“The relationships between servant leadership, strategic alignment, and financial performance”

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Preface

This thesis was written for the completion of the master Business Administration at the University of Twente in Enschede, the Netherlands. The research was carried out at House of Performance located in Utrecht and this thesis is used as input for the PhD research on Strategic Alignment and Leadership from Floor Slagter.

I would like to thank all employees for House of Performance for offering me this internship, their kindness, and their assistance. In particular, Floor Slagter for sharing her data, research insights, experiences and thoughts, and helping me out with the process of writing this thesis. I had a great and educational time at House of Performance and I wish you all the best in finishing your PhD research.

I also would like to express my sincere gratitude to my supervisors Prof. Dr. R. Kabir and Dr. D.H. Van Dun for their suggestions, support, valuable insights, and by providing me with feedback. It helped me to broaden my view when it was needed and had been of great value for me during the process of writing this thesis. I would also like to thank Dr. S. Essa for his advice and assistance in this process.

Weiling Yeh

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Abstract

Literature is moving away from transactional leadership toward more moral types of leadership, in which servant leadership plays a significant role the last few years. Using this leadership theory, this study examined the relationships among servant leadership, strategic alignment, and financial performance at the team level. In addition, this study also explored the effects of interaction of both servant leadership and organizational identification on strategic alignment and whether strategic alignment mediates the relationship between servant leadership and financial performance. Data were collected from 294 employees, working in 25 teams in 17 organizations from a variety of industries in the Netherlands. The results were analyzed at team level. The results showed that (1) servant leadership is positively related to strategic alignment and that organizational identification partly weakens the relationship between servant leadership and strategic alignment. Practical implications of the findings were discussed, together with limitations and further recommendations.
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1. Introduction

Today’s competitive environment is fast-changing and highly dynamic due to constant economic, technological, social, political, and demographic changes. Because of these changes, organizations are facing multiple challenges and are constantly seeking for new ways to maximize the performance of an organization. According to Porter (2011), competition determines the appropriateness of an organization’s activities that can contribute to its financial performance and is the core of the success or failure of organizations. Financial performance can be defined as the degree to which financial objectives are being or has been accomplished and is the process of measuring the results of an organization in monetary terms and is often used to measure the overall financial health and success of an organization over a given period of time.

Cossin and Caballero (2013) and Galpin and Whittington (2012) consider the style of the leader to be important in achieving its financial performance and organization’s strategy. According to Yukl (1999), leadership has been defined in terms of mobilizing employees toward achieving organizational goals and targets. Therefore, considerable attention has been focused on attempting to motivate the workforce. Prior studies constantly demonstrated the benefits of servant leadership over traditional forms such as transactional leadership (Greenleaf & Spears, 2002; Walumbwa, Hartnell & Oke, 2010). Servant leaders inspire followers to transcend their own self-interests for the sake of the collective. Van Dierendonck (2011) considered paying attention to all stakeholders (including employees) is the key to long-term profits. However, not the leadership style alone can be responsible for the performance of a team, the team also plays an important role (Walter, Kellermanns, Floyd, Veigo & Matherne, 2013; Yang, Huang & Wu, 2011). Specifically, Buller and McEvoy (2012) considered employee’s strategic alignment to be an important factor in achieving goals and performances. Strategic alignment refers to the mobilization of internal resources (employees) to implement the formulated strategy. Also, many studies relating leadership styles and strategic alignment have neglected important moderator variables in organizational contexts, e.g. organizational identification (Shamir & Howell, 1999). The positive results of these studies have been taken as proof for the beneficial effects of leadership style, regardless of the situation (Yukl, 1999; 2012). Nevertheless, the associations
between the variables may be due to the impact of moderator variables. There is very little
knowledge about the conditions under which servant leadership is more or less effective. This study
examined a variable that could conceivably influence the relationship between servant leadership
and employees’ strategic alignment, i.e. organizational identification.

Past studies have demonstrated direct relationships between leadership styles and financial
performance. However, the vast majority of studies focused on individual level, while only a few
recent studies have begun to examine the effects of leadership at the team level (e.g. Hur, Van Den
Kozlowski and Bell (2003), findings at one level of analysis cannot be assumed to be applicable to
higher levels of analysis. More research is needed to investigate the effects of leadership at team
level, particularly since organizations rely more and more on teams to contribute to sustained
business success. Also, most of the studies have focused on traditional forms of leadership styles
(e.g. transactional and transformational) and largely ignored the impact of servant leadership.

Literature is moving away from transactional leadership toward more moral types of leadership, in
which servant leadership plays a significant role the last few years. Therefore, this study focused
on developing a model of servant leadership and financial performance with strategic alignment as
mediator, while controlling for leader’s age, education, tenure, and team size. To my knowledge,
no study had yet attempted to develop this model. Also, this study examined organizational
identification as moderator variable between servant leadership and strategic alignment. Clearly,
knowing whether leadership style directly influences strategic alignment, and indirectly financial
performance has significant implications for management.

Evidence suggests that strategies developed by senior and top management are often modified
or even sabotaged during implementation at lower levels of the organization (Davies, 1993; Allen
& Wilson, 2003). It is also concluded in previous studies that strategy is formulated at top
management level, but essentially implemented at lower levels of an organization, with the
consequence that greater attention needs to be paid to the dynamics of alignment at lower levels of
the organization, such as middle management (Chan & Huff, 1992; Floyd & Wooldridge, 1997;
Balogun & Johnson, 2004; Currie & Procter, 2005). Therefore, this study focused on leaders at
lower levels within the organization from a variety of industries.
The objective of this study was to evaluate whether strategic alignment may be viewed as a consequence of servant leadership and as antecedent of financial performance and if organizational identification moderated the relationship between servant leadership and strategic alignment.

To address this problem the following main research question was formulated:

What is the influence of servant leadership of middle managers and organizational identification on employees’ strategic alignment and financial performance amongst work teams?

This study is divided into five chapters. First, a literature review is conducted on servant leadership, strategic alignment and financial performance: four hypotheses are developed. The third chapter focuses on the methodology and the results are presented in the fourth chapter. Finally, the fifth and last chapter draws the conclusions from this research. Also, the limitations and further recommendations were discussed in this last chapter.
2. Literature review

In this chapter, the most important concepts of this study, i.e. servant leadership, strategic alignment, organizational identification, and financial performance, are explored and defined. Consequently, some theories in the context of this study are discussed. In the last part of this chapter, hypotheses are formulated. Only peer-reviewed journal articles, review papers and book chapters are used to ensure reliability. Impact factors of journals in 2015 are used in order to select articles, a threshold of > 1 is used in this study. Literature was retrieved by using academic databases and search engines useful in an academic setting, such as Google Scholar, JSTOR, SCOPUS, and Web of Science.

2.1 Defining servant leadership

Bennis and Nanus (1997) stated in their study that the need for leadership was never so great since organizations need to cope with the expectations of their constituents. Leaders are essential to executing the vision of their organization and in setting the tone for their teams. The behavior of leaders has been extensively researched in the management literature (Goleman, Boyatzis & McKee, 2013; Northouse, 2015; Kotter, 2008; Zhang & Bartol, 2010). Northouse (2015) and Kotter (2008) examined the functions of leadership and concluded that the primary function of leadership is to produce change and movement. It is about seeking adaptive and constructive change. Other functions include establishing direction (e.g. creating visions and setting strategies), aligning people (e.g. communicating goals and seek commitment), and motivating and inspiring people (e.g. satisfying needs and empower subordinates). Koontz (2010) defined leadership style as the ability the leader has to influence a team for purposes of goal accomplishment and is the process of an individual (leader) that influences a team to achieve a common goal. This definition is fully supported by Northouse (2015), Cherian and Farouq (2013) and DuBrin (2015).

Literature supports the idea that different situations call for different styles of leadership. Because of this, several leadership theories were proposed in the late in the 20\textsuperscript{th} and 21\textsuperscript{st} century. Garrick examined the evolution of leadership theories and depicted it into a figure (see Figure 1).
In Figure 1, we clearly see that leaders were more focused on efficiency and viewed employees as mere tools. However, during the last few decades a shift in leadership has taken place. Leadership styles have evolved over the past century, with a prominent shift from the controlling leadership styles toward leadership styles which focus more on inter-personal leadership (Garrick, 2006; Avolio, Walumbwa & Weber, 2009; Van Dierendonck, 2011). This shift is also noticeable in the literature. Literature is moving away from transactional leadership toward more moral types of leadership, in which servant leadership plays a significant role the last few years (Avolio et al., 2009; Liden, Panaccio, Meuser, Hu & Wayne, 2014; Van Dierendonck, 2011). The amount of servant leaders is rising increasingly and is observable within organizations (Spears, 2004). Davis, Schoorman and Donaldson (1997) emphasized the importance of moving management theory beyond the principles of agency theory to governance based on viewing individuals as pro-organizational and self-actualizing, which is similar to the elements of servant leadership theory. Greenleaf and Spears (2002) stated that leader can play a critical role in helping employees to reach their potentials, and that is what servant leaders do.
Existing literature regarding servant leadership is indeterminate and anecdotal. Despite the fact that there is no clear definition of servant leadership, there is enough consistency in the literature to discern characteristics that should exist among servant leaders. Servant leadership emphasizes primarily the well-being of followers by empowering them, encouraging autonomy, and positively influencing personal development (Spears, 2004; Russell & Stone, 2002; Greenleaf & Spears, 2002). The objective of servant leaders is to serve people and to meet the need of others, and is not be motivated by a manager’s self-interest. Servant leaders inspire followers to transcend their own self-interests for the sake of the collective. Servant leadership differs from other leadership styles as it focuses on forming long-term relationships with employees and stresses personal integrity. Servant leaders serve multiple stakeholders, including society. Van Dierendonck (2011) reviewed servant leadership and stated that paying attention to all stakeholders may be the key to long-term profits. Servant leadership offers organizations the potential to improve organizational leadership in many settings and Russell and Stone (2002) and Van Dierendonck (2011), therefore, considered servant leadership as important to all types of organizations.

The concept of servant leadership overlaps with other more types of leadership styles, particularly transformational leadership. Servant and transformational leadership are people-oriented styles and emphasize the importance and well-being of followers. Transformational leadership consists of four distinct components, i.e.: idealized influence, inspirational motivation, intellectual stimulation, and individual consideration (McCleskey, 2014). The concept of transformational leadership is related to organizational outcomes. Transformational leaders inspire its followers to do more than originally expected, meet their emotional needs, intellectually stimulate, and broaden and elevate the interests of their followers. Also, they generate awareness and acceptance of the goals and stir their followers to look beyond their own self-interest for the good of the team.

Although transformational and servant leadership share common elements such as influence, vision, trust, respect/credibility, risk-sharing/delegation, integrity and modeling, there are differences in the process and behavior of leadership (Van Dierendonck, 2011; Stone, Russell & Patterson, 2004). In Stone’s et al. (2004) study, they mentioned one primary distinction. The distinguishing factor in determining whether leadership style is servant or transformational is the
extent to which a leader is able to shift the primary focus of the leadership to the follower. According to Russell and Stone (2002), servant leadership is an extended version of transformational leadership, in that there is a greater emphasis upon service and freedom of followers. Servant leaders focus upon service to their followers and do not serve with a primary focus on results, while transformational leaders primarily focus on followers to engage in and support organizational behavior (Stone et al., 2004; Van Dierendonck, 2011). Also, servant leaders place a higher degree of trust in their followers than any other leadership styles and serve all stakeholders. Servant leaders contribute to the development and maintenance of interpersonal relationships. According to prior studies, transformational and servant leadership are not antithetical and one is not superior to the other (Bass, 2000; Stone et al., 2004). Both leadership styles are similar and complementary, but are not exactly the same. Another difference is the way in which leaders act in order to achieve organizational objectives. An overview of the characteristics of both leadership styles is given in Table 1.

### Table 1. Characteristics of transformational and servant leaders

<table>
<thead>
<tr>
<th>Transformational leader</th>
<th>Servant leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Idealized influence</td>
<td>• Going beyond one’s self-interest</td>
</tr>
<tr>
<td>• Inspirational motivation</td>
<td>• Autonomy</td>
</tr>
<tr>
<td>• Intellectual stimulation</td>
<td>• Individual consideration and development</td>
</tr>
<tr>
<td>• Individual consideration</td>
<td>• Strong interpersonal relationships</td>
</tr>
<tr>
<td>• Well-being organization</td>
<td>• Other’s needs before own needs</td>
</tr>
<tr>
<td></td>
<td>• Sharing management</td>
</tr>
</tbody>
</table>


2.2 Defining strategic alignment

The concept of alignment is important in various management fields (Acur, Kandemir & Boer, 2012). Organizations rely more and more on the capability and commitment of their employees in order to compete in this dynamic environment. If employees are the primary
sources of strategic success for organizations, then it can be argued that greater attention must be placed on aligning employees with the strategic goals of the organization. Hardy (1994) described strategic alignment as the heart of the implementation process, that is, ‘the platform of architecture on which strategy is built’. Khadem (2008) stated in his study that strategic alignment is critical in the strategy implementation process, and thereby critical to organizational success. Strategic alignment is a condition to be achieved, and it requires leaders within an organization to demonstrate high integration capacity. Kaplan and Norton (2008) and De Wit and Meyer (2010) considered strategic alignment as a source of competitive advantage. Effective leadership leaders who can align people to a common purpose and vision (Souba, 2001), can create this advantage. Strategic alignment makes a crucial difference in employees distilling meaning from their work and identifying with the organization. There is a greater risk of ineffective or inappropriate behavior if employees lack information on the expectations or objectives of an organization in order to contribute to these objectives and therefore strategic alignment is crucial (Boswell, 2006).

Aligning employees toward organization goals produces not only synergy, but also compatibility in organizational direction, which leads to strategic success. Furthermore, they become more engaged in tasks and behaviors that foster tacit learning (Hatch & Dyer, 2004). Leaders who are able to align the interests of employees also reduce the agency conflicts from an agency perspective. The agency theory is concerned with resolving problems that arise in agency relationships (principal and agent) due to unaligned goals and interests (Eisenhardt, 1989; Hillier, Grinblatt & Titman, 2011). This situation may occur because the principal (e.g. employees) is not aware of the actions of the agent (e.g. leaders), or is prohibited by resources from acquiring the information. Leaders who disregard employees’ interests may be demotivating their employees. This presupposes that leaders have the incentive to align their employees.

Prieto and Carvalho (2011) emphasized how many different variations exist on the concepts and underlying constructs of strategic alignment. A review of recent literature shows that there indeed exists a wide variety of definitions (see Table 2) (Slagter, work in progress). This table gives an indication of the diversity of expressions used in existing literature.
Table 2 Expressions of strategic consensus and strategic alignment and its sub-constructs

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Term</th>
<th>Meaning and/or context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acur et al., (2012)</td>
<td>Strategic alignment</td>
<td>Strategic alignment of technology, market and NPD marketing</td>
</tr>
<tr>
<td>Andrews, Boyne, Meier, O’Toole and Walker (2012)</td>
<td>Vertical strategic alignment</td>
<td>Vertical strategic alignment as the degree to which priorities on strategic stances are consistent across different levels within an organization</td>
</tr>
<tr>
<td>Camelo-Ordz, Hernández-Lara and Valle-Cabrera (2005)</td>
<td>Strategic consensus</td>
<td>Strategic consensus as consensus on innovative strategy</td>
</tr>
<tr>
<td>Camelo, Fernandez-Alles and Hernández (2010)</td>
<td>Strategic consensus</td>
<td>Strategic consensus as a common strategic vision on matters of innovation among top management team within 97 innovative Spanish firms</td>
</tr>
<tr>
<td>Chen and Liang (2011)</td>
<td>Strategic fit</td>
<td>Strategic fit as the internal alignment between strategy and organizational features and the fit between organizational strategy and its external environment</td>
</tr>
<tr>
<td>DeCoene and Bruggeman (2006)</td>
<td>Strategic alignment</td>
<td>Strategic alignment of financial and non-financial performance measures between business strategy and manufacturing strategy in a Danish production company</td>
</tr>
<tr>
<td>Kellermanns, Walter, Lechner and Floyd (2005)</td>
<td>Strategic consensus</td>
<td>Strategic consensus as shared understanding of strategic priorities among managers at the top, middle, and/or operating levels of the organization</td>
</tr>
<tr>
<td>Prieto and Carvalho (2011)</td>
<td>External strategic alignment</td>
<td>External strategic alignment refers the adjustment capabilities of an organization to its environment</td>
</tr>
<tr>
<td></td>
<td>Internal strategic alignment</td>
<td>Internal strategic alignment refers to the mobilization of internal resources, both tangible and intangible, to implement the formulated strategy</td>
</tr>
<tr>
<td>Sarmiento, Knowles and Byrne (2007)</td>
<td>Strategic consensus</td>
<td>Strategic consensus on manufacturing competitive priorities</td>
</tr>
<tr>
<td>Srimai, Damsaman and Bangchokdee, (2011)</td>
<td>Strategic alignment</td>
<td>Strategic alignment as internal consistency (i.e. horizontal and vertical fit among organizational components) among chief officers at the Office of the Governor in Thailand</td>
</tr>
<tr>
<td>Walter et al. (2013)</td>
<td>Strategic alignment</td>
<td>Strategic alignment as the level of fit between an organization’s strategic priorities and its external environment</td>
</tr>
<tr>
<td></td>
<td>Strategic consensus</td>
<td>Strategic consensus as agreement on strategic priorities by decision-making groups, including those at top, and/or operating levels of the organization</td>
</tr>
<tr>
<td>Zajac, Kraatz and Bresser (2000)</td>
<td>Strategic fit</td>
<td>Strategic fit as a dynamic process using a set of organizational and environmental factors that theoretically should define strategic fit</td>
</tr>
</tbody>
</table>

Source: Slagter (work in progress)
Venkatraman (1989) stated in his research that due to the variation of terminology which is used during the development of the concept strategic alignment, difficulties can be caused. Therefore, it is important to focus on the underlying sub-constructs of the different terms used. Doing so results in the ability to define the area of research more precisely. It can be concluded that there are three underlying sub-constructs that can be identified in literature (Venkatraman & Camillus, 1984; Siggelkow, 2001; Stepanovich & Mueller, 2002; Prieto & Carvalho, 2011). These three are as follows:

- External strategic alignment,
- Internal strategic alignment,
- Strategic consensus.

The goal of this research was to explore whether a bridge can be built between theories on leadership and strategic alignment. Hereby the main focus is the influence that leadership can have on strategic alignment. It is about the actions employees take, and whether these actions contribute to the strategic direction of the organization. Therefore, this study used the definition of internal strategic alignment defined by Prieto and Carvalho (2011, p. 1412), since this one is focused mostly on successful strategy implementation: “Internal strategic alignment refers to the mobilization of internal resources (such as employees), both tangible and intangible, to implement the formulated strategy”. In addition, this definition focuses on the mobilization of resources, and that is what leaders do: Leaders mobilize organizational members with the purpose of contributing to strategy implementation. Whereby this study focused on the employees as ‘tangible resources’, in this case the definition is reformulated into: “Internal strategic alignment refers to the mobilization of internal resources (employees) to implement the formulated strategy”. Employee actions or behavior that is consistent with the company’s strategy is of vital importance to companies (Van Riel, Berens & Dijkstra, 2009).

Stepanovich and Mueller (2002) declared that an organization is said to be internally aligned when its manager’s act in accordance with the strategy, i.e. the strategy is being implemented effectively. This too supported the focus for this research on internal strategic alignment, since leaders and their influence on strategy implementation play a key role in this definition.
External strategic alignment was less relevant for this study, since it focuses on the match or fit with the external factors and the organization’s strategy. This study focused on internal factors (leadership characteristics) of an organization. However, this does not mean that this research does not acknowledge the fact that this is an important aspect. When considering the third underlying construct, strategic consensus, it can be argued that this was a relevant concept to take into account building this framework, since strategic consensus is complementary to internal strategic alignment. Internal strategic alignment appears to be a measurement of action, or the degree to which an organization is following expressed strategies. Strategic consensus on the other hand is more a measure of intent, the degree to which organizational members are in agreement concerning what should be done with respect to choice of strategy, but not a measure of what actually occurs (Stepanovich & Mueller, 2002). Therefore, it would make sense to focus on both internal strategic alignment and strategic consensus, so that both the influence on intent (by focusing on strategic consensus) of leaders and actions (by focusing on internal strategic alignment) that are influenced by characteristics of leaders within this study.

A variable that is used to measure internal strategic alignment and strategic consensus of both management and non-management employees is the line of sight of Boswell (2006). Line of sight is defined as: “the employee’s understanding of the organization’s goals (strategic consensus) and what actions are necessary to contribute to those objectives (internal strategic alignment and mobilization of resources)” (Boswell, 2006, p. 3). Biggs, Brough and Barbour (2014, p. 301) expanded upon the research of Boswell (2006), defining employee strategic alignment as “the employees’ line of sight between their specific job tasks and the strategic priorities of the organization”. Biggs et al. (2014) also added the extent to which employees considered the strategic priorities to be important.

2.3 Defining organizational identification

The construct of organizational identification had captured the attention of organizational theorists and practitioners during the last decade, since it has positive effects on various (work) outcomes in all types of organizations. Studies have indicated that higher identification (in)directly leads to enhanced performance, greater job satisfaction, turnover rates, lower
absenteeism, more extra-role behaviors, increased motivation and improved health and physical well-being (Van Dick, Wagner, Stellmacher, Christ & Tissington, 2005; Walumbwa et al., 2011; DeConinck, 2011; Smidts, Pruyn & Van Riel, 2001; He & Brown; 2013).

Organizational identification is a construct that refers to the psychological attachment between an individual and to a particular group or institution, and is derived primarily from social identity theory. The desire of individuals for work-based identifications increases along with the growing turbulence of societies and organizations and the increasing tenuousness of individual-organization relationships (He & Brown, 2013). Mael and Ashforth (1992, p. 104) defined organizational identification as “the perception of oneness with or belongingness to an organization, where the individual defines him- or herself in terms of the organization of which he or she is a member”. Employees who identify with their organization are more likely to work harder to help the organization in enhancing the success of their organizations, and make decisions that are consistent with converging objectives and sacrifice their own individual interests (Moriano, Molero, Topa & Mangin, 2014). Furthermore, organizational identification can be seen as a mechanism of persuasion. Through identification, employees can be influenced by getting them to buy-in to the organization’s activities. The organization’s goals become the individual’s goals, and those who identify strongly are more likely to be motivated to work hard to help achieve these goals.

2.4 Defining financial performance

Although performance is a variable of interest for many researchers, there is lack of clarity in the theoretical definition of financial performance (Barling, Weber & Kelloway, 1996; Carter, D’Souza, Simkins & Simpson, 2010; Van Beurden & Gössling, 2008). However, they all agree that financial performance refers to the degree to which financial objectives being or has been accomplished and is the process of measuring the results of an organization in monetary terms.

According to Richard, Devinney, Yip and Johnson (2009), performance is the ultimate dependent variable of interest for researchers from any area of management and encompasses three areas of outcomes: financial performance, product market performance, and shareholder return, in which financial performance could be considered to be the most important area.
Financial performance is often used to measure the overall financial health and success of an organization over a given period of time. Although maximization of financial performance is not the goal for firms, financial performance is an important factor in reaching any firm’s goals, e.g. maximizing value. Teams of organizations are being judged by their contribution to the organizational performance and measuring it is essential to evaluate leaders. Since this study focused on teams at lower levels of the organization, such as middle management, team financial performance was measured, rather than organizational financial performance.

There is no real consensus on the proper measure of team financial performance. In fact, there is a wide range of such measures. However, prior studies stated that team financial performance can be predicted by market-based factors measures and accounting-based measures (Van Beurden & Gössling, 2008; Wu, 2006). Market-based measures include market return, market to book ratio, and stock market performances. Those measures are especially used as measures of organizational financial performance. Accounting-based measures include profitability, return on asset, and growth. Those measures reflect an organization’s internal efficiency and are frequently used to judge teams for their contributions to the organizational performance (Wu, 2006). Reliance on accounting-based measures have been frequently criticized. Dalton, Daily, Ellstrand and Johnson (1998) argued that accounting-based measures which are subject to manipulation may systematically undervalue assets, which creates distortions due to the accounting rules and methods, and lack standardization. Palepu, Healy and Peek (2013) supported this argumentation. Van de Ven and Ferry (1980) stated that variables such as return on investment, sales revenue, earning power can be used to measure (team) financial performance. Koene, Vogelaar and Soeters (2002) used two variables to measure team financial performance, i.e. net profit margin and controllable costs. Barling et al. (1996) measured business unit sales as an indicator of team financial performance and Howell and Avolio (1993) measured performance as percentage of goals met regarding business-unit performance. In addition, De Hoogh et al. (2004) gathered multiple performance indicators through different methods, such as liquidity, solvency, and profitability. Boone and Van Witteloostuijn (2005) captured in their study team financial performance with return on equity (ROE), defined as profit after tax divided by balance sheet equity whereas Sung and Choi (2012) assessed the financial outcomes of participating sales teams as found in financial data. These studies have used quantitative financial indicators in order to measure team financial performance. Accounting-based measures are difficult to interpret in
the case of multi-industry participation by organizations, since they are not useful on a stand-alone basis (unless they got benchmarked against e.g. industry norm, aggregate economy, or past performances) (Palepu et al., 2013). Wall et al. (2004) examined the validity of subjective measures of financial performance and found that subjective and objective measures of financial performance were positively associated. In their study, they also stated that perceptual measures are cost effective because such data can be collected through surveys and simultaneously elicit information on practices. Orlitzky et al. (2003) conducted a meta-analysis of 52 studies and showed an overview of financial performance was measured in those studies. Subjective financial performance was often measured by rating items such as “To what degree has your organization achieved its most important goals” and “Compared with other organizations that do the same kind of work, how would you compare the organization’s performance over the last 3 years?” (Orlitzky et al., 2003, p. 97).

2.5 Theories

There are a few theories that can be used as a theoretical lens in this study, i.e. agency theory for explaining the relationship between servant leadership and strategic alignment, and social identity theory for explaining the role of organizational identification. Both theories are discussed in turn in this section.

2.5.1 Agency theory

An explicit element of servant leadership theory is to take all stakeholders into account. Not only shareholders, but also employees and the society. A theory that was linked to this study is agency theory. The agency theory is concerned with resolving problems that arise in agency relationships (principal and agent) due to unaligned goals (Eisenhardt, 1989; Hillier et al., 2011). This situation may occur because the principal is not aware of the actions of the agent, or it may be too difficult or expensive for a principal to verify what the agent is actually doing. This feature allows agents to pursue their own interests at the expense of others.
In this study, the focus was on the relationship between the team members (principals) and leaders (agents). When viewed from the agency perspective, the different attitudes of both parties regarding their common goals might result in agency problems. When one takes a closer look at the agency theory, it can be concluded that agency conflicts arise primarily because of leaders who disregard employees’ interests or because of information asymmetry and may be, as consequence, not aligned with organizational goals. This presupposes that leaders have the incentive to align their employees and that servant leadership reduces the agency conflicts, since the objective of servant leaders is to serve people and to meet the need of others. Servant leaders are not motivated by its own self-interest.

2.5.2 Social identity theory

Another theory that fits this study is the social identity theory. The construct organizational identification is derived from social identity theory (He & Brown, 2013). According to this theory, employees tend to classify themselves and others into various social categories, such as organizations, gender, and age cohort. Two motives for organizational identification can be derived from the social identity theory. These motives are:

- The need for self-categorization (cognitive component)
- The need for self-enhancement (affective component)

The former one requires the differentiation between ingroup and outgroup which may help defining the individual’s place in society, whereas the latter requires that group membership is rewarding, e.g. by associating oneself with a successful or attractive organization. Self-enhancement is also achieved when employees feel acknowledged in an organization. In order to foster organizational identification by means of communication one may thus emphasize either cognitive or affective ties with the organization, or both (Mael & Ashforth, 1992; Smidts et al., 2001; Riketta, 2005). The cognitive and affective components allow employees to feel solidarity with the organization, support for the organization, and perception of shared characteristics with other employees (Riketta, 2005). According to Edwards (2005), social identity is capable of explaining and predicting some behaviours in the workplace. Employees that for example highly
identifies with the organization or management, are more likely to work towards the strategic interests of the organization.

2.6 Hypothesis development

In the last part of this chapter, four hypotheses are formulated based on the different theories and explanations that are outlined in the previous sections.

2.6.1 Servant leadership, strategic alignment, and organizational identification

Prior studies have investigated relationships between leadership style and a wide range of consequences, such as performance outcomes (Barling et al., 1996; Wang, Chich-Jen & Mei-Ling, 2010; García-Morales, Jiménez-Barrionuevo & Gutiérrez-Gutiérrez, 2012; McColl-Kennedy & Anderson, 2002; O’Regan, Ghobadian & Sims, 2004; Koene et al., 2002), project success (Yang et al., 2011; Nixon, Harrington & Parker, 2012), and organizational learning (Kurland, Peretz & Hertz-Lazarowitz, 2010). In the last three decades, the concepts of leadership and strategy became somehow detached from each other, while both concepts from a practitioner point of view are considered closely related (Montgomery, 2012). Leaders play a significant role in infusing a company’s positioning with a strong sense of purpose, in refocusing the organization when it starts to stray off track and repositioning it when its original positioning has run its course, hence in the alignment process (Leavy, 2012). Effective leaders formulate a vision for the organization, communicate it to followers, turn the vision into a shared vision and create a way to achieve the vision and guide the organization into new strategic directions (Kotter, 2001; Banutu-Gomez & Banutu-Gomez, 2007). This means that effective leaders are needed; leaders who can align people to a common purpose and vision (Souba, 2001), so that strategy is aligned and consequently executed by all organizational members. This implies that a leadership style which focuses on followers and optimally influencing and guiding these followers would be most suitable to successful optimizing strategic alignment. Boswell (2006) stated that organizations must rely more and more on the capability and commitment of their human resources in order to compete in a demanding and dynamic business environment. That is why strategic alignment among employees is more important now than it was before. Leaders must strive to enable their
followers to think independently and autonomously in order to act aligned with strategic priorities (Bass, 2000). Therefore, servant leadership seems a more appropriate leadership style than any other type to consider when organizations strive to optimize their strategic alignment, since servant leaders are expected to infuse work with values by articulating an attractive vision, which will increase employee’s willingness to and enthusiasm for their work (House, 1977; 1996). Moreover, the servant leader and the employees have relatively more aligned interests from an agency perspective, since the presumption is that the servant leader is conscious and acts in congruence with the employees’ interests. Therefore, the first hypothesis is:

**H1: Servant leadership has a positive effect on strategic alignment.**

Many studies relating to leadership styles and strategic alignment have neglected important moderator variables (Shamir & Howell, 1999; Yukl, 1999; McColl-Kennedy and Anderson, 2002). The positive results of these studies have been taken as proof for the beneficial effects of leadership style, regardless of the situation. Nevertheless, the associations between the variables may be due to the impact of moderator variables (Lowe, Kroeck & Sivasubramanium, 1996; Epitropaki and Martin, 2005; Dick, Hirst, Grojean & Wieseke, 2007). According to Baron and Kenny (1986, p. 1174) a moderator is “a qualitative or quantitative variable that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable”.

Servant leadership makes employees feel responsible for the success of their organization (Murari & Gupta, 2012). Greenleaf and Spears (2002) also explained that servant leaders strive to develop their followers into autonomous servants. By pursuing this, the servant leader invites its followers to become free and autonomous and to follow their own conscience rather than the leader’s conscience (Parolini, Patterson, & Winston, 2008). Boswell (2006) found that employees' understanding of how to contribute to the organization's strategic goals was more important than only understanding the goals. Boswell (2006, p. 1504) stated in her study: “It appears that employees who understand how to contribute to an organization's strategic goals are more likely to feel a sense of belonging (or fit), perhaps since they are better able to work in alignment with the firm's needs, while this is not necessarily the case for employees that are
aware of the strategy but not necessarily know what to do about it”. Servant leaders try to match the employee’s own consciences to the organization conscience as much as possible. Studies suggest that the strength of employees’ organizational identification influences (work) behavior (Mael & Ashforth, 1995; Van Knippenberg & Van Knippenberg, 2000). Employees who strongly identify with the organization may choose to disregard personal moral standards and engage in acts that favor the organization (Ashforth & Anand, 2003). In this case, it might be more likely that the employee’s own conscience matches what is beneficial to the organization conscience, and the employee will have a stronger strategic alignment. From this theoretical basis, the following hypothesis is formulated:

**H2: Organizational identification strengthens the relationship between servant leadership and strategic alignment.**

2.6.2 Servant leadership, strategic alignment, and financial performance

Buller and McEvoy (2012) stated in their study that the assumption underlying the strategic alignment concept is that employees’ knowledge and behavior, aligned with the strategic goals of an organization, are the keys to achieve positive financial performance. In many studies over the years is stated that strategic alignment has an important effect on the financial performance of a company, amongst them are Venkatraman (1989), Acur et al. (2012) and Walter et al., 2013). When employees’ values fit the organizational culture, they are more likely to have positive attitudes and are less likely to leave the organization. Employees that are highly aligned, are more likely to behave in line with the strategy of the organization and facilitate these employees to make a more positive contribution to the growth and development of the organization. There is a greater risk of ineffective or inappropriate behavior if employees lack of information on the expectations or objectives of an organization for contributing to these objectives (Boswell, 2006) and therefore strategic alignment is crucial. To test this, the following hypothesis is formulated:

**H3: Strategic alignment has a positive effect on team financial performance.**
Studies have shown that leadership is an important factor in achieving financial performance of a team, and an organization’s strategy (Schneider, 1987; Wang et al., 2010). In order to survive or to sustain successes, organizations must transform their operations to those dynamic changes. Schneider (1987) stated that the most significant part in establishing a successful organization is the people, both leaders and followers, that form the organization. To be able to guide and influence followers to work eagerly toward objectives that are formulated, leadership skills are used (Barrow 1977; Cyert, 1990; Plsek & Wilson, 2001).

Den Hartog (1997) stated in her study that the relationship between leader behavior and performance is often quite indirect. Servant leadership is expected to drive employees to put in effort beyond expectations, which may be reflected in the financial performance. However, leadership is needed in order to formulate and deploy any type of strategy and is an important factor in strategic effectiveness. Bass (2000) and Harvey (2001) stated that with servant leadership, organizational goals will be achieved on long-term basis, only when the development and well-being of individuals/followers is facilitated. More recent research by Murari and Gupta (2012) stated that servant leadership makes followers feel that it is their responsibility to take the business to its heights of success. Consequently, it brings competitiveness and the organization prospers. It can be assumed that servant leadership tends to be more effective than any other leadership styles. Servant leadership is expected to drive employees to put in effort beyond expectations, which may be reflected in the financial performance. By contrast, where employees have the motivation toward the furthering of the organization’s goals as suggested by the servant leadership theory, the absence of strategic alignment may lead to greater frustration due to the inability of employees to contribute effectively toward desired outcomes. Thus, servant leaders are needed in achieving strategic alignment. This discussion leads to the fourth hypothesis:

\textit{H4: Strategic alignment positively mediates between servant leadership and team’s financial performance.}

The overall aim of the study was to test the relationships depicted in Figure 2, where strategic alignment mediates between leadership and financial performance and organizational identification strengthens the relationship between servant leadership and strategic alignment.
**Figure 2. Hypothesized model**

Organizational Identification

Servant Leadership $\rightarrow$ Strategic Alignment

H1 +

Financial Performance

H4 +

H2 +

H3 +
3. Research methodology

This study aimed to find a relationship between the leadership style, strategic alignment and financial performance. First, the research design is discussed. Secondly, the methods and measures, data and sample are discussed. Also, exploratory factor analysis was used to assess the validity and reliability of measurement scales (Hair, Black, Babin & Anderson, 2013).

3.1 Research design

Similar studies have used survey design in order to collect data and performed statistical analyses such as regression analyses and structural equation modeling to find relationships among the variables (McCull-Kennedy & Anderson, 2002; Koene et al., 2002; De Hoogh, et al., 2004). A survey consists of three components: sampling, designing questions, and data collection (Fowler Jr., 2013). Yin (2013) stated in his study that surveys deal with all possible types of research questions (who, what, where, how many, how much), whereas other forms of research methods, i.e. case studies and experiments, deal with how and why questions. In addition, surveys focus on contemporary events (which means they measure how things are at a specific time) and do not require control over behavioral events. Survey refers to the selection of a large sample of people from a pre-determined population, followed with a collection of a small amount of data. A researcher uses information of the survey to make inferences about a population (Kelley, Clark, Brown & Sitzia, 2003). Surveys are often used for descriptive purposes, but can also be used for exploration, explanation and testing hypotheses. Surveys enable researchers to get opinions, motivations and to capture relationships. Surveys can produce a large amount of data in a short amount of time at a low cost. In addition, respondents can answer the survey at their convenience (Kelley et al., 2003).

Edmondson and McManus (2007) considered three archetypes of methodological fit in research: nascent, intermediate, and mature. This study is similar to a mature theory research. Edmondson and McManus (2007, p. 1159) stated: “Mature theory encompasses precise models, supported by extensive research on a set of related questions in varied settings. Maturity stimulates research that leads to further refinements within a growing body of interrelated
theories”. In addition, research questions tend to focus on clarifying specific aspects of existing theories by example testing a theory, testing hypotheses, examining a mediation mechanism, or providing evidence for or against previous studies. Edmondson and McManus (2007) also stated that mature theory often use surveys as a method to collect qualitative data. Furthermore, similar studies have used surveys and statistical analyses in order to find a relationship between multiple variables (Barling et al., 1996; Wang et al., 2010; García-Morales et al., 2012; McColl-Kennedy & Anderson, 2002; O’Regan et al., 2004; Koene et al., 2002; Cherian & Farouq, 2013; Yang et al., 2011; O’Regan et al., 2004). The aim of this study was to examine the effect of one set of variables upon another set of variables and analyzing the direction of those effects. For this reason, a survey seems the most effective research method in this study in order to provide an answer to the research question. Taking into consideration the objective and scope of this study, this study was a cross sectional survey.

3.2 Survey measures

In this study, team members and team leaders are surveyed about their behavior. The survey was conducted in 2016—2017 and is included in Appendix A. The survey was composed of 9 constructs, consisted of 71 questions in order to measure servant leadership, organizational identification, strategic alignment, and financial performance. Employees and leaders were asked to rate servant leadership, organizational identification, and strategic alignment. However, only employees’ ratings were used in this study in order to measure how servant the leaders were. Only leaders were asked to rate the team financial performance, since not all employees are aware of the team financial performance. By doing this, the common source biases were eliminated. The survey questions that were included were based on a Likert scale. The variables are discussed in this section and have been labeled in Table 3.
3.2.1 Dependent variables: Strategic alignment and financial performance

Strategic alignment

A variable that was used to measure internal strategic alignment and strategic consensus of both management and non-management employees is the line of sight of Boswell (2006). Respondents were presented four items and indicate their agreement with each item on a 7-point Likert scale (1 = totally disagree, 7 = totally agree). Example of these items are “I have a clear understanding of the organization’s strategic priorities” and “It is important to me to help the organization achieve its strategic objectives”. High scores represent a high degree of strategic alignment with the priorities of the organization.

Financial performance

Given the imprecisions involved in interpreting accounting-based measures and the fact this study focuses on team’s financial performances instead of organizational performance, perceptual measures were used in this study. Also, perceptual measures are cost effective because such data can be collected through surveys and simultaneously elicit information on practices (Wall et al., 2004). Perceptual measures of financial performance is the most appropriate measure for this study, since financial records are not available for all participating teams. Leaders were asked to rate four items of team financial performance (e.g. “My team achieves its financial targets”) on a 5-point Likert scale (1 = totally disagree, 5 = totally agree) (Orlitzky et al., 2003; Wall et al., 2004).

3.2.2 Independent variable: Servant leadership

The survey measured servant leadership with fourteen items (e.g. “My supervisor creates solidarity among employees”) adapted from the scale developed by Ehrhart (2004). Respondents rated each of the items on a 5-point scale, (1 = totally disagree, 5 = totally agree) which is consistent with the use of this scale in previous research. This measure reported a reliability (Cronbach’s alpha) of .98 in previous research and .91 in this study.
3.2.3 Moderator variable: Organizational identification

Organizational identification was measured using the Dutch translation of the Mael and Ashforth (1992) Likert scale (1 = totally disagree, 5 = totally agree). Research by Van Knippenberg, Van Knippenberg-Wisse, Knippenberg-den Brinker and Van Knippenburg (2001) has shown that this Dutch translation is reliable and valid. The scale consists of six items, which was scored on a 5-point scale (1 = totally disagree, 5 = totally agree).

3.2.4 Control variables

The teams in this study were comparable in many respects. Control variables were used to reduce the effect of confounding variables. Control variables that are used in this study include leader’s age, gender, and education. According to Barbuto, Fritz, Matkin and Marx (2007) and Rowold (2011), these variables might account for variance in leadership. In addition, actual team size was included as a team level control variable and respondents are asked to fill in their organization tenure, as well as their team tenure. Organization and team tenure refer to the mean number of years that employees have worked for the organization or team, respectively, and are asked to be able to control for the possibility that it takes time for employees to get strategically aligned when they are new to the organization or team.
Table 3. Definitions of variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition/Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variables</strong></td>
<td></td>
</tr>
<tr>
<td>Strategic alignment (SA)</td>
<td>1 = totally disagree, 2 = mostly disagree, 3 = somewhat disagree, 4 = neither agree nor disagree, 5 = somewhat agree, 6 = mostly agree, 7 = totally agree</td>
</tr>
<tr>
<td>Financial performance (FP)</td>
<td>1 = totally disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = totally agree</td>
</tr>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
</tr>
<tr>
<td>Servant leadership (SL)</td>
<td>1 = totally disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = totally agree</td>
</tr>
<tr>
<td>Organizational identification (OI)</td>
<td>1 = totally disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = totally agree</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
</tr>
<tr>
<td>Team size</td>
<td>Numbers of employees</td>
</tr>
<tr>
<td>Gender</td>
<td>0 = male, 1 = female</td>
</tr>
<tr>
<td>Age</td>
<td>Age of employee in years</td>
</tr>
<tr>
<td>Education</td>
<td>1 = VO, 2 = LBO, 3 = MBO, 4 = HBO, 5 = WO, 6 = post-doc, or above</td>
</tr>
<tr>
<td>Team tenure</td>
<td>Team tenure in years</td>
</tr>
<tr>
<td>Organizational tenure</td>
<td>Organizational tenure in years</td>
</tr>
<tr>
<td>Employment</td>
<td>0 = part-time, 1 = fulltime</td>
</tr>
</tbody>
</table>
3.3 Data and sample

The data collection and sample of this study are discussed in this section. Also, the validity and reliability of the measurement scales are assessed.

3.3.1 Data collection

The data were collected by conducting a survey. The survey was composed of 9 constructs and consisted of 71 questions in order to measure servant leadership, organizational identification, strategic alignment, and financial performance. The survey was used for multiple studies and was designed together with Slagter (work in progress). The survey questions were adapted from various studies and were based on a 5 or 7 point Likert scale (Boswell, 2006; Orlitzky et al., 2003; Wall et al., 2004; Ehrhart, 2004; Mael & Ashforth, 1992). Likert scale is a rating scale which require the respondent to select their answer from a range of statements or numbers (Dawes, 2012). Advantages of making use of Likert scales are easy formation and enable the respondents to provide responses for the survey based on their opinion. Odd Likert scales have the disadvantage that respondents are able to stay neutral in their answers, which will eventually lead to skewed results. This can be compensated for, to some degree, by using an even Likert scale or omitting the neutral answer. Unfortunately, this eliminates what could be a valid answer and can also lead to skewed results intent (Hasson & Arnetz, 2005; Dawes, 2012). Limitations with the Likert scale is that wording of the descriptive categories most probably affect the responses and artificial categories might not be sufficient to describe a complex continuous, subjective phenomenon. Furthermore, too many response categories may lead to difficulties in choosing and too few may not provide enough choice or sensitivity, forcing the respondent to choose an answer that does not represent the person’s true intent (Hasson & Arnetz, 2005; Dawes, 2012).

The survey was tested before using it to collect data on a group of 5 employees from the targeted work areas. They were asked to comment on items that were ambiguous or difficult to understand. By doing this, the strengths and weaknesses concerning the question format,
wording, validity and can be determined. Based on the comments, only minimal changes were made toward the final version of the survey.

The surveys were distributed to 20 teams by management consultants of House of Performance, who made it possible to find respondents for this study, in 2016. Schatzman and Straus (1973) and Patton (2014) suggest that after several observations, the researcher will know who to sample for the purpose of the study and therefore researchers often use a selective and purposeful sampling. According to Patton (2014), the logic and power of purposeful sampling lies in selecting information-rich cases for study in depth. This study focused on leaders at lower levels within the organization and therefore used a selective and purposeful sampling. Evidence suggests that strategies developed by senior and top management are often modified or even sabotaged during implementation at lower levels of the organization (Davies, 1993; Allen & Wilson, 2003). It is also concluded in previous studies that strategy is formulated at top management level, but essentially implemented at lower levels of an organization, with the consequence that greater attention needs to be paid to the dynamics of alignment at lower levels of the organization, such as middle management (Chan & Huff, 1992; Floyd & Wooldridge, 1997; Balogun & Johnson, 2004; Currie & Procter, 2005). Employees who come together to achieve a common goal are referred as a team in this study.

Before collecting the data, each team was assigned a code to make sure that responses from the employees and managers were assigned to the right team. To facilitate accurate responses, anonymity was guaranteed to all employees and it was emphasized that the team leaders would receive only aggregated results. The survey that is used to collect the data was sent in hard copy to the respondents. This design was chosen over face-to-face interviews, telephone interviews and online survey design, since it can reach all respondents (including offline telecommunication) and enables respondents’ anonymity. In addition, respondents can answer the survey at their convenience (Kelley et al., 2003). Surveys were distributed to the team leaders from a variety of industries and were instructed to distribute the surveys to their team to fill out the surveys, put them in individual envelopes to ensure anonymity and confidentiality, and send them back. Postal surveys are characterized with a low response rate. In order to increase the response rate in this study, the surveys are anonymous, the importance of this study was highlighted by the team leader, a reminder was sent, and as an incentive, these leaders were offered the opportunity for
feedback on their leadership styles after closing of this study. After the first data collection session, team leaders were asked to rate their financial performance.

Consequently, only 18 out of 20 teams returned the surveys. Hair et al. (2013) considered a regression analysis to be effective with a sample of at least 20. Therefore, 11 additional teams were approached. Due the fact that postal surveys were time consuming, it had been decided to send an online version of the survey to the additional teams. Online surveys are also easier and faster to analyze since there is no need to enter the survey one by one. The surveys remained anonymous and the same incentive was offered to the leaders.

3.3.2 Sample

Data were collected from 707 employees from 31 operational teams in 17 organizations (31 team leaders and 676 team members) from a variety of industries (e.g. banking, utilities, municipalities, health care). Consequently, 312 (294 usable) surveys were returned, which makes the response rate 41.58%. Data were retrieved from 25 teams. The characteristics of the sample are shown in Table 4. The teams represented a wide range of industries, e.g. healthcare and government. Employees worked in teams with a range of 5 and 90 members per team, and an average of 24.08 members. Figure 3 shows the box plot of team size where the box represents the teams between 25th and 75th percentile of the distribution. The figure reveals that team sizes of teams 5, 7 and 16 are exceptionally large compared to the other teams. Therefore, the natural logarithm is used for the variable team size. Furthermore, leaders had an average team tenure of 5.70 years (SD = 6.55) and 14.40 (SD = 8.38) years for organizational tenure. The teams had an average tenure of 7.33 (SD = 5.21) with the team and 13.33 (SD = 8.01) with the organization. On average, leaders were 46.00 (SD = 7.14) years old. Of the respondents, 63.27% worked fulltime, 45.24% had a bachelor’s degree or above, and 48.64% were male.
Table 4. Characteristics of the sample

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team function</td>
<td></td>
<td></td>
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<tr>
<td>Employee</td>
<td>269</td>
<td>91.50%</td>
</tr>
<tr>
<td>Leader</td>
<td>25</td>
<td>8.50%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>143</td>
<td>48.64%</td>
</tr>
<tr>
<td>Female</td>
<td>128</td>
<td>43.54%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Median</th>
<th>Std. Deviation</th>
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</thead>
<tbody>
<tr>
<td>Team size</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>5.00</td>
<td>90.00</td>
<td>24.08</td>
<td>15.00</td>
<td>21.30</td>
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<tr>
<td>Leader</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>23</td>
<td>32.00</td>
<td>57.00</td>
<td>46.00</td>
<td>48.00</td>
<td>7.14</td>
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<tr>
<td>Tenure team</td>
<td>23</td>
<td>1.00</td>
<td>30.00</td>
<td>5.70</td>
<td>3.00</td>
<td>6.55</td>
</tr>
<tr>
<td>Tenure organization</td>
<td>23</td>
<td>1.00</td>
<td>30.00</td>
<td>14.40</td>
<td>13.00</td>
<td>8.38</td>
</tr>
<tr>
<td>Team</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>24</td>
<td>28.00</td>
<td>53.00</td>
<td>41.64</td>
<td>41.35</td>
<td>7.67</td>
</tr>
<tr>
<td>Tenure team</td>
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<td>1.00</td>
<td>26.00</td>
<td>7.26</td>
<td>7.29</td>
<td>5.21</td>
</tr>
<tr>
<td>Tenure organization</td>
<td>24</td>
<td>1.00</td>
<td>27.14</td>
<td>13.23</td>
<td>12.88</td>
<td>8.13</td>
</tr>
</tbody>
</table>

Figure 3. Box plot team size
3.4 Data analysis

The survey questions were adapted from various studies and were translated into Dutch (Boswell, 2006; Orlitzky et al., 2003; Wall et al, 2004; Ehrhart, 2004; Mael & Ashforth, 1992). Although most of the scales have been validated in previous studies, the question arise whether they are empirically distinct in this study. Therefore, a factor analysis was conducted on the aggregated data, before analyzing the data (Hur et al., 2011; Koene et al., 2002). Aggregating data was justifiable in this study because of the significant intra-class correlations. The ICC1 and ICC2 values for servant leadership were .28 ($p < .01$), and .83, respectively. Strategic alignment showed an ICC1 value of .25 ($p < .01$) and an ICC2 value of .88. Organizational identification showed an ICC1 value of .17 ($p < .01$) and an ICC2 value of .75. Bliese (2000) stated that ICC1 values close to .20 are appropriate and LeBreton and Senter (2008) stated that ICC2 values equal to or higher than .70 are satisfactory. Ratings of financial performance were also aggregated. Aggregating individual perceptions is in this case justified because the survey items have been written in such a way that they refer to the team, instead of to individuals (Chan, 1998; Klein & Kozlowski, 2000).

A summated measure for each variable was created for each team. Summated scores were utilized for each variable due to its benefits to minimize the measurement error for all variables (Hur et al., 2011). Furthermore, it has the ability to represent multiple aspects of a concept into one single measure (Hair et al., 2013). The reliability of the scales are also assessed. In addition, four assumptions have to be met in the course of calculating regression coefficients and predicting the dependent variable, i.e. normality, linearity, homoscedasticity, and independence of error terms. These assumptions were tested by conducting statistical analyses and determining values such as Durbin Watson and VIF.

To study the relationship between servant leadership, strategic alignment, financial performance and organizational identification, some variables were controlled in the regression analyses to rule out alternative explanations for statistical relationships between the variables. Over the years, different techniques of multiple regression have been used in order to find determinants. Logistic regression is often used in prediction studies, where the dependent variable is categorical (Hair et al., 2013). In contrast to logistic regression, ordinary least squares
(OLS) regressions allow the dependent variable to take on various scores. Therefore, OLS-regressions are used in this study.

An approach that has been widely used in the leadership literature for analyzing the relationship between the independent and dependent variables is multivariate hierarchical linear regression (Hur et al., 2011; De Hoogh et al., 2004). The analyses are conducted in a stepwise manner. The basic models report the results from estimating a model where only the control variables are included. In the full models, the basic models are extended with servant leadership. The amount of explained variance was also calculated for both models. The regression reports the t-statistic for each predictor variables and tests whether the impact of the predictor variable on the outcome variable is significant or not. The definitions of the variables can be found in Table 3. In order to test hypothesis 1 the multivariate hierarchical linear regression (1) below is estimated:

\[
SA_i = \alpha + \beta_1 SL_i + \beta_2 Age_i + \beta_3 Education_i + \beta_4 Teamsize_i + \beta_5 Team tenure_i + \beta_6 Organizational tenure_i + \varepsilon
\]

where the dependent variable (\(SA_i\)) is the extent of which leaders are servant. The subscript \(i\) indicates the participated teams in 17 organizations from a variety of industries. For H3, where the independent variable is strategic alignment and financial performance the dependent variable, regression (2) is estimated.

\[
FP_i = \alpha + \beta_1 SA_i + \beta_2 Age_i + \beta_3 Education_i + \beta_4 Team tenure_i + \beta_6 Organizational tenure_i + \varepsilon
\]

In order to analyze if organizational identification is moderating the relationship between servant leadership and strategic alignment (H2), regression (3) was estimated. The analysis compared the explanatory power of the restricted model (H1) with the interaction model (servant leadership \(\times\) organizational identification with strategic alignment as the dependent variable. The moderator hypothesis (H2) is supported if the interaction (\(\beta_3 SL_i \times OI_i\)) has a positive and significant beta on its dependent variable, strategic alignment.

\[
SA_i = \alpha + \beta_1 SL_i + \beta_2 OI_i + \beta_3 SL_i \times OI_i + \beta_4 Age_i + \beta_5 Education_i + \beta_6 Teamsize_i + \beta_7 Team tenure_i + \beta_8 Organizational tenure_i + \varepsilon
\]
To determine whether the effect of leadership on financial performance is mediated by strategic alignment (H4), the three-equation approach recommended by Baron and Kenny (1986) was used to test the mediation effect. According to Hayes (2009), this approach is the most widely-used method. This approach is a complex form of OLS regression and is used to show if there are variables that explain a statistically significant amount of variance in the dependent variable after accounting for all other variables (Lankau & Scandura, 2002). The steps include the following equations:

Step 1: \[ SA_i = \alpha + \beta_1 SL_i + \beta_2 Age_i + \beta_3 Education_i + \beta_4 Teamsize_i + \beta_5 Team tenure_i + \beta_6 Organizational tenure_i + \epsilon \] (4)

Step 2: \[ FP_i = \alpha + \beta_1 SL_i + \beta_2 Age_i + \beta_3 Education_i + \beta_4 Teamsize_i + \beta_5 Team tenure_i + \beta_6 Organizational tenure_i + \epsilon \] (5)

Step 3: \[ FP_i = \alpha + \beta_1 SL_i + \beta_2 SA_i + \beta_3 Age_i + \beta_4 Education_i + \beta_5 Teamsize_i + \beta_6 Team tenure_i + \beta_7 Organizational tenure_i + \epsilon \] (6)

If \( \beta_1 SL \) in step 1 and 2, and \( \beta_2 SA \) in step 3 are all significant, then there is a mediation effect. However, this approach has been criticized by several studies on multiple grounds. Fritz and MacKinnon (2007) have shown in their study that among the methods for testing mediation effects, the three-equation approach by Baron and Kenny (1986) had the lowest power and is, thus, least likely to be able to detect that effect. In addition, the three-equation approach is not based on attempting to test the mediation effect. Rather, it is a set of hypothesis tests and these are fallible, since they all carry the possibility of a decision error (Hayes, 2009; Zhao, Lynch & Chen, 2010). Nevertheless, the reason that the three-equation approach is widely used is due to its simplicity and the approach is widely understood (Hayes, 2009). New analytical methods have risen since the existence of the three-equation approach, such as Sobel test and structural equation modeling (SEM), which also have their weaknesses. According to Hayes (2009) and Zhao et al. (2010), the major flaw of the Sobel test is that it requires the assumption that the indirect effect is normally distributed. Due to the fact that Likert scales data will frequently be skewed, the Sobel test is not appropriate for this study. Multiple studies have shown that SEM is a more powerful test than the three-equation approach and Sobel test (Fritz & MacKinnon, 2007; Zhao et al., 2010). Bootstrapping is implemented in SEM software and therefore tends to have the highest
power and is able to control Type I error (Hayes, 2009). Due to the simplicity of the three-equation approach by Baron and Kenny (1986), this method was used in this study. If results show that there is no mediation effect, SEM will be performed as an additional test to rule out the mediation effect.

3.5 Quality of the scales

The validity and reliability of the scales were assessed by conducting a confirmatory factor analysis and by computing the Cronbach’s alphas of the scales. In the following sections, the results are presented in Appendix B and are discussed in this section.

3.5.1 Validity

In order to assess the validity of the measurement scales, an exploratory factor analysis (EFA) is conducted. A principal axis factoring with orthogonal rotation (VARIMAX) is conducted on the items on the aggregated data within each team and six factors were loaded. Hofstede, Neuijen, Ohayv and Sanders (1990) argued in their study that aggregated scores tend to be very reliable and stable because they were based on the mean scores of individuals. Therefore, fewer cases were requires than would have been the case for individual cases. When looking at the results of the factor analysis, two items (items 13 and 14 of servant leadership) loaded on separate factors. Items 1 and 2 of financial performance loaded high on the unintended factor. After deleting these items and rerunning the factor analysis, the results gives us a KMO of .78 (> .50), which indicates that correlations between pairs of variables can be explained by others variables. Moreover, Bartlett’s test of sphericity is significant (.00 < .01) and indicates that enough correlations among the variables exist (Hair et al., 2013).

Finally, the factor analysis ended up with four factors presented in Table B2 of Appendix B. The scree plot and eigenvalues also show four well-defined factors with eigenvalues greater than one that accounted for 52.52% of the variance of the indicators. Hair et al. (2013) consider factor loadings of .30 as acceptable, however stated that factor loadings above .50 are better. Out of 24
items, only four items had a lower factor loading than .50. All other items loaded higher than .50 on the intended factors. Item 4 of strategic alignment cross loaded a bit on factor 2. This cross loading is low, i.e. .34 and can therefore be ignored.

3.5.2 Reliability

Since this study summated individual data into team level data, it was necessary to ensure that responses are reasonable stable within each team. Therefore, Cronbach’s coefficients (α) were computed for the overall test as well as the variables. Overall reliability was .81. Reliability was assessed for servant leadership at .91, strategic alignment at .91, organizational identification at .86, and financial performance at .72. The values of Cronbach’s alpha should exceed a threshold of .70 (Nunnally, 1978; Hair et al., 2013). All of the α-values for the variables were above .70, indicating a high degree of internal consistency in the responses.
4. Results

In this part of the study, the statistical analyses such as regression analyses, were performed in order to gain insights into the hypothesized relationships. The results of the analyses are reported in the following sub-sections. Firstly, Pearson correlation analysis and descriptive statistics were conducted to determine the amount of collinearity. Consequently, regression analyses were carried out to test the hypotheses. The assumptions that have to be met in the course of calculating regression coefficients and predicting the dependent variable are tested in Appendix C, and are met.

4.1 Descriptive statistics and correlation matrix

Table 5 presents the descriptive statistics for the sample of 25 teams used in the regression analysis. It is worth noting that the items of strategic alignment were rated on a 7-point Likert scale, while the other main variables were rated on a 5-point Likert scale. The means for servant leadership, strategic alignment, organizational identification, and financial performance are 3.78, 5.45, 4.62, and 3.50 respectively. The standard deviations are also reported in Table 5. While the standard deviations for servant leadership and organizational identification are around .30, the standard deviations for strategic alignment and financial performance are between .50 and .75, indicating more variation. Employees worked in 25 teams with a range of between 5 and 90 members per team, and an average of 24 members. Leaders were on average 46 (SD = 7.14) years old and had an average team tenure and organizational tenure of 5.70 (SD = 6.55) and 14.39 (SD = 8.38) years. Almost all of the leaders worked fulltime. Employees were on average 41.34 (SD = 7.67) years old. They had an average team tenure and organizational tenure of 7.26 (SD = 5.21) and 13.23 (SD = 8.13) years. Thus, leaders had on average a longer team and organizational tenure than their employees did.

In Table 6, the Cronbach’s alphas are in parentheses along the diagonal. Table 6 shows some interesting relationships between the variables. There is a significant negative correlation between team tenure and strategic alignment ($r = -.45$, $p < .05$). Thus, employees that have been working in the same team for a long time are more likely to be less strategically aligned than
employees who have a short tenure. It might be due the fact that employees, who have a long team
tenure, had different leaders in the past, each with its own strategy. Those employees might have become skeptical, and are tired of change. Organizational identification is significant positively correlated to servant leadership ($r = .28, p < .10$). This may indicate that employees are more likely to identify with the organization when there is a servant leader. However, this effect is marginal. Organizational identification is positively and significantly related to strategic alignment ($r = .28, p < .05$), indicating that if an employee highly identifies with the organization, the employee will be more likely to align better with the strategy of the organization. Furthermore, servant leadership is significant positively correlated to strategic alignment ($r = .40, p < .01$) and financial performance is negative correlated to strategic alignment ($r = -.32, p < .10$).

Table 5. Descriptive statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
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<td>4.50</td>
<td>3.78</td>
<td>3.73</td>
<td>.30</td>
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<td>6.42</td>
<td>5.45</td>
<td>5.45</td>
<td>.59</td>
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<td>4.20</td>
<td>3.62</td>
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<td>.31</td>
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<tr>
<td>Financial performance</td>
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<td>5.00</td>
<td>3.47</td>
<td>3.50</td>
<td>.74</td>
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</tr>
<tr>
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<td>90.00</td>
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<td>.51</td>
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<td>57.00</td>
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<td>Education$^2$</td>
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<td>4.09</td>
<td>4.00</td>
<td>.90</td>
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<td>30.00</td>
<td>5.70</td>
<td>3.00</td>
<td>6.55</td>
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<td>41.35</td>
<td>7.67</td>
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<td>Team tenure</td>
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<td>7.26</td>
<td>7.29</td>
<td>5.21</td>
</tr>
<tr>
<td>Organizational tenure</td>
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<td>1.00</td>
<td>27</td>
<td>13.23</td>
<td>12.88</td>
<td>8.13</td>
</tr>
</tbody>
</table>

$^1$Gender and form of employment are a binary variable (0 = male, 1 = female; 0 = part-time, 1 = full-time).

$^2$The levels of education were coded (1 = VO, 2 = LBO, 3 = MBO, 4 = HBO, 5 = WO, 6 = post-doc, or above).
Table 6. Pearson correlation coefficients at the team level

<table>
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<tr>
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<th>2</th>
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<th>4</th>
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<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
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<tbody>
<tr>
<td>1. Team size</td>
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<tr>
<td>2. Gender¹ (leader)</td>
<td>-.04</td>
<td></td>
<td></td>
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<tr>
<td>3. Education² (leader)</td>
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<td>.61**</td>
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<td>4. Employment¹ (leader)</td>
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<td>-.22</td>
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<tr>
<td>5. Age (leader)</td>
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<td>-.26</td>
<td>.18</td>
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<td>6. Team tenure (leader)</td>
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<td>-.26</td>
<td>-.52*</td>
<td>.16</td>
<td>.39†</td>
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<tr>
<td>7. Organizational tenure (leader)</td>
<td>.04</td>
<td>-.18</td>
<td>-.52*</td>
<td>-.04</td>
<td>.58**</td>
<td>.69**</td>
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<td>8. Age (team)</td>
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<td></td>
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</tr>
<tr>
<td>9. Team tenure (team)</td>
<td>.24</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10. Organizational tenure (team)</td>
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<td></td>
<td></td>
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<tr>
<td>11. Servant leadership</td>
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<td>.07</td>
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<td>.10</td>
<td>-.00</td>
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<td>12. Strategic alignment</td>
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<td>.35†</td>
<td>-.14</td>
<td>-.04</td>
<td>-.45*</td>
<td>-.20</td>
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<td>-.28</td>
<td>.40**</td>
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<td>13. Organizational identification</td>
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<td>.11</td>
<td>.06</td>
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<td>-.24</td>
<td>-.05</td>
<td>-.21</td>
<td>-.02</td>
<td>-.24</td>
<td>.28†</td>
<td>.28‡</td>
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<td>14. Financial performance</td>
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<td>-.22</td>
<td>.16</td>
<td>.15</td>
<td>.05</td>
<td>-.08</td>
<td>.47†</td>
<td>-.02</td>
<td>.27</td>
<td>-.21</td>
<td>-.32‡</td>
<td>-.17</td>
<td>(.72)</td>
</tr>
</tbody>
</table>

N = 25

† p < .10
* p < .05
** p < .01

¹Gender and form of employment are a binary variable (0 = male, 1 = female; 0 = part-time, 1 = fulltime).

²The levels of education were coded (1 = VO, 2 = LBO, 3 = MBO, 4 = HBO, 5 = WO, 6 = post-doc, or above).
4.2 Predictors for strategic alignment

In this part of the study, a regression analysis is performed to test to what extent the dependent variables can be predicted by the independent variables. The first analysis focuses on strategic alignment. Table 7 reports regression results where servant leadership is the independent variable, and strategic alignment the dependent variable. The basic models report the results from estimating a model where only the control variables are included. In the full models, the basic models were extended with servant leadership.

Of the significant control variables in column 1, team size ($\beta = .46, p < .05$) and team tenure ($\beta = -.60, p < .05$) appear to be significant. Education is marginal significant ($\beta = .42, p < .10$). As concerns the servant leadership measure, the results of the full model in column 2 indicate that the coefficient ($\beta = .27, p < .10$) of servant leadership is marginal significant. By adding servant leadership to the basic model, none of the control variables remained significant. Servant leadership was marginal significant ($\beta = .27, p < .10$) and added 4% of explained variance.

As a robustness check, the tenure control variables were excluded in column 3 and 4. Of the control variables, education appears to be the only significant one in column 3 and 4 ($\beta = .50, p < .05$ and $\beta = .40, p < .10$). In column 4, servant leadership added was to the basic model. The results show that the coefficient of leadership was statistically significant ($\beta = .41, p < .05$) and added 14% of explained variance. Consistent with hypothesis 1, servant leadership was positively related to team’s strategic alignment, and is consistent with that of prior studies (Leavy, 2012; House, 1996; O’Regan et al., 2004). It is also more likely that the leader’s and team’s interests are more aligned which will reduce the possibilities of agency conflicts. O’Regan et al. (2004) used a sample of 194 organizations and found that ethical forms of leadership had a significant positive effect on different characteristics of strategy, including internal orientation, external orientation, and employee involvement.
Table 7. Regression analysis of strategic alignment

<table>
<thead>
<tr>
<th></th>
<th>Basic model (1)</th>
<th>Full model (2)</th>
<th>Basic model (3)</th>
<th>Full model (4)</th>
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<td>Age</td>
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<td>.35</td>
<td>.50†</td>
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<td>LnTeam size</td>
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<td>Organizational tenure</td>
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<td>Servant leadership</td>
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<td>.41*</td>
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<td>ΔR²</td>
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<td>.24</td>
<td>.28</td>
<td>.13</td>
<td>.27</td>
</tr>
</tbody>
</table>

Note: Coefficients presented are betas.
N = 25
† p < .10
* p < .05
** p < .01

4.3 Moderating role of organizational identification

To examine the effect of the moderator variable on the relationship between servant leadership and strategic alignment, moderated multiple regression analyses were conducted. Strategic alignment is regressed on servant leadership and organizational identification in the basic model. In the full model, the interaction predictor, servant leadership × organizational identification, was added to the regression. Table 8 presents the results of these analyses. In column 1 and 2, all control variables were included in the regression analyses. None of the variables were significant in column 1 and 2. In column 3 and 4, only the age of leaders and team sizes were included in the regression analyses. None of the variables were significant in column 1 and 2. In column 3 and 4, only the age of leaders and team sizes were included in the regression analyses. The results of the full model in column 4 show us that team size is marginal significant (β = .13, p < .10). By adding the interaction to the basic model (column 4), both servant leadership and organizational identification appear to be significant (β = 3.00 and β = 19.17, p < .05). The interaction had a significant negative effect and added 14% of explained variance (β = -19.73, p < .05). Since both the predictor and moderator were significant with the interaction term added, partial moderation had occurred. Therefore, no evidence was found for hypothesis 2. This finding is not consistent with the social identity theory.
and existing literature, which stated that employees who highly identifies with the organization are more likely to be strategically aligned (Riketta, 2005; He & Brown, 2013; Ashforth & Anand, 2003).

Table 8. Results of moderated regression analysis for independent variables explaining strategic alignment

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Basic model (1)</th>
<th>Full model (2)</th>
<th>Basic model (3)</th>
<th>Full model (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.01</td>
<td>-.05</td>
<td>-.13</td>
<td>-.11</td>
</tr>
<tr>
<td>Education</td>
<td>.35</td>
<td>.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LntTeam size</td>
<td>.34</td>
<td>.30</td>
<td>.11</td>
<td>.13†</td>
</tr>
<tr>
<td>Team tenure</td>
<td>-.45</td>
<td>-.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational tenure</td>
<td>.25</td>
<td>.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Servant leadership</td>
<td>.27</td>
<td>1.49</td>
<td>.47*</td>
<td>3.00*</td>
</tr>
<tr>
<td>Organizational identification</td>
<td>-.01</td>
<td>8.84</td>
<td>.10</td>
<td>19.17†</td>
</tr>
<tr>
<td>Servant leadership × organizational identification</td>
<td>-9.11</td>
<td></td>
<td>-19.73*</td>
<td></td>
</tr>
</tbody>
</table>

∆R²                                  | -               | -.03           |                 | .14            |
| R²                                  | .23             | .20            | .12             | .26            |

Note: Coefficients presented are betas.
N = 25
† p < .10
* p < .05
** p < .01

4.4 Predictors for financial performance

In order to test hypothesis 3, another regression analysis is performed. Table 9 reports results where financial performance is the dependent variable. Of the control variables in the first basic model, there are only marginal effects, i.e. age (β = .67, p < .10), education (β = -.68, p < .10), and organizational tenure (β = -.95, p < .10). In column 2, strategic alignment was added to the basic model but was not significant (β = -.12, ns). All other variables were also not significant. The tenure control variables were excluded in column 3 and 4. Again, in column 3 and 4 all
variables, including strategic alignment ($\beta = -.22$, ns), remained not significant. This finding suggest that no evidence was found for hypothesis 3.

Table 9. Regression analysis of financial performance

<table>
<thead>
<tr>
<th></th>
<th>Basic model (1)</th>
<th>Full model (2)</th>
<th>Basic model (3)</th>
<th>Full model (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.67†</td>
<td>.65</td>
<td>.14</td>
<td>.14</td>
</tr>
<tr>
<td>Education</td>
<td>-.68†</td>
<td>-.61</td>
<td>-.24</td>
<td>-.12</td>
</tr>
<tr>
<td>Ln team size</td>
<td>-.31</td>
<td>-.27</td>
<td>-.11</td>
<td>-.05</td>
</tr>
<tr>
<td>Team tenure</td>
<td>.16</td>
<td>.10</td>
<td>.10</td>
<td>.10</td>
</tr>
<tr>
<td>Organizational tenure</td>
<td>-.95†</td>
<td>-.89</td>
<td>-.22</td>
<td>-.22</td>
</tr>
<tr>
<td>Strategic alignment</td>
<td></td>
<td>-.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td></td>
<td>-.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.03</td>
<td>.05</td>
<td>-.14</td>
<td>-.19</td>
</tr>
</tbody>
</table>

Note: Coefficients presented are betas.
N = 17
† $p < .10$
* $p < .05$
** $p < .01$

4.5 Mediating role of strategic alignment

To test hypothesis 4, the three-equation approach recommended by Baron and Kenny (1986) was used to test the mediating effect. According to them, the mediating effect is demonstrated when the following conditions apply: the independent variable must be related to the mediator and to the dependent variable, and the mediator must predict the dependent variable while holding the independent variable constant. The results of the three-equation approach are presented in Table 10.

The first step was to show whether the independent variable, servant leadership, was significantly related to the mediator of strategic alignment. Servant leadership predicted strategic alignment ($\beta = .57$, $p < .05$). The second step was to show that servant leadership was significantly related to the dependent variables of financial performance. This was not the case ($\beta = .13$, ns), even after controlling for age, education, and team size. The third step in the three-
equation approach is to run a regression of both the independent variable and the mediator in relation to the dependent variable. Full mediation is supported when the relationship between the independent variable and dependent variable is not significant once the mediator is controlled for. Servant leadership and strategic alignment remained non-significant (β = .42 and β = -.48, ns, respectively). Therefore, no evidence was found for hypothesis 4.

Table 10. Hierarchical regression analysis of control variables, servant leadership, strategic alignment on financial performance

<table>
<thead>
<tr>
<th></th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.02</td>
<td>.08</td>
<td>-.01</td>
</tr>
<tr>
<td>Education</td>
<td>.40†</td>
<td>-.29</td>
<td>-.09</td>
</tr>
<tr>
<td>LnTeam size</td>
<td>.25</td>
<td>-.09</td>
<td>.06</td>
</tr>
<tr>
<td>Servant leadership</td>
<td>.57*</td>
<td>.13</td>
<td>.42</td>
</tr>
<tr>
<td>Strategic alignment</td>
<td></td>
<td></td>
<td>-.48</td>
</tr>
<tr>
<td>ΔR²</td>
<td></td>
<td></td>
<td>-.05</td>
</tr>
<tr>
<td>R²</td>
<td>.27</td>
<td>-.21</td>
<td>-.16</td>
</tr>
</tbody>
</table>

Note: Coefficients presented are betas. 
N = 17 
† p < .10 
* p < .05 
** p < .01

4.6 Additional test

In order to verify whether there was indeed no mediation effect, SEM was conducted through ADANCO software to ensure that there was no mediation effect. The advantages of SEM are that it controls some unreliability in the measures, has a higher power than regression analyses, and is able to control Type I error. The path model is presented in Figure 4. A popular measure of goodness-of-fit index is the standardized root mean residual (SRMR) (Henseler, 2017). SRMR values below .08 typically indicate that the degree of misfit is not substantial (Henseler, 2017). The data did quite fit the model (SRMR = .07). The values of d_{ULS} and d_{G} were 5.18 and 5.30.
These values were not significant which means that model fit has been established (Henseler, 2017).

The results of SEM can be found in Table 11 and is depicted in Figure 4. The results showed that servant leadership was positively associated with strategic alignment ($\beta = .47, p < .05$) and therefore evidence was found for hypothesis 1. The results also show us that the interaction was not significant ($\beta = -.26, ns$). This finding suggests that no evidence was found for hypothesis 2. In consistent with the results of the regression analysis, no evidence was found for hypothesis 3. The effect strategic alignment on financial performance was not significant ($\beta = -.18, ns$). SEM was also used to investigate if the indirect effect was significant. Significant indirect effects would indicate that the addition of strategic alignment to the model significantly decreased the direct effects of servant leadership. The results showed that the indirect effect of servant leadership through strategic alignment on financial was not significant ($\beta = -.01, ns$). Therefore, it can be concluded that no evidence was found that for hypothesis 4.

*Table 11. Summary of structural coefficients.*

<table>
<thead>
<tr>
<th>Effect</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Servant leadership $\rightarrow$ strategic alignment</td>
<td>.47**</td>
</tr>
<tr>
<td>Strategic alignment $\rightarrow$ financial performance</td>
<td>-.18</td>
</tr>
<tr>
<td>Servant leadership $\rightarrow$ financial performance</td>
<td>-.08</td>
</tr>
<tr>
<td>SL×OI $\rightarrow$ strategic alignment</td>
<td>-.26</td>
</tr>
</tbody>
</table>

Note: Coefficients presented are betas.

N = 25

† $p < .10$

* $p < .05$

** $p < .01$
Figure 4. Hypothesized path model with standardized coefficients. The dotted line is the indirect effect. * $p < .05$, ** $p < .01$. 

SL×OI

Organizational identification

Strategic alignment

Servant leadership

Financial performance

-0.26

0.75

0.08

0.59

0.77*

0.47**

-0.18

-0.08
5. Discussion

This study is to my knowledge one of few that investigates the relationships among servant leadership, strategic alignment, financial performance, and organizational identification. The most important finding is that servant leadership affects team’s strategic alignment. Additionally, organizational identification partially moderates negatively the relationship between servant leadership and strategic alignment. This study was unable to report that strategic alignment is related to financial performance and that strategic alignment is a mediator between servant leadership and financial performance.

The finding that servant leadership affects strategic alignment supported the theory that servant leaders, by aligning their interests and inspiring their followers, focuses on forming long-term relationships with employees, which in turn may increase employees’ strategic alignment. This finding is in consistency with that of prior studies and agency theory (Leavy, 2012; House, 1996; O’Regan et al., 2004). It is also more likely that the leader’s and team’s interests are more aligned which will reduce the possibilities of agency conflicts. O’Regan et al. (2004) used a sample of 194 organizations and found that ethical forms of leadership had a significant positive effect on different characteristics of strategy, including internal orientation, external orientation, and employee involvement.

It is somewhat surprising that organizational identification weakens the relationship between servant leadership and strategic alignment, rather than strengthens it. This finding is not consistent with the social identity theory and existing literature (Riketta, 2005; He & Brown, 2013; Ashforth & Anand, 2003). According to prior studies, employees that highly identify with the organization are more likely to work harder to help the organization in enhancing the success of their organizations. Studies have indicated that higher organizational identification (in)directly leads to enhanced performance, greater job satisfaction, turnover rates, lower absenteeism, more extra-role behaviors, increased motivation and improved health and physical well-being (Van Dick et al., 2005; Walumbwa et al., 2011; DeConinck, 2011; Smidts et al., 2001; He & Brown; 2013). Perhaps it takes more time to become strategically aligned than employees identify with the organization.
5.1 Limitations and further recommendations

Due to the nature of this study, it was almost impossible to collect quantitative financial performance on team level. Therefore, financial performance was measured with subjective and perceived measures rather than objective or quantitative measures. Such measures may be biased by common-source variance, due halo effects, central tendency or social desirability bias (Bass, 2000; Jing & Avery, 2016). Such bias is as much as possible reduced, by ensuring anonymity to all employees, ensuring confidentiality, and by aggregating data. In addition, respondents were able to answer the survey at their convenience.

The results of this study were limited to the specific sample used to conduct this research. With only 25 teams (294 respondents), the sample was considerably small compared to other studies (Hur et al., 2011). In addition, the surveys had been sent to teams from a variety of industries (e.g. government, health care). So, the context in which the hypothesized relationships were examined, was not able to control cross-industry and cross-firm variance. The differences among these industries were not assessed in this study and servant leadership or strategic alignment may be more important for some organizations than for others. From an agency perspective, it is plausible that large organizations require more alignment than small organizations. It is also more likely for large organizations to have a strategy than small organizations. Therefore, it is recommended to assess these differences in further research.

Another recommendation for further research is to investigate the differences of moral types of leadership styles, i.e. transformational and servant leadership, on organizational outcomes in one study. The concept of servant leadership overlaps transformational leadership (Stone et al., 2004), and, therefore, it is interesting to see which of those two types of leadership styles contributes more to organizational outcomes.

5.2 Practical implications

Understanding how servant leadership relates to strategic alignment of employees has practical implications. A practical implication of the study is that organizations should select
servant leaders. Such leaders appear to have positive effects on teams’ strategic alignment. For the same reason, servant leadership focuses on employee engagement. Morgan (2017) investigated the effects of focusing on employee engagement and analyzed 250 listed organizations. His results showed that organizations who invest in employee experience or engagement, were four times as profitable than others and outperformed the S&P 500 and NASDAQ (Morgan, 2017). Also, it is widely known that organizations who focus on employee engagement are more able to attract and retain employees, which is very helpful when knowledge is scarce. Google, for instance, is known for its employee engagement and has more than two millions applicants a year.
References


Dawes, J. G. (2012). Do data characteristics change according to the number of scale points used? An experiment using 5 point, 7 point and 10 point scales. *International Journal of Market Research, 40*(1), 61-77.


Appendix A

For further information about the questionnaire, send a mail to f.slagter@hofp.nl.
UNIVERSITY OF TWENTE.
UNIVERSITY OF TWENTE.
Appendix B

Table B1. KMO and Bartlett’s Test

<table>
<thead>
<tr>
<th>KMO and Bartlett's Test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</td>
<td>.78</td>
</tr>
<tr>
<td>Bartlett's Test of Sphericity</td>
<td></td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>1343.55</td>
</tr>
<tr>
<td>df</td>
<td>276</td>
</tr>
<tr>
<td>Sig.</td>
<td>.00</td>
</tr>
</tbody>
</table>

Table B2. Item loadings on team level data

<table>
<thead>
<tr>
<th>Items¹</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Servant leadership</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>.67</td>
</tr>
<tr>
<td>2.</td>
<td>.53</td>
</tr>
<tr>
<td>3.</td>
<td>.49</td>
</tr>
<tr>
<td>4.</td>
<td>.39</td>
</tr>
<tr>
<td>5.</td>
<td>.44</td>
</tr>
<tr>
<td>6.</td>
<td>.60</td>
</tr>
<tr>
<td>7.</td>
<td>.41</td>
</tr>
<tr>
<td>8.</td>
<td>.53</td>
</tr>
<tr>
<td>9.</td>
<td>.62</td>
</tr>
<tr>
<td>10.</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>.53</td>
</tr>
<tr>
<td>12.</td>
<td>.63</td>
</tr>
<tr>
<td>Strategic alignment</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>.79</td>
</tr>
</tbody>
</table>
Table B2. Item loadings on team level data (continued)

2.  .75  
3.  .78  
4.  .34  .57  

**Organizational identification**

1.  .57  
2.  .71  
3.  .69  
4.  .60  
5.  .70  
6.  .54  

**Financial performance**

3.  .85  
4.  .70  

1Only factor loadings ≥.3 are reported
**Table B3. Eigenvalues**

Total variance explained

<table>
<thead>
<tr>
<th>Factors</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sum of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Variance %</td>
<td>Cumulative</td>
<td>Total Variance %</td>
</tr>
<tr>
<td>1</td>
<td>5.82 24.25 24.25</td>
<td>5.28 22.00 22.00</td>
<td>3.76 15.65 15.65</td>
</tr>
<tr>
<td>2</td>
<td>3.08 12.81 37.06</td>
<td>2.53 10.56 32.56</td>
<td>2.97 12.39 28.04</td>
</tr>
<tr>
<td>3</td>
<td>1.97 8.21 45.29</td>
<td>1.53 6.37 38.93</td>
<td>2.54 10.58 38.62</td>
</tr>
<tr>
<td>4</td>
<td>1.74 7.25 52.52</td>
<td>1.33 5.55 44.47</td>
<td>1.41 5.85 44.47</td>
</tr>
<tr>
<td>5</td>
<td>1.13 4.72 57.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1.08 4.49 61.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>1.05 4.39 66.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>.86 3.57 69.68</td>
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<td></td>
</tr>
<tr>
<td>9</td>
<td>.81 3.38 73.05</td>
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</tr>
<tr>
<td>10</td>
<td>.75 3.11 76.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>.70 2.90 79.06</td>
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<td></td>
</tr>
<tr>
<td>12</td>
<td>.62 2.56 81.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>.57 2.36 83.99</td>
<td></td>
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<td>14</td>
<td>.55 2.28 86.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>.50 2.09 88.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>.47 1.95 90.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>.43 1.77 92.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>.37 1.52 93.60</td>
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<td>19</td>
<td>.33 1.37 94.98</td>
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<td></td>
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<td>21</td>
<td>.27 1.14 97.37</td>
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<td></td>
</tr>
<tr>
<td>22</td>
<td>.26 1.06 98.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>.20 .83 99.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>.18 .74 100.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Axis Factoring.
Figure B1. Scree plot
Appendix C

Hair et al. (2013) identified four assumptions that have to be met in the course of calculating regression coefficients and predicting the dependent variable. These assumptions are in four areas: linearity of the phenomenon, homoscedasticity, independence of error terms, and normality of the error term distribution. These assumptions are checked one by one in this study. In addition, multicollinearity is identified.

Linearity of the relationship between the dependent and independent variables represents the degree to which the change in the dependent variable is associated with the independent variables. The linearity is examined through residual plots and are shown in Figure C1. From Figure C1 it can be concluded that the relationships between both dependent and independent variables are linear.

*Figure C1. Residual plots*
Homoscedasticity describes a situation in which the error term is the same across all values of the independent variables (Hair et al., 2013). Levene’s test is used to assess the equality of variances and can be found in Table C1. Both dependent variables are not statistically significant and indicates that there is no difference in the variances.

**Table C1. Levene’s test**

<table>
<thead>
<tr>
<th></th>
<th>Test of Homogeneity of Variances</th>
<th>Test of Homogeneity of Variances</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Levene statistic</td>
<td>df1</td>
</tr>
<tr>
<td></td>
<td>1.43</td>
<td>7</td>
</tr>
<tr>
<td>Dependent variable: Strategic alignment</td>
<td>1Dependent variable: Financial performance</td>
<td></td>
</tr>
</tbody>
</table>

Independence of error terms means that the predicted value is not related to any other predictions. Identifying this occurrence is done by plotting the residuals against any possible sequencing variable or by calculating the Durbin-Watson test. The Durbin-Watson test tests for serial correlations between errors. The test statistic can vary between 0 and 4 with a value of 2 meaning that the residuals are uncorrelated (Hair et al., 2013). As a rule of thumb, the Durbin-Watson has to be around 2 (1.5 – 2.5) in order to be independent. Values outside this range could be cause for concern. The results are shown in Table C2 and indicate that the residuals are uncorrelated.

**Table C2. Independence of error terms**

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. Error of Estimate</th>
<th>Durbin Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>.69¹</td>
<td>.48</td>
<td>.23</td>
<td>.65</td>
<td>2.01</td>
</tr>
<tr>
<td>¹Predictors: (Constant), Age, education, ln team size, team tenure, organization tenure, servant leadership, organizational identification.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>²Dependent variable: Strategic alignment.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
Table C2. Testing for independence of error terms (continued)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. Error of Estimate</th>
<th>Durbin Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.59 ¹</td>
<td>.34</td>
<td>-.05</td>
<td>.76</td>
<td>1.73</td>
</tr>
</tbody>
</table>

¹Predictors: (Constant), Age, education, ln team size, team tenure, organization tenure, strategic alignment.

Normality tests are used to determine if data is distributed normally. Clason and Dormody (1994) stated that it is difficult to see how normally distributed data can arise in a single Likert-type item. The data will frequently be skewed, and often these items do not capture the true limits of the attitude. Such data are comparable only in terms of relative magnitude rather than actual magnitude. For Likert scale data the assumption of normality cannot possibly be justified (Gibbons & Chakraborti, 2014). Data that come from a normal distribution can take on all real values (infinity values) and are not limited to integer values. Therefore, this assumption can be ignored.

In addition, multicollinearity is examined. Multicollinearity refers to the correlation among multiple independent variables (Hair et al., 2013). In the case of multicollinearity, the single independent variable’s predictive power is reduced by the extent to which it is associated with the other independent variable. If VIF is lower or equal to 10 and tolerance is higher or equal to .10, then there is no multicollinearity (Hair et al., 2013). The results of testing multicollinearity is shown in Table C3. The tolerance and VIF for the data were between .24 and .77 and between 1.30 and 4.25. Thus, there was no multicollinearity.
Table C3. Multicollinearity tests

<table>
<thead>
<tr>
<th></th>
<th>Strategic alignment</th>
<th></th>
<th>Financial performance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
<td>VIF</td>
<td>Age</td>
<td>.53</td>
</tr>
<tr>
<td></td>
<td>Tolerance</td>
<td>VIF</td>
<td>Education</td>
<td>.55</td>
</tr>
<tr>
<td></td>
<td>Tolerance</td>
<td>VIF</td>
<td>LnTeam size</td>
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<tr>
<td></td>
<td>Tolerance</td>
<td>VIF</td>
<td>Team tenure</td>
<td>.37</td>
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<td></td>
<td>Tolerance</td>
<td>VIF</td>
<td>Organizational tenure</td>
<td>.29</td>
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<td></td>
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<td>VIF</td>
<td>Servant leadership</td>
<td>.68</td>
</tr>
<tr>
<td></td>
<td>Tolerance</td>
<td>VIF</td>
<td>Organizational identification</td>
<td>.77</td>
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