	partially disagree	disagree	agree	partially agree	strongly agree

3. In my organization, people help each other learn.

1	2	3	4	5	6
strongly disagree	partially disagree	disagree	agree	partially agree	strongly agree

4. In my organization, people can get money and other resources to support their learning.

1	2	3	4	5	6
strongly disagree	partially disagree	disagree	agree	partially agree	strongly agree

5. In my organization, people are given time to support learning.

1	2	3	4	5	6
strongly disagree	partially disagree	disagree	agree	partially agree	strongly agree

6. In my organization, people view problems in their work as an opportunity to learn.

1	2	3	4	5	6
strongly disagree	partially disagree	disagree	agree	partially agree	strongly agree

7. In my organization, people are rewarded for learning.

1	2	3	4	5	6
strongly disagree	partially disagree	disagree	agree	partially agree	strongly agree

8. In my organization, people give open and honest feedback to each other.

1	2	3	4	5	6
strongly disagree	partially disagree	disagree	agree	partially agree	strongly agree

9. In my organization, people listens to others' views before speaking.

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree

10. In my organization, people are encourage to ask 'why' regardless of rank.

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree

11. In my organization, people state their view, they also ask what others think.

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree

12. In my organization, people treat each other with respect.

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree

13. In my organization, people spend time building trust with each other.

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree

14. In my organization, teams/groups have freedom to adapt their goals as needed.

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree

15. In my organization, teams/groups treat members as equals, regardless of rank, culture, or other differences.

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree

16. In my organization, teams/groups focus both on group's task and on how well the group is working.

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree

17. In my organization, teams/groups revise their thinking as a result of group discussions or information collected.

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree

18. In my organization, teams/groups are rewarded for their achievements as a team/group.

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree

19. In my organization, teams/groups are confident that the organization will act upon their recommendations.

1 strongly disagree	2 partially disagree	3 disagree	4 agree	5 partially agree	6 strongly agree