



**LUND UNIVERSITY**  
School of Economics and Management

# **Does team building support the creation of high-performing teams?**

**A perceptual study of the effectiveness of team building**

By

Yuqiao Xie Hultin, Chenyang Zhang and Yuhua Hu

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Supervisor: Ola Mattisson

# Abstract

**Purpose:** The aim of this study is to discover whether team building activities positively affect team performance or not, by probing into the correlation of the components of high-performing teams. Consequently, the objective of this study is to develop the understanding of the effect of team building as well as probing into the factors which managers should consider when conducting team gatherings.

**Research Questions:**

- Do team building activities support the creation of high-performing teams?
- What are the factors that affect the results of team building activities?

**Methodology:** This study uses quantitative approach which gathers data from a questionnaire distributed to different people, which can be categorized as deductive research. The questionnaire was designed and developed specifically for the research question, with a pilot test done before the distribution of formal questionnaire.

**Conclusion:** The positive correlation between team building and team performance evidently exists, which is sorely determined by the quality instead of frequency of team building.

**Keywords:** team building, high-performing team, team performance, effectiveness of team building, team building quality, team building frequency,

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# 1. Introduction

## 1.1 Background

How to increase team performance by better collaboration is a continued topic dressed by many organizations and researchers. There are many factors affecting team performance, team dynamic is one of them, and team building activities are considered as an important approach to improve team dynamics. Thus, what is the correlation between team building and high-performance team and what factors can affect team building quality are the topics explored in this paper.

People achieve shared goals and common vision through teamwork. As defined by Scarnati (2001), teamwork is “a cooperative process that allows ordinary people to achieve extraordinary results”. Teams, the basic structure within companies, are the fundamental unit where projects, activities and tasks are being managed (Druskat and Wolff 2001).

Team building activities aims at developing team relation between team members and strengthening cohesion to improve the team to a higher developmental stage with a better level of performance.

There have been many approaches to define the term “team building”. For example, Arrey (2014) defines it as “a process of promoting the effectiveness of work groups, which can be achieved in both accomplishing group tasks and satisfying personal needs of the group members”. According to Cresswell (2008), goal setting, relationships, problem-solving, and role clarity are counted as the basic factors in team building activities. Buller (2014) adds that task and relationship problems in work teams are the two main focuses while implementing team building activities. Dyer (1977) described team building as “an intervention conducted in a work unit as an action to deal with condition seen as needing improvement”. In addition, Beer (1980) originally defined team building as “a process by which members of a group diagnose how they work together and plan changes which will improve their effectiveness” (p.140).

The authors' hypothesis is that team building would affect team dynamics, and the result of which could possibly influence team performance. However, there are both positive and negative outcomes of team building. Results from a study by Salas et al. (1999) have suggested that there is no positive effect from team building on team performance when the context and the approaches of team building process have been changed. Personal values of team members and the subjects of these team building activities will also affect the outcomes. Values such as core beliefs can guide behavior, form the basis of goal setting and motivation, and serve as the standard to evaluate behavior (Rokeach 1973). These behaviors which will be moderated by individual values, are the elements of team building as stated by Buller (2014).

Does team building support the creation of high performance team? Several researches have been conducted to describe the traits of high performing teams. Jackson and Madsen (2004) had put forward a model of high performing teams with numbers of components. However, to what extent these components will have been affected by team building activities accordingly remains unclear. That is the reason the authors would like to explore more about it by learn from individual's perceptions. The knowledge of the corresponding change of each component will facilitate for team leaders to conduct team gatherings to raise the level of those factors which are less likely to be affected by team building activities.

One follow-up question would be, "is it the more frequent team building is conducted, the higher team performance it will achieve?" The authors are curious and interested in finding out if the level of frequency of team building could potentially result in a high-performance team. Therefore, the aim of this study is to discover whether positive perceptions from team members regarding the quality and frequency of team building positively affect team performance or not, by probing into the correlation of the components of high-performing teams. This study is based on the perceptions of the respondents combined with perceptions of team building and team performance.

Despite that the popularity of team building has been growing in recent years due to the benefits that teams gained from it, there is no clear conclusion stated that the team building 100% lead to high

performance team. Salas et al. (1999) found that the outcomes of team building are actually “mixed, vague or non-significant” (p. 309).

## 1.2 Problem discussion

Given the “mixed, vague or non-significant” effect of team building, the authors are curious to find out if and how the purpose to create high performing team could be achieved. According to Katzenbach and Smith (1993), there are four reasons that teams work: 1) a mix of complementary skills and experiences; 2) a sense of shared vision; 3) accountability and flexibility while needed 4) a social atmosphere where team members have fun and interact with each other. Jackson and Madsen (2004) have also stated that high-performance teams have some common traits alike, but whether they necessarily link to team building activities or not remain unclear.

Individual’s perception of team building is another important issue when it comes to collaboration . Regan (1991) stated that individuals on a team not only have a shared vision they are committed to, but also develop their trust and relationship over time. Then, they would voluntarily sacrifice one’s individual needs for the sake of others’ success as well as the team’s (Regan, 1991). Regan also added that team members must “take risks involving conflict, trust, interdependence, and hard work” in order to perform effectively (p. 109), which also relates to the perceived attitude towards their team.

Based on the understanding of the importance of team members’ perception towards team, in undertaking research for this study, the authors would like to explore the correlation of perceived quality of team building activities and perceived team performance. In this context, team building activities can be conducted in both formal and informal settings that are able to improve interpersonal relations, solve conflicts efficiently, and clarify team roles, for the purpose of boosting team effectiveness (Schein, 1999). A review of existing research has shown some clues that team



building skill is considered as one of the most valuable competencies (Jackson and Madsen, 2004). In this paper, team building is defined as a process to achieve these four factors mentioned above (Cresswell, 2008) with a focus on handling tasks and relationship issues.

## 1.3 Research purpose and research questions

### 1.3.1 Research purpose

In order to give practical implications for managers or organizations about how to take advantages of team building activities as a tool to create high-performance team, the authors would like to contribute to shed light on the individual's perception of team building activities and the correlation of team performance by doing this research. It could support to accelerate organizational culture developing, depict the nature of team dynamics and understanding of organizational behavior, as well as development of both individual and group.

### 1.3.2 Research questions

#### **Do team building activities support the creation of high-performing team?**

Given the mixed result regarding the effectiveness of team building, It is important to provide a clear conclusion by running a test of correlation between perceived level of team building and perceived level of team performance.

#### **What are the factors that affect the results of team building activities?**

It should be acknowledged that the outcomes of team building will be influenced by a set of factors. Different team setting may be diversely affected by implementation of team gatherings arranged by managers. Therefore, it is critical to probe into the effect of each factor including age, gender, cultural background etc. regarding team building to provide managers with a more practical approach of conducting team building.

## 1.4 Structure of the dissertation

The following chapters of the dissertation are organized based on the sequence of the research process. Relevant theoretical terms and knowledge regarding chosen types of team, teamwork and team performance were introduced and discussed in chapter two, followed by the justification of our choice of methodology and our intended approach of its implementation, which will be presented in Chapter three. The process of data analysis will be displayed in chapter four, followed by our findings and discussions. Chapter five reviews and evaluates the author's findings, along with presenting the suggestions of this study based on the analysis of data. Chapter six summarizes the process and the result of the study as well as possible future research of this study. The reference and appendixes will be provided at the end of the dissertation.

## 2. Theoretical Review

### 2.1 Objective and Overview

In this chapter, the authors present an overview of literature and models which relates to the research questions. It begins with the definitions of team and team dynamics. On top of that, the importance of team dynamics will be addressed. Since term team building has been defined and discussed by many academics, a discussion on the benefits of team building as well as the disadvantages of team building has been provided, from which the necessity of the research to unveil the overall effect of team building has been made clear. The following describes the conceptual model of team performance which also includes the content of the five stages of team development. Moreover, the components of high-performing team will be introduced.

### 2.2 Team and team dynamics

#### *Team instead of group*

Not every group of people is identified as a team (Robinson and Robinson, 1994). Katzenback and Smith (1994) defines a team, as “a small number of people with complementary skills who are committed to a common purpose, performance goals, and common approach for which they hold themselves mutually accountable”. This is to be distinguished from a group defined as a “dynamic whole which is characterized by a close interdependence of their members” (Lewin 1947, p. 8). Additionally, the term *team* also shares some characteristics that are used to describe the term *group*: “complex, adaptive, dynamic, coordinated, and bounded set of patterned relations among members, tasks and tools” (Arrow, McGrath, Berdahl 2000, p. 34). Although Bartol and Martin (1994) claim that it is not obligated to have and then fulfil a common goal in a group, they also admit that there are groups formed for a specific purpose. Furthermore, McGrath et al (1995) states that the term team is often referred as a group formed to accomplish a specific goal in an organization. Therefore, team is a certain type of group. There are various types of team. Some are permanent while some teams are formed for a short duration until the task is accomplished. Some teams have frequent physical

meetings while some only communicate with each other online through internet. For the purpose of this research, the authors are going to use the term *team* as a way to differentiate from a *group*. Because a team is defined as a group of individuals whose skillsets and feedback are required to fulfill the task; they are working interdependently and collaboratively for their common goals (Jones et. al; 2007), regardless of the duration and the way of communication within the team.

### *Group dynamics*

One of the first researchers who has made significant contribution in the field of group dynamics, Lewin (1947), emphasizes that the group dynamics is dependent on the interdependent relationships among members within the group. He coined the term *group dynamics* as a “dynamic whole which is characterized by a close interdependence of their members” (p. 8). This subject is essential because it influences how productive a team can become since group dynamics is about how team members react to and deal with changes (Lewin, 1947). By conducting team building activities, a team is more likely to create positive group dynamics thus achieve high performance. A phenomena called *group mind* (Cartwright and Zander, 1968, p.7) is considered having a significant impact on interrelationship. The concept *group dynamics* in terms of group mind was doubted by Allport (1927). He argues that “we are in danger of being misled into thinking that it is a crowd mind rather than the minds of individuals which is accountable for these phenomena” (p.3). Strongly disagreed with Allport, Lewin (1947, p.8) claims that a group itself has its own characteristics that differ it from the properties of individuals within the group. He continuously argues that group structure, ideology and cultural values are as important as the personality of individuals members.

In addition, Lewin (1948) indicates that the size of a group can affect the group dynamics in many ways and he believes that the smaller a group is the more interdependent group members are. However, Shaw (1971) finds the difficulty to actually draw a clear line between small groups and large groups. Although Shaw (1971) suggests what numbers a small group and a large group should contain, he points out that measuring the size of the group relies on the interrelatedness among the team members. Therefore, the authors decide to disregard the sizes of the teams in this study. Instead, the elements of high-performing team will be used to measure whether there is enough interdependence exists among team members.

## 2.3 The term “team building”

According to Lind and Skärvad (1997), poor group dynamics can hinder the performance of a team and consequently result in failures in teamwork. Team building helps increasing work effectiveness and solving interpersonal problems within the team. Therefore, group dynamics will be improved because of better interdependence among team members and working environment. What team building is can be a tough question due to its ambiguous nature (Salas et al., 1991), and a question that has been studied many times. There are various way to define the term *team building* that has brought challenges while reviewing the literature (Salas et al., 1991). Given the acknowledgement of the complexity of this signifier, the authors find two definitions of team building that are most relevantly close to the overall research purpose of this research. Firstly, Mazany et al. (1997) refer team building as “an investment in the people resource of an organisation”. Then, Toofany (2007) defines team building as a way of “encouraging individuals to participate in activities together” (p. 27). Previous studies have made distinctive definitions from the content of team building, also known as act perspective, and purpose perspective of team building. The definition of the *act* of team building is to improve work teams (McShane and Travaglione, 2003). Team building is not necessarily undertaken whether indoors or outdoor, it can be carried out at any location. Carron et al. (1997) add that team building puts the individuals of the team together by sharing close physical distance, thus resulting in an increase of cohesiveness. Team cohesion can be recognized as an inevitable feature in high-performing teams, also an interdependent relationship can be perceived between team cohesiveness and team performance (Michalisin, Karau & Tangpong, 2007). The *purpose* of team building is to amplify effectiveness of a team (Toofany, 2007) by setting goals, enhancing relationship among team members, solving problems, and clarifying roles (Wheelan, 2005). Therefore, it is noticeable that the *purpose* of team building is accomplished by the *act* of team building. The authors present detailed descriptions of these four terms in preparation of understanding how team building affects team performance thus leads to high performance.

*Goal setting:*

Goal setting can be regarded as the purpose of team building activities which aim at encouraging the development of individual or team goals by “providing tools that enable the participants to clarify and then work through ways to achieve those goals” (Salas et al., 1999).

*Relationships:*

As an inevitable reality at workplaces, interpersonal relationships can be remarkably affected by communication, and support, trust and confidence given by team members (Cresswell, 2008). Forming positive relationships with the individuals of the team will result in maximizing each other’s potentials which provide preconditions for boosting effectiveness and team dynamics (Greenberg and Baron, 2008).

*Problem-solving:*

According to Priest and Gass (1997), problem-solving is considered as a main factor that has an impact on decision-making of a high performing team is partially dependent on an appropriate role allocation (Bradley and Frederic, 1997). Behrman & Perreault (1984) added that role clarity increases individuals’ job satisfaction which will motivate them to thrive and perform.

## 2.4 The aspects of team building

This section summarizes the different aspects which are the effectiveness and negative effect of team building that the authors find are the most relevant to this study. It is imperative to stress the term ‘effectiveness’ before digging into the effectiveness of team building. Mazany et al., (1995) stated that the effectiveness in terms of team building can be measured by positive results performed by the team. According to Buller (2014), team building activities have a significant impact on performance. He also addresses that the purpose of implementing team building is to boost efficiency and effectiveness of teamwork within organizations. Team building activities can be utilized as means to ends, to solve pre-identified problems in the group (Buller, 2014). Svyantek et al. (1999) agreed that “team building brings positive influence to workgroup productivity”. Therefore, the focus of team building activities may vary from task-oriented to relationship-oriented, while the intended outcome

of team building activities could include goal setting, role clarification and other possible designed target, depending on the way team building activities are being organized. Dick (1996) added that team building mainly facilitates the connection between group members, which should be designed to benefit both individuals and the team as a whole. By stressing the “system” in the original quote, Dick (1996) also indicated a focus on the capability of handling problems while designing team building activities. He explained furthermore that the system can manage the traffic flow among people while they get overwhelmed with flooded materials, information, and services (Dick, 1996). Therefore, team building could improve this traffic flow due to the interdependent relationship between this traffic flow and the system (Dick, 1996). Moreover, he mentioned “need satisfaction” can be the motivation of team building activities, for instance, different groups of people have different need, and different approach to satisfaction (Dick, 1996).

However, working in teams not only provides benefits due to the collaboration and cohesion of team members but also brings out challenges for individuals. Then, team building is often needed to tackle down current or upcoming issues and enhance a team’s morale. These issues can either be task oriented or relationship oriented. The team can always organize seminars and workshops to redistribute workload and reallocate team roles, or if allows, can even offer a short-term tutoring and learning program to plug skills and knowledge gaps. On the other hand, people oriented issues take more time and energy to be fixed. Disagreement on purpose and goals, lack of motivation, poor communication, lack of clarity on team roles, conflict, power struggles can fragment the team (Jackson and Madsen, 2004). Also, Shani (2009) states that there are chances that teams perform poorly or individuals in a team outperform teams despite of being well-functioned.

## 2.5 Perception

As this study is evaluating team building and team performance based on individuals’ perceptions, it is necessary to address the definition and the nature of perception. According to Berelson and Steiner (1964), perception is a “complex process by which people select, organize, and interpret sensory stimulation into a meaningful and coherent picture of the world”.

It is acknowledged by the authors that the difference between a perceived situation and reality exists in this study. However, a perception of reality or a situation has more personal influence than reality or a situation itself does (Magnusson, 1981). Knoblich and Sebanz (2006) support this claim by stating that “mapping perceived actions to one's own action repertoire enables direct understanding of others' actions and supports action identification.” In the light of the research regarding the connection between individual's perception and action, the authors intend to conduct the research using perceived team building quality as one key performance indicator.

## 2.6 Tuckman's model of team development

While analyzing the team development and change, Tuckman's model (1965) appears to be the most relevant among all. Furthermore, Katzenbach and Smith (1996) had divided teams into five categories which can be considered as an extension of Tuckman's model regarding team dynamics and performance impact. Tuckman's (1965) team development model is composed of five stages; forming, storming, norming, performing and adjourning. In the context of this study, the authors decided to focus on the first four stages of team development as they seem more applicable to the teams that we want to study. The first stage refers to the very first meeting of the team when individuals get to know each other. Cartwright (1968) adds that not only having similarity can attract team members but also having dissimilarity can be a source of attraction. Also, it can be observed that the team dynamics can be increased by team members having motives to remain part of the team. Usually, the team atmosphere at this stage is friendly and relaxing even though individuals may have hesitations and doubts. Then, team members start to address personal and work preference, and discuss team goal and rule at the second stage as they become more familiar with one another. As team members reveal more about themselves, disagreement or conflict can be spotted among individuals. Ungerleider (2008) points out that the rise of conflicts in the team could also lead team to realize a need for change. He explains that having the right attitude facing and handling conflicts can result in “deepened communication and honest self-examination can lead to creative, positive energy” (p. 213). It is an important step to create positive team dynamics. If the team functions



relatively well from the storming stage, the team is able to begin the norming stage where the individuals develop understanding and grow respect for each other. Thus, a sense of cohesiveness and belongingness can be evident in the team. Forsyth (2006) refers cohesiveness in a team as “the strength of the bonds linking individuals to the group, feelings of attraction for specific group members and the group itself, the unity of a group, and the degree to which the group members coordinate their efforts to achieve goals” (p. 14). According to Byrnes (2009), team cohesion can be achieved when a shared goal is reached within a time limit. The fourth stage of performing comes when the team takes decisions as a whole and performs highly effectively. After the team has completed the current tasks, it eventually comes to the stage of adjourning. As stated by Mazany et al., (1995), teams can move rapidly through these five phases if effective team development facilitated by team building is properly coordinated. The authors find out that Tuckman’s model is applicable in observing individuals’ performances and involvements on different stages considering this study is focused on team building. Therefore, individuals’ perceptions on team building can be measured by analyzing team development.

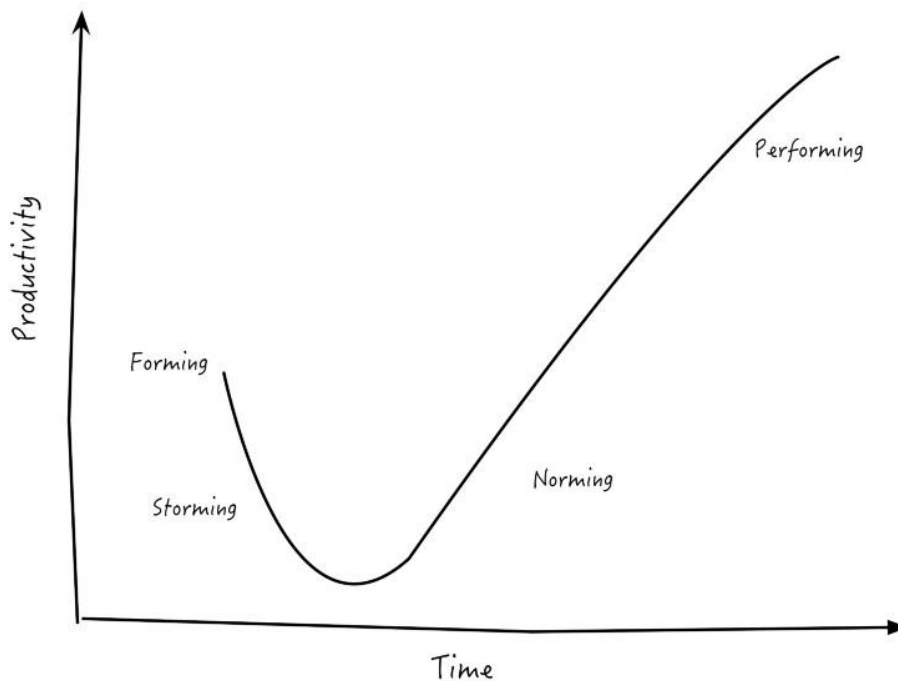


Figure 1: Tuckman’s five stage of team development (adapted from Doddi, S., 2015)

Furthermore, Katzenbach and Smith (1993) provided the “team performance curve” which has exact features of Tuckman’s model (1965) but also has an addition of performance impact. The first stage in team performance is called the “working group” where individuals are gathered to share information but no shared goals are set. Individuals are only responsible for the work they have been assigned, the team is performing but is far from being a high-performing team (Katzenbach and Smith, 1993). Continuously, the team delivers results but the team members are not acting as a team or trying to make common purpose and achieve it. That is where the team is at, the lowest point of the “team performance curve”, because the “pseudo team” is less effective than “working group” (Katzenbach and Smith, 1993). Once team members realized the need for improvements, clear vision, and shared goals and even are willing to work on it, the team becomes a “potential team” which is the stage before evolving to a “real team” (Katzenbach and Smith, 1993). There is mutual accountability among the individuals in the team and a common purpose has been agreed. Not all teams can reach the stage of “high performance”, the team that does is because team members share interdependent relationships with one another as well as fulfill all the requirements of the “real time” (Katzenbach and Smith, 1993).

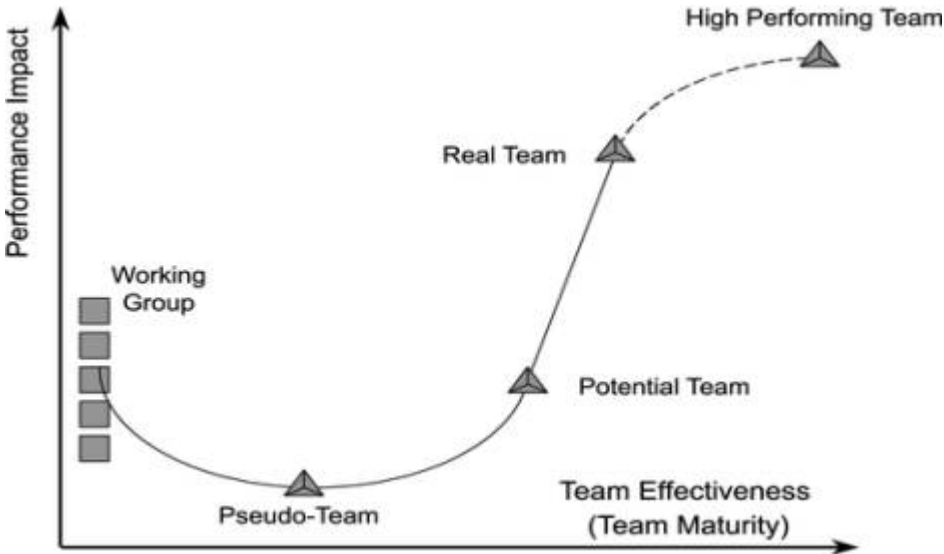


Figure 2: Team performance curve (adapted from Wenger, J., 2012)

However, teams are able to move through the stages and occasionally stuck between certain stages or moving backwards instead of heading to the final stage (Robbins et al, 2001). Robbins et al. (2001) added that there are limitations in understanding teamwork due to different organizational context and group behaviours while implementing models. The authors notice that the “team performance curve” fills out the description of Tuckman’s model of five stages. For every stage of team development there is performance impact for team growth.

The combination of Tuckman’s model and Katzenbach and Smith’ curve provides full particulars in analyzing team performance in various stages of group formation; It together with the components of high performance team helps the authors to identify if teams have reached the high performance level. Therefore, it seems useful to review these stages of team development as they provide some insights for people to understand the elements of a high performing team and the nature of group dynamics.

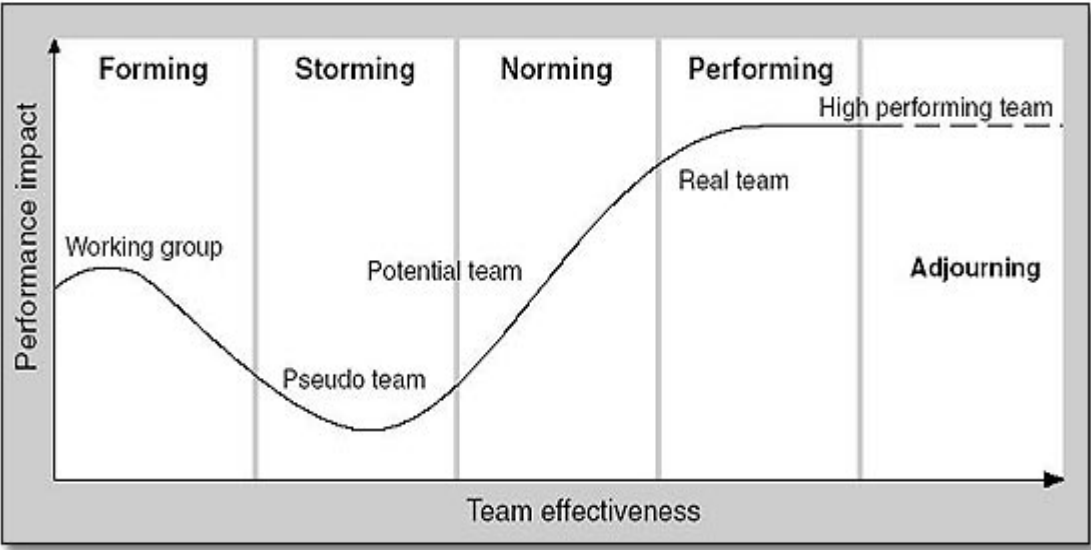


Figure 3: A combined model of Tuckman’s and Katzenbach and Smith’s (adapted from Mercure AACE 2013)

## 2.7 Components of high performance teams

This section is to identify the components of high performing teams that contribute most to team dynamics. According to Jackson and Madson (2004), “high-performance work teams are generally composed of a combination of purpose and goals, talent and skills, incentives and motivation, efficacy, conflict, communication, and power and empowerment”.

### *Purpose and goals:*

A shared purpose is the prerequisite to succeed (Katzenbach and Smith, 1993) because it binds individuals’ needs and accomplishments on one tie. Having a shared purpose motivates individuals on the team to achieve higher and accelerates their potentials towards a common goal (Katzenbach & Smith, 1993). According to Weiss (2002), team members tend to be more capable of accomplishing their assignments if they have been informed about the reason they are assigned to do them.

It is essential for teams to set a common goal in each task. According to Knight, Durham, & Locke (2001), teams with a common goal show a tendency of achieving greater results and sustaining their goals. Knight & Durham (2001) added that goal setting makes positive impact on team performance. It is also evident that the difficulty that teams may encounter while creating goals can encourage teams to perform better (Regan, 1999).

### *Talent and skills:*

In high performing teams, individuals’ talents and skills should be recognized, utilized effectively and cultivated to achieve greater results. According to Larson & Lafasto (1989), individuals with talents tend to be more engaging and collaborative on making contribution in teamwork. A set of skills such as problem-solving and conflict solving (Stevens & Campion, 1994), and decision making and interpersonal skills (Lawler, 1992). These skills should be applied by individuals for tackling issues in teamwork (Csikszentmihalyi, 1990).

### *Incentives and motivation:*

Team incentive build and strengthen relations among individuals in the team, as result of this, positive impact will be produced on team performance (Knight, Durham, and Lock, 2001). It is also important for individuals to feel motivated and be rewarded by their accomplishment. Once team members are enjoying the working environment and are personally satisfied in their work, better performance in the team can be expected (Weiss, 2002).

*Efficacy:*

One of the approaches to evaluate team effectiveness is through team efficacy (May and Schwoerer, 1994). Team efficacy means that individuals are confident to utilize their competencies in team performance (May and Schwoerer, 1994). The connection between team performance and efficacy is evident (Knight, Durham, and Locke, 2001). To obtain high team performance, it is needed for team members to have faith in themselves, their organization and their team (Brown, 2003).

*Conflict management:*

Conflict is impossible to avoid in teamworks as well as in a process of becoming a high performing team (Katzenbach & Smith, 1993). Conflict solving is considered as a skill to properly deal with interpersonal issues and work towards solutions with mutual agreement (Mohrman and Cohen, 1995). According to Jehn & Chatman (p.196, 2000) and Rainey (1991), conflicts can be found in various fields such as working preference, cultural background, personal values and goals, personalities and etc.,

*Communication:*

Communication is considered as a skill which is required for effective teamwork (Salas et al., 1992). More effective interactions can be done with team members while appropriate communications are implemented in teamworks (Davis et al., 1986). Effective team communication usually occurs in an informal and relaxing team environment setting (Stevens & Campion, 1994). According to Steven & Campion (1994), effective communication is an indispensable characteristic of high performing team that has a significant impact on team process and outcome; it highly relies on an individual's behavior and attitude towards other team members. Additionally, team members have personal

communications with one another to make sure that messages and informations are understood correctly (McIntyre, Morgan, Salas, & Glickman, 1988).

*Power and empowerment:*

The need for power exists in each individual and has a close association with goal setting and direction manipulation (Peterson, 2007). Individuals with power usually are seeking for a leadership position with a goal of directing and managing (Lee, 2013).

## 2.8 Summary

This chapter has reviewed and discussed literatures concerning group dynamics, team building, perception, the stages of team development, and the components of high performance team. According to the literature reviewed, there is interdependent relationship between group dynamics and team development. Also, group dynamics can affect how a team functions. Moreover, goal setting, interpersonal relationship, problem solving and role clarity are defined and discussed for the purpose of supporting the effectiveness of team building. Greenberg and Baron (2008) conclude that goal setting and interpersonal skills will improve productivity along with problem solving skill (Priest and Gass, 1997) and clear roles assigned (Bradley and Frederic, 1997) thus lead to successful performance.

Tuckman's model of team development (1965) and the curve of team performance (Katzenbach and Smith, 1993) were discussed separately, although both models are seemingly identical. It is noticeable that the team development in Tuckman's model is measured by time while the curve of team performance is measure by team effectiveness. Therefore, the combination of these two models is provided and applied to identify whether teams reach the high performing phase. This is followed by a description regarding the components of high performance teams (Jackson and Madsen, 2004). Conclusively, this chapter contributes to a summary of theoretical background chosen by the authors

with the aim of providing potential approaches for the selection of methodology for this study.

In summary, this literature review has shown that team building activities can result in improving team dynamics and effectiveness. However, there are a couple of aspects that have not been discussed in the literature review, such as, does age, gender, or cultural diversity have any impact while team members participating in team building activities.

# 3. Methodology

## 3.1 Objective and overview

This chapter gives an overview of the approach to the research purpose. It includes research approach, methodological selection and method of data collection as well as limitation in order to answer the research question in a well-considered way.

No common agreement has been reached regarding the approaches how the methodology of research should be defined despite its significance to academic and business process (Amaratunga, Baldry, Sarshar & Newton, 2002; Collis & Hussey, 2003). It is agreed though that the methodology of the research is a process of inquiry and investigation. Which is organized, logical and extends knowledge (Amaratunga, Baldry, Sarshar & Newton, 2002; Collis & Hussey, 2003).

Yin (2003) describes research design as the “logic that links the data that has been collected for the initial questions of study”. Therefore, research approach will be discussed as follows to make sure the research design was logically conducted. Current research methodologies as well as theories are selected for the purpose of understanding the interdependent relationship between team building and high performing teams. This chapter aims to discuss the methods of data collection, including sample selection, questionnaires conduction and data analysis processes.

## 3.2 Research Approach

This study is set to reveal a connection of team building and high performance which is conducted in a deductive approach. As the evaluation of individual’s experience of teamwork plays a crucial role in this research, quantitative data was gathered from the questionnaire distributed to different people, which can be categorized as deductive research. This approach allows analyzing the data collected and exploration of the patterns between respondents through the process of research and data



analysis for the purpose of expanding the knowledge in this field (Saunders, Thornhill & Lewis, 2007).

Quantitative data was collected through the questionnaire, by analyzing individuals' responses to a set of questions based on their experience and perceptions of the team building activities and team performance. It is worth to mention that it is acknowledged that the research is based on learnings from the participants' perception, which is subjective. Therefore, the researchers managed to avoid potential biases by analyzing the average situation of a big amount of data to provide a valid conclusion. Furthermore, recognizing limitations of the research processes will also positively influence confirmability (Shenton, 2004).

### 3.3 Methods of data collection

#### 3.3.1 Sample selection

In order to reach research questions, the researchers decided to use snowball sampling method to targeted audiences in two groups: students and employees. We therefore removed the data that cannot be categorized into either team. Hence, the participants selection was based on purposive sampling (Bryman & Bell, 2011). Most students participated in our research have been working in teams, these students were hence selected as the target sample. We also chose to target the employees as another major participant group. Their accessibility and involvement in the research played an essential role in the selection process. Overall, a number of 215 respondents were received. which suffices for quantitative analysis.

Admittedly, the snowball sampling approach may affect the conclusion in a way that it attract participants of certain similar characteristics, however, the authors believe that given the amount of the responses received through snowball sampling approach, the conclusion of our quantitative analysis could be made more valid through this method.

### 3.3.2 Questionnaire design

The questionnaire was designed and developed specifically for the research question. The questionnaire included four parts namely personal information, team information, team building activities and the components of high performance teams. Apart from questions concerning general information of the respondents, the questionnaire mainly utilize multiple choices on the scale of 1 to 5 to gather statistics, thus qualitative information was not captured. The questionnaire document was designed by researchers by Google doc., where the final copy was finalized after a pilot study.

The questionnaire predominately used a 5 point Likert scale method (Cresswell, 2009), which can be interpreted as follows. 1-Strongly disagree, 2-Somewhat disagree, 3-Neutral, 4-Somewhat agree, 5-Strongly agree. The approach to conduct quantitative research based on this theory is supported by Roland, Wagner and Weigand (1995), who stated that the Likert scale survey is the most popular used, as it is easy to understand and quantifiable (Cresswell, 2009). Reason for using a 5-point scale rather than a 7-point scale is that researchers believed it would cause unnecessarily difficulties to the participant by introducing two additional options, because the researchers suppose that it would be confusing to place two options between being neutral and being absolute agreeing or disagreeing

The questionnaire started with brief instruction, including explanation of what it is about and described that 1-5 point represent strongly disagree to strongly agree. The first part is participants' demographics which includes age range, gender, region of origin and location. This information was required to identify participants that occurred in the final analysis (Cresswell, 2009). Lee (1999) states that the demographic part comes to the first of the questionnaire due to ease reason. The inclusion of demographics concurs with Becker (1992) who note the importance of study target audience.

Part two of the questionnaire was designed to look into team status starting with a question concerning the exact type of team our participants are actually in. It was reckoned that the complexity of the constitutes of the team affects the effectiveness of team building activities, as more

complex goals are to be set and more compound roles are to be clarified through team building. Therefore, we divided the team which our participants might once or still be in into two categories, project team and functional team. In addition, cultural diversity among team members can also be a critical factor concerning the outcome, which justifies the need for Question 8 regarding diverse cultural background in the team in the Questionnaire.

The frequency of team building activities has also been recognized as one of the significant factors affecting the utility of team building, which has been evaluated in Question 7. It should be taken into consideration that each individual measure the frequency of team building activities differently based on their cognition. Therefore, we choose to collect data on specific occurrence over time instead of rate it from on the scale of 1 to 5 (Roland, Wagner and Weigand, 1995), in order to obtain objective results of team building frequency. However, when dealing with the figures to run correlation analysis, we will transform the exact rate of occurrence into numerals which can be quantitatively analyzed.

Part three aims to collect information about quality of team building activities. It starts with questions that we designed to draw forth the general views on the team building activities including levels of motivation, personal experience and perception of how the team building activities influence on team performance.

Part four is designed with the purpose of evaluating the level of team performance based on Jackson's the theory of components of high performance team. This section included question regarding sectors such as communication, shared goals, conflict handling, efficiency and motivation as well as empowerment in a team.

### 3.3.3 Questionnaire conduction

The pilot study was executed to improve the research instrument before the questionnaire was distributed (Bryman & Bell, 2011). Nine people including five current students in Lund University

and four working professionals who were identified as target group at Purac AB and Schneider-electric Sweden AB. They were asked to test the survey and provide feedback about the comprehensibility regarding the twenty-four survey questions. Modifications were made accordingly after three hours of discussion. For example, one question was removed completely, another question had a specific explanation added to each alternative. Additionally, several descriptions were added to each ranking choice along with a number of practical terms. The final online-based survey was distributed through social network sites such as Facebook, LinkedIn, and WeChat to reach respondents who are located all over the world (Easterby-Smith, Thorpe & Jackson, 2012). The test group had three days to complete the pilot questionnaire and the feedback was provided immediately when completed.

### 3.3.4 Questionnaire data collection process

The questionnaire was completed by the participants within two weeks through emails and social media channel due to the effectiveness consideration.

The questionnaire was based on closed questions which produce the data that can be analyzed. The purpose of the questionnaire was to understand the individual perception regarding the team building activities in different types of groups as well as team performance in different criteria such as communication, conflict handling and team efficiency as well as goal achievements. Therefore, a connection between team building activities and high performance can be revealed.

The questionnaire data collection was conducted in three stages, with the pilot questionnaire being the first stage. In the second stage, a snowball sampling method was implemented to target respondents maximally within the time limits of two weeks. In the third stage, the researchers finalized all 215 inputs from respondents to SPSS for analysis. The output from SPSS was then displayed in the following chapter as figures.

### 3.3.5 Data analysis-questionnaires

Bryman and Bell (2011) described various methods which can be applied when evaluating quantitative data. However, the questionnaire was decided as the sore method. Therefore, the empirical data was collected and analyzed by means of statistical programs, which was presented and visualized using charts and diagrams produced in SPSS. During the process of analysis, there are 24 questions from where the information was obtained relevant to the research questions, based on which the outcome of these questions was presented and analyzed.

## 3.4 Limitations

Regarding the research questions, there is an acknowledged limitation of questionnaire approach. First, most questions in questionnaire designed are closed questions, which restricted exploration of individual experience in specific areas; Secondly, in order to collect more data, researchers used varied methods to motivate potential participants to invite others (and questionnaire could therefore reach out to different groups), for example, there was phenomenon of tradeoff when it came to finding more participants for data collection, which likely lead to similarity of the group; Thirdly, in order to ensure sufficient data for analysis, the researcher deleted the “other” option for team choosing question, thereby avoiding invalid response which would possibly force participants to answer the question in a certain way. The questionnaire, which was designed to measure the level of successful team building activities and the level of team performance, thus to dig out the correlation between these two indicators, was limited to 22 questions in total with 7 questions in both team building part and team performance part respectively.

During the data collection process, the limitation of the research design was noticed. Researchers only conducted quantitative data collection due to time limitation, which was a lack of deeply empirical data exploration due to no qualitative method was designed for the research.

Additionally, considering that this study is aiming to study the effectiveness of team building by

analyzing individuals' perceptions, it is essential to mention there might be a difficulty to eliminate individuals' bias.

### 3.5 Summary

This chapter has provided the methodology chosen for this study. It followed by details regarding questionnaire approach for quantitative data collection, and the reason why this methodology was applied to the research. The perception of individuals' experience and attitude towards team building activities and team performance was explored. Finally, the limitation of the study was enlightened.

# 4. Findings

## 4.1 Quantitative Findings

This section presents our quantitative findings obtained from the responses to the questionnaire, which is distributed to 215 participants including both students and employees regardless of their gender, age and nationalities. The data will be presented descriptively with statistical evaluation to significant figures suggesting correlations between individual perception of the quality of teambuilding activities and team performance or otherwise. The questionnaire can be found in Appendix B while the data extracted from the questionnaire can be found in the figures below.

### 4.1.1 Profile

The sample group consists of a mix of 215 individuals from 30 countries with 210 valid responses. The majority of the participants originate from China (48.9%) and from Sweden (21.9%). Other remaining nationalities include Angola, Australia, Brazil, Canada, Denmark, England, Finland, France, Germany, Iceland, India, Indonesia, Iraq, Ireland, Japan, Korea, Macedonia, Malaysia, Myanmar, New Zealand, Pakistan, Russia, Singapore, South Africa, Thailand, Turkey and the United States.

It should be noted that the following regions including Taiwan, Hong Kong and Tibet are counted as part of China. Hence, people who answered these regions will be taken into account as answered as China.

### *Occupation*

As displayed by Figure 6, the majority of the respondents (55.9%) currently study at schools, including students in Lund and other international study settings, followed by those who have gone to the workplace (41.7%).

### *Team type*

Nearly two-thirds (65.4%) of the participants currently work in project teams while 63 individuals (29.9%) are of functional teams. The rest is distributed to other categories which may include the state of being unemployed, starting up own business and working as an individual.

Another fact concerning the difference between the distribution of team type among students and employees is that only 12 students out of 63 individuals in total who participate in the survey claim that they currently work in functional team, which contributes to 19% of the people who work in functional team. Therefore, the majority of the people who work in functional team are employees (81%).

### *Age*

The majority of the respondents fall into the age group between 19 to 34 which altogether 85.3% of the whole examinees. This indicates that most of the participants in this study have not been senior workers, including students and young employees. These participants comprise those who fall in the age bracket between 19 to 24, which make up 40.8% of all respondents and those who range from the age of 25 to age of 34, which take another 44.5%. This is followed by 10% of people who are in the age group between 35 to 44, whereas the remaining 4.7% reach the age of 45 or even older.

### *Gender*

It is presented in Figure 9 that the scale of the gender of the participants in this survey is distributed evenly. A slightly more than half (51.9%) of the examinees are male while the rest 48.1% are taken by the female.



## 4.2 Factors influencing team building quality

The analysis of the data from the questionnaire of team building (referred to as TB) is established upon numeral value of several terms. Team building quality (referred to as TBQ) which has been calculated by averaging the figure of the responses to the six questions (Question 9 to Question 14) concerning the perceived quality of team building activities in part 3 of the questionnaire, and team performance (referred to as TP) which has been described by the average of the answers to ten questions (Question 15 to Question 24) in part 4 of the questionnaire. Another significant indicator is the frequency of team building which is referred to as TBF in the following analysis, which has been determined by the answers to Question 7 in the Questionnaire.

### 4.2.1 Age

One conclusion reached from Table 1 regarding team building quality would be that there is little difference between different age groups of respondents. When inquired about the level of care among team members' feelings and comments, all the age groups average between 3.1 to 3.3. Likewise, the level of intention to spend time with the team member after work is relatively lower than the former question, but also differ very little between each group. The average of all questions of each group fluctuates from 3.06 to 3.27, while revolving around the overall average of the level of team building quality which is 3.20.

AGE GROUP	19-24	25-34	35-44	45 and older	AVG
TBQ	3.14	3.27	3.14	3.06	3.20

Table 1: Age

#### 4.2.2 Gender

When categorized by gender, one conclusion can also be made from Table 2 that the perception of team building quality differs little between male and female participants. Comparatively, women tend to perceive the quality of their team building experiences slightly higher than the overall average, which was indicated by a 0.09 plus, while male group falls behind with a fine 0.09 minus out of 5.

GENDER GROUP	MALE	FEMALE	AVG
TBQ	3.11	3.29	3.20

Table 2: Gender

#### 4.3 Correlation between Team building activities (TB) and team performance (TP)

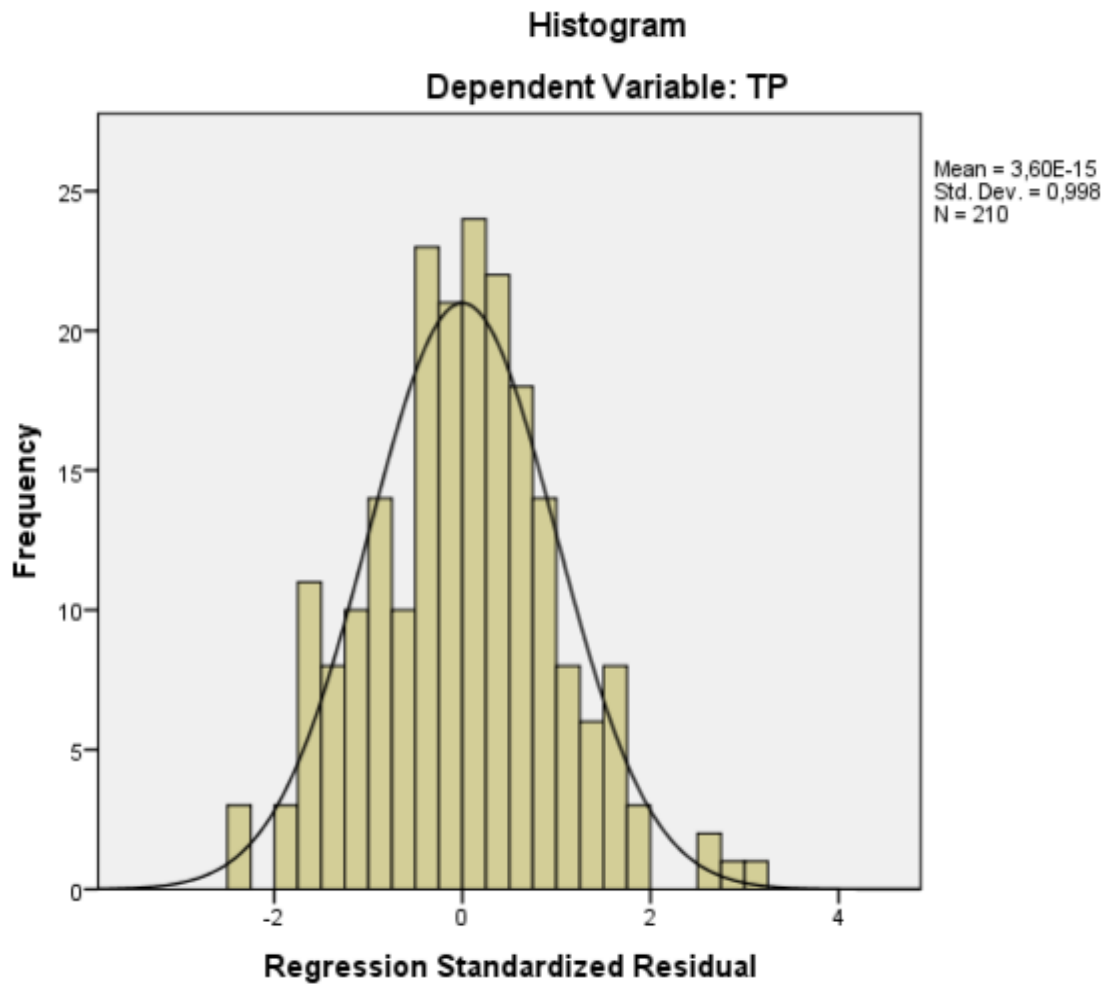
Below presents the analysis of correlation between team building activities and team performance which is conducted via three approaches; either to test the correlation of TBF or TBQ as single independent variable with team performance (TP), or to run a regression test with TBF and TBQ as double independent variable and TP as dependent variable.

### Correlation of TBQ and TP

		TBQ AVG	TP AVG
TB AVG	Pearson Correlation	1	.521**
	Sig (2-tailed)		.000
	N	210	210
TP AVG	Pearson Correlation	.521**	1
	Sig (2-tailed)	.000	
	N	210	210

Table 3

Based on the 210 responses to the questionnaire, we ran a test of correlation between the level of the quality of team building (TBQ) and team performance (TP) in order to experiment on the research questions. The value of correlation coefficient as displayed in Table 3 is 0.521 which indicates an overall large positive correlation between TB and TP. The significant level (listed as Sig (2-tailed)) which indicates how much confidence we should have in the results obtained is almost 0, which shows a very strong reliability of our result that a large positive correlation does exist between team members' cognition of the quality of their team building and their team performance. An obvious normal distribution of the residuals of correlation between quality of team building and team performance is displayed in Graph 1(next page), which justifies the credibility of the results above.



Graph 1

Correlation of TBF and TP

		TBF	TP AVG
TBF	Pearson Correlation	1	.015**
	Sig (2-tailed)		.833
	N	210	210
TP AVG	Pearson Correlation	.015**	1
	Sig (2-tailed)	.833	
	N	210	210

Table 4

On the contrary, the level of team building frequency is proven not to have correlation with team performance, in other words, the results of team building activities will not be affected by their number. This is supported by an extremely high value of the significance of the correlation which reaches .833 as shown in Table 4. Therefore, the validity of such correlation is weak and should not be taken into consideration.

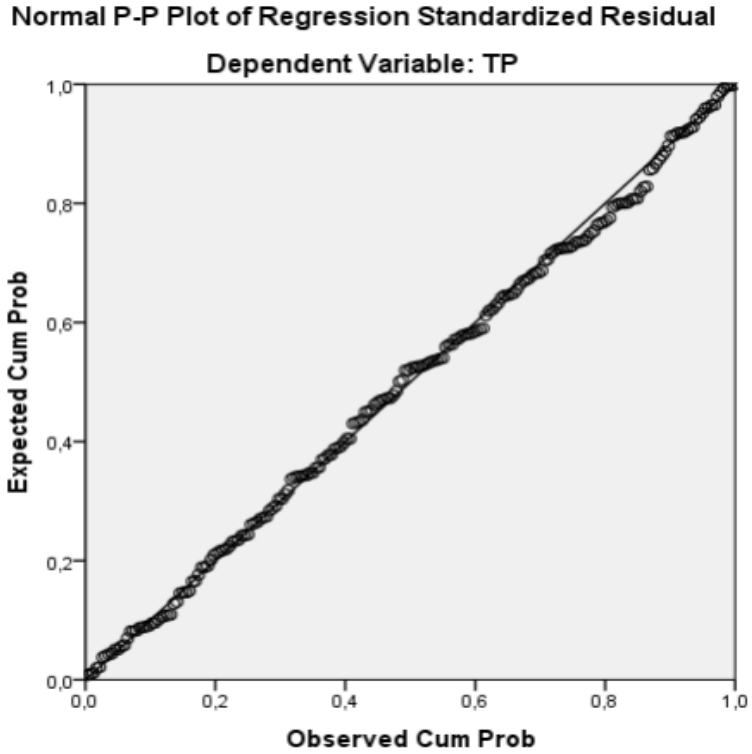
Regression analysis of TBF and TBQ with TP

		Unstandardized Coefficients		standardized Coefficients	t	Sig.
		B	Std error	Beta		
1	constant	2.196	.192		11.429	.000
	TBF	-.130	.043	-.186	-3.010	.003
	TBQ	.579	.061	.585	9.452	.000

Table 5

Given the idea that both TBF and TBQ might affect each other's performance regarding their influence on team performance, a regression analysis was done to describe how these two factors are integrated together to affect team performance. As presented in Table 5, the coefficient of team building quality is .579 on the scale of 5, which shows that team performance can be positively affected by the quality of team building considerably, whereas the coefficient of team building frequency is -.130, which suggest a negative effect regarding team performance.

To further examine the validity of this regression model, a residual test has been conducted to see whether the result of residual is accord with normal distribution. From the normal P-P plot of regression standardized residual (provided as Graph 2), a conclusion can be made clear that the distribution of residual fits well with normal distribution, with almost all dots determined by observed cumulative probability and expected cumulative probability are distributed close to the diagonal line in the first quadrant.



Graph 2

## 4.4 Correlation between Team building and components of high performance team

As introduced by Jackson and Madson (2004), a high performance team should be composed of a set of elements. In order to conduct further tests to explore the correlation between respondents' perception of the quality of team building with different components of high performing team accordingly, the fourth part of the questionnaire was purposely designed with each question exploring one corresponding component of high performance team, which has been detailedly explained in the Questionnaire.

	TB AVG		
	Pearson Correlation	Sig (2-tailed)	N
TB AVG	1		210
PURPOSE & GOAL	.274**	.000	208
TALENT & SKILL	.415**	.000	210
CONFLICT	.297**	.000	208
COMMUNICATION	.412**	.000	210
POWER & EMPOWERMENT	.300**	.000	210
EFFICACY	.381**	.000	209
INCENTIVE& MOTIVATION	.421**	.000	210

Table 6

Further tests were conducted in order to explore the correlation between respondents' perception of the quality of team building with different components of high performing team accordingly. As presented in Table 6, the significant level of all results of correlations is almost zero, which indicates

a very strong reliability regarding the results of the value of  $r$ . The level of correlation between TB and incentive & motivation comes highest as .421, which indicates a high-medium correlation, followed by the figure of talent & skill which arrives at .415, and then *communication* at .412. The level of correlation between *efficacy* and TB is presented as .381, which also shows a relatively strong correlation in *medium* group. One last component which falls into the category of having medium correlation is *power and empowerment* which shows a exact .300 in Figure 17.

As being illustrated in Table 6, two components fall into the group of having small correlation with TB, with *conflict* comes first as .297, and then *purpose & goal* as .274. These results, however, shows the strongest correlation in *small* group. Therefore, it can be concluded that TB poses considerable positive effects among all components of high-performing team. Components falling into medium category, including those which almost reach .500 which indicates a high correlation comprise incentive & motivation, talent & skill, communication, efficacy and power and empowerment, these components can be significantly promoted the implementation of team building activities. The rest of components including conflict and purpose & goal can also be promoted with slighter effect through team building.

## 4.5 Further analysis of factors concerning the correlation

### 4.5.1 The effect of age regarding the correlation between TB and TP

One conclusion can be made obvious concerning team building quality that the variation of age does not impair the positive effect of it towards team performance. The minimum coefficient of TBQ is of .580 (on the scale of 5) which belongs the youngest age group and indicates a significant positive result. A tendency of growth of this coefficient as the age goes up is clearly presented in Table 7(next page), despite the invalid statistics of people who are beyond age 45 which was shown by its overly high significance. On the contrary, the influence of team building frequency continually drops to the minimum of -.196 as people grow older, which proves a constant negative effect towards team performance.



		Unstandardized Coefficients		standardized Coefficients	t	Sig.
		B	Std error	Beta		
19-24	constant	1,977	,261		7,567	.000
	TBQ	,580	.082	,643	7,101	.000
	TBF	-,090	.54	-,152	-1,679	.097
25-34	constant	2,046	,297		6,883	.000
	TBQ	,611	,096	,605	6,338	.000
	TBF	-,115	,071	-,156	-1,634	.106
35-44	constant	1,936	,682		2,841	,011
	TBQ	,773	,249	,690	3,110	,006
	TBF	-,196	,217	-,200	-,902	,379
45 or older	constant	4,500	,632		7,124	,000
	TBQ	,390	,260	,521	1,499	,178
	TBF	-,257	,206	-,434	-1,251	,251

Table 7

#### 4.5.2 The effect of gender regarding the correlation between TB and TP

The situation of male group seems similar to that of the overall participants, with the level of TBQ bringing positive effect and TBF negatively affecting TP, whereas in female group, the original positive correlation is replaced by an opposite one which contradicts with the overall result. However, such conclusion should not be reckoned as credible with the significance level reaching .218 and .594. In other words, the correlation between TB and TP has not been proven to be affected by the difference in gender.

		Unstandardized Coefficients		standardized Coefficients	t	Sig.
		B	Std error	Beta		
Male	constant	2,387	,272		8,781	.000
	TBQ	,572	,087	,566	6,585	.000
	TBF	-,185	,062	-,256	-2,976	.004
Female	constant	3,694	,380		9,719	.000
	TBQ	-,053	,099	-,054	-,535	,594
	TBF	,084	,068	,125	1,241	,218

Table 8

### 4.5.3 The effect of country of origin regarding the correlation between TB and TP

A conclusion can be made clear that Chinese and Swedish respondents are all positively affected by the quality of team building from Table 9, with a difference that participants who originally live in China will be more positively affected by the quality of team building compared with Swedish natives with a .113 plus, which has been calculated by subtracting the value of B of TBQ of Swedish respondents (.474) to that of Chinese respondents (.587). Meanwhile, high team building frequency affects people from Sweden more regarding team performance than Chinese respondents with the value of B of the former drops to minus .237, and the latter to minus .103.

		Unstandardized Coefficients		standardized Coefficients	t	Sig.
		B	Std error	Beta		
China	constant	2,192	,259		8,456	.000
	TBQ	,587	,086	,611	6,830	.000
	TBF	-,103	,065	-,142	-1,591	,115
Sweden	constant	2,724	,430		6,338	.000
	TBQ	,474	,139	,498	3,404	,001
	TBF	-,237	,102	-,339	-2,315	,025

Table 9

# 5. Discussion

With the purpose of the discussion, the research questions have been explored as below.

## 5.1 Research question one

### **Does team building activities support the creation of high performing teams, and if so, how?**

As has been studied in the above chapter, team building does facilitate team performance with a strong positive correlation concluded from the answers of all participants attracted. The effect of such correlation is determined by both the quality and the frequency of team building. However, it should be stated that the effect of both the factors may be impaired or facilitated with other factors including gender, age, etc.

#### 5.1.1 The effect of team building quality

As displayed in the previous chapter, under most of the team contexts, team building activities of high quality promote the level of team performance, no matter how frequent these activities are conducted, which agrees with Buller's (2014) statement. Therefore, those who seek to develop their team performance should focus on improving the quality of team building activities. Given the idea that this study mainly explores the perception of team members as the approach to portray team building quality and team performance, it is very important for those who seek to understand the need of their employees in the team. By managing team building in a way which caters to the preference of team members, the process of these team gatherings should be taken as of high quality, which will definitely bring positive effect to team performance. Therefore, managers should make effort to investigate in team members' inclination before conducting team building and gather feedbacks afterwards, which can be achieved through reflection of managers, and even of fellow employees. This can also be supported by the answers for *question 14* in the questionnaire, where "a

positive change in the team after team building activities” ranked the second highest among all questions concerning team building.

Apart from the significance of adopting a reflective mindset, it can also be concluded from the answers to the questionnaire that the inclusiveness and efficiency of team building activities are two of the most concerned factors. It indicates that the majority of the participants regard team building which most of the team members can be actively involved in to be of high quality, and even better if with high efficiency throughout the process. Hence it should be acknowledged that these two factors should always be kept in mind when conducting team building. Additionally, comments and feelings from team members, as displayed by the answers, matter significantly throughout team building process, which should be intentionally monitored and evaluated by the managers.

### 5.1.2 The effect of team building frequency

The frequency of team building compared to the quality of team building obtains little to no negative correlation towards team performance, which indicates that the whether team building is often or seldom conducted has little impact on the effect of team building. This can also be proven from the answers to *question 12* in the questionnaire that the intention to spend more time with team members after work ranks lowest among all criterias. Therefore, it would seem unnecessary for managers to arrange recurrent team building activities with the team, probably because many would choose to arrive at home much earlier after work, no matter which type of social gatherings they are asked to participate.

However, further analysis of the data at hand reveals that the correlation between team building frequency and team performance is not strictly negative, instead the presented results cater to more of a normal distribution. People who attend team building activities once to three times per month are proven to reach a higher level of team performance than those who do more or less. Based on the research, it would seem ideal for team leaders to organize team building activities at most three times per month in order to promote team performance.

### 5.1.3 The components of high-performing team

Naturally, team building activities pose diverse effect among different qualities, also known as components of high performing teams as brought out by Jackson and Madson (2004). Therefore, managers are made able to strengthen certain aspects of the team by conducting team building activities. For instance, if team leaders were to reinforce the level of motivation and communication within the team, it would be critically effective for them to gather team members and implement certain types of team building. The same would apply to those who wish to develop team members' talents and skills, if team building activities which are designed to boost technique and expertise have been conducted. Meanwhile, the effect of promoting the level of empowerment and clarifying purpose and goals, which is regarded as one major purpose of team building by Sales et al. (1999), will be comparatively lower but still significant. It should be acknowledged that the result of team building may be affected by its content, therefore one clear suggestion provided for managers will definitely be that they should always manage to understand the status of the team so that certain types of team building can be implemented accordingly.

## 5.2 Research question two

**What can be the factors affecting the results of team building activities?**

### 5.2.1 Gender

Based on the analysis in the previous chapter, the effect of team building activities towards males and females are highly contradictory among each other. That team building activities of high quality which are conducted with a relatively low frequency will positively affect team performance is recognized by most of the male participants in this study, which is in accordance with the overall situation. On the contrary, there seems to be almost no clues of how team performance is affected by team building among female respondents. Therefore, their team performance cannot be predicted by team building, neither can it be altered by them, as indicated by the result of the research.

### 5.2.2 Age

An increased positive effect of team building activities are witnessed as the age rises as in the Figure 18. To those who have stepped in their maturity, occasional team gatherings of high quality seem to be precious for them to perform better in teamwork. The effect of team building activities is comparatively lower among younger participants, whereas they will not be bothered much by frequent gatherings. People who are above age 35, on the other hand, dislike continual team building in a small period of time. Consequently, managers should conduct more quality team building activities and keep them scarce for senior employees, and do reversely for those who are younger.

### 5.2.3 Country of origin

Considering the influence of the culture from the original countries, one can see that the results of team building activities differ between people from different countries of origin. Therefore, the concept of the context culture is introduced to categorize all countries mentioned in this study. As elaborated by Brett et al. (2006), low context culture relies on explicit verbal communication while people from high context culture value interpersonal relationship and devote themselves to form stable close connection with each other. As a result, people born and brought up in higher context culture, as represented by Chinese culture, are more likely to be positively affected by team building activities, compared with people from lower context culture setting, as represented by Sweden. Additionally, fewer team building activities should be organized within teams whose team members are mostly from low cultural context, for it will more possibly provoke negative effect regarding team performance. People who grow up in countries with high cultural context are more welcome to more team gatherings, or even if they do feel unpleasant in these situations, they will not let others know.

## 6. Conclusion

The aim of this research is to discuss if team building activities support the creation of high-performance team. The quantitative study was conducted with 215 participants in order to fulfill the research purpose. Specifically, the results of the statistics showed that an overall positive effect could be spotted with the implementation of team building, by facilitating communication, goal setting, problem-solving as well as effective conflicts handling.

The authors found that the frequency of the team building activities has no direct impact on team performance. However, the quality of team building as demonstrated by the participants highly affect team performance, which results in high level of cohesiveness at work places. Regarding the components of high-performing teams, team building activities were used in support of different components of high-performing teams based in Jackson and Madson (2004), such as purpose and goals, talent and skills, incentives and motivation, efficacy, conflict management, communication, power and empowerment. The findings showed that the team building activities poses considerable positive effects among all components of high-performing teams. Especially incentive & motivation, talent & skill, communication, efficacy as well as power & empowerment has been indicated a significantly promoted the implementation of team building activities.

Findings also revealed the factors affecting the results of team building activities. As a result, the perception of team building quality differs little between male and female participants. Comparatively, women tend to perceive the quality of their team building experiences slightly higher than the overall average while male group falls behind. And the factors such as motivation, skills, communication as well as the empowerment has been indicated as key factors that are affecting the results of team building activities. Regarding the age, individuals who stepped in maturity tend to be more positively influenced by high quality team building activities, while the young people demonstrated comparatively lower affection. On the other hands, people above 35 years old dislike continual team building in a small period. Furthermore, people who were born and grew up in high-



context cultures were more likely to be positively affected by team building activities compared to people born in low-context cultures.

Therefore, the hypotheses of this research have been proven. The result of the quantitative analysis shows that team building activities support the creation of high-performing teams. However, it should also be acknowledged that some teams can also reach the high-performing stage without intended team building. Overall, the effect of team building activities seemed very positive regarding team performance, while factors including age, gender and nationalities slightly affect the result of team building.

### **Practical Implication**

This study shed light on the individual's perception of team building activities and the correlation of team performance. It offers practical implications for organizations about how to use team building activities as a tool to create high-performing teams. Thereby, it can accelerate organizational culture developing, depict the nature of team dynamics and understanding of organizational behavior, as well as development of both individual and group.

### **Research limitation**

Given the acknowledgement that the results of team building activities will be affected on the participants' perceptions, one major limitation of this study is failing to analyse team building and team performance in a systematic and objective way. Moreover, the study intends to look into how team building activities affect team performance, yet subtle difference may exist in the effect of specific types of team building activities, which was not being discussed thoroughly in the study. In team performance part, we designed the questions to measure several components of high performance teams, including purpose, talent, conflict, communication, power, efficacy and motivation which had been brought out by Jackson and Madsen (2004) to increase the validity of our research. However, there are still other feasible approaches to depicting the nature of team dynamics as well as to understand organizational behaviour.

## **Future suggestions**

Based on the status quo, this research solely based on quantitative study which aims to explore the perception of individuals. However, the absence of qualitative data was could be further supplemented in the future research. Additionally, the validity of results would be improved if an objective evaluation approach instead of self-assessment which was based on participants' perception could be utilized to study team building quality and team performance in future researches. Thirdly, as a hindsight, detailed cultural interference can be further studied when conducting team building, along with the impact of immigration from regions with diverse cultural background. It should also be mentioned that there is an opportunity for future research to explore the organizational needs, and study team building from organizational perspective. Lastly, more detailed and elaborated researches can be further achieved regarding different factors affecting the correlation as mentioned in previous chapters.

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# Appendix A

Figure 4: Country of Origin

Country	Number of respondents	Percentage
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China	88	48.9
Sweden	37	20.6
New Zealand	8	4.4
Iceland	5	2.8
UK	4	2.2
US	4	2.2
India	3	1.7
Germany	3	1.7
Indonesia	2	1.1
Ireland	2	1.1
Brazil	2	1.1
Russia	2	1.1
Finland	2	1.1
Australia	2	1.1
Malaysia	2	1.1
Japan	2	1.1
Myanmar	1	0.6
Singapore	1	0.6
France	1	0.6
Denmark	1	0.6
South Africa	1	0.6
South Korea	1	0.6
Canada	1	0.6
Macedonia	1	0.6
Turkey	1	0.6
Pakistan	1	0.6
Thailand	1	0.6
Angola	1	0.6

**Figure 5: Country of Residence**

Country	Number of respondents	Percentage
---------	-----------------------	------------

Sweden	123	58.9
U.S.	20	9.6
China	18	8.6
Denmark	17	8.1
New Zealand	9	4.3
Japan	6	2.9
U.K.	4	1.9
Singapore	2	1
France	2	1
Canada	2	1
Croatia	1	0.5
Australia	1	0.5
Finnland	1	0.5
Malaysia	1	0.5
Germany	1	0.5
India	1	0.5

## Appendix B

### Questionnaire: Does team building lead to high performance?

5 - Strongly agree                      4 – Somewhat agree    3 – Neutral  
 2 – Somewhat disagree              1 – Strongly disagree

#### Part 1. Personal information

1. How old are you?

- A. 19-24      B. 25-34      C. 35-44      D. 45 or older

2. Gender

- A. Male      B. Female      C. Other

3. Which country do you come from?

\_\_\_\_\_

4. Which country are you currently in?

\_\_\_\_\_

5. Are you a student or an employee?

- A. Student      B. Employee      C. Neither

**Part 2. Team information**

6. What kind of team are you involved in currently?

- A. Project team      B. Functional team      C. Other

7. How often does your team have team building activities?

- A. Almost never or never  
B. 1 time per month or less  
C. 2-3 times per month  
C. 1-2 times per week  
D. 3 times per week or more

8. Your team has a diverse cultural background.

1	2	3	4	5
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### Part 3. Teambuilding

9. I am actively involved in team building activities.

1	2	3	4	5
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10. Team building activities are conducted efficiently.

1	2	3	4	5
---	---	---	---	---

11. I care about my team member's comments and feelings.

1	2	3	4	5
---	---	---	---	---

12. I intend to spend more time with my team members after work.

1	2	3	4	5
---	---	---	---	---

13. Team members attach more importance to team building activities than their own agendas.

1	2	3	4	5
---	---	---	---	---

14. I feel a positive change in the team after each team building activity.

1	2	3	4	5
---	---	---	---	---

### Part 4. Team performance

15. The team is organized and structured suitably for the tasks it has to perform.

1	2	3	4	5
---	---	---	---	---

16. Team members have a clear shared vision for each task.  
(Purpose & goal)

1	2	3	4	5
---	---	---	---	---

17. I feel that my skills have been needed and utilized in the team.  
(Talent & Skills)

1	2	3	4	5
---	---	---	---	---

18. Conflict between or among team members is handled promptly and effectively.  
(Conflict)

1	2	3	4	5
---	---	---	---	---

19. Communications between team members are valuable and constructive.  
(Communication)

1	2	3	4	5
---	---	---	---	---

20. There is clear role allocation in my team when being assigned tasks.  
(power and empowerment)

1	2	3	4	5
---	---	---	---	---

21. I feel trusted, respected, and supported by other team members.

1	2	3	4	5
---	---	---	---	---

22. I feel comfortable to express my opinions and feelings.

1	2	3	4	5
---	---	---	---	---



23. Team decision-making methods and processes are efficient.  
(efficacy)

1	2	3	4	5
---	---	---	---	---

24. Team members are encouraged to participate in the team.  
(incentives & motivation)

1	2	3	4	5
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