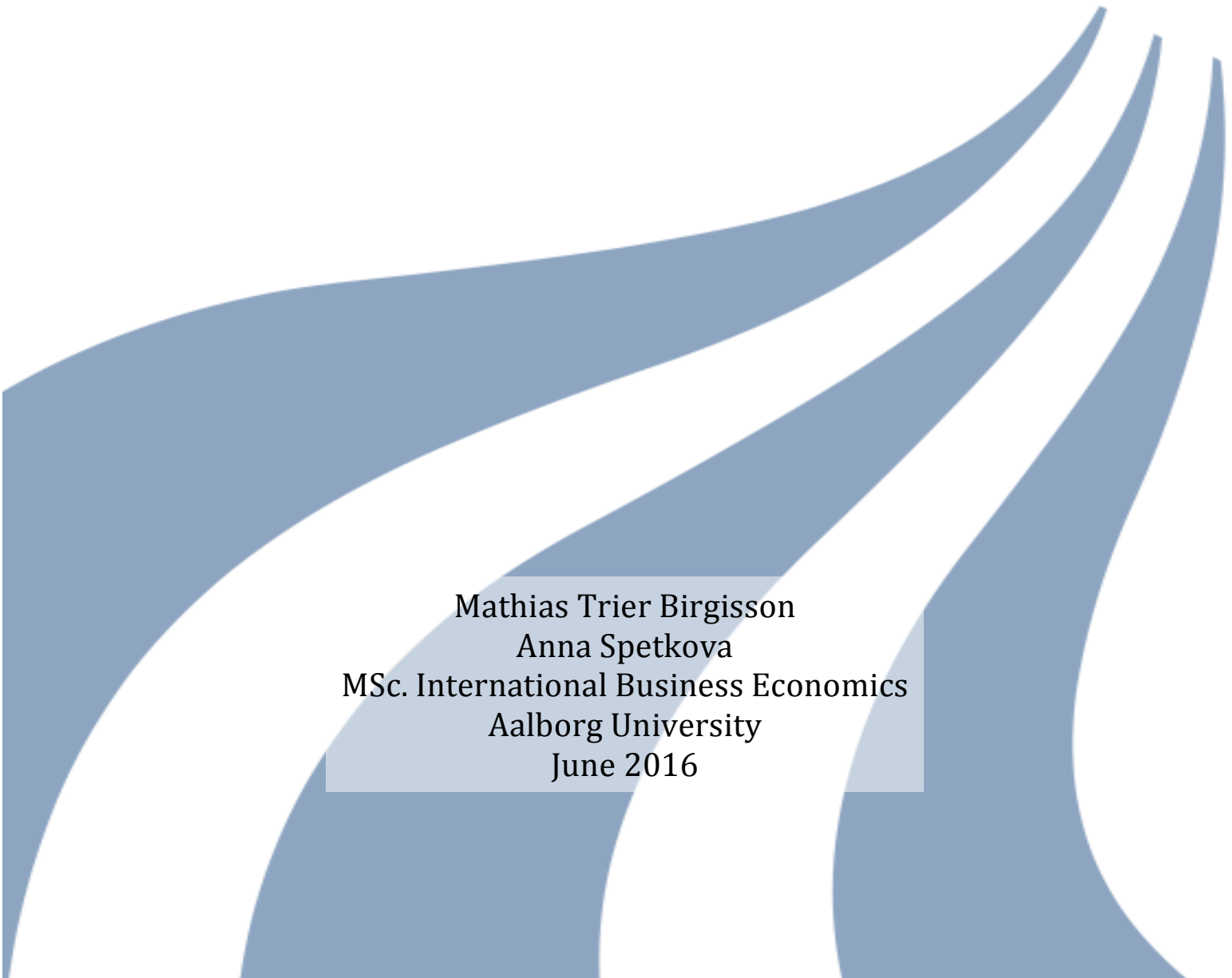


Master's Thesis

Can the use of Change Management Principles Overcome The Everlasting High Failure Rates of Cross-Border Mergers and Acquisitions?



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Abstract

Purpose: The purpose of this thesis is threefold. The first purpose is to discover the relationship between CBM&A performance and change management that promise success. Furthermore, this thesis aims to contribute to research with the empirical testing of the main principles found in the prescriptive change management models. Finally, the aim of this thesis is to examine whether successful CBM&As are using change management principles differently than unsuccessful CBM&As.

Methodology: To discover the relationship between CBM&A and change management, both fields were thoroughly reviewed through a literature review. Next, the main principles of change management were identified through a structured four-step process. By adopting a quantitative approach stemming from functionalist paradigmatic standpoint, this thesis further employs a cross-sectional survey design using self-completion questionnaires and statistical tests to examine the use of change management principles in successful CBM&As, and the difference between successful and unsuccessful CBM&A in the use of the change management principles.

Findings: The findings of the literature review suggest that although high failure rates of CBM&A are still a hot topic, with integration and its inevitable part, change management, playing a crucial role, there is has been no research done to explore the link between the field of CBM&A performance and change management. Further research of change management field revealed eight main principles by specifically looking at teleological models that emphasize planned change or planned and emergent change. These were: "Define the initiative", "Challenge the status quo", "Lead the change and build a change leader team", "Develop a vision", "Communicate the change vision", "Empower people for change", "Guide and motivate the change process", and "Make change last". Next, the findings suggest that successful CBM&A employ the eight change management principles to a great extent. Yet some minor divergences exist on the sub-dimensional level of the principles. These include the misalignment in the question of involvement of different employees and middle managers when defining the M&A initiative, the presence of some sources of complacency, and low diversity of the members of the guiding coalition in terms of them belonging to different stakeholder groups. Finally, through testing for statistical significance, the findings suggests that the use of change

management principles between successful and unsuccessful CBM&As differ in four principles: “Develop a vision”, “Empower people for change”, “Guide and motivate the change process”, and “Make change last”.

Research limitation/implications: The research design limits the outcomes of this thesis as low response rates and the need to merge two samples lead to non-response error and sampling error which together decrease the external validity. Consequently, the samples used in this thesis might not be representative of whole population, thus the generalizability of thesis’ findings is limited. Nonetheless, the results can be used as a foundation for further research, which is needed to establish external validity of our results. Lastly, due to our choice of a cross-sectional design and the weak internal validity hereof, we are not able to conclude causality, although we can infer it.

Practical implications: The findings have important implications for management as by employing the change management principles managers and organizations can reach their goals and create successful CBM&As even in the challenging environment with high failure rates. Consequently, mainly the four identified principles, which proved to be statistically different in their use between successful and unsuccessful CBM&A, establish a prescriptive framework managers can use to gain success.

Originality/value: Firstly, this thesis contributes to the discussion of targeting the historically low success rates of CBM&As and establishing the linkage between performance and change management. Moreover, this thesis contributes to the understanding and validity of the planned and theological change management models. This was achieved through responding to a call for empirical testing and subsequent finding of empirical support for some of the principles. Moreover, this research lays solid foundations for next research. Specifically, we suggest the use of structured interviews to increase the response rates, and conducting the research in other context in in order to be able to generalize to a greater population. Additionally, we suggest further research to adopt a longitudinal research design to be able to determine the actual causality, and whether the sequence of the principles affect the performance of the CBM&A.

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Chapter 1: Introduction

1.1 Mergers and Acquisitions trends and development

With the world becoming increasingly globalized as national boundaries erode, new opportunities for companies emerge. Mergers and acquisitions (M&As) which are one type of Foreign Direct Investment (FDI) have long been a preferred alternative for strategic expansion (Shimizu et al., 2004). They can enable a company to renew its market position at a speed not achievable by internal development (Haspeslagh and Jemison, 1991).

Although M&As have been relatively rare until 1980s, the liberalization of FDI in the following decade has resulted in tremendous increase in the popularity of this strategy. In monetary terms, the total value of M&As completed between 1998 and 2000 reached nearly US\$4 trillion, which accounts for more than the total value of all M&A deals finalised during the previous 30 years (Henry, 2002). While M&A market is characterised by a cyclical nature, the total number of M&As has been increasing at a fast rate (see Figure 1.1). This phenomenon can be ascribed to the consolidation of industries and regions, as well as to the overall dynamic nature of the international trade (Shimizu et al., 2004). As seen from Figure 1.1, the total number of M&A deals totalled 45,000 and was valued at US\$4.5 trillion in 2015 (IMAA, 2016).

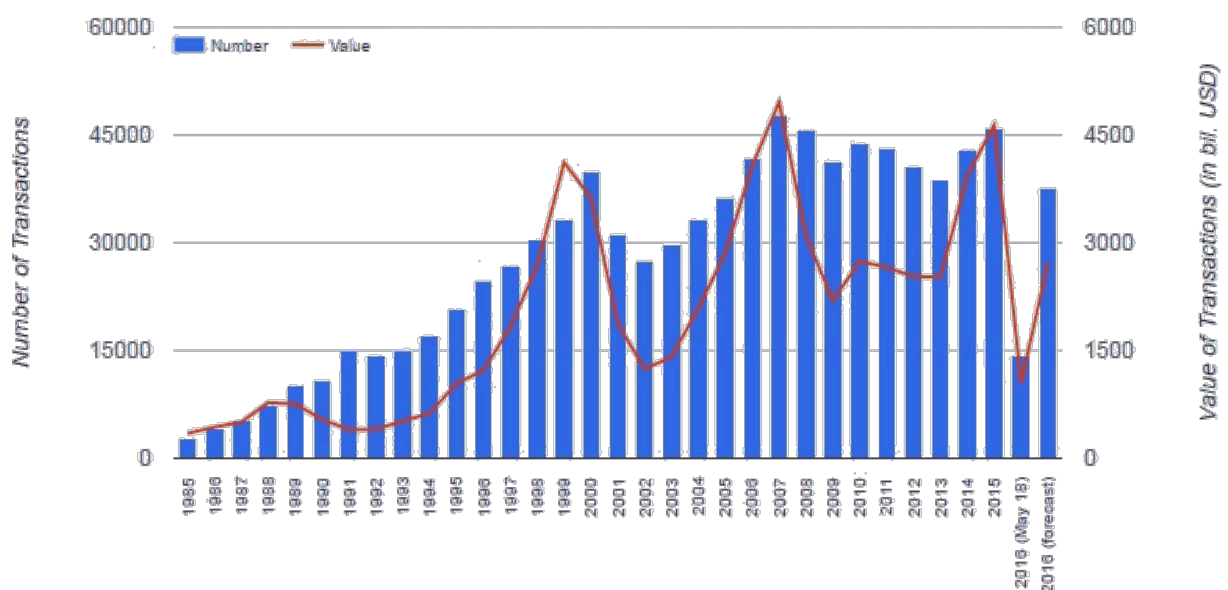


Figure 1.1 - Mergers and acquisitions worldwide (IMAA, 2016)

1.2 Cross-border Mergers and Acquisitions

While the majority of M&As consider two companies in the same country, more than 40% of the M&As completed between 1999 and 2000 included companies from two different countries (Hiit et al., 2001). These M&As are known as cross-border mergers and acquisitions (CBM&A). The evidence shows that the rate of CBM&As has been growing at a fast pace since 2000. However, CBM&As also follow the cyclical pattern of the overall M&A market, thus since their peak in 2007 when they reached US\$1 trillion, they experienced a downturn in 2009 when they totalled approximately US\$250 billion (See Figure 1.2). Following the most recent statistics, the value of cross-border deals rose to US\$644 billion in 2015, which is a 61% increase over the same period of 2014 (UNCTAD, 2015). The current economic and financial trends predict further growth of CBM&As although at a slower pace. In terms of the investor landscape, companies from developing and transition economies are securing a larger share in the total CBM&A value, which rose from about 10% in 2003 to almost 40% in 2012 and has stabilized since then (UNCTAD, 2015).

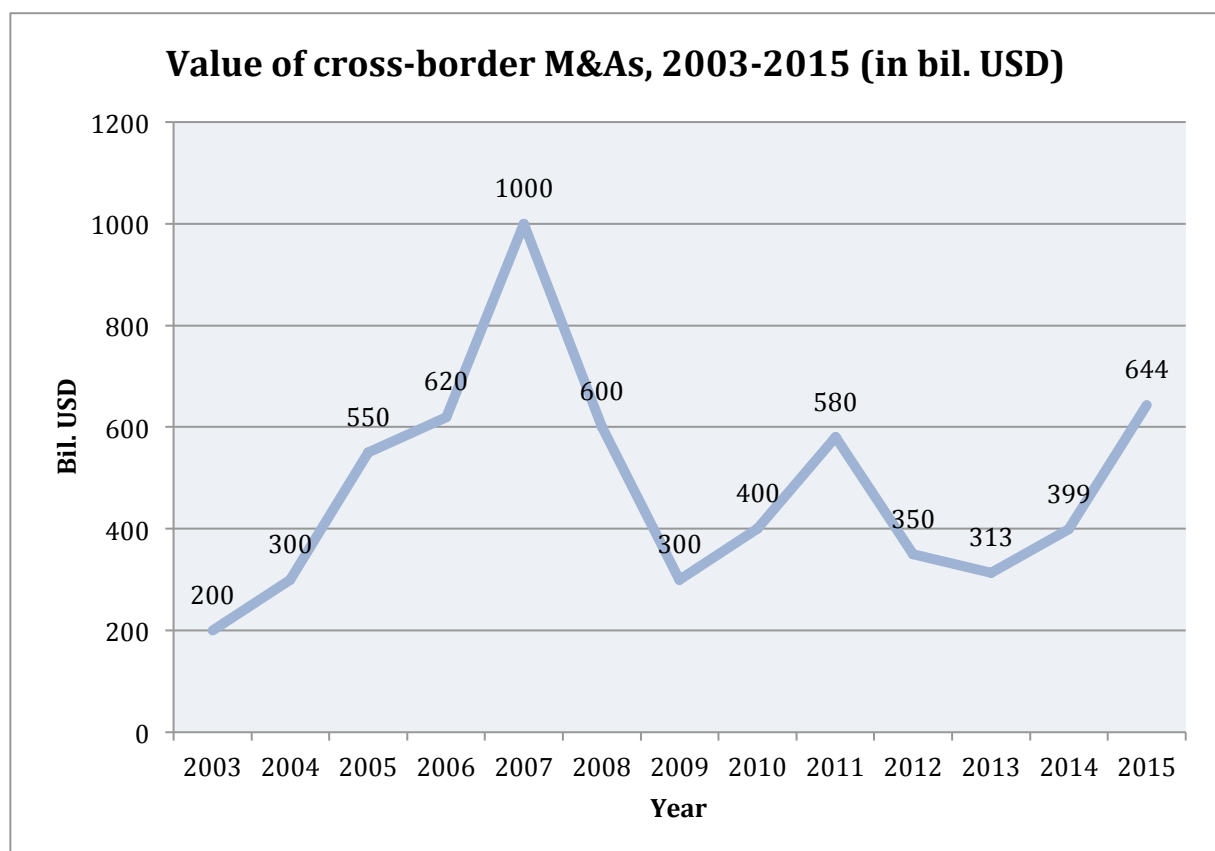


Figure 1.2 - Trends in CBM&A (UNCTAD, 2015)

Naturally, the increasing globalization of business has emphasised both the opportunities and pressures to participate in cross-border deals (Hitt, 2000). Meanwhile the field of CBM&As grows in importance, a review of the academic literature points at the fact, that the literature has not kept pace with the growth of this field. Instead, the majority of research has been confined to the study of domestic M&As, which is still prevailing in the overall M&A research (Shimizu et al, 2004; Datta and Puia, 1995). This draws our research to the gap of the CBM&A field.

1.2.1 High failure rates

Next, the attention of this project turns to an interesting yet controversial topic within M&A field, the M&A performance. Bearing in mind the overall growth of M&A market it is surprising how low the M&As' performance in conventional terms is considered to be. Both the researchers and consulting companies are not in total alignment about the exact M&As' failure rates, so they range from as high as 80% (Marks and Mirvis, 2001; Tetenbaum, 1999) to as low as 40% (LaJoux, 1998; Kitching, 1974). Interestingly, in spite of very unique challenges cross-border deals are faced by, such as "liability of foreignness", "acculturation", and "double layered acculturation" (Hofstede, 1980; House et al., 2004; Zaheer, 1995; Barkema et al., 1996; Larsson and Lubatkin, 2001), there is evidence that CBM&A outperform purely domestic transactions and create value (Hopkins, 1999; Markides and Ittner, 1994). Following Ghosal (1987), the unique opportunities of CBM&As, which include leveraging national differences such as wages and cost of capital, the economies of scale, and the economies of scope imply that CBM&As would outperform the domestic M&As. Nonetheless, the majority of CBM&As is not considered to be successful. Studies such as the one by KPMG claimed that 53% of cross border acquisitions destroyed shareholder value while only 17% created it (Economist, 1999).

1.3 Change management

One of the widest cited reasons for both M&A and CBM&A failure is the set of integration challenges related to the post acquisition or merger stage (Child et al., 2001). Seen from a different perspective, integration is also the core of M&A success. While the literature considers many aspects of integration in relation to success, it is notable that the core of integration, the actual change process, is vastly omitted. Although numerous authors

emphasize that integration is one of the greatest changes that can happen to a business (Mirvis and Marks, 1992; DiGeorgio, 2002; Evans, Pucik and Barsoux, 2002), and change management seems to be the key process in managing the change successfully (Evans, Pucik and Barsoux, 2002), there is no research done which would focus on the linkage between M&A performance and change management. This gap in the research is elevated by the fact that change management seems to play an increasing role in businesses. Following Graetz (2000), the leadership of organizational change is the primary task of management nowadays, in the environment characterized by globalisation, the fast pace of technological innovation, a growing knowledge workforce, and changing demographic trends. A part of its growing importance, what change management also shares with M&A field, are the high failure rates. They are often referred to as 70% (Beer and Nohria, 2000; Kotter, 1995, Keller and Aiken 2009a). While academics as well as practitioners devoted plenty of time to researching and finalizing various sets of change management principles which would enable companies to manage change effectively (Kouzes and Posner, 2007; Kotter, 1995; Lewin, 1947; Ulrich, 1998; Kanter et al., 1992; Beer et al., 1990; Garvin, 2000), there is a call for empirical testing of these models (By, 2005; Appelbaum et al. 2012).

1.4 Problem field

The increasing importance of CBM&A field as well as managing change in the organizations, corresponding to the current trends of globalization and social and demographical changes related to it, sets the scene for establishing our problem field. We are further triggered to explore this field by seeing the extremely high failure rates for both CBM&A deals, and organizational change management. Moreover, following the research it is undeniable what a vital role integration, which essentially involves managing all kinds of changes in merging organizations, plays. Hence, we respond to a gap in research in both the CBM&A field and the intersection between the CBM&A and change management fields. Thus, we seek to discover the relationship between M&A performance and change management that promise success. Furthermore, we aim to contribute to research with the empirical testing of the some of the ideas in the prescriptive change management models. We do so by answering the following research questions:

RQ1: According to literature, what role does change management play in CBM&A?

RQ2: According to literature, what are the principles of change management?

RQ3: To what extent do successful companies engage the principles of change management in CBM&As?

RQ4: How does the use of change management principles differ between successful and unsuccessful CBM&As?

1.5 Road map

After the initial introduction into the problem field and specification of the research questions, which we aim to answer in this project, we will briefly outline its structure. The second chapter, "Literature review" aims to answer our first two research questions. Hence, it is divided into two parts where the first one sets the scene by presenting the background of the M&A field and through the review of the most applicable literature considers the role of change management in CBM&A. The second part explores the field of change management and our search for the most relevant principles of change management. Here, the final principles of change management are uncovered and presented.

The next chapter, "Methodology", explicitly states the methodological considerations and the paradigmatic position of this study. This is done in order to justify the chosen research design of this project including the choice of the methods and techniques for collecting and analysing the data. The following chapter, "Analysis", aim to present and discuss the data gathered in order to finding the answers to the final two research questions. This chapter is further divided into two parts, out of which the first one deals with the third research question when exploring the extent to which successful CBM&As engage the principles of change management, while the second seeks to answer the final research question. Thus, it describes the differences between the use of change management principles between successful and unsuccessful CBM&As via statistical testing.

The following part of this project includes the research reflections and inevitable limitations of this project. This project if rounded up with a coherent conclusion where

all the main findings are summarized and presented to the reader in a logical order following the research questions.

Chapter 2: Literature review

In this chapter the main concepts and current literature on M&A, and change management is reviewed in order to answer our first two research questions:

RQ1: According to literature, what role does change management play in CBM&A?

RQ2: According to literature, what are the principles of change management?

In order to do so, we first research key concepts of M&A field such as M&A performance, including their main phases with a focus on integration and the correlation to change management. We proceed to the literature review on change management, which consists of defining the most relevant type of change for this thesis, and discussing different change management schools. Finally, we attempt to bring together the main findings of both fields to identify the streams within change management in which main principles can be found for our research.

2.1 Mergers and acquisitions

2.1.1 M&A typology

M&A is a term that generally refers to the consolidation of companies (Bierman, 2015). It is however needed to point out, that there are differences in the legal terminology between a merger and an acquisition. While the former refers to an operation where two or more companies are joined together to create a new company, the latter considers an acquisition of sufficient shares to gain control over a company. In other words, an acquisition is a purchase of one company by another (Bierman, 2015). Here, no new company is created (Bierman, 2015).

In practice, how the particular transaction is labelled depends mostly on the accounting and tax implications of the deal, as well as on public relations strategies (Evans, Pucik and Barsoux, 2002). Consequently, many mergers are structured as acquisitions; meanwhile some acquisitions are labelled as mergers. Therefore, often the term M&A is used to refer both to mergers and acquisitions. In spite of vast media coverage of mega-mergers such as Daimler-Chrysler or Citibank and Travelers, these so called true 'mergers of equals' form only a minority of the overall M&A deals (Zaheer, Schomaker,

Genc, 2003). This is rather interesting considering the clear benefits that appear from worldwide industry consolidation, as acknowledged by Schmidt and Ruhli (2002) who noted the benefits within the European pharmaceutical industry. Overall, in spite of a disunited definition of M&A, and the fact that acquisitions are prevailing among M&A deals, following (Evans, Pucik and Barsoux, 2002; 252) “what matters is the strategic intent, not the label”. For the purpose of our project, we are interested in researching both mergers and acquisitions, as they both involve a certain degree of integration and change will play an important role.

Prior to moving further in our journey to discover the overlap between change management and M&A, it is imperative to understand how M&A arise in different forms. Academics and practitioners distinguish between two main forms of M&A: domestic and cross-border (CBM&A). While the domestic mergers consider all participating firms which originate and act in the same country, firms in CBM&A act across the borders. Therefore, the domestic and the target countries are different in CBM&A. Based on the growing importance of globalization, international trade and foreign direct investment (FDI), CBM&A attract increasing numbers of scholars (Hitt et al., 2001). Naturally, with the international nature of CBM&A, unique challenges reflecting diverse regulatory environments, cultural backgrounds, and economic conditions arise. These are “liability of foreignness”, “acculturation”, and “double layered acculturation” which are being explored by Hofstede (1980), House et al. (2004), Zaheer (1995), Barkema et al. (1996), Larsson and Lubatkin (2001), and are briefly outlined below.

Liability of foreignness is a common phase for any firm which enters a foreign market. These liabilities stem from lack of familiarity, roots, and legitimacy in a local environment, and lead to more negative reputation of the foreign firm (Zaheer, 1995). Next challenge of CBM&A, originally defined as changes induced in two cultural systems caused by diffusion of cultural elements (Berry, 1980), is acculturation. Larsson and Lubatkin (2001) examined the correlation between the level of integration and the level of acculturation needed, and found out that with growing level of integration, the need for strong acculturation increases. Closely linked to acculturation is double layered acculturation. This concept reflects the double influence of organizational as well as national cultures which is characteristic for CBM&A (Barkema et al, 1996). Merging within different countries where the above-mentioned challenges emphasise the

importance of integration forms the base of our M&A context, which is CBM&A. We will introduce the integration process and its linkage to change management later on in this section.

Apart from the differentiation between domestic and cross-border M&A, we close this sub-section with three general types of M&A: horizontal, vertical, and conglomerate. Horizontal and vertical mergers are merges between two companies operating in the same industry (Hu and Huynh, 2015). The difference between them is that while horizontal mergers are formed by directly competing companies, vertical mergers comprise related companies within the same supply chain (Hu and Huynh, 2015). Conglomerate mergers are entirely different kind of M&A, as they are formed by firms operating in unrelated industries (Hu and Huynh, 2015). Naturally, conglomerate mergers also have very different motives usually related to diversification of the portfolio to lower the risk. In contrast, the horizontal mergers aim to bring cost and revenue synergies, and the vertical mergers aspire to achieve economies of scale and also decrease risk (Hu and Huynh, 2015).

2.1.2 M&A performance

After defining and classifying different types of M&A, we move on to one of the core, yet controversial topics within M&A; M&A performance. As mentioned in the Introduction, M&A are cursed with failure rates ranging from 40% (LaJoux, 1998; Kitching, 1974) to 80% (Marks and Mirvis, 2001; Tetenbaum, 1999). High failure rates in this range are reported by various consulting companies, as well as by scholars (Hopkins, 1999; Schoenberg, 2006; Iskandarani, 2010; Bauer and Matzler, 2014). However, it is vital to take into account the different measures of performance and the impact they make. Therefore, while financial disciplines have relied on objective performance metrics such as share-prices and accounting data, organizational behaviour and strategic management frequently relied on more subjective performance indicators, such as managers' self-assessments (Schoenberg, 2006). Overall, the stock-based measures are predominant in research and they suggest higher failure rates (Haspeslagh and Jemison, 1991) than the value creation measures (Herd and McManus, 2012).

While the overall success rate seems to be quite unsatisfactory, there is evidence that the cross-border M&A outperform purely domestic transactions, and create value

(Hopkins, 1999; Markides and Ittner, 1994). Although research on cross-border deals has not been that extensive, according to Gonzales et al. (1998) and Hopkins (1999), there are theoretical reasons to believe that cross-border deals would outperform domestic ones. Following Ghosal (1987), these are leveraging national differences such as wages and cost of capital, economies of scale, and economies of scope. The latter two relate to expanding and exploiting potential scale economies in any activity, and sharing of investments and costs across products and markets (Ghosal, 1987). As described above, the evidence also shows that cross-border acquirers purchase companies in familiar businesses to which they are able to add value (Evans, Pucik and Barsoux, 2002). Moreover, they also execute multiple acquisitions, thus they accumulate experience, learn from mistakes, and eventually execute more effectively (Barkema et al., 1996). Companies such as Cisco and GE even consider competence in CBM&A as one of their core capabilities (Evans, Pucik and Barsoux, 2002). In spite of the unique cultural challenges CBM&A face, this also lead them to pay more attention to the intangible but critical HR aspects of M&A management. This way, CBM&A become more successful than domestic M&A in terms of value creation (Evans, Pucik and Barsoux, 2002).

2.1.3 Three literature streams

Thorough literature review uncovered the three main streams, which aim to identify the factors that may explain the differences in performance between individual M&A: strategic fit, organizational fit, and integration. We proceed with outlining the core focus of each stream as well as its main researchers. However, our main attention belongs to the integration in which we find a direct correlation to change management.

Strategic fit

The literature on strategic fit considers the link between performance and the strategic attributes of the merging companies. According to Cartwright and Schoenberg (2006), it is in particular the extent to which a target company should be related to that of the acquirer. Although no great consensus has been reached (King et al., 2004; Seth, 1990), two prevailing value creation mechanisms have been defined. These are founded in resource-based view, and consider either resource similarity or resource complementarity.

The former argues that the similarity between merging companies is the primary source of strategic fit (Palich, Cardinal and Miller, 2000; Robins and Wiersema, 1995), while the latter argues the same for the complementarity of acquirer and target (Capron, Dussauge, and Mitchell, 1998; Harrison et al., 1991; Wang and Zajac, 2007). Knowledge transfer was also recognised as base for a value creation mechanism in M&A (Ahuja and Katila, 2001).

In terms of M&A different phases, strategic fit can be classified under the pre-merger phase. This phase mainly consists of firm valuation, planning, and preparation work undertaken in order to examine the targets, and continues until the deal is closed (Evans, Pucik and Barsoux, 2002). This is known as due diligence. Due diligence often involves the assessment of the human and cultural factors, which deserved a great deal of attention in literature, and is known as 'cultural fit' (Evans, Pucik and Barsoux, 2002).

Organizational fit

Smoothly we move on to the second literature stream, which is the organizational fit, also known as the cultural fit, which we just mentioned. Although cultural fit should ideally form a part of the pre-M&A phase, which is due diligence, it is inevitable that it is also present as a part of the whole integration process in the post-M&A phase (Cartwright and Schoenberg, 2006).

Organizational or cultural fit regards the cultural dynamics of M&A including the behavioural and emotional response of employees involved (Cartwright and Schoenberg, 2006). This growing field seeks to explain M&A underperformance in terms of dysfunctional impact of the event itself, the associated uncertainty, as well as the integration process on the individuals impacted (Cartwright and Schoenberg, 2006).

Within this literature the lack of cultural compatibility or cultural fit is a much-cited reason for M&A failure. Researchers seek to classify merging companies' national (Hofstede, 1984) and organizational (Cameron and Quinn, 1988; Zaheer, Schomaker and Genc, 2003) cultures to evaluate if there is certain level of cultural compatibility. Overall, the relationship between intangible cultural aspects continues to confuse researchers, which results in contradictory findings in results (Cartwright and Schoenberg, 2006).

In spite of the importance of both strategic and organizational fit in answering the question of low M&A performance, as Cartwright and Schoenberg (2006) note, this cannot be explained without taking the wider integration process into account. Therefore, we move on to the third and final stream in the M&A literature related to performance, which is the integration.

Integration

Lack of integration is probably the most widely cited root of M&A failure (Shrivastava, 1986; Hu and Huynh, 2015) and integration the main determinant of M&A success (Evans, Pucik and Barsoux, 2002; Haspeslagh and Jemison, 1991). According to scholars as well as practitioners, the ability to add value in the merged companies as well as the realization of possible synergies in any M&A depend mostly on what happens after the deal is complete (Evans, Pucik and Barsoux, 2002). Thus, it is rather peculiar that only 8% of the time top management spends on M&A deal is devoted to implementation (Kantner, 1989).

The supporters of lack of integration being a main cause of M&A failure usually point to various examples of unsuccessful cases such as Coca Cola acquisition of Wine Spectrum, which led to disastrous performance and, as most of the cases, ended up with a divestment (Shrivastava, 1986). Shrivastava (1986) for instance acknowledges that integration is a rather complex process, which happens at various levels. Subsequently, his model distinguishes between procedural, physical, and managerial integration. Shrivastava (1986) argues, that negligence of any of the three forms of integration can lead to the M&A failure.

Significant value creation (Haspeslagh and Jemison, 1991) as well as realization of expected synergies (Evans, Pucik and Barsoux, 2002) are among the main arguments for the positive influence of integration on M&A performance. Haspeslagh and Jemison (1991) for instance argue that transfer of capabilities as well as collaboration of the people from both companies is essential for value creation in M&A. They also note, that the collaboration is dependent on the will and abilities of management from both companies to collaborate. Salama, Holland and Vinten (2003) further acknowledge that

the key to integration is to attain the participation of people without compromising strategic task. This is also reflected in Hu and Huynh's (2015) study where the importance of stakeholder management to the firm's performance is highlighted. Moreover, the authors argue that stakeholder management is especially relevant in CBM&A, which are the context of our research.

In terms of M&A phases, the integration topic considers a broad range of integration implications; from the choice of integration strategy in the pre-merger phase to the actual integration process in the post-merger phase (Cartwright and Schoenberg, 2006). Integration strategy attracted the attention of Mirvis and Marks (1992) who view integration as a degree of change needed from both merging firms. Their typology distinguishes between various types of mergers, from 'stand-alone' mergers, which require little or no change by either company, to 'transformation' mergers where there is a high degree of change from both companies. Respective to mergers of equals there are 'best of both' types, where there are substantial changes in both companies (Mirvis and Marks, 1992). Bearing in mind that the focus of our research is both mergers and acquisitions, we will be most likely dealing with different types of M&A.

Moving on to the post-merger phase, one of the most widely cited integration models is the matrix by Haspeslagh and Jemison (1991). The authors focus on the integration process after the M&A deal has been completed. The core of their matrix is the evaluation of two factors: strategic interdependence, and organisational autonomy. The former is defined as interlinking between two merged units and how their strategic capabilities can be exchanged between them, while the latter refers to the level of need for independent organizational identity. After the evaluation of both criteria, the preferred integration approach is chosen between the four options: Absorption, Preservation, Symbiosis, and Holding. While in 'Holding' the need for target firm's autonomy as well as the need for strategic interdependence are low, in 'Symbiosis' both criteria are high. This matrix resembles Mirvis and Marks's (1992) model, and we can see that their merger strategies with highest degree of change needed, 'best of both' and 'transformation', correspond with Haspeslagh and Jemison's (1991) 'Symbiosis' type of the merger. DiGeorgio (2002) acknowledges that the higher degree of integration, the more difficult success becomes. Subsequently, he proposes so called 'systems approach' which emphasises the importance and inevitability of change and leadership to succeed.

Nonetheless, it is essential to emphasise that no matter the strategy/approach, change will happen and is required.

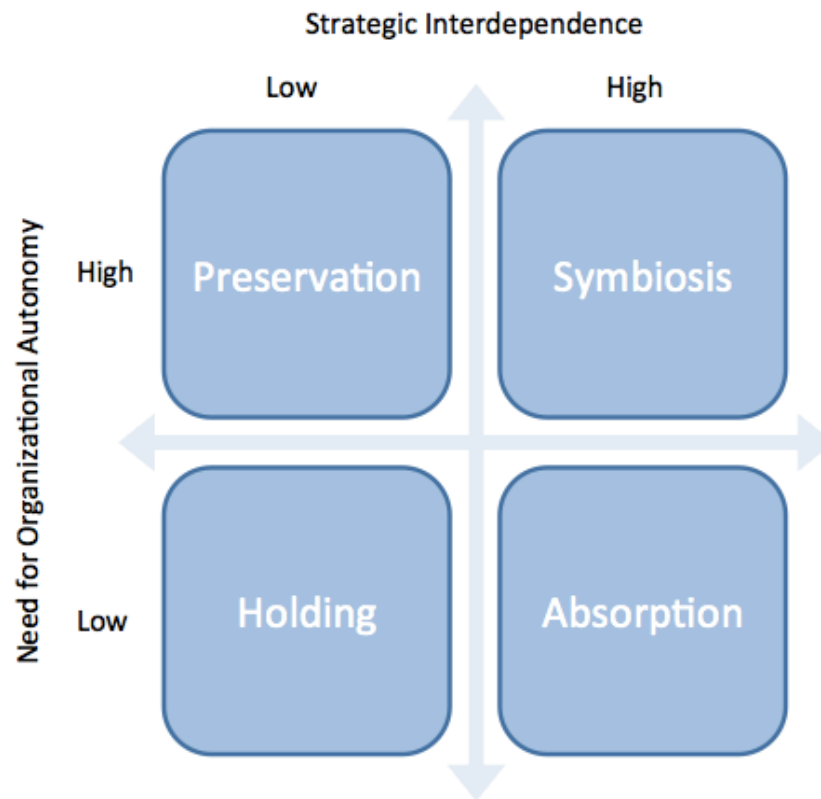


Figure 2.1 - M&A Integration matrix by Haspeslagh and Jemison (1991)

2.1.4 Integration and change management

After introducing the broad field of M&A, with a special focus on CBM&A and their performance, it is vital to answer RQ1 and uncover the role of change management in CBM&A literature. First of all, it is needed to point out, that numerous authors mention a change in relation to M&A integration, which is seen as the core of M&A success. Specifically, integration gets emphasised as one of the greatest changes that can happen to a business (Mirvis and Marks, 1992; DiGeorgio, 2002; and Evans, Pucik and Barsoux, 2002). Not surprisingly, managing integration involves many aspects that lead to that one word: change. These include combating the winner-loser syndrome, preparation of the employees for the change, as well as the schedule for the changes, putting in place new structure, policies and practices, and more (Evans, Pucik and Barsoux, 2002).

In spite of the clear linkage uncovered, there is no thorough research done which would focus on the role of change management in M&A performance. The situation seems

slightly different among practitioners, as many companies who succeed in M&A note the inevitable presence of change linked to the importance of change management. For instance, General Electric emphasizes the inevitability of change in M&A by the following quote: “If you do not want to change, don’t put yourself for sale.” (Evans, Pucik and Barsoux, 2002: p.263). In spite of practical acknowledgement of change among firms, and the fact that some researchers note the correlation between a good track in managing change and capabilities in managing M&A (Evans, Pucik and Barsoux, 2002), there is a significant gap in research. Therefore, we move on to the literature review on change management to be able to gather the main principles, which will guide our study with the aim to answer the identified gap in the research.

2.2 Change management

CBM&A with high failure rates up to 80% correspond to the high failure rates of change initiatives (e.g. Beer and Nohria, 2000; Kotter, 1995, 2008; McKinsey and Company, 2010; Parry et al., 2014; Keller and Aiken, 2009a, 2009b). The failure rate of change initiatives is often referred to as 70% (Beer and Nohria, 2000; Kotter, 1995, Keller and Aiken 2009a), withal Hughes (2011) and Burnes (2011) note that these rates should be treated with caution. Nonetheless, within the change management literature several prescriptions on how to be successful in obtaining one’s change initiative goals can be found. Thus, this part of the literature review will answer the second research question, *‘According to literature, what are the principles of change management?’*

This will be done by, firstly, defining the kind of change that is relevant to focus on and discussing the different schools, which, together with the “2.1 Mergers and acquisitions”, will help us identify the stream within change management, in which the principles will be found. For this we will rely mainly on Van de Ven and Poole’s (1995) typology, By (2005), Graetz and Schmidt (2010), and Beer and Nohria (2000). Next, after discussing and choosing the appropriate kind of organizational change, the principles of change management are identified through a four-step selection process, which will be elaborated on later in this paragraph.

2.2.1 Organizational Change

Looking at Van de Ven and Poole (1995; 512), organizational change can be defined as “an empirical observation of difference in form, quality, or state over time in an

organizational entity”, and it can according to By (2005), who borrows from Senior (2002), be categorized into three categories. They have been identified as change characterized by the rate of occurrence, by how it comes about, and by scale. These categories will be discussed in order to qualify the later discussion of which stream of organizational change is relevant in order to identify the principles of change management from this thesis’ perspective. A distinction is important, as one size does not fit all (Anderson and Anderson, 2001).

Change categorized by rate of occurrence

Change can, according to By (2005), be discontinuous, incremental or continuous. Discontinuous change is found when organizations change through drastic action (Meyerson, 2001) or through dramatic revolution, which is why some authors term discontinuous change, revolutionary change (Nasim and Sushil, 2011). Discontinuous change is defined as change that creates rapid shifts in either strategy, structure or culture, or all three, it takes place through large, widely separated initiatives, and it happens as a onetime event (By, 2005). Internal problems, technological innovations or external shocks are the major triggers of discontinuous change (By, 2005; Senior, 2002; Meyerson, 2001; Anderson and Anderson, 2001). Although advocates of discontinuous change argue that this approach to change is cost-effective and periods of incremental change in between the large onetime events change, contemporary authors agree that the benefits from discontinuous change do not last, as the world is changing rapidly. Instead these authors advocate for a continuous change approach.

Opposite discontinuous change, continuous change is defined as the ability to change continuously in a fundamental manner (By, 2005). This entails that people monitor and respond continually to both the external and internal environment in small steps, which creates an on-going process. Similar to continuous change is incremental change. However, they differ in one aspect. Incremental change is concerned with organization-wide strategies, whereas continuous change describes departmental, operational, on-going change (By, 2005). Incremental change is also referred to when one problem and objective at a time is dealt with increasingly and separately (By, 2005). Incremental change will cumulatively create major changes (Nasim and Sushil, 2011). By (2005) further argues, by referring to Grundy (1993), that continuous and incremental change can be bumpy. Bumpy incremental change is characterized by periods of serenity

punctuated by acceleration in the pace of change (By, 2005). The same is valid for continuous change with the amendment that it is termed departmental and operational change.

Change categorized by how it comes about

In the extant literature there is a certain amount of disagreement when it comes to how change comes about. There are several different approaches (By, 2005), but the typical discussion is whether change is planned or if it emerges through other factors – is change planned or emergent? (Eriksson and Sundgren, 2005).

The planned approach to change, which was initiated by Kurt Lewin in 1946 with his three-stage process of change (By, 2005; Nasim and Sushil, 2011), try to explain the process that brings about change, which is going from an unsatisfactory state to an identified desired state (By, 2005). The process of change in a planned model often follows Bullock and Batten's (1985) four-phase model of planned change (By, 2005). This model argues that the process consists of exploration, planning, action and integration (Bullock and Batten, 1985). The planned change approach assumes that change is an event, which must be made to happen through decisive intervention, and it insists that radical change cannot happen gradually, but must be rapid and disruptive (Chia, 2014). According to Chia (2014) the planned approach to change is associated with top-down control, and large-scale, system wide initiatives involving significant disruptions.

Instead of seeing change to be top-down driven, the emergent approach to change tends to see change as driven from the bottom up (By, 2005; Chia, 2014), and it has raised as an answer to the criticism of the planned approach. Firstly, the planned approach has been criticized for emphasizing small-scale change and is therefore not applicable to the situations that require transformational change. Secondly, the planned approach to organizational change is based on the assumption that organizations operate under constant conditions and that they can move in a pre-planned manner. Thirdly, it ignores situations in which more directive approaches are required. These are situations that do not allow for widespread consultation or involvement. Lastly, the planned approach assumes that a common agreement can be reached (By, 2005).

On the contrary, the emergent approach to change emphasizes the unpredictable nature of change. Therefore, change should not be perceived as a series of linear events, but as a continuous, open-ended, iterative process of adapting to changing circumstances, and aligning and realigning organizational priorities with the ever-changing environment (By, 2005; Chia, 2014). To cope with the changing circumstances, organizations need to become open learning systems, as success is less dependent on detailed plans than on understanding the complexity and identifying the range of available options. This makes the emergent approach more concerned with change readiness and facilitating for change rather than with specific pre-planned steps (By, 2005).

Besides the planned and emergent approach to change, By (2005) additionally includes a contingency and a choice approach. The contingency approach argues that managers need a model of change that indicates how to vary change strategies to achieve optimum fit with the ever-changing environment (By, 2005). The choice approach puts forward the idea that organizations can exercise some choice over their internal practices and external variables – they can influence situational variables (By, 2005).

Change categorized by scale

Compared to the first two categories, there is wider agreement within the literature when it comes to change characterized by scale, which can be divided into four different characteristics: fine-tuning, incremental adjustment, modular transformation, and corporate transformation (By, 2005). Fine-tuning is an on-going process to match the organization's strategy, processes, people and structure, and is manifested at a departmental or divisional level. Incremental adjustment involves distinct change of management processes and organizational strategies. However, it does not include radical change. The third scale, modular transformation, is defined as change identified by major shifts of one or several divisions. This kind of change can be radical, but at a departmental or divisional level. Lastly, corporate transformation is corporate-wide change, which is characterized by radical change in the business strategy (By, 2005).

2.2.2 Process models of organizational change

In order to be able to structure the discussion of organizational change we look to the typology of change process theories by Van de Ven and Poole (1995). In this typology

the authors have synthesized various perspectives on organizational change into four main types, which each have their own approach to change in the way that they represent fundamentally different sequences and mechanisms to explain how and why change happens (Van de Ven and Poole, 1995). These types are life-cycle, teleology, dialectical, and evolutionary theory, which are classified along two dimensions: the unit of change and the mode of change (see Figure 2.2)

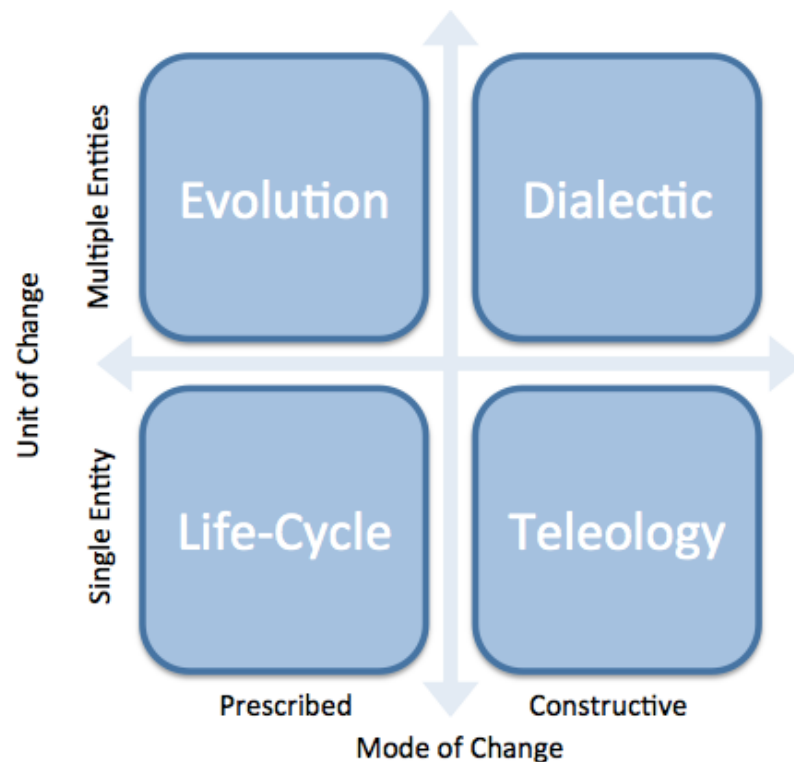


Figure 2.2 – Process models of Organizational Change (Van de Ven and Poole, 1995)

Life-Cycle process model

The life-cycle model of organizational change depicts the process of change as progressing through a prescribed sequence of stages over time in a single unit (Van de Ven and Poole, 1995; Van de Ven and Sun, 2011). The life-cycle philosophy is, by Graetz and Smith (2010), identified as a biological sub-philosophy of change philosophies, which entails that this model implicitly assumes that change is immanent. Accordingly, organizations have an underlying logic, form, program or code that regulates the process of change right from their beginning (Van de Ven and Poole, 1995; Garud and Van de Ven, 2001). The generating force, the immanence of change, implies that although change can be planned within this perspective (Jacobsen, 2005), the organizational change progresses in a specific and predetermined manner. Jacobsen (2005), therefore,

advocates that the life-cycle model can, in a way, be considered a variant of the teleological model which will be explained next. The difference is that in the life-cycle model the organizations only have limited alternative options of actions, which are given in advance. In other words, change from this perspective is moderately affected by the environment and moderately controllable (Graetz and Smith, 2010). Yet, it is always mediated and triggered by the immanent logic, rules or program that govern the organization's development (Van de Ven and Poole, 1995; Poole et al., 2001).

The pace of change in the life-cycle model is slow and incremental (Graetz and Smith, 2010), due to the fact that mode of change is prescribed (Van de Ven and Poole, 1995; Poole et al., 2001). A prescribed mode of change - or a first-order change - entails that organizations develop in a prescribed direction and incrementally change in a stable and predictable way (Van de Ven and Poole, 1995). This manifests itself in the life-cycle approach in the way that an organization's immanent form is realized by various steps. Some steps may seem like discontinuous, radical change, but there is an underlying continuity due to the immanent form, logic, program, or code that drives development as mentioned above. Consequently, radical changes very seldom arise in life-cycle models (Van de Ven and Poole, 1995). Lastly, the process in a life-cycle approach can potentially fail due to the resistance to change and non-compliance (Van de Ven, 2011).

Teleological

The second model identified by Van de Ven and Poole (1995) is the teleological. Underlying the teleological model is the rational philosophy of change (Graetz and Smith, 2010), which assumes that organizations are purposeful and adaptive (Van de Ven and Poole, 1995; Graetz and Smith, 2010). Change from this perspective occurs because top management and other change agents deem it necessary (Graetz and Smith, 2010). It is triggered by significant problems, goals, threats or opportunities (Van de Ven and Poole, 1995; Van de Ven and Sun, 2011; Van de Ven, 2011; Jacobsen, 2005), and it proceeds towards a goal or a desired end state – a purposeful social construction (Van de Ven and Poole, 1995) in a rational and linear manner (Graetz and Smith, 2010). More specifically, change is a discontinuous sequence of constructing an envisioned end state (goal formulation), taking action to reach it (implementation), monitoring the progress (evaluation), and modification of goals based on what was learned (Van de Ven and Poole, 1995; Poole et al., 2000). When the goal or desired end state of an entity is

attained, it does not mean it does not change anymore, since goals in this perspective are socially reconstructed and enacted (Van de Ven and Poole, 1995). A breakdown in the change process is ascribed to the lack of recognition of change, lack of consensus on plans or goals, faulty plans or goals due to biases in group or individual judgment, error in decision making, group thinking and escalating commitment to failing courses of action (Van de Ven and Sun, 2011).

Teleological theories, similar to life-cycle theories, operate on a single entity. This does not preclude interactions between entities or the external environment from influencing the course of development, these interactions, however, are subsidiary to the teleological generating forces, which drives the single unit to enact an envisioned end state (Van de Ven and Poole, 1995). Unlike the prescriptive mode of change found in the life-cycle model of change, the teleological theory incorporates a constructive mode of change – a second order change – which often generates unprecedented, discontinuous and unpredictable change (Poole et al., 2000). That the change is unpredictable agrees with the idea of equifinality that some teleological models subscribe to. It is also important to add that, although a teleological motor projects discontinuous change incremental accounts of goal implementation can be found. However, this will be in the composite model made up of a teleological and life-cycle model (Van de Ven and Poole, 1995).

Dialectical

The dialectical model of change is built on the political philosophy of change, which assumes that it is the clashing of opposing forces that produces change (Graetz and Smith, 2010). Furthermore, this approach rests fundamentally on the Hegelian assumption that organizational entities exist in a pluralistic world of colliding events and forces, which can be internal as well as external, and which compete with each other for domination (Van de Ven and Poole, 1995; Jacobsen, 2005). The dialectical theories operate on multiple entities, as the process requires at least two distinct entities to respectively play the role of thesis and antithesis (Van de Ven and Poole, 1995), and the model explains change in terms of the relative balance of power between the thesis and antithesis (Van de Ven and Sun, 2011). Change in this perspective occurs as a result of a confrontation over domination between the thesis and the antithesis (Jacobsen, 2005). For instance, the antithesis may have enough power to challenge the current thesis, and

the resolution of the conflict may produce a synthesis, which can become the new thesis over time and the process continues (Van de Ven and Poole, 1995).

The mode of change of dialectical theory is constructive, with conflict being the core generating mechanism (Van de Ven and Sun, 2011). This is true since the sequence by which the thesis and antithesis confront each other is highly uncertain with the result of a synthesis that can be revolutionary (Van de Ven and Poole, 1995; Poole et al., 2000). Consequently, although the change process can be slow, change can suddenly spring quickly, on a large scale, and also quite unexpectedly (Graetz and Smith, 2010). The typical breakdowns in the dialectic change process are destructive conflict, power imbalance and irresolvable differences (Van de Ven, 2011; Van de Ven and Sun, 2011).

Evolutionary

The last kind of change model Van de Ven and Poole (1995) identify is the evolutionary. Similar to the life-cycle model, the evolutionary theories rest on the biological philosophy (Graetz and Smith, 2010). The unit of change and the unit in focus is not the single entity, but rather multiple entities (Van de Ven and Poole, 1995; Jacobsen, 2005). From this perspective, change proceeds through a continuous cycle of variation, selection and retention (Poole et al., 2000). The creation of novel forms through variation is seen to emerge by random chance, while selection of organizations occurs through competition for scarce resources, and the environment selects the organizations with the best fit with the resource base of the environment (Van de Ven and Poole, 1995). Forces that maintain certain organizational forms make up the retention aspect. Consequently, according to Van de Ven and Poole (1995) the evolutionary model explains change as a recurrent, cumulative and probabilistic progression. The mode of change is prescribed, as the evolutionary system operates according to prescribed rules and specified population dynamics, which determine whether a variation breaks through, resulting in change occurs (Van de Ven and Poole, 1995).

2.2.3 Merger as an organizational change: perspectives used in this thesis

In this thesis, regarding the models from which we will identify change management principles, we only focus on single entities, thus we exclude the evolutionary and dialectic theories. Neither are we interested in how prescribed changes unfold, but

rather we are focusing on what change leaders and agents can do to lead change. This change leader centric focus is also the most dominant stream within the research field (Armenakis and Harris, 2009; Trompenaars and Wooliams, 2003). Consequently, we will be focusing on teleological models, as we in the teleological model, which assumes purposiveness (Van de Ven and Poole, 1995), find the models that rest on the most popular philosophy for leaders seeking to impose a direction upon an organization (Greatz and Smith, 2010). Furthermore, the teleological approach is in accordance with our functionalistic paradigmatic assumptions (see “3.2 The paradigmatic position of this research”).

Although change is clearly planned (By, 2005) in the teleological perspective, it does not exclude incremental emergent change, which sometimes can be found in the intersection between life-cycle theories and teleological theories (Van de Ven and Poole, 1995). It is even advocated by some authors to use planned and emergent processes concurrently (Liebhart and Lorenzo, 2010). Beer and Nohria (2000) with their ‘Theory E’ and ‘Theory O’ are some of these authors. Theory E, the “hard” approach, is based on economic value with the explicit goal to dramatically and rapidly increase shareholder value (Luecke, 2003), which is the only legitimate measure of corporate success (Beer and Nohria, 2000). In contrast, the goal of Theory O change is to develop organizational capabilities and a culture that supports learning and a high-performance employee base (Beer and Nohria, 2000; Leucke, 2003). Change is driven and managed from the top according to Theory E (Beer and Nohria, 2000; Leucke, 2003), which is similar to planned change (By, 2005), while change participation is encouraged in Theory O (Beer and Nohria, 2000). Therefore, Theory O can be seen as stemming from an emergent approach and Theory E form a planned approach (Chia, 2014). Furthermore, Theory E emphasizes structures and systems through planning and establishing programs with financial incentives as the main motivational factor (Beer and Nohria, 2000). Conversely, Theory O focuses on building corporate culture, employees’ behavior and attitudes through experimenting and evolving with commitment as the main motivational factor and pay as a fair exchange (Beer and Nohria, 2000). These differences between Theory E and Theory O can be seen in Table 2.1

Dimension of Change	Theory E	Theory O
Goals	Maximize shareholder value	Develop organizational capabilities
Leadership	Manage change from the top down	Encourage participation from the bottom up
Focus	Emphasize structure and systems	Build up corporate culture: employees' behavior and attitudes
Process	Plan and establish programs	Experiment and evolve
Reward System	Motivate through financial incentives	Motivate through commitment—use pay as fair exchange
Use of Consultants	Consultants analyze problems and shape solutions	Consultants support management in shaping their own solutions

Table 2.1 – Comparison of Theory E and Theory O (Beer and Nohria, 2000)

Many of the prevalent change models in the extant literature also incorporate both Theory E and Theory O. For Instance, Jacobsen (2005) highlights that Kotter's (1995) eight-step model has both the elements of Theory E, such as creating a sense of urgency and forming a guiding coalition, and of Theory O, such as creating a vision and empower broad-based action. Consequently, we are including both planned models and models that incorporate both planned and emergent change in our search for principles. We do so since, following Jacobsen (2005), emergent change can still be lead as it only affects the opportunities of the change agent and the amount of choices. Accordingly, we are looking for teleological models that emphasize planned change or planned and emergent change, which are applicable in situations with disruptive and corporate transformation change, which mergers constitute.

2.2.4 Change management principles

In order to identify the abovementioned change models, in which the change management principles are to be found, we created a four-step selection process.

The procedure of identifying change management principles

The first step in the selection process was selecting the journals in which we would search for literature on change management models. We wanted to make sure that we

were reviewing the most relevant journals with the highest quality, thus they were selected based on a number of criteria. Firstly, the publications' subject area had to be categorized as being 'International Business' or 'General & Strategy' in Harzing (2015). Secondly, we looked at whether the respective journals were included in Financial Times' (2012) top 45 journals used in their ranking of business schools. Thirdly, we computed a score based on the journals' ranking in 'Association of Business Schools Academic Journal Quality Guide, February, 2015', 'ESSEC Business School's Journal Ranking List, Paris, August 2015', and 'Australian Business Deans Council Journal Rankings List, November 2013' (Harzing, 2015), and the journals' impact factor. The score was computed in the way that the rankings were converted into points, from which an average were computed, which in turn were added together with the respective journal's impact factor and divided by two. Lastly, we included additional two journals known for publishing articles on organizational change management, *Journal of Change Management* and *Journal of Organizational Change Management* (Ford and Ford, 2015). We did not include *Journal of Applied Behavioral Science*, although it is mentioned by Ford and Ford (2015), as Harzing (2015) categorizes it under the subject area of 'Psychology'. As we initially looked at citations, we chose 15 journals which are seen in Table 2.2 (See Appendix A for all journals and scores), as we argued that this amount would be enough to identify the most cited and relevant change management models.

No.	Journal	Selective (N/Y)	FT (Y/N)	Average Score	Impact Factor	Final Score
1	Academy of Management Review	N	Y	4,67	7,48	6,07
2	Academy of Management Journal	N	Y	4,67	6,45	5,56
3	Strategic Management Journal	N	Y	4,67	3,34	4,00
4	Journal of International Business Studies	N	Y	4,33	3,56	3,95
5	Journal of Management Studies	N	y	4,00	3,76	3,88
6	Administrative Science Quarterly	N	Y	4,33	3,33	3,83
7	California Management Review	N	Y	3,00	1,67	2,33
8	Harvard Business Review	N	Y	3,00	1,57	2,29
9	MIT Sloan Management Review	N	Y	2,00	1,53	1,76
10	Journal of Management	N	N	4,33	6,07	5,20
11	Academy of Management Annals	N	N	2,33	7,77	5,05
12	International Journal of Management Reviews	N	N	3,00	3,86	3,43
13	Academy of Management Perspectives	N	N	2,67	3,38	3,03
14	Journal of Organizational Change Management	Y	N	1,33	0,46	0,90
15	Journal of Change Management	Y	N	0,00	0,00	0,00

Table 2.2 – Journals used to identify change management principles

In the second step we created a search-string ("change management") AND ("change model" OR "model of change" OR "model of organizational change") in ProQuest database and applied it to the abovementioned 15 journals, which gave us 136 unique, peer-reviewed articles. These were read and analyzed for references and citations of change management models. The result of this analysis was 73 models (see Appendix B).

Thirdly, we categorized the 73 change models and, in accordance with “2.2.3 Merger as an organizational change: perspectives used in this thesis”, we included only those, which we categorized to be teleological models, thus emphasizing planned change or planned and emergent change, while being applicable in situations with disruptive and corporate transformation change. This third step left us with 34 models. These are shown in Appendix C.

Author	Name of Paper	Year of		Change Type	Citations
		Publication	Name of Change model		
Kouzes and Posner	The Leadership Challenge	2007	THE FIVE PRACTICES OF EXEMPLARY LEADERSHIP® MODEL	Teleological	9228
Kotter	Leading Change	1995	Eight Steps to Leading Change	Teleological	7565
Lewin	Frontiers in Group Dynamics	1947	Three Step Model	Teleological	4373
Ulrich	Human Resource Champions	1998	Seven-Step model	Teleological	2318
Kanter et al.	The Challenge of Organizational Change	1992	Ten Commandments	Teleological	1646
Beer et al.	Why Change Programs Don't Produce Change	1990	Task Alignment Model for Change	Teleological	1534
Garvin	Learning in Action: A Guide to Putting the Learning Organization to Work	2000	The GE model	Teleological	919

Table 2.3 - The seven teleological change management models with most citations on Google Scholar

Finally, we chose seven models based on which of the authors and models that have the most citations on Google Scholar, as citations offer an indication of what has been the most influential in the field (By, Hughes and Ford, 2016). Consequently, the seven models, from which we identified the change management principles, were: Kouzes and Posner's (2007) Exemplary Leadership Model, Kotter's (1995) Eight Steps to Leading Change, Lewin's (1947) Three-step Model, Ulrich's (1998) Seven-step Model, Kanter et al.'s (1992) Ten Commandments, Beer et al.'s (1990) Six Steps to Effective Change, Garvin's (2000) GE-model. These seven models are shown above in Table 2.3

The principles

Analyzing the seven above mentioned models we came up with eight change management principles, which are seen in Table 2.4 and are explained below. A principle was only included if the step or its equal was found in three or more of the seven change management models. Consequently, only Kanter et al.'s (1992) third commandment, 'Separate from the past', and Beer et al.'s (1990) fifth step, 'Start change at periphery, then let it spread to other units without pushing it from the top, were excluded.

Principle	Lewin	Kotter	Kouzes and Posner	Ulrich	Kanter et al.	Beer et al.	Garvin
Define the Initiative			3. Challenge the Process		1. Analyze the Organization and Its Need for Change	1. Mobilize Energy and Commitment through Joint Identification of Business Problems and Their Solutions	
Challenge Status Quo	1. Unfreeze	1. Establish a Sense of Urgency		2. Create a Shared Need	4. Create a Sense of Urgency		2. Creating a Shared Need
Lead the Change and Build a Change Leader Team		2. Create a guiding Coalition	1. Model the Way	1. Lead Change 4. Mobilize Commitment	5. Support a Strong Leader Role 6. Line Up Political Sponsorship	3. Identify the Leadership	1. Leading Change 4. Mobilizing Commitment
Develop a Vision		3. Develop a Vision and a Strategy	2. Inspire a Shared Vision	3. Shape a Vision	2. Create a Vision and a Common Direction	2. Develop a Shared vision of How to Organize and Manage for Competitiveness	3. Shaping a Vision
Communicate the Change Vision	2. Moving	4. Communicate the Change Vision			9. Communicate, Involve People and be Honest		
Empower People for Change		5. Empower Broad-Based Action	4. Enable Others to Act	5. Change Systems and Structures	7. Craft an Implementation Plan 8. Develop Enabling Structures		7. Changing Systems and Structures

Guide and motivate the change process		6. Generate Short-Term Wins	5. Encourage the Heart	6. Monitor Progress	4. Focus on Results, Not on Activities 7. Monitor and Adjust Strategies in Response to Problems in the Change Process	6. Monitoring Progress
Make Change Last	3. (Re)freeze	7. Consolidate Gains and Produce More Change 8. Anchor New Approaches in the Corporate Culture		7. Make Change Last	10. Reinforce and Institutionalize Change 6. Institutionalize Success through Formal Policies, Systems, and Structures	5. Making Change Last
Excluded					3. Separate From the Past 5. Start Change at the Periphery, Then Let It Spread to Other Units without Pushing It from the Top	

Table 2.4 - The Eight Change Management Principles

Principle 1: Define the initiative

The first identified principle of change management is concerned with defining the change initiative (Beer et al., 1990; Kanter et al., 1992; Kouzes and Posner, 2007). According to Beer et al. (1990), this step is the starting point of any effective change initiative, as it clearly defines the business problem. Kanter et al. (1992) elaborates on this argument by stating that in order to craft an effective implementation plan for later on, managers need to understand their organization's operations, its weaknesses and strengths and how the change effort will affect the company. They need to analyze the organization and its need for change. Throughout this process, the companies should look both externally and internally for problems and opportunities to change by staying sensitive to the external realities, actively looking for and analyzing change potential, and letting ideas flow from outside (Kouzes and Posner, 2007). Moreover, leaders and managers should encourage employees to do the same and not monopolize the process (Beer et al., 1990; Kouzes and Posner, 2007). Leaders should invite others to take part in the identification of the change need and in the problem-solving process (Kouzes and Posner, 2007), in order to motivate the change recipients. Motivation and change are found to be greatest when the change recipients are instrumental in identifying the problem and planning its solution (Beer et al., 1990; Leucke, 2003). Beer et al. (1990) coming from a mixed planned and emergent change model state, that it is not the top management's role to control the change, but rather to support it, which is an essential task. Top-driven change can potentially lead to inertia of the change initiative (Beer et al., 1990; Leucke, 2003). Through analyzing the need for change and identifying the business problem a foundation for motivation is created through the creation of a sense of urgency, which is a part of the next step.

Principle 2: Challenge status quo

The second principle, "Challenge status quo", is often found to be one of the first steps in the change management models, and it is also closely related to the first identified change management principle. This principle is about getting people to understand the need for change, and motivating them to collaborate on the change initiative (Beer et al., 1990; Kanter et al., 1992; Kotter, 1995; Ulrich, 1998; Garvin, 2000; Leucke, 2003).

Lewin (1947) argues that the first step in a successful change project is unfreezing, by which he means destabilizing the equilibrium, which can be achieved by disconfirmation of the validity of status quo (Burnes, 2004). This is also called creating a sense of urgency (Kanter et al., 1992; Kotter, 1995) or creating a shared need (Ulrich, 1998; Garvin, 2000). Kotter (1995) agrees with Lewin's (1947) notion and argues that change efforts must begin with individuals and groups looking hard at a company's competitive situation, market position, technological trends, opportunities and financial performance in order to be successful. This is closely related to the first principle. Subsequently, when a crisis, a potential crisis or a great opportunity is identified, this information has to be communicated broadly and dramatically in order to challenge the status quo (Kotter, 1995; 1996). The purpose of creating a sense of urgency and challenging the status quo is to minimize and eliminate complacency and make employees understand why change is needed (Kanter et al., 1992; Ulrich, 1998; Garvin, 2000).

Some of the sources of complacency, according to Kotter (1996), are: lack of a visible crisis, too many visible resources, low performance goals, organizational structure, evaluation systems that focus on the wrong criteria, lack of feedback from external sources, a conflict-averse culture, peoples' ability to deny, and too much unconcerned communication from top-management. If these sources are eliminated and minimized, a higher degree of motivation to change will be produced, which in turn will foster aggressive cooperation that is needed in the beginning of the change initiative (Kanter et al., 1992; Kotter, 1996). As many sources of complacency exist, there are also many ways of dealing with them. However, one solution does not fit all (Lewin, 1947). Nonetheless, Kotter (1996) and Kanter et al. (1992) especially suggest creating a crisis or getting external consultants as tactics for challenging the status quo. To answer the question of how much sense of urgency is needed, the literature proposes that 75% of all managers need to be convinced that a significant change is necessary (Beer et al., 1990; Kotter, 1996; Leucke, 2003).

Principle 3: Lead the change and build a change leader team

The principle of leading the change and building a change leader team, which is our third principle, is related to those who are in charge of the change and champion it. The literature suggests that, firstly, leader(s) need to model the way (Beer et al., 1990;

Kanter et al., 1992; Ulrich, 1998; Garvin, 2000; Leucke, 2003; Kouzes and Posner, 2007). This is due to the fact that in the change process the leaders play a critical role in guiding, driving and inspiring the change (Kanter et al., 1992). They have to champion the change, publicly commit to the change initiative, commit personal time and attention into the process (Ulrich, 1998; Garvin, 2000), assemble the resources needed for the project and take leadership of it (Beer et al., 1990; Leucke, 2003). In this capacity, as a champion of change, it is important that the leaders' actions are aligned with the change initiative and the underlying values (Kouzes and Posner, 2007). Focusing on the change leaders' characteristics, Beer et al. (1990) emphasize three characteristics: a persistent belief that the change initiative is the key to competitiveness, the ability to articulate their conviction in the form of a credible and compelling vision, and operating experience which consists of people-skills and organizational know-how to implement the change.

Although change leaders are critical for leading the change, they cannot do it alone (Kanter et al., 1992; Kotter, 1995, 1996; Ulrich, 1998; Garvin, 2000). Success depends on a broader base of support. Accordingly, Kanter et al., (1992), Kotter (1995, 1996), Ulrich (1998), and Garvin (2000) argue that the organization that initiates a significant change initiative has to create a guiding coalition. Kotter (1996) argues that not all guiding coalitions are strong, but only those are effective, which have the right composition of people, with sufficient trust among coalition-members and a common goal. Moreover, it is specified that effective coalitions share four key characteristics. First, the coalition has enough position power among its members, so that top-managers will not obstruct the change initiative. Second, the coalition has expertise, and diverse, task-relevant perspectives are present. Third, credibility is ascribed to the coalition, so that employees will take its work seriously. Fourth, leadership is found in the group (Kotter, 1996). Kanter et al., (1992) add to this and argue that members of the guiding coalition have to be co-owners of the change, and members ought to consist of both power sources, which corresponds to Kotter's (1996) criteria of position power, and stakeholders – those who stand to gain or lose from the change. On the other hand, the size of the coalition depends on the size of the organization (Kotter, 1996).

Principle 4: Develop a vision

A vision can be seen as an attempt to articulate what a desired future for a company would be (Kanter et al., 1992), and it is a central component in all leadership (Kotter, 1996). No serious contemporary treatment of leadership leaves it out (Kouzes and Posner, 2007), which is evident in the change management literature. Consequently, the fourth identified change management principle is 'Develop a vision'. Having a vision unites employees behind an idea (Kanter et al., 1992), and it has the potential to break through all resistance, inertia and powers supporting status quo, while it promotes the significant change initiatives (Kotter, 1995, 1996). A great change vision acknowledges that it will be necessary to make sacrifices, but these will bring about concrete benefits, which far exceed what is possible in the current situation (Kotter, 1995; Leucke, 2003).

According to Kotter (1996), a vision serves three important goals. Firstly, it specifies the general direction of the change. Secondly, a vision motivates employees to take initiative in the right direction, even if the first steps are personally painful. Thirdly, having a vision coordinates employees' actions in a remarkably quick and effective way. Other authors add to this. Ulrich (1998) and Garvin (2000) see the vision as serving the function of getting employees to see the desired outcome of change in concrete behavioral terms, whereas Kanter et al. (1992) argue that the vision motivates people to rethink what is possible.

However, in order for the vision to fulfill its purpose it has to be effective. Six central characteristics of an effective vision are offered (Kotter, 1996; Leucke, 2003). It has to be imaginable, and it has to be desirable in a way that it appeals to the long-term interests of constituents and stakeholders (Kotter, 1996; Kouzes and Posner, 2007). It has to be feasible, and focused to a degree to which it can guide the decision-making process, but still allow for individual initiative and changing conditions (Kotter, 1996). The vision also has to be flexible and communicable. An effective vision, as a rule of thumb, can be articulated to others within five to seven minutes (Kotter, 1996; Kouzes and Posner, 2007). Lastly, the process of developing the vision should engage a group of people, the guiding coalition, and not only a single individual (Kotter, 1996; Kouzes and Posner, 2007).

Principle 5: Communicate the change vision

After developing the change vision it has to be communicated, as the real power of the vision is only unleashed when the majority of the involved in the change initiative have the same understanding of its goal and direction (Kotter, 1996). Looking to Lewin's (1947) three-step model, this could be seen as the beginning of moving from one position to another – from a less acceptable to a more acceptable position (Burnes, 2004). Consequently, the fifth principle is concerned with communicating the change vision.

Resistance to change is often mentioned as a challenge in the change management literature, and some of this resistance originates, according to Kotter (1996), from the lack of communication or under-communicating. The change agents and the guiding coalition have already in the process of developing the change vision spent a lot of time dealing with intellectually and emotionally challenging questions that might have arisen. However, change recipients have not done so and consequently, they may be reluctant to get behind the vision due to the same intellectually and emotionally challenging questions that make it difficult to accept the vision (Kotter, 1996). For the purpose of overcoming this aforementioned resistance and creating the positive reactions, the change leaders need to communicate to be able to give employees a personal stake in the outcome of a transformation (Kanter et al., 1992). Moreover, articulating the change vision to the change recipients potentially produces a range of positive reactions: job satisfaction, motivation, commitment, loyalty, esprit de corps, pride in organization and organization productivity (Kouzes and Posner, 2008).

However, in order to overcome the above-mentioned resistance and create the positive reactions through communicating the change vision, the communication has to be effective (Kotter, 1995). According to Kotter (1996) effective communication is in accordance with the following advice. First of all, the communication needs to be simple – it has to be free of jargon and technological terms, as it potentially confuses people and not all stakeholder groups understand the jargon. Secondly, the language should be vivid and utilize metaphors, analogies and examples. Painting a verbal picture can be more valuable than a thousand words, as it conveys a lot of information and it is more emotionally appealing, which makes the message memorable (Kotter, 1996; Kouzes and

Posner, 2007). Thirdly, a vision is most effective when different sources are employed, as different sources can help answer diverse sets of questions, and the message has a greater chance of being remembered. Therefore, the change vision should be communicated through many different forums (Kotter, 1996). Fourthly, the vision needs to be repeated as much as possible since effective communication of information demands repetition. Next, considering that the most effective way of communicating a change vision is through actions (Kouzes and Posner, 2007), top-management has to personify the vision. Thus, the change agents need to lead through personal example (Kotter, 1996). Sixthly, managers need to explain seeming inconsistencies between the change vision and the change agents' actions, if they are present. This is needed, as there is nothing more undermining for communication than incongruence. In successful change processes inconsistencies are almost always handled, and if they can't be eliminated, they are explained in a simple and honest way (Kanter et al., 1992; Kotter, 1996). Lastly, the communication needs to be two-way communication (Kotter, 1996; Kouzes and Posner, 2007). This way, questions that emerge during the change process can be answered, and it is made sure that people are willing to walk in the same direction (Kotter, 1996).

Principle 6: Empower people for change

Empowering people for change is the sixth identified change management principle. The principle exists due to the presence of obstacles to the change initiative, and consequently it is concerned with changing structures and eliminating obstacles in order to reinforce the change effort (Kanter et al., 1992; Kotter, 1996; Ulrich, 1998; Garvin, 2000; Kouzes and Posner, 2007). It is important that organizations align their formal structures with the change vision, otherwise, there is a risk of the employees being so frustrated that they will lose faith in the change initiative (Kotter, 1995, 1996). This can be done by enriching employees' jobs by giving them more responsibilities, more variety in their assignments, and the opportunities to make meaningful decisions about how their work gets accomplished (Kouzes and Posner, 2007).

Kotter (1996) also emphasizes the need for developing competencies in the employees to overcome the obstacle of lack of capabilities, which is supported by Kouzes and Posner (2007), who say that training and development are critical. Kotter (1996) further emphasizes the importance of the type of training and he argues that it has to be the

right kind of training, the right amount and at the right time. The training needs to be concerned with both attitude and capability development, because without them employees might feel powerless to change. The third obstacle is related to the compensation and performance-appraisal systems that are not aligned with the vision (Kotter, 1995; Ulrich, 1998; Garvin, 2000). The last obstacle identified by Kotter (1995, 1996) is bosses who refuse to change and who make demands that are inconsistent with the overall effort. Such a situation should be handled by confronting the bosses and with honest dialogue trying to identify the underlying needs and problems. Besides these four obstacles, Kanter et al. (1992) elaborate that the creation of the enabling structures can vary from the practical, as those above mentioned, to the symbolic such as changing the organization's name or physically rearranging the space. Nonetheless, the point of the principle is to alter and develop systems, structures and competencies to ensure that they complement and reinforce the change initiative (Ulrich, 1998; Garvin, 2000).

Principle 7: Guide and motivate the change process

Creating and planning short-term wins are one way of guiding and motivating the change process. Accordingly, the change management literature advocates for change agents to focus on short-term wins, even though change efforts are often long-term endeavors (Beer et al., 1992; Kotter, 1995, 1996; Kouzes and Posner, 2007).

Most people involved in a change campaign need convincing signs that the change is producing the desired results, and they want to see these signs within 6-18 months, depending on the size of the organization and the change initiative (Kotter, 1996). Moreover, the results have to be visible, unambiguous, and clearly linked to the change initiative for them to have an effect (Kotter, 1996). If the short-term wins share these characteristics, it will according to Kotter (1995, 1996), help the initiative in at least six ways.

Short-term wins generate the necessary credibility to maintain the change initiative, and in this way short-term wins are lending support to the change initiative. Small wins also give the change agents and change recipients a chance to relax a moment and celebrate the progress (Kotter, 1996). Kouzes and Posner (2007) add to this and state that the celebration, rewarding and recognition of contributions should be made publicly. If that is the case, an example is set to follow, self-esteem is bolstered, role models are

provided, feedback given, commitment is built, and employees are encouraged to continue with the change initiative (Kouzes and Posner, 2007).

Kotter (1996) suggests that if the feedback on short-term wins is provided it helps the change initiative. In this case the change agents get feedback on the validity of the vision and are reassured that they are on track towards the change campaign's goal. Moreover, short-term results undermine the criticism from the opponents of the change initiative, while simultaneously contributing to maintaining top-management's support. Lastly, short-term wins build drive and progress (Kotter, 1995; 1996). This process of achieving short-term wins should be monitored in order to be able to adjust and assess the progression towards the planned short-term wins (Beer et al., 1990; Ulrich, 1998; Garvin, 2000). The fact that the process can be monitored implies that the wins are planned in advance. This is emphasized by Kotter (1996), and Kouzes and Posner (2007). Change agents should not hope for small-term wins, but rather plan them and create them. The final benefit of utilizing small-term wins is that it helps to maintain a sense of urgency, since it creates healthy pressure on the change recipients (Kotter, 1996).

Principle 8: Make change last

The final change management principle identified is 'Make change last'. First of all, this principle is about consolidating gains and using them to produce more change (Beer et al., 1990; Kotter, 1996; Leucke, 2003). As there is always a risk of the critical progression being lost and being followed by a regression when those involved in a change relax and celebrate the wins too early, Kotter (1996) suggests that the momentum created from earlier phases in the change process and the earned credibility are used to initiate bigger and more change efforts. Here, Kotter (1996) builds on a notion that in companies there is a great degree of interdependence. The change momentum should be used to get more people involved, maintain the sense of urgency, and reduce unnecessary interdependency, which will make change initiatives easier to accomplish (Kotter, 1996).

Within this principle, Lewin's (1947) last step in his three-step model, named 'Refreeze', is found. Refreezing is essentially about stabilizing a new equilibrium in order for progression not to be lost, which will happen if routines and norms are not transformed

(Burnes, 2004), Within organizations this means that in order to make change last, the new approaches need to be anchored in the organizational culture, policies, systems, reporting relationships, and practices (Beer et al., 1990; Kanter et al., 1992; Kotter, 1996; Ulrich, 1998; Garvin, 2000; Burnes, 2004). Therefore, this principle is concerned with anchoring the new approaches in the corporate culture, so that the changes will last.

The reason why it is important to change the culture, or at least to anchor the changes in the culture, is that corporate culture is very influential. This is due to the fact that employees are carefully chosen and indoctrinated and this influence is evident through people's actions. This is all happening unconsciously, which makes it difficult to dispute (Kotter, 1996). Due to this influence, the progression and the new practices can be lost easily if they are not consistent with the corporate culture. Managers then need to shape, change and reinforce a new culture that fits with the changed organization (Kanter et al., 1992). According to Kotter (1996), this change should be made lastly, and not initially. Culture only changes when employees' behaviors have been changed, when these behaviors have created results and been beneficial for the group, and when employees have realized the connection between the behavioral change and the performance improvements. Therefore, culture should be changed at last (Kotter, 1996).

Moreover, change can only be anchored in the culture when it has owned its merits. In other words, the anchoring depends on the results, and only happens when the changes have clearly produced results which are better than those produced the old way (Kotter, 1996). The process of shaping the new culture potentially entails employee turnover in order to make sure that key persons personify the new approaches. Lastly, the promotion-decision has to become very important, which means that the criteria by which people are promoted have to be in accordance with the new practices.

2.2.5 Summary

Through a four-step selection process we were able to choose seven change management models from the theological stream of change management literature. This was done in order to answer *RQ2: According to literature, what are the principles of change management?* The outcome was eight change management principles we have gathered.

The first principle we identified we labelled “Define the initiative”, because it regards defining the change initiative by defining the business problem and/or opportunity through a process of assessing the company’s strengths, weaknesses and how the predicted effects of change on the company. The second principle, “Challenge status quo”, is about getting people to understand the need for change, while the third principle “Lead the change and build a change leader team” is concerned with how the change should be led. “Develop a vision” is the fourth change management principle and it introduces the vision into the change initiative. The fifth principle, “Communicate the change vision” guides how the vision should be communicated. The sixth principle, “Empower people for change” is concerned with changing structures and eliminating obstacles in order to reinforce the change effort and in that way empower the people. “Guide and motivate the change process” was identified as the seventh change management principle. The emphasis in the principle is on monitoring the process, creating short-term wins, and celebrating them. Lastly, “Make change last”, considering the consolidation of gains and using them to produce more change, was identified as the eighth and last change management principle.

Chapter 3: Methodology

After the Literature review of M&A and Change management, and the identification of the main principles within Change management our project smoothly proceeds with the Methodology chapter. The purpose of this chapter is to explicitly present the methodological considerations and paradigmatic position of this study, which explain the basic assumptions and logic underlying it. We do so in order to justify the chosen research design of this project, which aims to answer the following research questions:

RQ3: To what extent do successful companies engage the principles of change management in CBM&As?

RQ4: How does the use of change management principles differ between successful and unsuccessful CBM&As?

Initially, we will define a paradigm and its content, while presenting the underlying assumptions of this thesis. Subsequently, the research design will be presented, in which the reasons for the choice and use of the selected research process will be justified. Finally, the methods and techniques for collecting and analyzing the data used in this research will be discussed.

3.1 Paradigm

It is a common fact that the distinct views on the world that researchers hold predetermine different foundations for knowledge about the social world. Thus, the choice of methods, types of data, and reporting forms are influenced by these assumptions (Kuada, 2012). It is, therefore, important to make the paradigmatic assumptions of this report explicit and engage in the philosophical discussions. A paradigm is, by definition, a grouping of beliefs which for scientists in a particular discipline influence what should be studied, how research should be done, and how results should be interpreted (Bryman and Bell, 2007).

Therefore, a paradigm incorporates a set of common understandings of the nature of the phenomenon, the types of questions essential to investigate the phenomenon, the structure of answering those questions, as well as the way the results are to be

interpreted. One of the most common distinctions in regards to paradigms is between the objective and subjective dispositions (Bryman and Bell, 2007; Arbnor and Bjerke, 2009; Burrell and Morgan, 1979). Based on this distinction, most of the typologies of paradigms are defined in terms of four sets of assumptions. These are: ontological, epistemological, methodological assumptions and assumptions about human nature (Kuada, 2008; Burrell and Morgan, 1979).

Ontological assumptions are the assumptions about the nature of the phenomena under investigation, in other words, a reality (Burrell and Morgan, 1979). Related to ontology there is epistemology, which is concerned with the nature of knowledge, or “about how one might begin to understand the world and communicate this as knowledge to fellow human beings” (Burrell and Morgan, 1979: p.2-3). Next, there is human nature, which refers to the relationship between human beings, and their environment (Burrell and Morgan, 1979). The final set of assumptions is methodology, which considers the way in which the researcher attempts to investigate and gather knowledge about the world (Burrell and Morgan, 1979). In other words, methodology is the action plan guiding the research.

Overall, there are numerous typologies of paradigms with the most widely used ones being FISI classification, RRIF classification by Burrell and Morgan (1979), and Abnor and Bjerke’s classification (Kuada, 2012). Since Burrell and Morgan base their classification of paradigms on the notion of objective and subjective approached to research (see Figure 3.1), we will continue with discussing our paradigmatic stance using this typology.

	The Subjectivist approach		The Objectivist approach
Ontology	Nominalism	↔	Realism
Epistemology	Non-Positivism	↔	Positivism
Human Nature	Voluntarism	↔	Determinism
Methodology	Ideographic	↔	Nomothetic

Figure 3.1 - The subjectivist-objectivist disposition (Burrell and Morgan, 1979)

3.2 The paradigmatic position of this research

In order to determine the paradigmatic position of this research, the above-mentioned concepts from business research will be discussed. Our aim in this section is to make these assumptions explicit to the reader, so they are able to understand and evaluate the choices made in this project.

Borrowing from Kuada (2012), our view on reality is best described as pragmatist. Under this view we believe that the nature of research as well as the objectives of investigation determine the view of reality (Kuada, 2012). Therefore, while we might be inclined to opt for the objective perspective to study one topic, we might choose the subjective perspective to be more suitable to study another. Also, we do not neglect the combination of both views on reality if the problem formulation suggests that it would give us the best insight (Kuada, 2012). After specifying our view on reality being pragmatist it is vital to classify this project.

The phenomenon, which we investigate in this report, is change management within companies engaged in CBM&A. By conducting research which aims to assess whether main principles of change management are being followed in companies engaged in CBM&A deals, it is already implied that we see the world and reality as being external to the individual, thus objective. Moreover, we aim to collect facts and sum them to arrive to rational explanations. Based on the prevailing arguments for the objective stance, which will be elaborated on below, this project falls in one of the right side quadrants of the matrix by Burrell and Morgan (1979) (see Figure 3.2).

Burrell and Morgan (1979) further add another dimension to the philosophy of science, the assumptions about the nature of society, distinguishing between “the sociology of radical change” and “the sociology of regulation”. In brief, these assumptions regard the function of research in investigating the world of business, which can be either regulatory or radical. Following the sociology of regulation, the purpose is to explain what is happening in the organizations and to suggest minor changes (Kuada, 2012). However, the purpose is not to make judgment of the organization (Bryman and Bell, 2011). We situate our project under the sociology of regulation, as its main purpose is

not to judge the organizations. Also, we do not aim to focus on deep-seated structural conflicts characterizing the radical position. Moreover, the sociology of radical change has gained little acknowledgement in market driven societies (Kuada, 2012), which are the frame of this project. Consequently, based on Burrell and Morgan's (1979) typology our research follows objective paradigm of Functionalism the best.

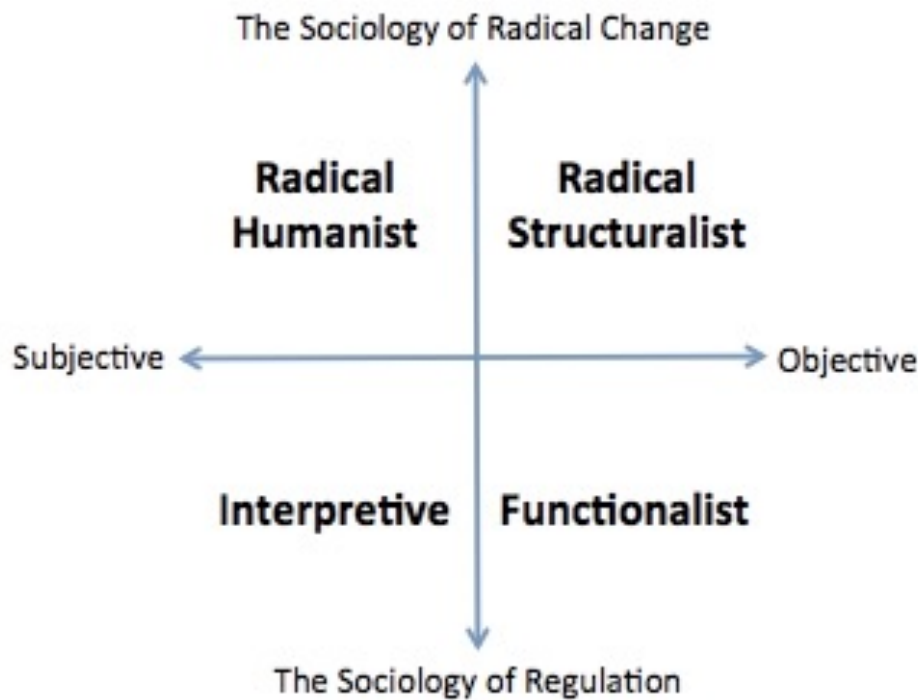


Figure 3.2 - Burrell and Morgan's (1979) typology of paradigms

3.2.1 Ontology

In terms of ontology, the Functionalist approach follows realism, which assumes that the world exists regardless of an individual's appreciation of it (Burrell and Morgan, 1979). Furthermore, it claims that the reality is factive and summative (Arbnor and Bjerke, 2009). Since we believe that the reality of performance of CBM&A and activities of change management within organizations exist outside the individual's perception of it, thus we are able to observe it and sum the facts, we follow the objectivist approach of realism in this project. This is further supported by the highly rational approach to change management embracing strategic decision-making and careful planning towards organizational goals (Graetz and Smith, 2010) which is reflected in teleological theories we framed our choice of change principles by.

3.2.2 Epistemology

Epistemologically, our project follows positivism. Positivism suggests that the researchers can be objective and conduct the research as external observers (Kuada, 2012). Additionally, from this perspective, the purpose of the research is to explain and predict by searching for regularities and causal relationships (Burrell and Morgan, 1979). Moreover, according to positivism the process of knowledge growth is cumulative, thus implying that new knowledge is added on to the existing stock of knowledge, and falsified hypotheses are removed (Burrell and Morgan, 1979). In this project we believe that we can generate knowledge by acting as external observers of our researched phenomenon of change management within CBM&A. We also search for patterns of associations between the change management principles and CBM&A performance, which can lead to potential discovery of causal relations. Moreover, we have chosen to examine the principles of change management and consequently test them adding on to the existing stock of knowledge in the field of change management.

3.2.3 Human nature

In terms of human nature we follow the objectivist approach of determinism. Determinism suggests that the human behaviour is determined by the situation in which an individual finds themselves (Burrell and Morgan, 1979). Based on our belief that organizations are purposeful and adaptive, which is in line with chosen teleological theories, the organizations follow the change process their leaders rationally and logically initiated (Graetz and Smith, 2010). Thus, this project follows the objective stance of determinism.

3.2.4 Methodology

Overall, the assumptions about ontology, epistemology and human nature influence the methodology. According to Arbnor and Bjerke (2009) methodology's mission is to explain how different aspects of the research come together in an integrated whole. Methodology, also known as the "theory of methods" (Glaser, 1992), seeks to explain the reasons underlying the choice of the applied methods (Kuada, 2012). Following the pattern from previously mentioned components of a paradigm, methodology distinguishes between the objectivist and subjectivist stances corresponding to the nomothetic approach and the ideographic approaches, respectively.

Considering our assumptions about ontological, epistemological, and human nature, it is apparent that this project follows the objective approach. This is already indicated in our problem formulation, which is created in accordance with our assumption that reality is external to the individual and exists independently. Additionally, we aim to search for any linkages between the leaders driving change and their organizations in the context of CBM&A rather than to understand, which is in accordance with positivism. Thus, using Burrell and Morgan's (1979) terminology this project follows the nomothetic approach to methodology.

The nomothetic approach is corresponding to the analytical approach defined by Arbnor and Bjerke (2009). According to the analytical approach, the main efforts of the research are to uncover patterns and relations, generalize results and predict future incidents (Arbnor and Bjerke, 2009). Also, the reality can be decomposed into small elements, which can then be transformed into concepts to be able to reveal causal relations via hypothesis testing (Arbnor and Bjerke, 2009). Researchers following this approach must stay outside the object researched and not interact with it. According to Burrell and Morgan (1979) and Mentzer and Flint (1997), this approach uses mostly quantitative techniques for data analysis and the construction of scientific tests by means of statistical procedures.

Thus, reflecting our assumptions and objectivist stance this research makes use of quantitative methods. These methods are known to start with a theory and use theory to guide the consequent observations (Creswell, 2014). In other words, in this process the researchers deductively move from the general to the particular.

It is visible that our project is built on the theory of principles of Change management, thus follows the characteristic of quantitative methods. Quantitative methods are also means of testing objective theories such as our principles of Change management by examining the relations among variables. Not surprisingly, the research of this type is characterized by extensive literature review, which enables researcher to deduce hypothesis and research questions. It is clear that we have employed this method in our project to be able to draw the most relevant principles of Change management.

3.3 Research design

Given that this research is positioned within functionalism and it has a quantitative methodology, this thesis also adopts a research design which is aligned with the quantitative methodology. A research design is a framework for the collection and analysis of data (Bryman and Bell, 2011). Thereby, a research design represents the structure that guides the execution of a research method and the analysis of the subsequent data. Consequently, the research design acts as a blueprint of methodology and shows how the research will be conducted (Ekinici, 2015).

The research design which has been chosen for this thesis is the survey research design, which is firmly placed within the context of quantitative research (Bryman and Bell, 2011). The survey research design can be categorized as a specific type of cross-sectional research design (Bryman and Bell, 2011). Within a cross-sectional research design many research methods can be employed, but data in a survey research design are predominantly collected by questionnaire or structured interviews (Bryman and Bell, 2011). This is why it is also referred to as a social survey design (Bryman and Bell, 2011) or a survey research design (Ekinici, 2015).

Considering that except for the applied research methods, the survey research design and the cross-sectional design do not differ, the survey research entails the collection of data at a single point in time (Burns and Burns, 2008), and on more than one case (Bryman and Bell, 2011). This is due to the fact that researchers employing the cross-sectional design are interested in variation, and variation can only be established when more than one case is examined (Bryman and Bell, 2011). Consequently, by implementing a survey research design, we are able to examine our research objective, to investigate if there is a difference between successful and unsuccessful CBM&As in their use of change management principles.

We do so by looking at the variation between the cases. However to enable this, the collected data have to be quantitative or quantifiable, which provides a necessary, systematic and standardized method for gauging variation (Bryman and Bell, 2011). Another element of the cross-sectional research is that only patterns of associations, but not causal relationships, can be examined. However, certain inferences about causality

can be drawn (Bryman and Bell, 2011). We will return to this discussion in “3.7 Validity and reliability”

Taking the abovementioned research design and the quantitative methodology into account, the research process we apply in this thesis include the following steps: defining the research objectives, reviewing the literature, data sampling, collecting the data, analyzing the data, and presenting the findings. This research process is shown below in Figure 3.3

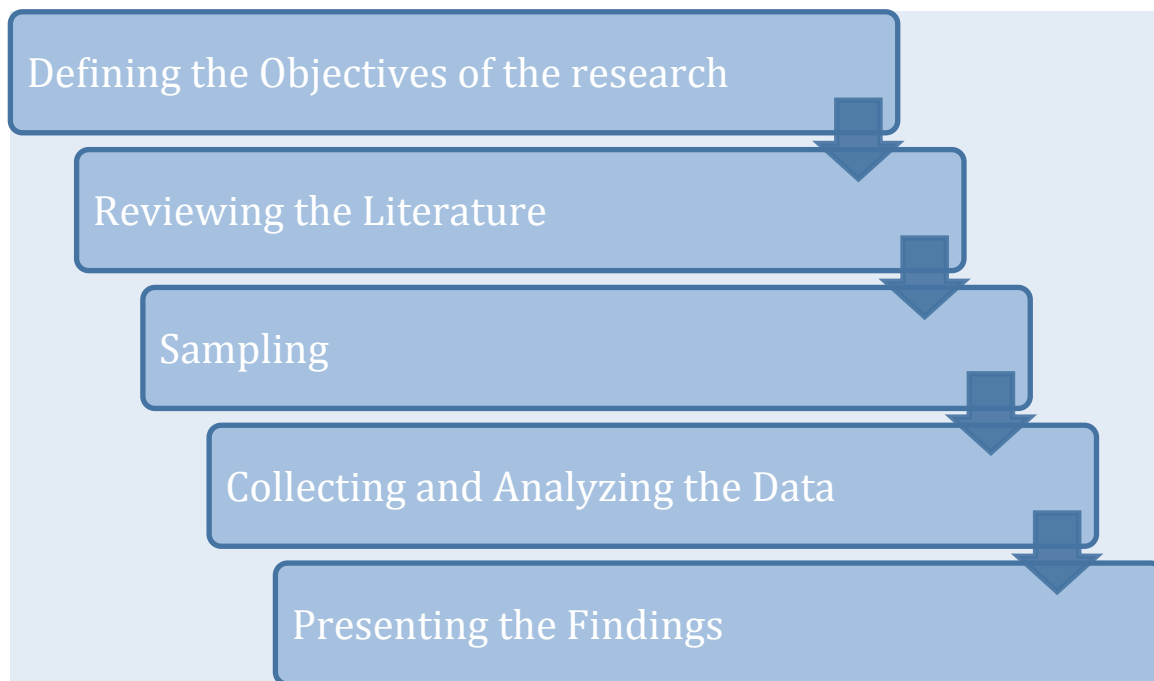


Figure 3.3 - Research Design

The research objectives together with a problem formulation with four research questions were already developed in the introduction of this thesis. Next, in “Chapter XY Literature Review” we reviewed the literature and subsequently answered RQ1 and RQ2. In the following section we focus on the specific parts of the design of our research, which aim to answer the RQ3 and RQ4. Firstly, we present and discuss how the sampling was conducted and how the data were collected, analyzed and presented.

3.4 Sampling

Sampling is an important aspect and a key step in conducting survey research (Bryman and Bell, 2011). The process starts with the researcher determining what kind of population is suited for the investigation of the research topic. From this population a

sample is drawn due to practical reasons considering that it is, in most cases, unfeasible to examine an entire population. Thus, the sample is the segment of a population that is selected for investigation (Bryman and Bell, 2011).

In relation to this thesis, the context of our investigation was initially chosen to be the American companies, which had been involved with CBM&As from 01-01-2006 to 01-01-2016, a ten-year period. This means that our population initially consisted of the deals in this period with the acquirer or one of the merging companies being institutionalized in the United States (US). US based companies were picked based on the big population, assumed familiarity with change management, anticipated low response rates, and in order for us to be able to compare the great failure rates which were mainly found in the US (e.g. Keller and Aiken, 2009a) with our results. We chose not to add any other criteria for selection, as we wanted to be able to generalize very broadly. Other criteria, which could have been used, include but are not limited to: size, industry and geographic distance between the companies. From this population, or more specifically from the sampling frame that was created using a global database of M&As, Zephyr, we needed to draw a sample which we wanted to make sure to be representative. Consequently and in line with our methodology, we opted for a probability sampling technique, simple random sampling. We did so with the knowledge of probability samples having a better chance of keeping sampling error in check and the fact that they make it possible to make inferences to the population from which the sample was selected (Bryman and Bell, 2011; Zikmund et al., 2013). The sample size was chosen to be 1.000 deals out of the 11.470 deals, which constituted our sampling frame. The reasons our sample size was chosen to be 1.000 were: 1) our goal was to have a representative sample, 2) sampling error decreases when the sample size increases, 3) our population had a great degree of heterogeneity with greater variation, which required a greater sample to make it representative (Bryman and Bell, 2011), and 4) it was in line with recommendations (Zikmund et al., 2013). The 1.000 cases were then randomly chosen using Microsoft Excel's "RAND"-function.

Due to the anticipation of low response rates from the sample of the US deals, caused by the previously mentioned reasons, we took necessary precautions and created a backup sample using the same procedure as mentioned above, but with the acquirer or one of the merging companies being institutionalized in Denmark. This was done due to Danish

companies' familiarity with Aalborg University, which could help to increase the response rates (Bryman and Bell, 2011). 400 cases were drawn from the sample frame of 881 deals. Our survey was sent to the acquirer and directed to the managers at the highest levels who were involved in the M&A.

Regarding the response rates, the rate of the US sample was only 1.6 % while the rate of the Danish sample was a mere 3.7%. These response rates were way below the minimum of 10% which could be recognized as acceptable (Ekinci, 2015). This constituted a problem, because very low return rates make it difficult to establish the representativeness of the sample as those responding may not represent the research sample (Ekinci, 2015). In other words, in this case there is a difference between the sample and the population from which it is drawn due to the non-response error (Zikmund et al., 2013). When this happens, the external validity of the project decreases (Bryman and Bell, 2011). The validity of this project will further be discussed in "3.7 Validity and reliability".

Thus, instead of working with either the US sample or the Danish sample, which only had 14 respondents each, we combined the two, so that we would have 28 cases to analyze. By combining the samples we got a sample which resembled a disproportional stratified sample with a Danish and a US stratum. In a disproportional stratified sample the sample size for each stratum is not allocated in proportion to the population size (Zikmund et al., 2013), which adds some sampling error. However, in our case we argue that the benefit of having more cases supersedes the disadvantage of having more sampling error, considering that the degree of nonresponse error has already hurt the external validity of the research. Consequently, we ended up with a sample of 28 cases, which corresponded to a response rate of 2.24%. Our final sample is described below in Table 3.1.

	Sample						
Country of Incorporation	USA	Denmark					
	50%	50%					
Size (employees)	Small (<250)	Medium (250-499)	Large (500-1000)	Enterprise (>1000)			
	53,6%	7,1%	7,1%	32,1%			
Industry	Administrative and Support and Waste Management and Remediation Services	Agriculture, Forestry, Fishing and Hunting	Finance and Insurance	Information	Manufacturing	Professional, Scientific, and Technical Services	
	14,3%	7,1%	7,1%	3,6%	25,0%	28,6%	
	Transportation and Warehousing	Wholesale Trade	Unknown				
	3,6%	7,1%	3,6%				
Year of M&A	2006	2007	2010	2011	2012	2013	
	7,1%	3,6%	3,6%	7,1%	10,7%	25,0%	
	2014	2015	2016				
	10,7%	25,0%	7,1%				
Position of Respondent	CEO	CFO	COO	Director	Other		
	32,1%	10,7%	7,1%	46,4%	3,6%		
Country of other Company	Australia	Canada	Finland	France	Germany	Italy	
	3,6%	7,1%	3,6%	10,7%	10,7%	3,6%	
	Norway	Russia	Spain	Sweden	Ukraine	UK	
	3,6%	7,1%	3,6%	10,7%	3,6%	25,0%	
	USA						
	7,1%						

Table 3.1 - Sample: Descriptive Statistics

3.5 Data collection

After discussing our sample, we will continue to discuss the methods and techniques used to create the empirical foundation of this thesis. In the following section we will describe the data collection method used and, just as important, justify why it has been applied.

3.5.1 Self-completion questionnaire

In this thesis we employ a survey as a research instrument for collecting data, since we are interested in obtaining an insight into many cases at a single point in time. We do so in order to examine patterns of association, which is in correspondence with the cross-sectional research design, for which a survey serves as an excellent tool. More specifically, we utilized a self-completion questionnaire, which requires the respondents to answer questions by completing the questionnaire themselves (Bryman and Bell, 2011). Besides factual questions about the CBM&As we designed the questionnaire to include closed-response questions, which were to be answered on an ordinal scale from “Not at all” to “Very high degree” with three options in between and a “Don’t know” option. Our questionnaire was distributed through e-mails with a link to SurveyXact and data were collected over a three-week period.

The reasons we chose a self-completion questionnaire are to be found in some of the advantages that come with it. Firstly, the self-administered questionnaire allows for geographic flexibility in a cost and time efficient way (Bryman and Bell, 2011; Zikmund et al., 2013). In order to reach our US sample and considering that this is a Master’s thesis, which is not sponsored or financially backed, it was important that our data collection tool allowed us to reach the geographically dispersed companies within a reasonable time frame without costs. Secondly, having the respondents carrying the responsibility for reading and answering the questions, rather than an interviewer, eliminates the interviewer effect, which entails a decrease in biased answers (Bryman and Bell, 2011). Finally, we have included highly standardized questions, since we included closed-response questions in our questionnaire (Burns and Burns, 2008). In relation to our thesis, this provided us with the quantitative data (Ekinci, 2015), which made it easy for us to compare and look for variation and patterns of association in an objective way.

However, the self-completion questionnaire does not come without some limitations or rather some disadvantages. Mainly one drawback is in evidence in our case, and that is the fact that self-completion questionnaires tend to have lower response rates (Ekinci, 2015). This is one of the most damaging limitations to this kind of survey (Bryman and Bell, 2011). The reason is, as touched upon earlier in this chapter, that with low response rates it is difficult to know what population the sample is representative of, and there is a risk of bias which in turn negatively impacts the external validity of the research.

In order to increase the response rates in our research we made use of the recommended practices. The first thing we did was to include a cover letter, which can be found in Appendix D. In the cover letter we explained the reason for conducting this research, why the respondent had been selected, and we also promised confidentiality (Bryman and Bell, 2011). Moreover, we primarily made use of an egotistical appeal by emphasizing that the recipient's opinions were of great importance to us, and we personalized the cover letter to include information on the CBM&A, we were interested in. Both of these elements are important in increasing the response rate (Burns and Burns, 2008). Secondly, we followed up with four reminding e-mails to those recipients who had not yet returned the questionnaire. Multiple contacts almost always increase response rates (Zikmund et al., 2013). We also tried to design the questions and the layout of the questionnaire to make it interesting and attractive, in accordance with guidelines (Bryman and Bell, 2011; Ekinci, 2015). Although we applied these recommended practices for increasing response rates, the response rate of our combined sample was only 2.24% percent. The response rate and the consequences hereof are discussed in the chapter "3.7 Validity and reliability".

The structure of our survey, which can be found in Appendix E, consists of two parts. The first part asks factual questions about the specific M&A, while the second part is concerned with both the use of change management principles in the M&A, and the performance of the M&A. However, before the data could have been collected, these concepts and principles needed to be operationalized (Burns and Burns, 2008). In the following section we elaborate on this operationalization.

3.5.2 Operationalizing of concepts and principles

In order to get quantitative data for our research, both the principles and M&A success had to be operationalized. Often research would rely on previously applied measures and indicators, as the reliability and validity of these already have been established. We follow this practice with operationalizing the M&A performance. However, for the principles we relied heavily on the literature from which the principles have been identified and not on previously established measures and indicators. This was due to the authors of the thesis' best knowledge of this being the first research that tried to test the change management principles in a survey and in a CBM&A context. Consequently, the following operationalization of concepts drew on the eight identified principles and chapter "2.2.4 Change management principles" in the literature review of this thesis. We also refer to this chapter for a more thorough assessment of the principles.

Principle 1: Define the initiative

"Defining the initiative" is the first identified change management principle, and it is concerned with defining the change initiative (Beer et al., 1990; Kanter et al., 1992; Kouzes and Posner, 2007). One dimension of defining the initiative is, according to Kanter et al. (1992), for managers to understand their companies' strengths and weaknesses. Kouzes and Posner (2007) add another dimension and state that companies should look both externally and internally for problems and opportunities to change, and employees should be encouraged to take part in the process of doing so (Beer et al., 1990). Opportunities and challenges of M&As should not only be identified, but the impact of the M&A should also be evaluated (Kouzes and Posner, 2007). Considering the abovementioned dimensions, the first principle of change management, "Defining the Initiative", is operationalized using the indicators seen in Table 3.2

Define the Initiative	
Variable	Operationalization
define_t	To which degree, before the M&A, did you - Thoroughly analyze your strengths and weaknesses?
defin_1	To which degree, before the M&A, did you - Identify challenges and opportunities?
defin_2	To which degree, before the M&A, did you - Assess the impact of the M&A?
defin_3	To which degree were employees and middle-managers involved in the process of identifying the need and/or the opportunity to merge/acquire?

Table 3.2 - Operationalization of Principle 1

Principle 2: Challenge status quo

This second principle is about getting people to understand the need for change, and motivating them to collaborate on the change initiative (Beer et al., 1990; Kanter et al., 1992; Kotter, 1995; Ulrich, 1998; Garvin, 2000; Leucke, 2003). The purpose of creating a sense of urgency and challenge status quo is to minimize and eliminate complacency and make employees understand why change is needed (Kanter et al., 1992; Ulrich, 1998; Garvin, 2000), which is done by communicating the identified challenges and opportunities broadly and dramatically, which in turn challenges status quo.

Another dimension of this principle is the sources of complacency, which, according to Kotter (1996) are: lack of a visible crisis, too many visible resources, low performance goals, organizational structure, evaluation systems that focus on the wrong criteria, lack of feedback from external sources, a conflict-averse culture, peoples' ability to deny, and too much unconcerned communication from top-management. These have to be minimized and eliminated to challenge the status quo.

Lastly, the literature proposes that at least 75% of all managers need to be convinced that a significant change is necessary (Beer et al., 1990; Kotter, 1996; Leucke, 2003) for it to be an indicator of whether sufficient sense of urgency has been created. The indicators of the second principle, "Challenge status quo", are found below in Table 3.3 in the form of survey questions.

Challenge status quo	
Variable	Operationalization
csq_1	To which degree did the employees understand why the M&A was important?
csq_2	How often did the organization emphasize that the M&A was necessary in front of the employees before the M&A?
csq_3	Approximately, what percentage of all managers were convinced that the M&A was absolutely necessary?
csq_4	To what degree did the company clarify to the employees the consequences of not doing the M&A?
csq_5	Before the M&A, to which degree were the following the case in the organization? - The absence of a major and visible crisis
csq_6	Before the M&A, to which degree were the following the case in the organization? - Too many visible resources
csq_7	Before the M&A, to which degree were the following the case in the organization? - Low overall performance standards and goals
csq_8	Before the M&A, to which degree were the following the case in the organization? - Organizational structures that focus employees on narrow functional goals

Challenge status quo	
Variable	Operationalization
csq_9	Before the M&A, to which degree were the following the case in the organization? - Internal measurement systems that focus on inappropriate performance indexes
csq_10	Before the M&A, to which degree were the following the case in the organization? - A lack of sufficient performance feedback from external sources
csq_11	Before the M&A, to which degree were the following the case in the organization? - A kill-the-messenger-of-bad-news, low candor, low confrontation culture
csq_12	Before the M&A, to which degree were the following the case in the organization? - Employees denying the need for a M&A
csq_13	Before the M&A, to which degree were the following the case in the organization? - Too much happy talk from senior management

Table 3.3 - Operationalization of Principle 2

Principle 3: Lead the change and build a change leader team

Regarding the third principle, “Leading the change and building a change leader team”, the literature focuses on those who are in charge of the change and champions it. One dimension of this principle is that leaders need to model the way (Beer et al., 1990; Kanter et al., 1992; Ulrich, 1998; Garvin, 2000; Leucke, 2003; Kouzes and Posner, 2007), as they play a critical role in guiding, driving and inspiring the change (Kanter et al., 1992). This entails championing the change, publicly committing to the change initiative, committing personal time and attention into the process (Ulrich, 1998; Garvin, 2000).

A second dimension of this principle concerns characteristics of the change leaders. Beer et al. (1990) emphasize three characteristics: a belief that the change initiative is the key to competitiveness, ability to articulate this belief, and people-skills and organizational know-how to implement the change.

Although change leaders are critical for leading the change, they cannot do it alone (Kanter et al., 1992; Kotter, 1995, 1996; Ulrich, 1998; Garvin, 2000). Thus, a third dimension focuses on a guiding coalition. Kanter et al., (1992), Kotter (1995, 1996), Ulrich (1998), and Garvin (2000) argue that the organization that initiates a significant change initiative – such as a M&A – has to create a guiding coalition. Not any coalition will do, though. Only those coalitions that share the following four key characteristics are effective: position power, expertise, credibility, and leadership skills (Kotter, 1996). To this Kanter et al. (1992) add that the guiding coalition should be made up of members belonging to diverse stakeholder-groups. These abovementioned dimensions

are operationalized and found in Table 3.4 as indicators of the third change management principle.

Lead the change and build a change leader team	
Variable	Operationalization
lead_1	To which degree did you have - a leader who owned and championed the M&A?
lead_2	To which degree did you have - a leader who was publicly committed to making the M&A succeed?
lead_3	To which degree did you have - a leader who put in the personal time and attention needed to make the M&A work?
lead_4	Did the leaders of the M&A - Believe that the M&A was the key to competitiveness?
lead_5	Did the leaders of the M&A - Have the ability to articulate the belief that the M&A was the key to competitiveness?
lead_6	Did the leaders of the M&A - Have the people-skills and organizational know-how to follow through with the M&A?
lead_7	Did the company establish and make use of a guiding coalition/a project group to head the M&A process?
lead_8	To which degree would you assess the team in charge of the M&A on these four characteristics: - Position Power
lead_9	To which degree would you assess the team in charge of the M&A on these four characteristics: - Expertise
lead_10	To which degree would you assess the team in charge of the M&A on these four characteristics: - Credibility
lead_11	To which degree would you assess the team in charge of the M&A on these four characteristics: - Leadership Skills
lead_12	To which degree were members of the team, which was ahead of the M&A, belong to different stakeholder-groups?

Table 3.4 - Operationalization of Principle 3

Principle 4: Develop a vision

The change management literature recognizes the need for a vision, because it has the potential to unite employees behind an idea (Kanter et al., 1992), and to break through all resistance, inertia and powers supporting status quo, while it promotes the significant change initiatives (Kotter, 1995, 1996). Ulrich (1998) and Garvin (2000) emphasize another dimension, namely the vision's function of getting employees to see the desired outcome of change in concrete behavioral terms.

However, in order for the vision to fulfill its purpose it has to be effective. Accordingly, the change management literature offers six central characteristics of an effective vision (Kotter, 1996; Leucke, 2003; Kouzes and Posner, 2007). The vision has to be: imaginable, desirable, feasible, focused, flexible, and communicable. Lastly, the process

of developing the vision should engage a group of people, the guiding coalition, and not only a single individual (Kotter, 1996; Kouzes and Posner, 2007). Considering this operational definition, the fourth principle of change management, “Develop a vision”, is operationalized using the indicators seen in Table 3.5.

Develop a vision	
Variable	Operationalization
vision_1	To which degree - Did the company develop a vision for the M&A?
vision_2	To which degree - Did employees understand the outcome of the change in behavioral terms?
vision_3	To which degree - Did employees understand how the M&As would benefit themselves, customers and other stakeholders?
vision_4	To which degree did the vision of the M&A - Convey a picture of what the future would look like?
vision_5	To which degree did the vision of the M&A - Appeal to the long-term interests of employees, customers and other stakeholders?
vision_6	To which degree did the vision of the M&A - Comprise realistic and attainable goals?
vision_7	To which degree did the vision of the M&A - Focus on manageable and coherent sets of goals?
vision_8	To which degree did the vision of the M&A - Have the ability to adapt to changing circumstances?
vision_9	To which degree did the vision of the M&A - Have the ability to be easily communicated to different levels?
visio_1	To which degree were more people than a sole leader involved with developing the vision for the M&A

Table 3.5 - Operationalization of Principle 4

Principle 5: Communicate the change vision

The real power of the vision is only unleashed when the majority of the involved in the change initiative have the same understanding of its goal and direction (Kotter, 1996). Thus, the change vision has to be communicated. Seven advices on communicating the change vision effectively are found (Kotter, 1996). The communication has to be: Simple, vivid, given through multiple sources and channels, repeated, personified in the actions of top-management, used to explain seeming inconsistencies between the change vision and what the leaders stand for and/or represent in their behavior, and two-way. This is captured in the indicators of the fifth change management principle, which are found below in Table 3.6

Communicate the change vision	
Variable	Operationalization
com_1	In the period of communicating the vision for the M&A, to which degree do you agree that the communication was - Simple (e.g avoiding jargon and technical terms)
com_2	In the period of communicating the vision for the M&A, to which degree do you agree that the communication was - Utilized metaphors, analogies and examples?
com_3	In the period of communicating the vision for the M&A, to which degree do you agree that the communication was - Given through multiple sources and channels?
com_4	In the period of communicating the vision for the M&A, to which degree do you agree that the communication was - Repeated?
com_5	In the period of communicating the vision for the M&A, to which degree do you agree that the communication was - Personified in the actions of top-management?
com_6	In the period of communicating the vision for the M&A, to which degree do you agree that the communication was - Used to explain seeming inconsistencies between the change vision and what the leaders stand for and/or represent in their behavior?
com_7	In the period of communicating the vision for the M&A, to which degree do you agree that the communication was - Two-way communication?

Table 3.6 - Operationalization of Principle 5

Principle 6: Empower people for change

“Empower people for change” exists due to the presence of obstacles to the change initiative, and consequently it is concerned with changing structures and eliminating obstacles in order to reinforce the change effort (Kanter et al., 1992; Kotter, 1996; Ulrich, 1998; Garvin, 2000; Kouzes and Posner, 2007). The principle is concerned with aligning formal structures with the change vision and eliminating obstacles, because otherwise there is a risk of the employees being so frustrated that they will lose faith in the change initiative (Kotter, 1995, 1996). One way of doing this is to allow employees to have more responsibilities and more variety, which will enrich people’s jobs (Kouzes and Posner, 2007). Kotter (1996) also emphasizes the need for developing competencies in the employees, while a third obstacle of incongruence between compensation, performance-appraisal systems, and the change vision need to be eliminated by aligning the systems with the vision (Kotter, 1996). Lastly, bosses who refuse to change and who make demands that are inconsistent with the overall effort should be confronted.

Additionally, Kanter et al. (1992) state that enabling structures could also be symbolic, such as rearranging the office space or changing the organization's name. However, in this context we argue that it is not relevant to focus on changing the organization's name. All things considered, the focus of the sixth principle of change management is to alter and develop systems, structures and competencies to ensure that they complement and reinforce the change initiative (Ulrich, 1998; Garvin, 2000). This is captured in the indicators of the principle found in Table 3.7.

Empower people for change	
Variable	Operationalization
empower_	To which degree - Did the leaders of the change recognize the effects of the M&A on the company's structures and systems?
empow_1	To which degree - Did the company physically rearrange the office space due to the M&A?
empow_2	To which degree - Were the formal structures aligned with the M&A change vision?
empow_3	To which degree - Were more responsibilities or an increased variety in their assignments given to employees in relation to M&A?
empow_4	To which degree - Were training and development opportunities provided for the employees in relation to the M&A?
empow_5	To which degree - Were compensation and performance-appraisal systems aligned with the vision of the M&A?
empow_6	To which degree - Were bosses who refused to change and made demands inconsistent with the M&A change vision confronted?

Table 3.7 - Operationalization of Principle 6

Principle 7: Guide and motivate the change process

Most people involved in a change campaign need convincing signs that the change is producing the desired results, and they want to see these signs within 6-18 months depending on the size of the organization and the change initiative (Kotter, 1996). Moreover, the results have to be visible, unambiguous, and clearly linked to the change initiative for them to have an effect (Kotter, 1996). If the short-term win share these characteristics, it will, according to Kotter (1995, 1996), help the change initiative. Short-term wins give the opportunity to celebrate progress (Kotter, 1996), to which Kouzes and Posner (2007) add that the celebration, rewarding and recognition of contributions should be made publicly in order to set an example to follow and boost self-esteem.

Another dimension of this principle is that the process of achieving short-term wins should be monitored in order to be able to adjust and assess the progression towards the planned short-term wins (Beer et al., 1990; Ulrich, 1998; Garvin, 2000) Table 3.8 provides indicators of the seventh principle of change management, which is “Guide and motivate the change process”.

Guide and motivate the change process	
Variable	Operationalization
guide_1	To which degree - Did the organization have the means of measuring the success of the M&A?
guide_2	To which degree - Did the organization plan to benchmark progress on both the results and the process of implementing the changes?
guide_3	To which degree - Did you plan for short-term wins (within 6-18 months)?
guide_4	To which degree were these short-term wins - Visible to employees?
guide_5	To which degree were these short-term wins - Unambiguous?
guide_6	To which degree were these short-term wins - Clearly linked to the change initiative of the M&A?
guide_7	To which degree were these short-term wins - Celebrated?
guide_8	To which degree were the celebrations - Public?
guide_9	To which degree were the celebrations - Used to recognize individual contributions?

Table 3.8 - Operationalization of Principle 7

Principle 8: Make change last

The final change management principle identified is ‘Make change last’. First of all, this principle is about consolidating gains and using them to produce more change (Beer et al., 1990; Kotter, 1996; Leucke, 2003). Within this principle, Lewin’s (1947) last step in his three-step model, ‘Refreeze’, is found. Refreezing is essentially about stabilizing a new equilibrium in order for progression not to be lost, which will happen if routines and norms are not transformed (Burnes, 2004). Within organizations this means that in order to make change last, the new approaches need to be anchored in the organizational culture, policies, systems, reporting relationships, and practices (Beer et al., 1990; Kanter et al., 1992; Kotter, 1996; Ulrich, 1998; Garvin, 2000; Burnes, 2004).

Secondly, change can only be anchored in the culture, when it has owned its merits. In other words, the anchoring depends on the results, and only when the changes clearly have produced results, which are better than those produced the old way (Kotter, 1996). The process of shaping the new culture potentially entails employee turnover in order to make sure that the key persons personify the new approaches. Lastly, the promotion-

decisions have to become very important, which means that the criteria, by which people are promoted have to be in accordance with the new practices. All the abovementioned is captured in the indicators of the eighth and final change management principle. They are found below in Table 3.9

Make change last	
Variable	Operationalization
last_1	To which degree - Has the company used the initial change momentum to initiate greater changes?
last_2	To which degree - Were and are the criteria of promotion-decisions in accordance with the new practices from the vision of the M&A?
last_3	To which degree - Was and is employee turnover managed in accordance with the new practices from the vision of the M&A?
last_4	To which degree do you assess that the new approaches have been anchored in the organization's - Culture?
last_5	To which degree do you assess that the new approaches have been anchored in the organization's - Policies?
last_6	To which degree do you assess that the new approaches have been anchored in the organization's - Systems?
last_7	To which degree do you assess that the new approaches have been anchored in the organization's - Reporting Relationships?
last_8	To which degree do you assess that the new approaches have been anchored in the organization's - Practices?

Table 3.9 - Operationalization of Principle 8

M&A performance

Regarding M&A performance, we drew on Schoenberg (2006), who compares four commonly applied performance measures. These four measures are cumulative abnormal return, managers' subjective assessments, expert informants' subjective assessments, and divestment.

The first measure, cumulative abnormal return, measures M&A performance by assessing "the impact of an event (acquisition announcement) on a firm's share price by estimating the 'normal' or expected return to its share in the absence of an event and comparing it to the actual return achieved during a period of time around the event" (Schoenberg, 2006; 362). The advantage of such an approach is that it is fully objective and it is the only direct measure of shareholder value. The fact that the measure is limited to the cases where the acquiring firm is publicly quoted is mentioned as the greatest weakness of the measure (Schoenberg, 2006). Moreover, the movements in the share price may reflect other actions of the firm extraneous of the M&A.

The second measure presented by Schoenberg (2006) originates from the management literature as an operationalization of the multidimensional performance construct. When this measure is applied, managers are asked to rate the extent to which their original objectives have been met (Schoenberg, 2006). The strengths of using managers' subjective assessments are that they take differing management objectives into account and they are applicable across all types of M&As. On the negative side, the measure may be subject to managerial bias.

The third measure, expert informants' subjective assessment, is similar to using managers' subjective assessments, but with the variation of experts being asked instead of managers. In this way external assessment independent of the management is provided and potential managerial bias is eliminated (Schoenberg, 2006). Instead, however, it may reflect the experts' subjective bias (Schoenberg, 2006).

Using divestment as a performance measure of M&As is the final measure presented by Schoenberg (2006). This performance measure "identifies whether an acquired firm has subsequently been divested, with divestment deemed to show managements' dissatisfaction with the acquisition's performance" (Schoenberg, 2006; 363). The strength of this measure is that it is a relative simple method to use and it does not require detailed financial information. Nonetheless, it also has some weaknesses. Divestment as a performance measure is ambiguous meaning that divestment, on one hand, may indicate strategic failure, but on the other hand, it may indicate profit taking following successful restructuring (Schoenberg, 2006).

In our thesis, we use managers' subjective assessments to measure M&A performance. The reason is that the cumulative abnormal return, which is the most objective measure, and thus the most preferable to use in this thesis considering the methodology, is an ex-ante measure and not all of the companies involved in the deals in our sample were publicly listed. Neither did we find divestment to be a suitable measure, due to its ambiguity. This left us with the choice of subjective assessments either from managers involved in the M&A or from expert informants. Out of these two options we chose managers' assessments since we do not believe that it would be possible to find experts' assessment of every deal we researched. Moreover, Schoenberg (2006) showed that managers' subjective assessments and expert informants' subjective assessments as

measures are correlated. Accordingly, the choice between these two measures is not paramount for the answers nor for the accuracy of the answers. Hence, the operationalization of M&A performance, can be found below in Table 3.10

M&A performance	
Variable	Operationalization
performa	Do you personally believe that your M&A was a success?
perfo_1	To which degree were the intended M&A goals achieved?

Table 3.10 - Operationalization of M&A Performance

3.6 Data analysis

Next, we move on to the data analysis part of the research design. Processing and analyzing the data entails three steps in our thesis: computing summated scores, examining frequencies, and testing for variance.

3.6.1 Computing new variables

The first step of computing new variables is to divide our sample of 28 respondents into two groups: those who assessed their M&A as successful and those who did not. We do so by computing a new variable. Those respondents who answered “very high degree” to the question “To which degree were the intended M&A goals achieved” constitute the successful M&As, while those who answered “not at all”, “low degree”, “moderate degree” and “high degree” are defined as the unsuccessful M&As. By defining success in this way our sample corresponds more or less to the failure rates found in the literature (Marks and Mirvis, 2001).

Furthermore, the first step also entails reverse coding of the question “Before the M&A, to which degree were the following the case in the organization?” The reason this is needed is, that it allows us to compute a grouped aggregated score for each principle consisting of the sub-dimensions (Burns and Burns, 2008). These were in turn computed by taking the average of all sub-dimensions. Respondents who did not respond to at least 85% were excluded, as we otherwise would have gotten a rather distorted image. Consequently we were able to analyze the change management principles on an aggregated level as well as on a sub-dimensional level.

3.6.2 To what extent do successful companies engage the principles of change management in CBM&As?

Our first analysis comprised the creation of frequency tables for the dimensions of each change management principle. Frequency tables are a form of univariate analysis, which provides the number of respondents and percentage belonging to each of the categories for the variable in question (Bryman and Bell, 2011). According to the literature, as long as a question only deals with one variable, and therefore excludes relationships of association or causal relations, tabulation, of which creating frequency tables is a sub-form, is probably the best approach (Zikmund et al., 2013). However, in our case we wanted the frequencies to be showed based on our definitions of successful and unsuccessful M&As. Consequently, we cross-tabulated, which can be thought of as combining frequency tables (Zikmund et al. 2013). Having this overview of the cross-tabulations in form of contingency tables allowed us to gain insight into RQ3, which is listed below.

RQ3: To what extent do successful companies engage the principles of change management in CBM&As?

3.6.3 How does the use of change management principles differ between successful and unsuccessful CBM&As?

In order to answer RQ4 we conducted two different tests, one on the sub-dimensional level and one at the aggregated principle level. For the former we used a chi-square analysis, while at the principle level we applied an independent t-test.

Chi-square analysis

Chi-square analysis is a bivariate analysis of differences that is concerned with the analysis of two variables at a time in order to examine whether or not the two variables are related (Bryman and Bell, 2011). Moreover, such a test of differences is used to investigate whether two or more groups differ with respect to measures on a variable (Zikmund et al., 2013). In relation to this thesis, we wanted to test the difference in use of change management principles between successful and unsuccessful CBM&As, which constitute our fourth research question that is shown below.

RQ4: How does the use of change management principles differ between successful and unsuccessful CBM&As?

The chi-square analysis provided us with a means of examining the statistical significance of the contingency tables we created to answer RQ3. The test involved comparing the observed frequencies with the expected frequencies, which provided a statistic of the goodness-of-fit (Zikmund et al., 2013).

The bivariate chi-square analysis was made on the level of the dimensions of the principles, because these were made up of ordinal scales. In accordance with practice within business and managerial research (Bryman and Bell, 2011), the tests were conducted at a significance level of 5%, which implied that there were fewer than five chances in 100 that we could have a sample that showed a relationship when there was none in the population (Bryman and Bell, 2011).

Independent t-test

While the chi-square analysis was used on the sub-dimensions, we conducted independent t-tests on an aggregated level of the principles, in order to answer RQ4. The reason we did not apply the chi-square test in this case, was that we have computed new ratio variables on the aggregated level. Therefore, instead of grouping the new ratio variables into categories, ordinal scales, and possibly introducing processing-error, we compared the means of the two groups, successful and unsuccessful M&As. For this purpose the t-test was chosen.

However, in order for the independent t-test to be considered an appropriate approach to testing our data, the data had to pass six assumptions. The first assumption was that the dependent variable had to be measured on a continuous scale. This we already established. After the transformation to the aggregated level the new variables were categorized as ratio variables. The second assumption was that the independent variable should consist of two categorical groups. In our case we had two performance groups; successful and unsuccessful. Independence of observations, which means that there is no relationship between observations, was the third assumption, which our data also passed. The final three assumptions were that the data should not contain significant outliers, the dependent variable should be approximately normally distributed for each

group of the independent variable, and that there needed to be homogeneity of variance (Lund Research, 2013a). These assumptions were further tested in “4.2.1 Assumptions”.

3.7 Validity and reliability

Within the tradition of quantitative business and management research there are certain criteria used to evaluate the quality of the research conducted. These criteria are: validity, reliability, and replicability (Bryman and Bell, 2011).

3.7.1 Validity

Validity is concerned with the integrity of the conclusions that are generated from the research. As a consequence it is seen as the most important criterion in many ways of research (Bryman and Bell, 2011). There are various types of validity: measurement validity, internal validity, external validity and ecological validity. Regarding, measurement validity, which is essentially concerned with the adequacy of measures (Bryman and Bell, 2011), we draw on different sources of validity. The M&A performance measure we utilized, was already established in the literature as valid and reliable (Schoenberg, 2006). However, for our indicators of the principles and their dimensions we were not able to draw on already established measures and indicators. Instead, we relied on face validity and construct validity for those indicators.

Face validity was established by letting the indicators being created in close accordance with the theory. This was done to make sure that the measure reflects the content of the principles in question (Bryman and Bell, 2011). However, even though we tried to establish face validity of our indicators, it is up to the reader and other researchers to determine whether we were successful in doing so.

Construct validity, on the other hand, reflects whether the indicators and measures behave like the theory says it would (Zikmund et al. 2013). Our results suggested that our indicators did behave in accordance with the change management theory.

Nonetheless, construct validity is first established when numerous studies using the instrument have been evaluated and a correlation has been established (Peters, 1981).

Lastly, measurement validity is closely related to the reliability of the measures, as they both are expressions of the adequacy of the measures. Therefore, we elaborate more on the adequacy of the measures in “3.7.2 Reliability”

The second main type of the validity, internal validity, regards causality issues (Bryman and Bell, 2011). More specifically, it is concerned with whether conclusions that incorporate a causal relationship between two or more variables are valid (Bryman and Bell, 2011). The internal validity of this thesis could be seen as weak due to the nature of our research design. The reason is that in the cross-sectional design there is no time for reordering of variables since the data on them are collected simultaneously, and there is no option of manipulating one of the variable, as it is in experimental designs (Bryman and Bell, 2011). Consequently, we could not conclude causality between variables even if we found a relationship between them, and we could not say that an independent variable preceded the dependent one. However, we were able to infer that one variable caused the other, by drawing on common sense and theoretical ideas. However, this presents a risk of us being wrong (Bryman and Bell, 2011). Nonetheless, throughout the project and particularly in the literature review we borrowed support from the change management literature, which argued that following the principles of change management would lead to success of the particular change initiative – in our case the CBM&A. Therefore, we argue that although the internal validity of this project is not as high as in an experimental design due to the nature of our cross-sectional design, it is still at an acceptable level. In other words, we believe that our inference that the change management principles will precede M&A performance and success is strong and grounded in the literature. Yet it is important to stress that, as it is the case with cross-sectional designs, even though our inference may be based on sound reasoning, it can only be an inference. Thus, there is a possibility that the real pattern of causal direction is the opposite of the anticipated (Bryman and Bell, 2011).

The third of the main types of validity is external validity, which is an especially important concern in quantitative research with a cross-sectional design like ours (Bryman and Bell, 2011). External validity concerns the question of whether the results of a study can be generalized beyond the specific research context, which is the main reason that quantitative research is so keen on generating representative samples (Bryman and Bell, 2011). Usually the external validity will be strong if the sample from which data are collected has been randomly selected (Bryman and Bell, 2011). This was the case in our research, because we initially utilized simple random sampling as mentioned in “3.4 Sampling”, which would create high external validity.

Conversely, we recognized some issues with the representativeness of our sample, which we also discussed in “3.4 Sampling”. In particular, we identified two sources of the issues of the representativeness of our chosen sample. First of all, the response rates to our sample and our backup sample, which were 1.6% and 3.7% respectively, were way under the minimum acceptable response rates (Ekinci, 2015). In other words, non-sampling error in the form of non-response error is present in our sample. We pinpointed a number of reasons for this low response rate. We utilized a self-completion questionnaire and although we used strategies to increase the response rate, see “3.4 Sampling”, this research instrument is genuinely associated with lower response rates. Furthermore, the respondents of our survey were managers, out of whom some may have changed jobs during the ten-year period we were interested in. Also, managers may have been more reluctant to answer because of time constraints and the lack of prioritization for such tasks (Bryman and Bell, 2011). Additionally, our time frame presented another issue. Managers may have had troubles recalling the information we were interested in and rather might have chosen not to answer. Lastly, there is a growing tendency of people refusing to participate in survey research (Bryman and Bell, 2011). These abovementioned reasons can justify a lower than normal response rate, and it should also be added, that prominent survey researchers have questioned the assumption that low response rates are associated with biased results (Groves, 2006). However, we cannot get around the fact that the response rates are too low, which affects the representativeness of our samples in the way that it is not known of what population our samples are representative of.

The second source of the issues of the representativeness of our chosen sample comes from sampling error. Besides our sample being relatively small, we also introduced more sampling error by combining our initial sample with our backup sample. The error appears in the fact that the Danish companies are overrepresented in comparison to the American. However, considering the already questionable representativeness, we argue that the advantages of combining the samples outweigh the added error by far. All things considered, the external validity is up for discussion at its best. Consequently, constraints are placed on the generalizability of our research as the survey is potentially biased (Bryman and Bell, 2011). Therefore, the reader should be careful in trying to transfer our results into other contexts than the context of this research. Likewise, we

will be careful when generalizing to the population of the research. Nonetheless, the results can be used as a foundation for further research, which is needed to establish external validity of our results.

Lastly, the ecological validity of this project, as it is in the majority of cross-sectional research (Bryman and Bell, 2011), is limited. The reason is that the research instruments – in our case the self-completion questionnaire – disrupt the natural habitat (Bryman and Bell, 2011).

3.7.2 Reliability

The next criterion for evaluating the quality of quantitative research is reliability, which is fundamentally concerned with issues of consistency of measures (Bryman and Bell, 2011). The stability of the measures is the first parameter that could be examined to determine the reliability. However, this requires a test-retest, in which our survey would have to be sent out to the same sample on a later occasion. Unfortunately, this was not possible or feasible in our case. Another way of looking at reliability is to focus on the inter-observer consistency. In relation to our thesis, no problems were identified regarding the inter-observer consistency, because we designed our questionnaire exclusively, except for one question regarding industry classification, with closed-response questions. Lastly, the internal reliability can be assessed in order to establish the project's reliability. Internal reliability is concerned with whether the indicators that make up a scale are consistent (Bryman and Bell, 2011). To examine the internal reliability in our project, we utilize a Cronbach's alpha test, which is the most commonly applied test. We conduct the test on the level of the principles and the produced alphas can be seen below in Table 3. 11.

Cronbach's Alpha Tests	
Define the initiative	0,596
Challenge status quo	0,836
Lead the change and build a change leader team	0,835
Develop a vision	0,913
Communicate the change vision	0,866
Empower People for Change	0,808
Guide and motivate the change process	0,897
Make change last	0,932

Table 3.11 - Cronbach's Alpha Tests

The results of the Cronbach's alpha tests show that there is a high degree of internal reliability. We state so based on the consideration that 0.7 is the minimum acceptable result and an alpha of 0.8 and more is considered to indicate very good internal reliability (Zikmund et al., 2013). However, the alpha of the first principle was just below 0.6, which could be due to the fact that only four dimensions were measured (Burns and Burns, 2008). And then again, our principles did not constitute scales as such, but rather the questions measured different dimensions of the principle, which did not necessarily have to be interlinked and correlated.

3.7.3 Replicability

The criterion of replication regards whether a study is capable of replication (Bryman and Bell, 2011). Firstly, throughout our thesis we explicitly spell out our procedures for every step made. Furthermore, we provide our indicators, steps of analysis, questionnaire and more as appendices. Consequently, we argue that we have specified our procedures to a large degree, and that our research has a high degree of replicability.

Chapter 4: Analysis

In this chapter we aim to present and discuss the data gathered from our survey to be able to proceed in our quest of finding the answers to the final two research questions:

RQ3: *To what extent do successful companies engage the principles of change management in CBM&As?*

RQ4: *How does the use of change management principles differ between successful and unsuccessful CBM&As?*

To maintain clarity in this project, this chapter is further divided into two sections each of which focuses on one research question. Thus, the use of change management principles by successful companies on both an aggregated and individual level is discussed first. Next, the second section provides a comparison between successful and unsuccessful companies by statistically testing for significant differences. The reader is referred to “3.5.2 Operationalizing of concepts and principles” or Appendix K for the operationalizations of the variables.

4.1 To what extent do successful companies engage the principles of change management in CBM&As?

4.1.1 Aggregated view of Change management principles

As mentioned above, we start the analysis by looking at the change management principles on an aggregated level (see Figure 4.1). Bearing in mind that in this section we discuss the successful companies only, hence the companies, which stated that their CBM&A was a success to a “very high degree”, we can see that seven out of eight individual principles were followed to a high or a very high degree. The principle which was followed to a moderate degree by the majority of respondents (71.4%) was “Challenge status quo”. In spite of the fact that “Communicate the change vision” also included 28.6% of responses indicating a moderate degree of following the principle, the rest of the respondents answered that the principle was employed to a high extent.

On the other hand, the most optimistic answers were received on the “Lead the change and build a change leader team” and “Develop a vision” principles with 85.7% and

71.4%, respectively, of answers indicating a very high degree of following these principles. Overall we can conclude that the majority of successful companies seem to follow the vast majority of the eight principles of change management to a high or a very high degree. Below we will individually describe each principle with its sub-dimensions to be able to capture the whole picture.

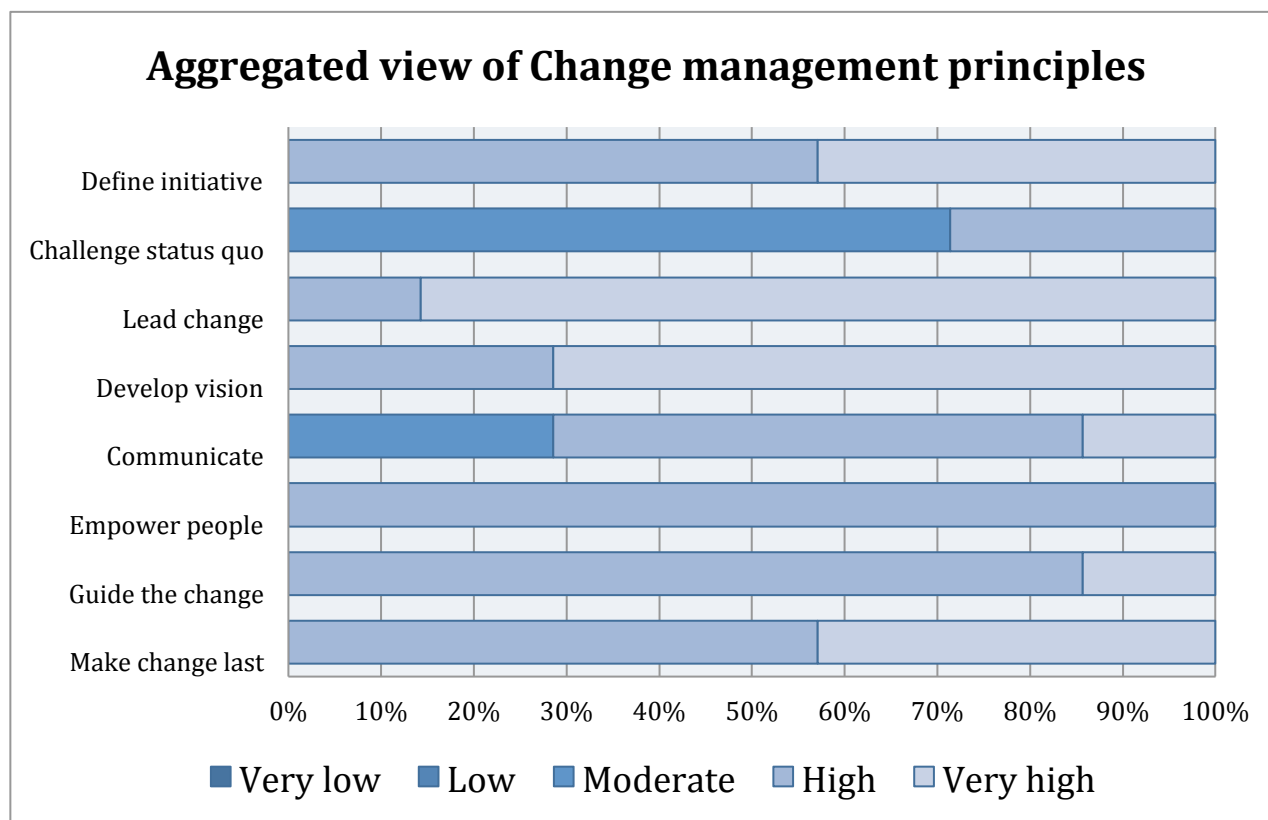


Figure 4.1 - Aggregated view of the Change Management Principles

4.1.2 Individual view on change management principles

Principle 1: Define the initiative

The first principle to elaborate on is “Define the initiative”, which considers the degree to which a problem or an opportunity has been identified (see Figure 4.2). Breaking this principle down to four previously described indicators, we can see that 100% of the successful companies have agreed to a high or a very high degree to have *assessed the impact of the M&A*, while 85% confirmed to have *identified the challenges and opportunities* to a high or a very high degree. The results considering whether the *company's strengths and weaknesses were analysed* were less optimistic ranging from a moderate (42.9%) through a high (42.9%) and a very high degree (14.3%) of following this sub-dimension. The lowest degree of agreement was witnessed in the last sub-

dimension with widest distribution of responses ranging from a very low (14.3%) to very high (28.6%) degree. Thus, it appears that successful companies are not in consensus about *the degree to which employees and middle managers were involved in identifying the needs or opportunities to conduct an M&A*. This also makes sense based on the confidential nature of this topic. Overall, it appears that although most of the companies have identified their challenges and opportunities, together with the predicted impact of M&A, their more concrete strengths and weaknesses were only partially analysed. Interestingly, in spite of large emphasis on previously mentioned analyses our data show that the companies were somewhat misaligned in the question of involvement of employees and middle managers.

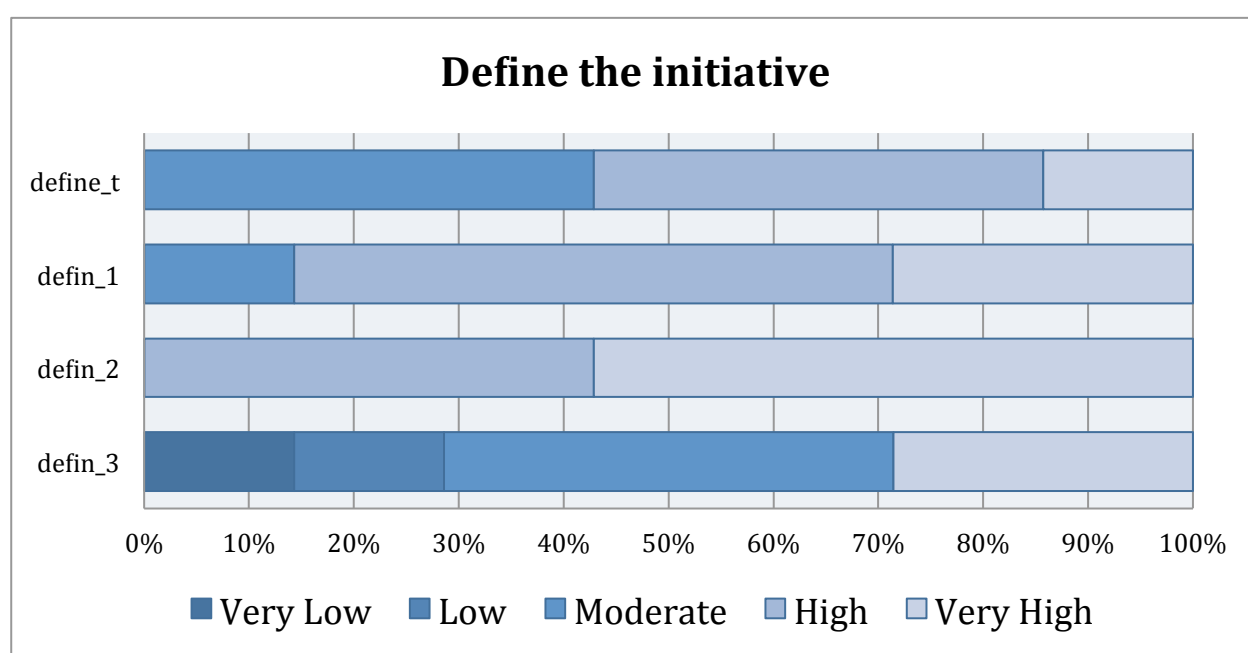


Figure 4.2 – RQ3: Define the initiative

Principle 2: Challenge status quo

Closely linked to the first principle is the second principle called “Challenge status quo”. This principle is also known to create the sense of urgency or initiating the unfreezing process on an organization (see “2.2.4 Change management principles”). In other words, now we look at how the information regarding M&A, which was gathered by the previous principle, was communicated to the employees in order for them to understand the importance/urgency of the deal. As seen from Figure 4.3 there are 13 sub-dimensions of this principle. We can state that the overall pattern of the answers suggests that these dimensions were mostly used to a very low, low, or moderate degree in all dimensions considering the sources of complacency in the pre-M&A phase (csq_5 -

csq_13). Drawing from the literature review (see “2.2.4 Change management principles”), if the below mentioned sources of complacency are in place, for instance if the employees believe that there are *too many visible resources* such as private corporate limousine cars, they will not perceive the need for a change. Thus, the sense of urgency would not be created.

Thus, the majority of successful companies have stated that the following unfavourable conditions and sources of complacency were experienced in the pre-M&A state to only a low degree or not at all; *low overall performance standards, organizational structures leading to narrow goals, internal systems measurement systems which focus on inappropriate performance indexes, , low confrontation culture, employees ‘denial of the need of M&A and excessive happy talk from senior management.*

On the other hand, over 80% of the companies admitted to have experienced the *absence of a major crisis* to a moderate degree, and 70% of them agreed to a moderate or high degree on the *lack of sufficient external performance feedback*. Furthermore, 60% of the respondents agreed to a moderate degree to have *too many visible resources*. Nonetheless, the sense of urgency does not have to be created using all the sources at once, thus it makes sense that various successful companies employ various sources to a different extent.

Moving on, we see that the dimensions mostly followed by successful M&A companies were those considering the *employee alignment on the importance of M&A* (csq_1). Here, 71.4 % of companies reported a high degree of alignment and further 28. 6% even agreed on a very high degree of alignment.

As the literature states, the sense of urgency is created when over 75% of the employees are aligned. Bearing in mind that both high and a very high alignment correspond to percentages over 60% we can state that all employees were aligned, thus the sense of urgency has been created in all the successful companies. In line with this finding, the third dimension about the *alignment of managers* (csq_3) with the importance of M&A received very positive responses with 71.4% of companies answered that 81-100% of all managers were convinced that the M&A was absolutely necessary and 14.3% answered 61-80%.

The final two dimensions (csq_2 and csq_4) relate to the *frequency of emphasizing the importance of M&A* as well as *clarifying the consequences of not engaging in M&A to the employees in the pre-M&A phase*. The responses outline very fragmented outcomes ranging and being almost equally distributed between all degrees: from not at all to very high.

In conclusion, examining the Challenging status quo dimension, we have observed a pattern suggesting that successful M&A companies did not concentrate on the unfavourable pre-M&A conditions relating to systems or structures, but rather they focused on the alignment with the M&A goals for both the employees and management. This is closely linked to the previous principle of “Defining the initiative”, where it was discovered that employees and managers are not always consulted in the need identification process. Interestingly, in this section we uncovered that in spite of that, the companies are very likely to emphasise the employee and managerial alignment.

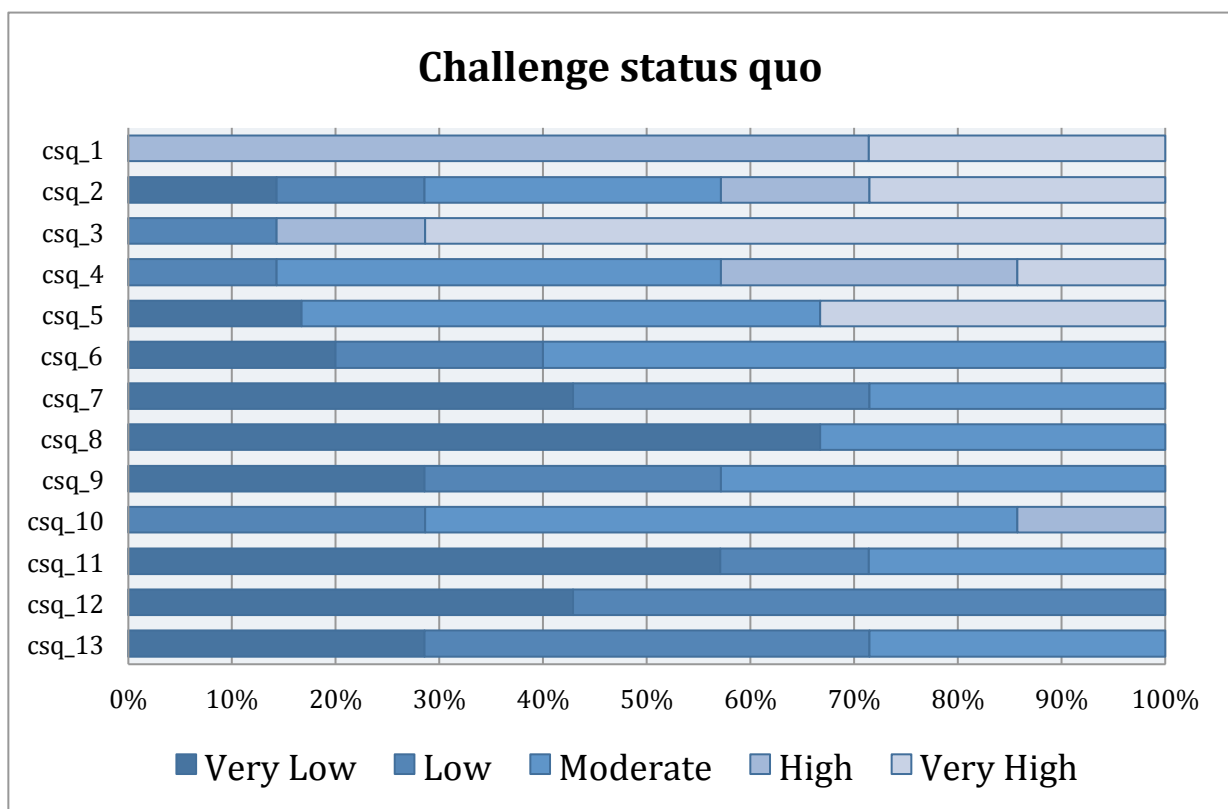


Figure 4.3 – RQ3: Challenge Status Quo

Principle 3: Lead the change and build a change leader team

The next principle, which we are about to analyse, revolves around the importance of leadership in successful change management. We have used twelve dimensions, which

can be grouped into three categories to address this principle (see Figure 4.4). The first group of dimensions (lead_1 – lead_3) considers the presence of a leader to lead the change, the second (lead_4 – lead_6) examines the characteristics of those leaders, and the third (lead_7 – lead_12) assesses the presence of change leader teams and their features.

After taking a closer look at our data it is clear that there is a pattern, which follows the grouping of the above-mentioned dimensions. This pattern is the most noticeable on the first group of dimensions, which considers the presence of a leader. Here, the responses on all three dimensions agreed on a high (28.6%) or a very high (71.4%) degree. Thus, all the successful companies seemed to have a *committed leader who championed the M&A and put in the personal time and attention to make the deal work*. An almost identical and a highly positive pattern continues through to the second group of dimensions about the characteristics of a leader. The findings demonstrated that all the companies were highly or very highly in agreement about their *leaders' belief in M&A being a key to competitiveness, their ability to articulate this belief, and have both the people-skills and the organizational know-how to make the M&A deal work*.

The final group of dimensions considering the change leader team presented the most fragmented responses within this principle. The findings show that vast majority of successful companies had a *guiding coalition/project team to lead the change*. More specifically, 71.5% of the companies followed this dimension to a high or a very high extent with the outstanding 14.3% following to a moderate extent, and final 14.3% following to a low extent only. In terms of the characteristic an effective change leader team ought to have, the findings are mostly positive. Thus, *expertise, credibility and leadership skills* were present to a high or a very high degree in more than 85% of the companies followed by the *position of power* witnessed to a high or a very high degree by 71.4% of the companies. The rest of the respondents perceived the above mentioned change leader teams' characteristics to a moderate extent only. Rather different findings were gathered regarding the diversity of a change leader team in terms of *various members belonging to various stakeholder groups*. In this case, the majority (57.1%) of respondents agreed to a moderate extent and 14.3% did not agree at all while the rest of the respondents agreed to a very high extent.

Overall, the successful CBM&A companies seemed to have a strong and capable leader of the change process in place, as well as the change leader team. The responses on the team characteristics were slightly less positive than the leaders' characteristics as they included a percentage of respondents agreeing to their dimensions to a moderate extent.

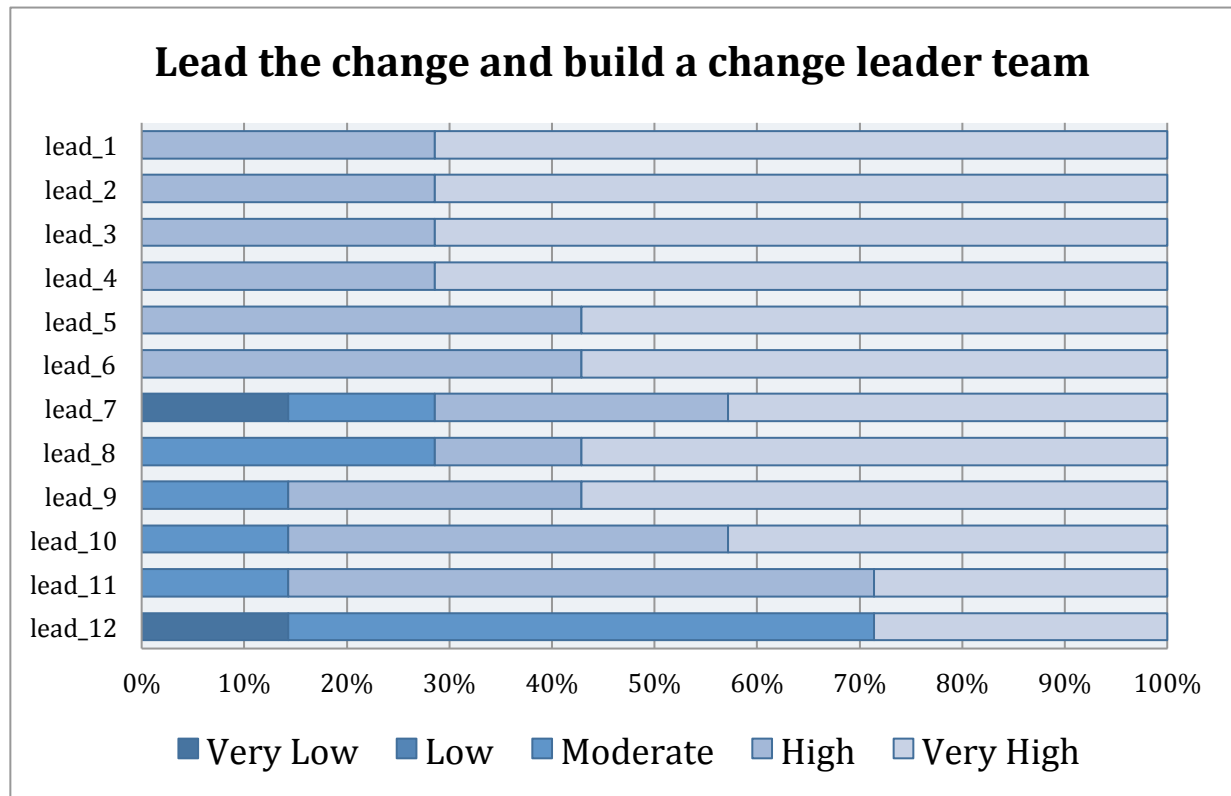


Figure 4.4 - RQ3: Lead the change and build a change leader team

Principle 4: Develop a vision

After discussing the leadership and its role in the change process, we move on to a key component of leadership, which is the vision. Looking at the Figure 4.5 we can state that successful companies are very positive about the inclusion and different characteristics of a change vision in the M&A process. In essence, the majority of respondents agreed to our dimension of *developing a vision* to a high extent (40%), followed by a very high (24.6%), and a moderate extent (11.7%).

The companies were largely in consensus about whether their *employees understood the outcome of the change, and the benefits of change for themselves and others*. Respectively, 83.4% and 100% of the companies have agreed to a high and a very high degree.

Our analysis also examined the characteristics of M&A visions developed. The results show that out of six key characteristics of an effective vision (see “2.2.4 Change management principles”) successful M&A were positive about all of them, but most positive about three of them. A whopping 100% of the respondents admitted their *vision to have had the ability to be easily communicated to different levels* to a high degree. Moreover, the vision was found to *convey a picture of a desirable future*, and be *appealing to the long-term interests of company’s stakeholders* to either a high or a very high degree. The final three characteristics of a *vision comprising realistic, manageable and coherent set of goals*, and *having the ability to adapt to changing circumstances* each included 14.3% of respondents claiming that this was the case only to a moderate degree. Nonetheless, the rest of companies agreed to these characteristics to a high or a very high degree. Finally, our research discovered that in most of the cases more *people than just the leader were involved in developing the vision*. This was demonstrated by 71.5% of the companies agreeing to a high or a very high degree, and the outstanding 28.5% to a moderate degree. Overall, it appears that most of the successful companies conducting CBM&A are using the principle of developing a vision to a high or a very high degree.

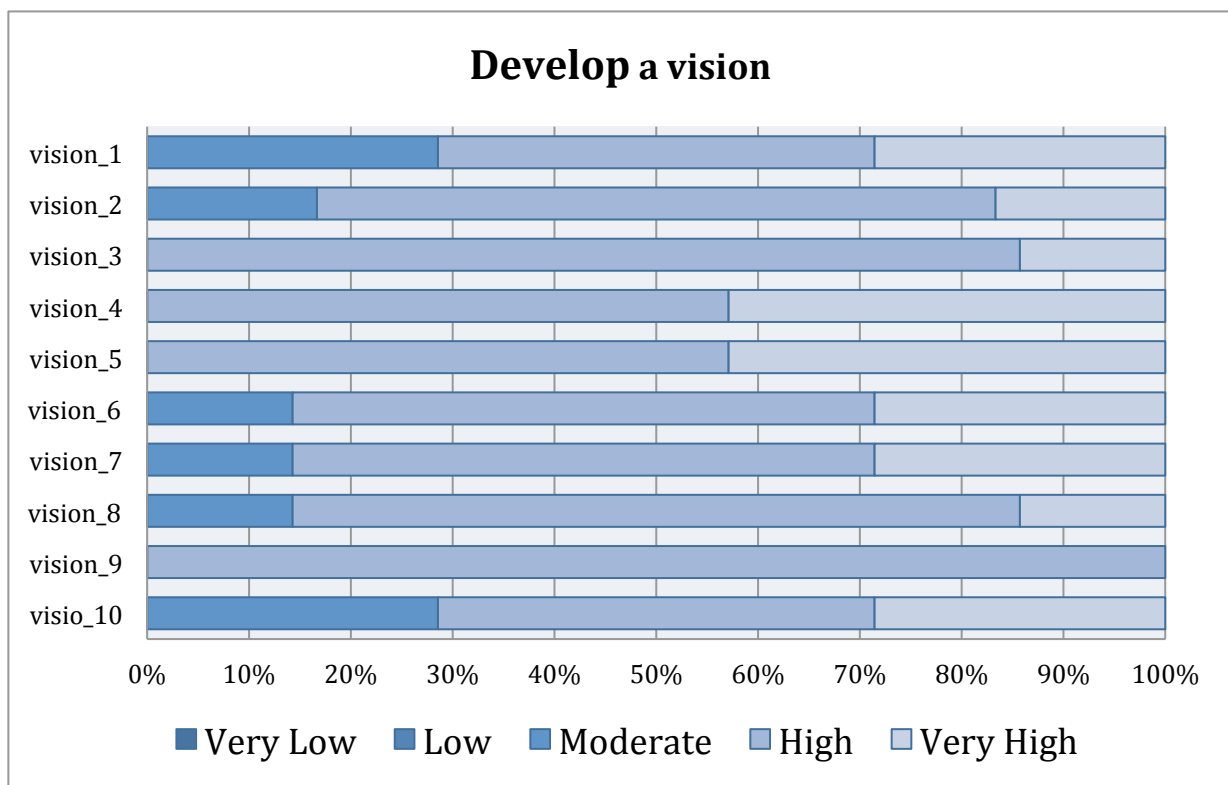


Figure 4.5 - RQ3: Develop a vision

Principle 5: Communicate the change vision

After establishing that the vision has been developed in most of the successful M&A companies, it has to be communicated in order to exploit the power of the vision to its full potential. Hence, now we take a closer look at whether the companies communicated the vision effectively using the main characteristics of an effective change vision communication defined in the previous chapter, “2.2.4 Change management principles”.

Looking at Figure 4.6 it is apparent that, unlike in the previously mentioned principles, there is a much higher variety of responses, ranging from not at all to very high degree of agreement on different dimensions. However, the majority of dimensions seem to be agreed on to a high or a very high extent. Specifically, the communication was *simple* to a high or a very high degree to 85.7% of the respondents, and it was also *repeated*, *personified in the actions of management*, and *two-way communication* to a high or a very high degree 71.5% of the companies.

More diverse responses were found in the dimensions considering the *use of multiple channels* for communicating the vision where 42.9% of successful companies agreed to a high or a very high degree but 28.6% agreed to a low level only. Similarly, 66.7% of the companies agreed to a high or a very high level to *use the communication to explain possible inconsistencies between the change vision and the behaviour of the leader*, while the outstanding 33.3% agreed to a low level only or not at all. The *use of metaphors and examples* was the least likely characteristic of the vision communication based on the fact that more than a half of the companies agreed to this to only a low extent or not at all. Overall, the more diverse responses on the dimensions of “Communicate the change vision” were noted. Nonetheless, four characteristics of the communication were agreed on to a high or a very high degree which leads to the outcome of change vision communication in majority of the successful M&As being simple, repeated, personified in the actions of top management, and being essentially a two-way communication.

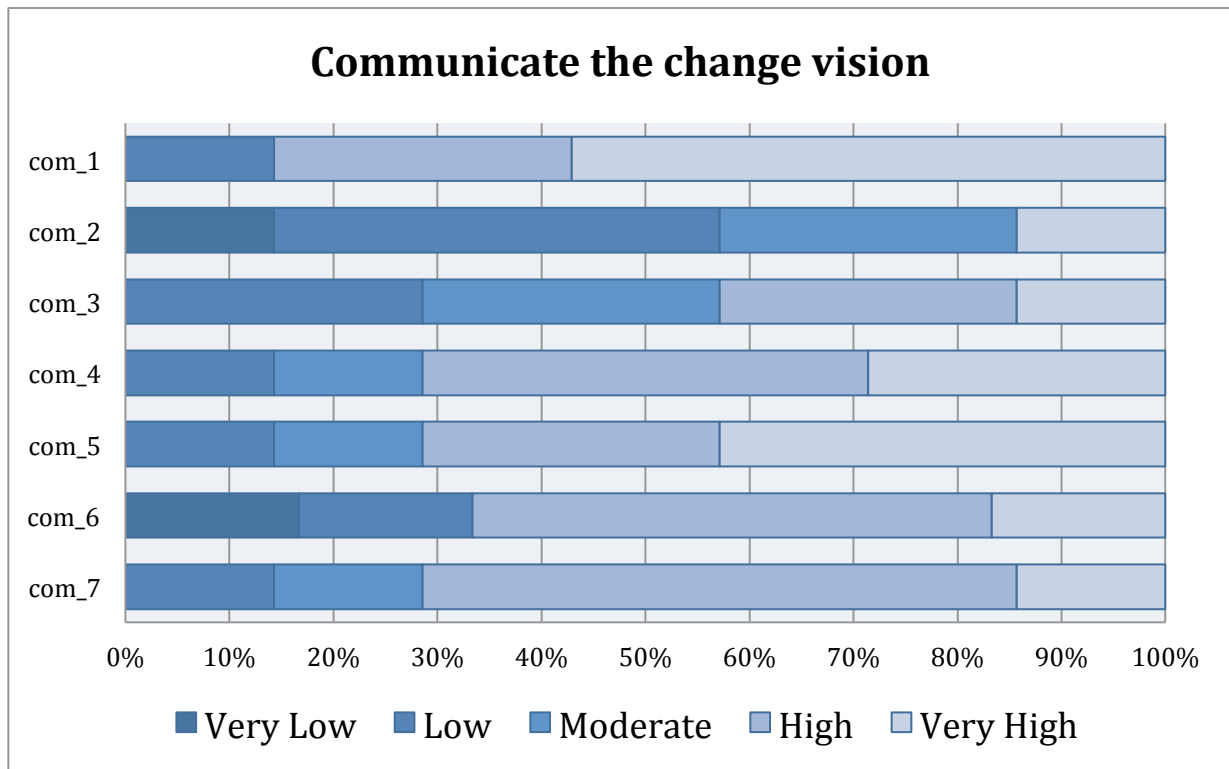


Figure 4.6 - RQ3: Communicate the change vision

Principle 6: Empower people for change

The following principle aims to tackle the obstacles, which stand in the way of the change initiative. In other words, it is focused on alteration and development of the systems and competencies to complement the change initiative and empower the people (see “2.2.4 Change management principles”). Using the seven dimensions, which can be seen in the Figure 4.7, it seems that although the positive responses of high and very high agreement are prevailing, a fairly large proportion of the companies agreed to a moderate extent only. Accordingly, 71.4 % of the companies agreed to a high or a very high degree that their *leaders recognised the effect of M&A on company structures and systems, the alignment of formal structures with the M&A vision, and training and development opportunities for their staff.*

Slightly less positive and more neutral were the answers on two dimensions regarding an *increase in responsibilities for employees, and aligned performance appraisal system.* Here, two thirds of the companies agreed to a high or a very high extent, however the rest to a moderate extent only.

On the other hand, in case of *physically rearranging the office space*, and *confronting the bosses who were inconsistent in their demands in relation to change*, the respective proportion of 28.6% and 42.9% of successful companies agreed to a low extent only. Overall, although the trend of more positive responses persists in the case of this principle, rearranging the office space, and confrontation of bosses with inconsistent demands seemed not to be the case in many companies. In contrast, the recognition of effects of M&A on companies' structures, and their respective alignment, together with training opportunities for employees were the dimensions most frequently found in successful companies.

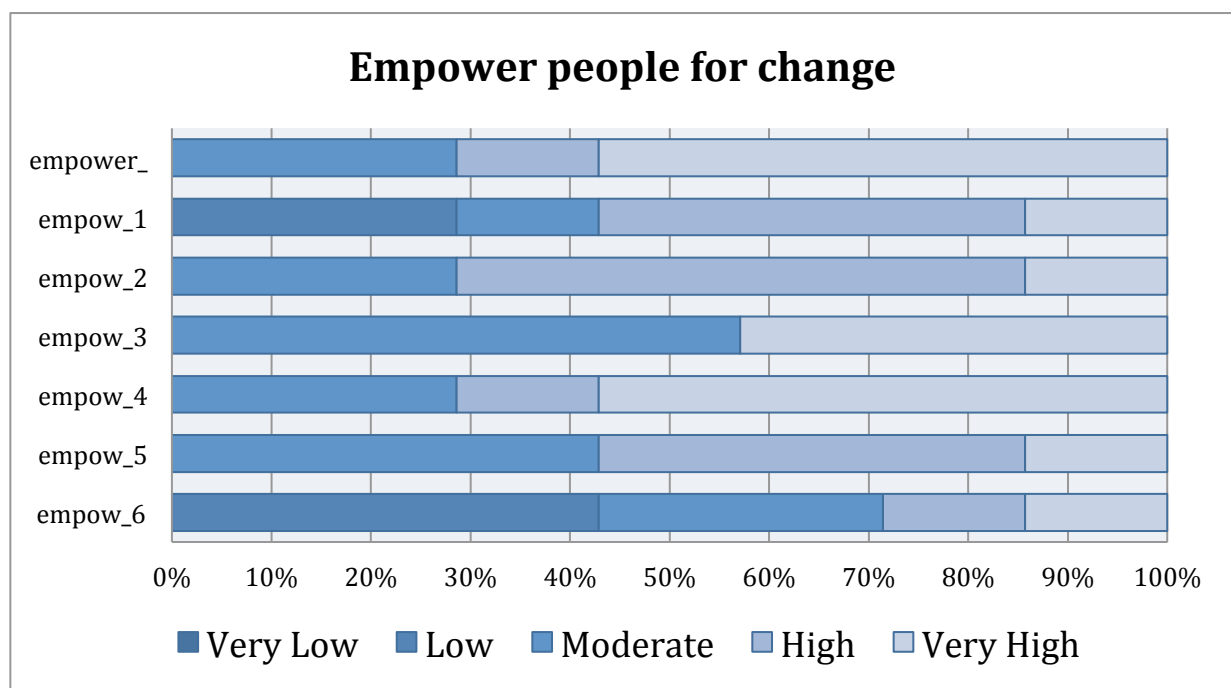


Figure 4.7 - RQ3: Empower people for change

Principle 7: Guide and motivate the change process

The next principle we discuss deals with the short-term wins, which help to guide the change process by the means of keeping up the motivation of the involved people. As seen in the Figure 4.8, all 100% of the companies had a *means to measure success of the M&A* as they agreed to this dimension to a high or a very high degree. Moreover, the majority (71.5%) of the successful companies agreed to a high or a very high degree to have *planned to benchmark the progress*. The results of *planning for a short-term wins* show a greater variation in responses. Hence, the same proportion of the companies

(28.6%) agreed to a very high, to a high, and to a moderate degree. The rest of the respondents agreed to have planned for a short-term wins only to a low extent.

Bearing in mind that above half of the companies agreed to have planned for short-term wins to at least a high extent we move on to the four characteristics of short-term wins, which are reflected in our dimensions guide_4 – guide_7. The answers are fairly consistent with all respondents agreeing to either a high or a moderate degree. The most highly supported characteristic of short-term wins was found to be the *clear linkage to the change initiative of the M&A* with 87.5%. In the other end, there is the *celebration of short-term wins*, which was witnessed by majority of the companies (66.7%) to a moderate extent only. The other two characteristics of the *visibility of short-term wins to the employees*, and the *unambiguity of the short-term wins* brought a high degree of agreement totalling 71.4%.

Coming back to the celebrations of the short-term wins, our final dimensions look at a couple of their main characteristics. Interestingly, the research uncovered that most of these *celebrations were not public* with 60% of the companies' voting for a low degree or not at all answer. On the other hand, the situation looks more favourable when *using the celebrations to celebrate individual goals*. Here, 40% of the companies agree to a high extent, 40% to a moderate extent and the outstanding 20% to a low extent.

Overall, all the companies had the means to measure success, and more than a half had planned for short-term wins. The prevailing characteristics of the short-term wins were found to be the linkage to the change initiative followed by the visibility and unambiguity of the short-term wins. The celebrations were not supported mostly to a moderate degree and it appeared that in most instances they were not public.

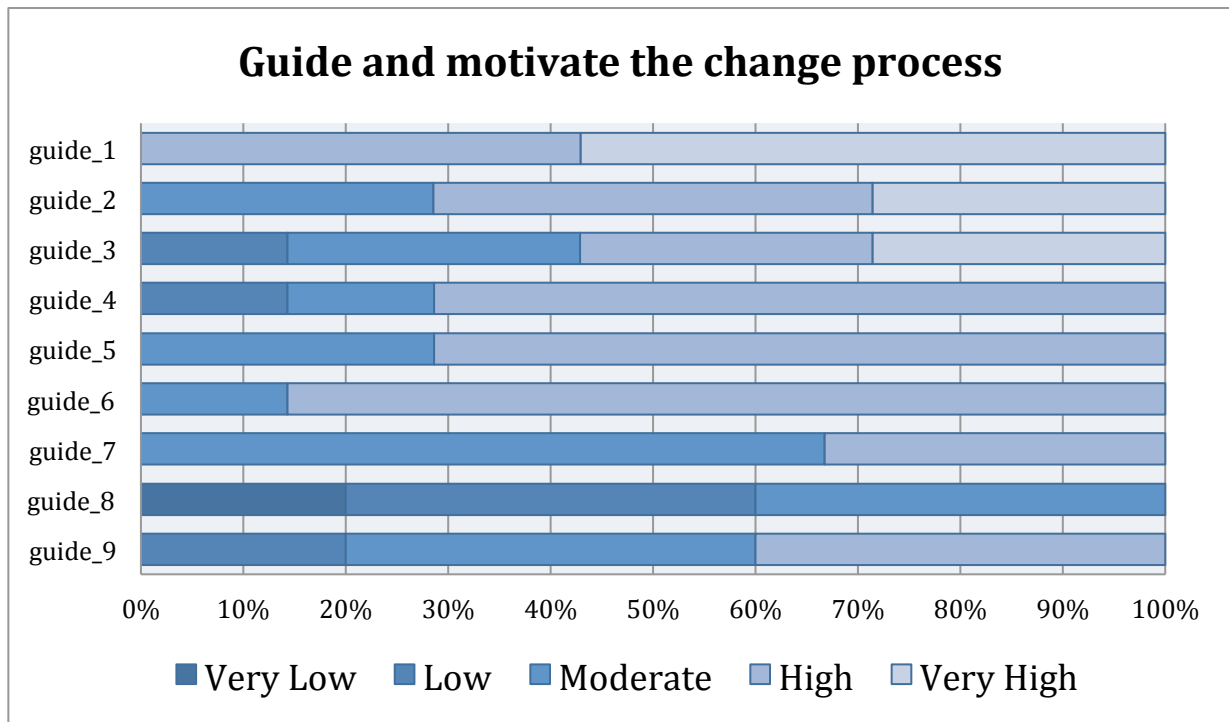


Figure 4.8 - RQ3: Guide and motivate the change process

Principle 8: Make change last

The very final principle to discuss is the one about consolidating the gains from change efforts previously mentioned and making the change last. Figure 4.9 comprises the eight dimensions of this principle, out of which the majority consider whether the new approaches have been anchored in the various structures and systems of the company (last_4 – last_8). The first look at the data shows agreement to the dimensions to a minimum of a moderate degree and a maximum of a very high degree. Thus, appears that this principle has been followed to a relatively high degree overall. However, it is important to emphasise that the most positive scores were gathered on the dimensions belonging to the section about anchoring the new approaches in the organization. Specifically, 85.7% of the successful companies admitted to have *anchored new approaches into their culture, policies and practices* to a high or a very high degree. Out of these three dimensions, the *anchoring of the new approaches into companies' policies* has included the highest number of companies agreeing to a very high extent. *The anchoring in the reporting relationships*, and *the anchoring in the systems* have been the case to a high or a very high extent in 57.2% and 71.4% of the companies respectively. Thus, the anchoring of the new approaches in the systems is the least likely out of the organizational structures mentioned.

The lowest score within this principle was noted when looking at the first dimension of *use of change momentum to initiate greater changes*. We see that 66.7% of the companies agreed to a moderate degree only. The final two dimensions considering the *alignment of promotion decisions*, and *employee turnover with the new M&A vision* have been followed to a high or a very high degree by 71.4% of the successful companies.

Overall, it appears that successful companies consider anchoring of new approaches in their culture, policies, and practices to be the most important, followed by the alignment of employee turnover, decisions on promotions, and anchoring of new approaches in reporting relationships. The successful companies are least likely to use the change momentum to initiate greater changes. This can reflect the nature of an M&A as a discontinuous change.

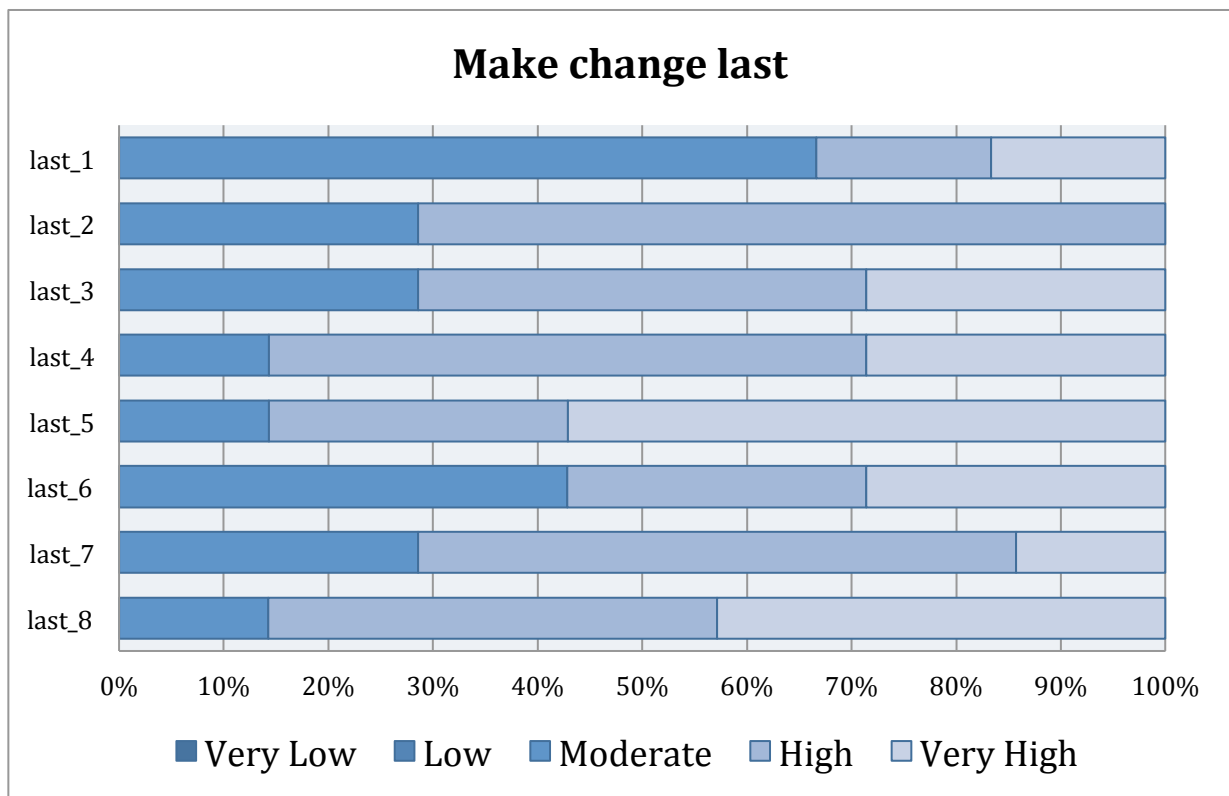


Figure 4.9 - RQ3: Make change last

4.1.3 Summary

In this section we presented and discussed the results gathered on the use of change management principles in successful CBM&As. Our findings showed, that on an aggregated level, the successful companies used all the principles but one to a high degree. The greatest recognition was gained by “Lead the change and build a change

leader team” and “Develop a vision” principles with 85.7% and 71.4% of respondents indicating a very high degree of following these principles. On the other end there were “Challenge status quo” and “Communicate the change vision” principles with 71.4% and 28.6% of responses indicating only a moderate degree of following the principles respectively. In the breakdown of the principles to the individual level we have discussed their sub-dimensions. The findings showed predominantly higher alignment with the dimensions, however there were some interesting deviations from this trend.

Firstly, the companies were strongly misaligned in the question of *involvement of different employees and middle managers* when “Define the initiative”, although this could have been due to the confidential nature of the topic. Next, M&A companies were found not to follow the “Challenge status quo” dimensions considering the *sources of complacency*, but strongly focused on the *alignment with the M&A goals* for both the employees and management. The *presence of an effective change leader and a change leader team* defined by the characteristics drawn from literature was strongly supported by the companies. However, surprisingly low ratio of the companies agreed on the *diversity of the change leader team members in terms of them belonging to a different stakeholder groups*. Strongly supported “Develop a vision” principle was surprisingly followed by a more hesitant support of “Communicate the change vision” principle. Although the findings regarding effective communication have varied between least supported dimension of *use of metaphors* and the most supported dimension of the *simplicity of the communication*, we concluded that for the communication to be effective perhaps not all the characteristics have to be employed.

Regarding “Empower people for change”, *rearranging the office space*, and *confrontation of bosses with inconsistent demands* seemed not to be the case in many companies. In contrast, the *recognition of effects of M&A on companies’ structures*, and their respective *alignment*, together with *training opportunities for employees* were the dimensions most frequently found in successful companies. Within “Guide and motivate the change process” principle we discovered that the companies had the *means to measure success*, and more than a half had *planned for short-term wins*. The prevailing characteristics of the short-term wins were found to be the *linkage to the change initiative* followed by the *visibility* and *unambiguity of the short-term wins*. The *celebrations* were the least

supported characteristic of the short-term wins and it appeared that in most instances they were not *public*.

The final principle of ‘Make change last’ uncovered successful companies consider *anchoring of new approaches in their culture, policies, and practices* to be the most important, followed by the *alignment of employee turnover, decisions on promotions*, and *anchoring of new approaches in reporting relationships*. The successful companies are least likely to *use the change momentum to initiate greater changes*.

Overall, we conclude that the eight change management principles, which we identified in the literature, were followed to a high extent, with minor divergences in their sub-principles. In the next part of this chapter we continue with answering RQ4 by looking at the potential differences between the successful companies and the unsuccessful ones.

4.2 How does the use of change management principles differ between successful and unsuccessful CBM&As?

We have just showed that change management principles were to a great extent employed in successful CBM&As, but what about in the less successful cases? RQ4 tries to answer that question by looking at how the use of change management principles differ between successful and unsuccessful CBM&As. In order to obtain the answer we first examine the underlying assumptions of the tests we use. Hereafter, the analysis and results are presented on the principle level. The tests, the chi-square analysis and independent t-tests, are found in their entirety in Appendix F and Appendix G, respectively.

4.2.1 Assumptions

As mentioned in “3.6 Data Analysis”, the independent t-test assumes no significant outliers, an approximate normal distribution of the dependent variable for each group of the independent variable, and homogeneity of variance.

Regarding the first assumption, we created box plots, which are found in Appendix H, to assess whether significant outliers are present in our data. This analysis showed that only in principle 4, “Develop a vision”, significant outliers were found, but both for the successful and unsuccessful performance groups. When the assumption of no significant outliers is violated, a nonparametric Mann-Whitney U Test can be run instead (Keller,

2012). We have employed it in the case of principle 4. The Mann-Whitney U Test confirmed and validated the independent t-test, the details of which we will discuss later in this chapter.

We tested our data for normality graphically by creating normal Q-Q plots, which are found in Appendix I. The results were that all of the dependent variables for each group of the independent variable were approximately normally distributed, since the data points were close to the diagonal line and did not stray from the line in an obvious non-linear fashion (Lund Research, 2013b).

The third assumption of homogeneity of variance was tested in SPSS using Levene's Test for Equality of Variances. The results, which are found in Appendix G, show that principles 6, 7, and 8 violate this assumption. In these cases, we used Welch t-Test instead, which is a variation of the independent t-test that does not assume homogeneity of variance.

Concerning the chi-square analysis, it builds on a “rule of five”, which means that the expected values should be at least five (Keller, 2012). This is not the case in many instances in our data due to the relatively small sample. To ensure the validity of our results, we therefore used Fisher's Exact Test of Interdependence as an additional test. The results of Fisher's Exact Test, which are found in Appendix F, showed the same results as the chi-square tests, and thus validated the results.

4.2.2 Results from analysis of the principles

It is evident from Table 4.1, which shows the descriptive statistics of the principles on the aggregated level, that the group of successful CBM&As use the principles more than the group of unsuccessful CBM&As. Studying the means of each group for each principle displays this.

Means of Performance Groups					
	Performance Group	N	Mean	Std. Deviation	Std. Error Mean
Define the initiative	1	7	3,893	0,4532	0,1713
	2	21	3,571	0,7589	0,1656
Challenge status quo	1	7	2,7073	0,42063	0,15899
	2	19	2,5695	0,70887	0,16263

Means of Performance Groups

	Performance Group	N	Mean	Std. Deviation	Std. Error
Lead the change and build a change leader team	1	7	4,3571	0,33923	0,12822
	2	21	3,9563	0,61329	0,13383
Develop a vision	1	7	4,1302	0,36827	0,13919
	2	21	3,4862	0,74093	0,16168
Communicate the change vision	1	7	3,585	0,87361	0,33019
	2	20	3,1571	0,79458	0,17767
Empower people for change	1	7	3,7755	0,16198	0,06122
	2	20	2,869	0,86046	0,1924
Guide and motivate the change process	1	5	3,5111	0,16851	0,07536
	2	21	2,9815	0,87689	0,19135
Make change last	1	7	3,9898	0,36696	0,1387
	2	19	3,1607	1,04811	0,24045

Table 4.1 - Means of performance groups on an aggregated level

Furthermore, Table 4.2 presents the statistics of the several t-tests, we carried out on the aggregated level. We will, in the following, comment on these results and examine if the differences are statistically significant together with the results of the chi-square analysis on the sub-dimensional level.

Results of t-tests

	defin_average	csq_average	lead_average	vision_average
t-test	1.052	0.480	1.634	2.191*
	com_average	empower_average	guide_average	last_average
t-test	1.197	4.489*^a	2.575*^a	2.987*^a

Note: * $p < 0.05$, ^a Welch t-Test

Table 4.2 - RQ4: t-tests

Principle 1: Define the initiative

According to Table 4.2, which displays the statistics of the t-test on the aggregated level, no statistically significant difference in the mean score was found between successful and unsuccessful CBM&As in terms of their use of change management Principle 1, “Define the initiative” ($t = 1.052$; $p = .303$). This implies that successful and unsuccessful CBM&As apply the first principle to the same extent.

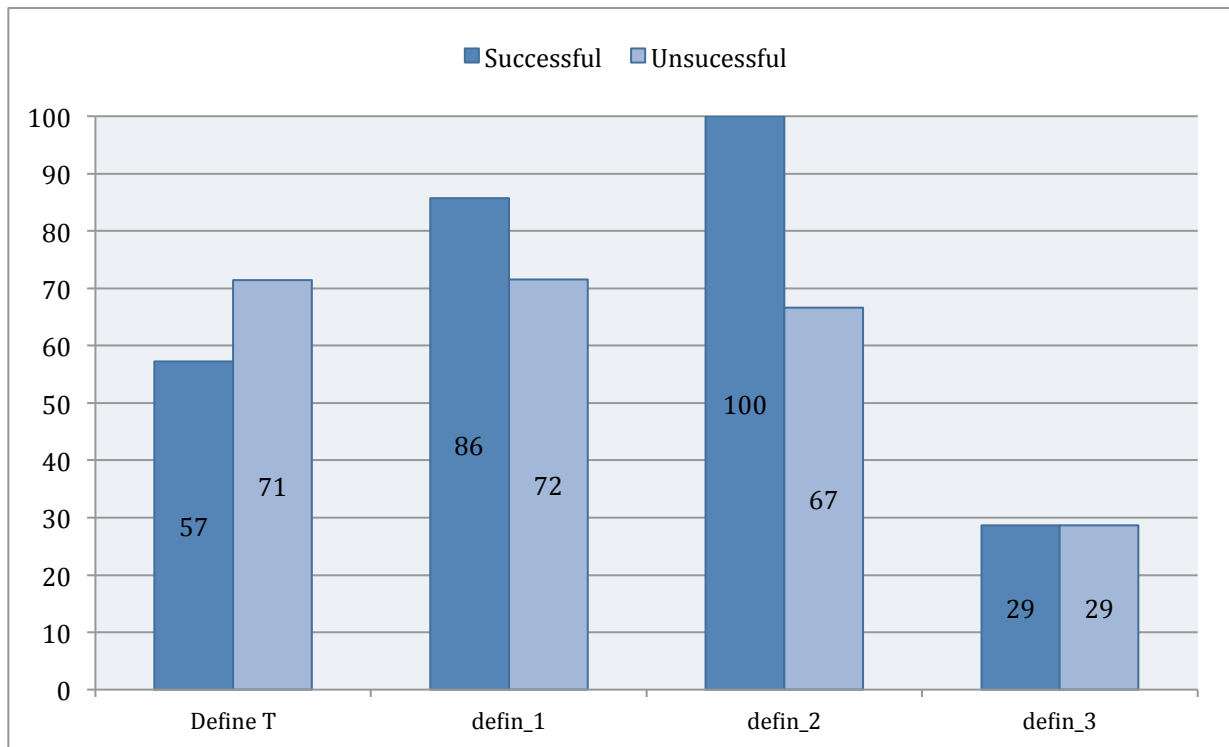


Figure 4.10 - RQ4: Define the initiative, Percentage of respondents who answered "high" or "very high"

On a sub-dimensional level, Figure 4.10 indicates that there are no major differences either. Interestingly, however, the greatest difference on a sub-dimensional level is found in the degree to which the companies assessed the impact of the M&A prior to the M&A. 100% of the companies involved in successful CBM&As indicated that they did so to a high or very high degree, while only approximately 67% of the unsuccessful companies did the same. In neither successful nor unsuccessful CBM&As were employees and middle managers involved to a great extent in identifying the need and/or the opportunity to merge/acquire. This is not surprising due to the strategic and confidential nature of M&As. What is more surprising is, that the unsuccessful grouping of companies thoroughly assessed their strengths and weaknesses marginally more.

PRINCIPLE 1 - DEFINE THE INITIATIVE

	Define T	defin_1	defin_2	defin_3
Pearson Chi-Square	2.554	0.786	5.026	5.196
Fisher's Exact Test	2.212	0.981	3.995	5.060
N of Valid Cases	28	28	28	28

Note: * $p < 0,05$

Table 4.3 - RQ4: Define the initiative, Chi-square statistics

Table 4.3, which displays the results of the chi-square analysis for Principle 1, supports the conclusion that there are no statistically significant differences on a sub-dimensional

level in the way successful and unsuccessful CBM&As employ Principle 1, “Define the initiative”.

Principle 2: Challenge status quo

In CBM&As successful and unsuccessful CBM&As challenge status quo to the same extent, as no statistical significant difference in the mean score was found between them in terms of their use of change management principle 2 ($t = .480$; $p = .635$). This result indicates that both groups of companies equally emphasize the need for the M&A to the employees and minimized and eliminated sources of complacency.

More detail is found in the sub-dimensions of the principle. Figure 4.11 shows that all employees in the companies with a successful M&A understood to a very high or high degree why the M&A was important. This is unexpected considering that only 43% of the successful companies answered that they clarified to a high or very high degree to the employees the consequences of not doing the M&A. Only 43% answered “often” or “very often” to how often the necessity of doing the M&A was emphasized to the employees. Correspondingly, only 62% of the companies from the unsuccessful grouping answered that the employees understood to a high or very high degree why the M&A was important. However, these differences are not statistically significant according to our chi-square test results for Principle 2, which are presented in Table 4.4.

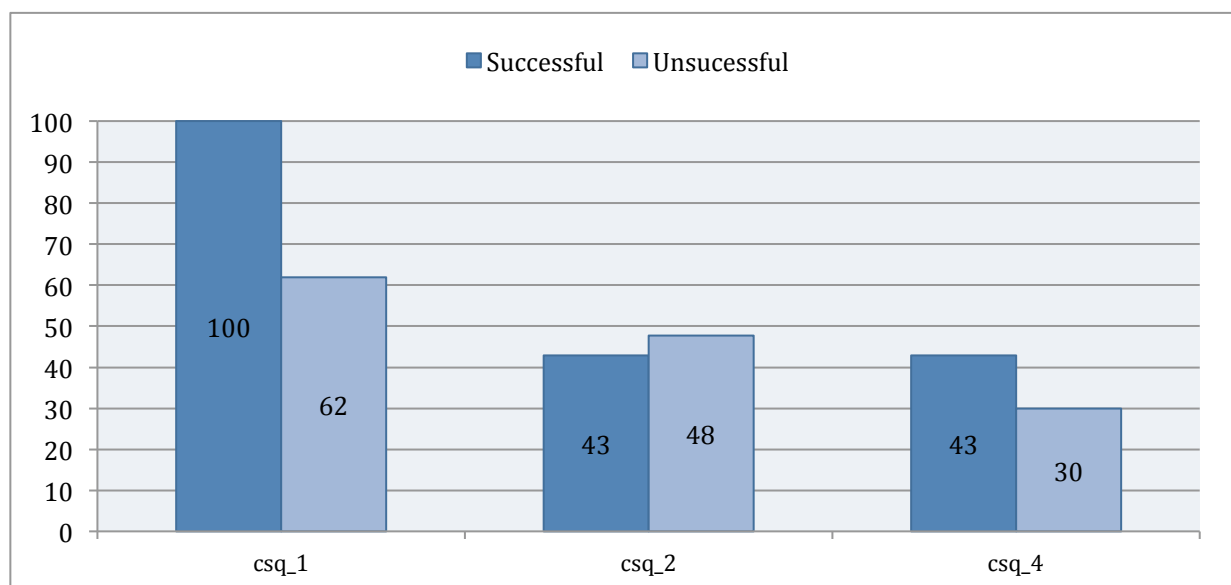


Figure 4.11 - Challenge Status Quo, Percentage of respondents who answered "high" or "very high"

Regarding the sources of complacency, our analysis showed that there was a statistically significant difference in the absence of major and visible crises between the two performance groups ($p = .034$). By looking at Figure 4.12, we can see that 53% of the unsuccessful companies had a major and visible crisis, which could be used to challenge status quo.

PRINCIPLE 2 - CHALLENGE STATUS QUO

	csq_1	csq_2	csq_3	csq_4	csq_5	csq_6	csq_7
Pearson Chi-Square	4.444	7.454	6.443	2.359	9.923*	3.450	2.620
Fisher's Exact Test	3.523	6.569	5.353	2.368	8.240*	3.128	2.513
N of Valid Cases	28	28	22	27	25	24	26

	csq_8	csq_9	csq_10	csq_11	csq_12	csq_13
Pearson Chi-Square	8.292	3.055	6.214	3.854	1.219	1.603
Fisher's Exact Test	7.688	2.630	5.468	3.382	1.113	2.014
N of Valid Cases	25	26	26	26	27	26

Note: * $p < 0,05$

Table 4.4 - Challenge status qua, Chi-square statistics

Interestingly, when seen as a whole, Figure 4.12 also indicates that the sources of complacency were naturally present or minimized to a greater extent in the unsuccessful CBM&As. According to the literature fewer sources of complacency are seen as a step towards success in the change initiative (Kotter, 1996), therefore this result is unpredicted. However, no other difference is statistically significant, as seen in Table 4.4.

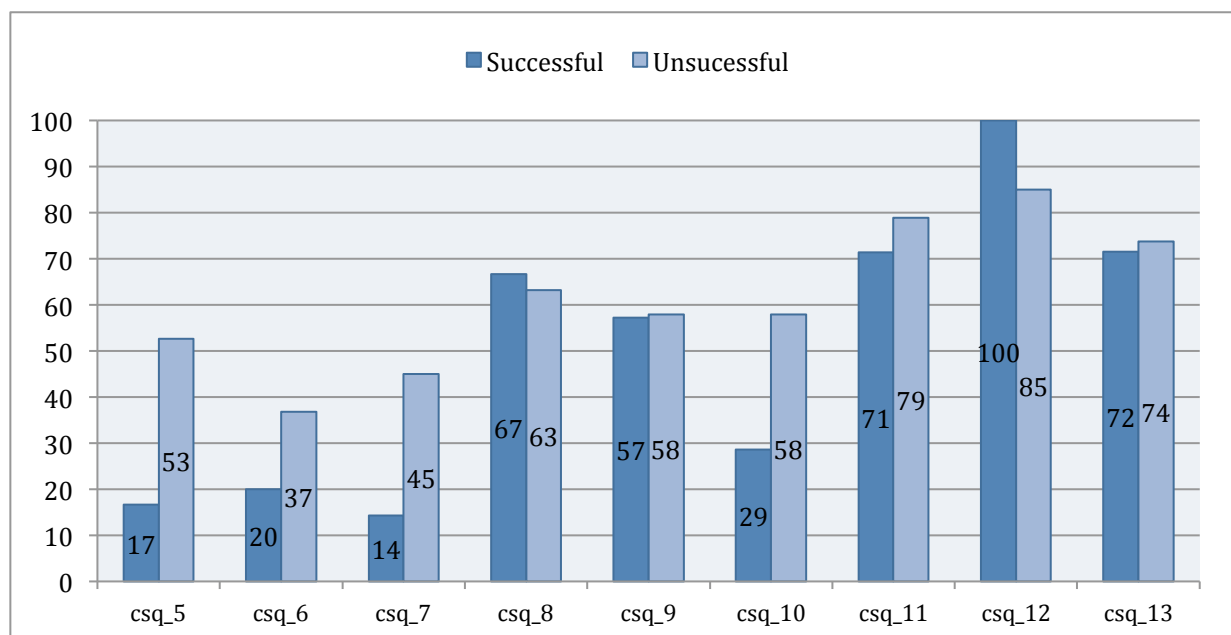


Figure 4.12 - Challenge status quo: Sources of complacency, Percentage of respondents who answered "not at all" or "low"

Principle 3: Lead the change and build a change leader team

The third principle is concerned with those who are in charge of the change and champion it, the leaders and the guiding coalition. Our results indicate that neither in this case is there a statistical significant difference in the mean score between successful and unsuccessful CBM&As ($t = 1.634$; $p = .114$). However, since we implicitly hypothesize that companies involved in successful M&As will employ the third principle to a greater extent, we might halve the reported significance, thereby obtaining .057 as the observed p-value. This indicates that the difference is not significant in terms of the use of change management Principle 3, “Lead the change and build a change leader team”, but it is close to being so.

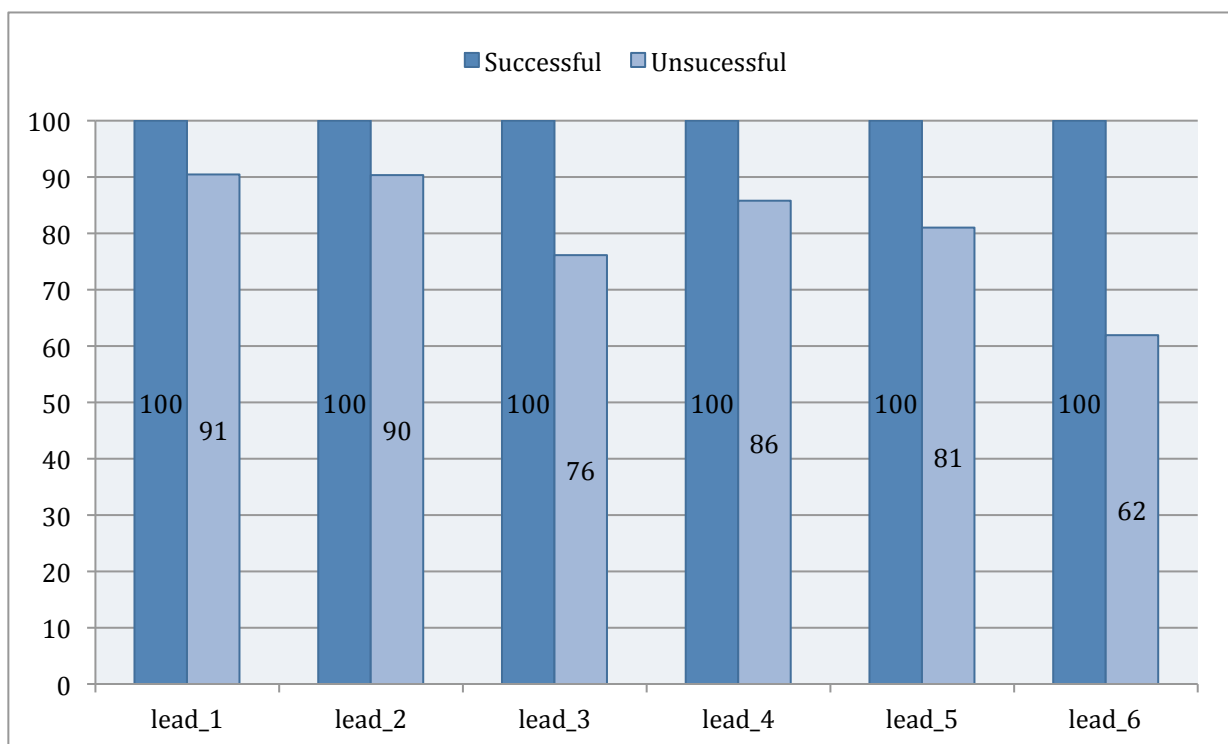


Figure 4.13 - Lead the change and build a change leader team: Leadership dimensions, Percentage of respondents who answered "high" or "very high"

On a sub-dimensional level, the companies involved in successful CBM&As in the leadership dimension, as indicated Figure 4.13, apply the change management principle to a greater extent than the unsuccessful companies. These results suggest that in the successful cases the leaders champion, are publicly committed to making the M&A succeed, and invest the personal time and attention needed to make the M&A work to a greater extent than leaders in the unsuccessful cases. The same is true for the characteristics of the leaders of the M&As. In the successful ones the leaders believe that

the M&A is the key to competitiveness, have the ability to articulate this belief, and have the personal-skills and know-how. It is not that leaders in the companies involved in unsuccessful CBM&As do not possess these skills as seen from Figure 4.13, but their counterparts all answered “high” or “very high” to the questions assessing this dimension. However, as shown in Table 4.5 below, none of these differences are statistically significant. The same is true for the dimensions concerning the guiding coalition. Even though Figure 4.14 suggests some differences, namely in the application of a guiding coalition (lead_7), no significant statistical differences are found regarding the dimension concerning the guiding coalition.

PRINCIPLE 3 - LEAD THE CHANGE AND BUILD A CHANGE LEADER TEAM

	lead_1	lead_2	lead_3	lead_4	lead_5	lead_6
Pearson Chi-Square	0.732	0.880	2.048	2.130	2.629	4.000
Fisher's Exact Test	1.108	1.151	1.446	1.861	2.522	3.979
N of Valid Cases	28	28	28	28	28	28
	lead_7	lead_8	lead_9	lead_10	lead_11	lead_12
Pearson Chi-Square	2.294	2.090	3.259	0.237	0.444	6.193
Fisher's Exact Test	2.139	2.294	2.818	0.634	0.984	6.087
N of Valid Cases	28	28	28	28	28	28

Note: * $p < 0,05$

Table 4.5 - Lead the change and build a change leader team, Chi-square statistics

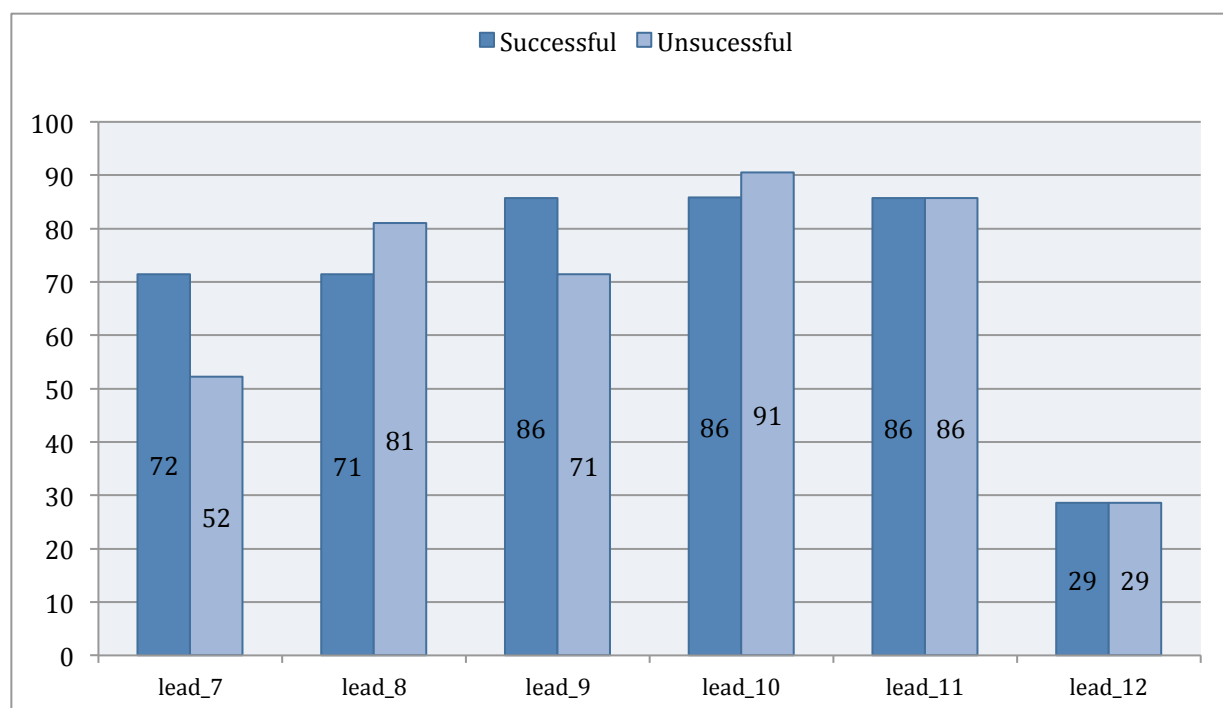


Figure 4.14 - Lead the change and build a change leader team: Guiding coalition dimensions, Percentage of respondents who answered "high" or "very high"

Principle 4: Develop a vision

According to our results displayed in Table 4.2, a statistical significant difference in the mean score was found between successful and unsuccessful CBM&As in terms of their use of change management Principle 4, “Develop a vision” ($t = 2.191$; $p = .038$). However, as mentioned in “4.2.1 Assumptions”, the variable of the fourth principle on an aggregated level did not pass the assumption of no outlier. Therefore we applied a Mann-Whitney U Test to validate the results. This test can be found in Appendix J and gave a significant result ($p = .019$) as well. Consequently, we can conclude that the difference in the use of the fourth change management principle, “Develop a vision”, is significant and the successful companies use and benefit from a vision to a greater extent than the unsuccessful group.

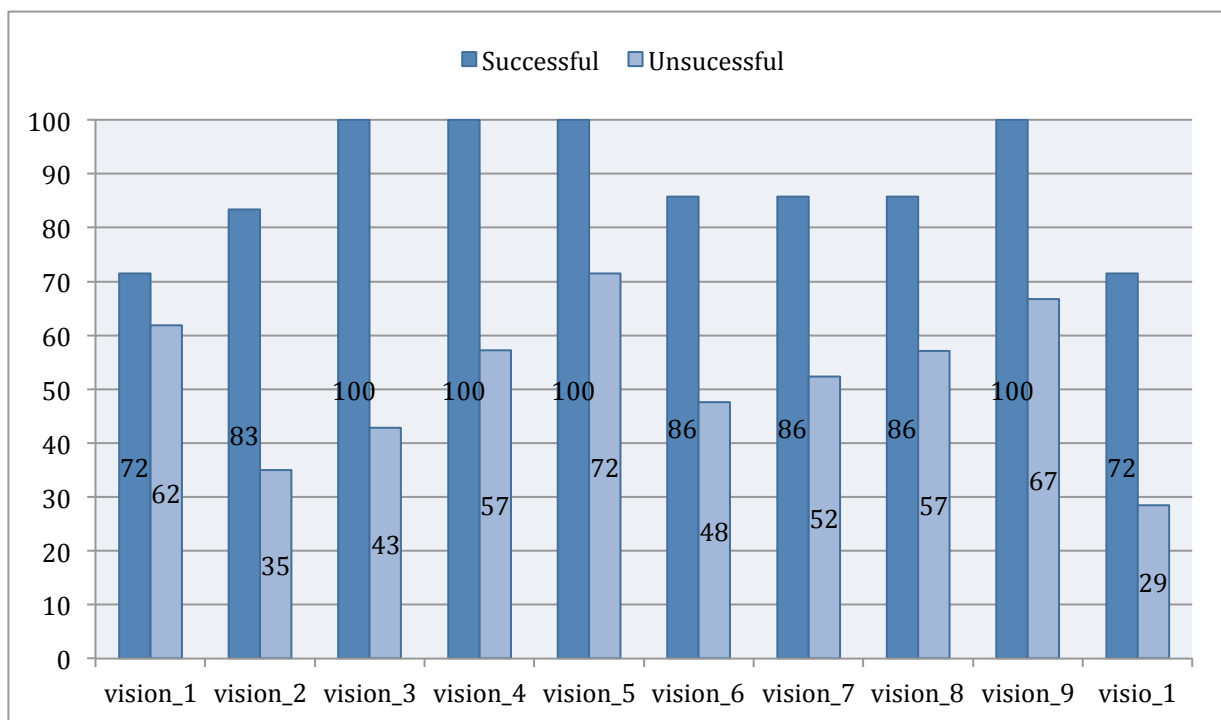


Figure 4.15 – Develop a vision, Percentage of respondents who answered "high" or "very high"

Examining the differences on a sub-dimensional level of Principle 4 gives the insight that there are great differences in the degree of employment of a vision between the two performance groups as seen in Figure 4.15. Firstly, employees of companies involved in successful CBM&As understand the outcome and benefit of M&As to a greater extent. In this way, according to the literature (Kotter, 1995, 1996), these companies might be able to break through all resistance, inertia and powers supporting status quo. Secondly, the

visions of the successful CBM&As can be seen as more effective as they score higher on the six central characteristics of an effective vision. Lastly, the successful CBM&As did to a greater extent include more people than a sole leader in developing the vision for the M&A compared with unsuccessful CBM&As. Yet none of these sub-dimensional differences prove to be statistically significant according to the chi-square analysis and values shown in Table 4.6 below.

PRINCIPLE 4 - DEVELOP A VISION

	vision_1	vision_2	vision_3	vision_4	vision_5
Pearson Chi-Square	0.996	4.499	7.214	5.231	2.564
Fisher'sExact Test	1.354	4.400	6.154	5.207	2.432
N of Valid Cases	28	26	28	28	28
	vision_6	vision_7	vision_8	vision_9	visio_1
Pearson Chi-Square	3.284	2.806	3.056	5.185	5.600
Fisher'sExact Test	3.150	2.601	2.658	4.311	4.973
N of Valid Cases	28	28	28	28	28

Note: * $p < 0,05$

Table 4.6 – Develop a vision, Chi-square statistics

Principle 5: Communicate the change vision

The independent t-test analysis showed no statistically significant difference between the two performance groups regarding the fifth change management principle, “Communicate the Change Vision” ($t = 1.197$; $p = .243$).

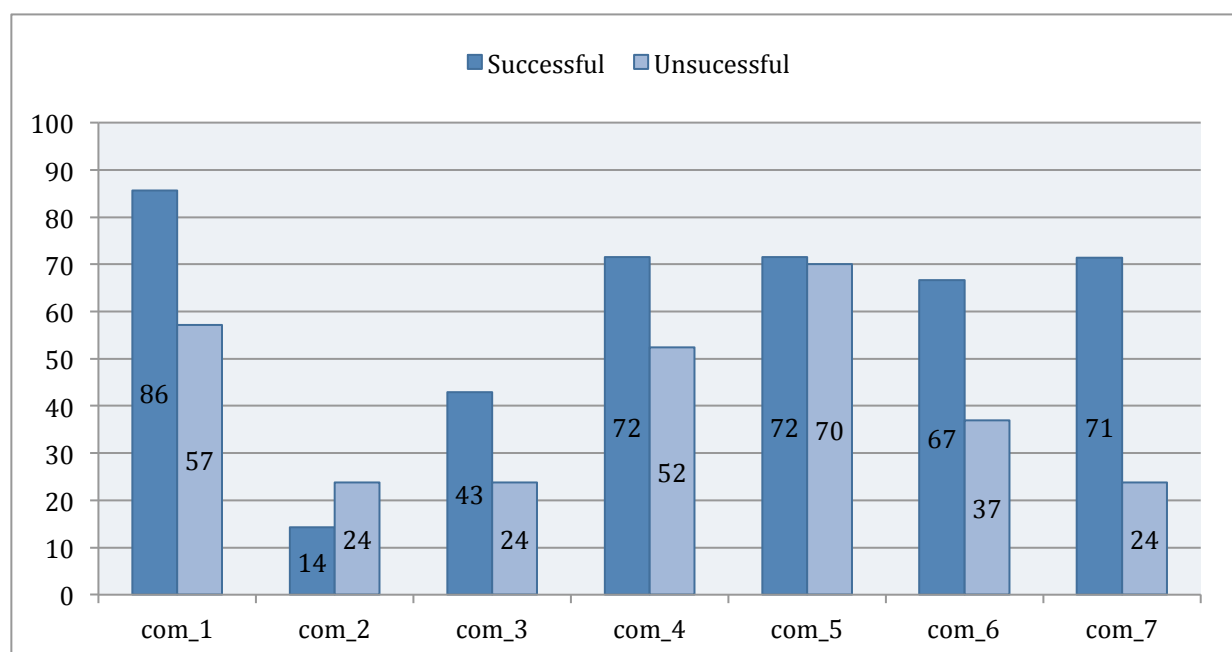


Figure 4.16 – Communicate the change vision, Percentage of respondents who answered "high" or "very high"

On a sub-dimensional level, Figure 4.16 indicates that both performance groups follow the advice for effective communication with some intergroup differences. Particularly, successful companies differ from unsuccessful ones in having the communication as two-way communication. The difference is close to being statistically significant as the chi-square reported a significance of $p = .076$ and Fisher's Exact test reported a significance of $p = .057$. Furthermore, none of the other dimensions of the fifth principle proved to have statistically significant differences as indicated in Table 4.7. These results suggest that the reason for greater performance is not found in communicating the change vision.

PRINCIPLE 5 - COMMUNICATE THE CHANGE VISION							
	com_1	com_2	com_3	com_4	com_5	com_6	com_7
Pearson Chi-Square	7,463	5,717	1,926	2,540	0,878	2,796	8,410
Fisher's Exact Test	7,151	5198	2,151	2,577	1,508	3,108	1,738
N of Valid Cases	28	28	28	28	27	25	28

Note: * $p < 0,05$

Table 4.7 - Communicate the change vision, Chi-square statistics

Principle 6: Empower people for change

In the case of Principle 6, "Empower people for change", the data on the aggregated level violated the assumption of the independent t-test of homogeneity of variance, see Appendix G. Therefore, we applied the variation of the independent t-test, Welch t-test, which showed a statistically significant difference in the mean score between successful and unsuccessful CBM&As in terms of their use of the sixth change management principle ($t = 4.489$; $p = .000$). This result indicates that the companies involved in successful CBM&As empower people for change during the M&A to a greater extent than the companies involved in unsuccessful CBM&As.

Regarding the sub-dimensions of the principle, Figure 4.17 shows that in successful CBM&As the different dimensions are employed more compared to the unsuccessful cases. The only exception is in the way that bosses who acted inconsistently with the change vision were confronted, where 56% of the unsuccessful cases answered that they were confronted to a high or very high degree compared to 29% in the successful cases. Nonetheless, this difference is not statistically significant according to Table 4.8. On the other hand, statistically significant differences were found between the companies involved in successful and unsuccessful CBM&As, respectively, in the extent to which the effects of the M&A on the company's structures and systems were recognized ($p = .009$),

training and development opportunities were provided for the employees in relation to the M&A ($p = .026$), and compensation and performance-appraisal systems were aligned with the vision of the M&A ($p = .019$). In this way it is obvious that companies involved in successful CBM&As recognize the effects of the M&A in the company, provide training and development opportunities in relation to the M&A, and align compensation and performance-appraisal systems with the M&A vision to a greater extent compared to companies involved in unsuccessful CBM&As.

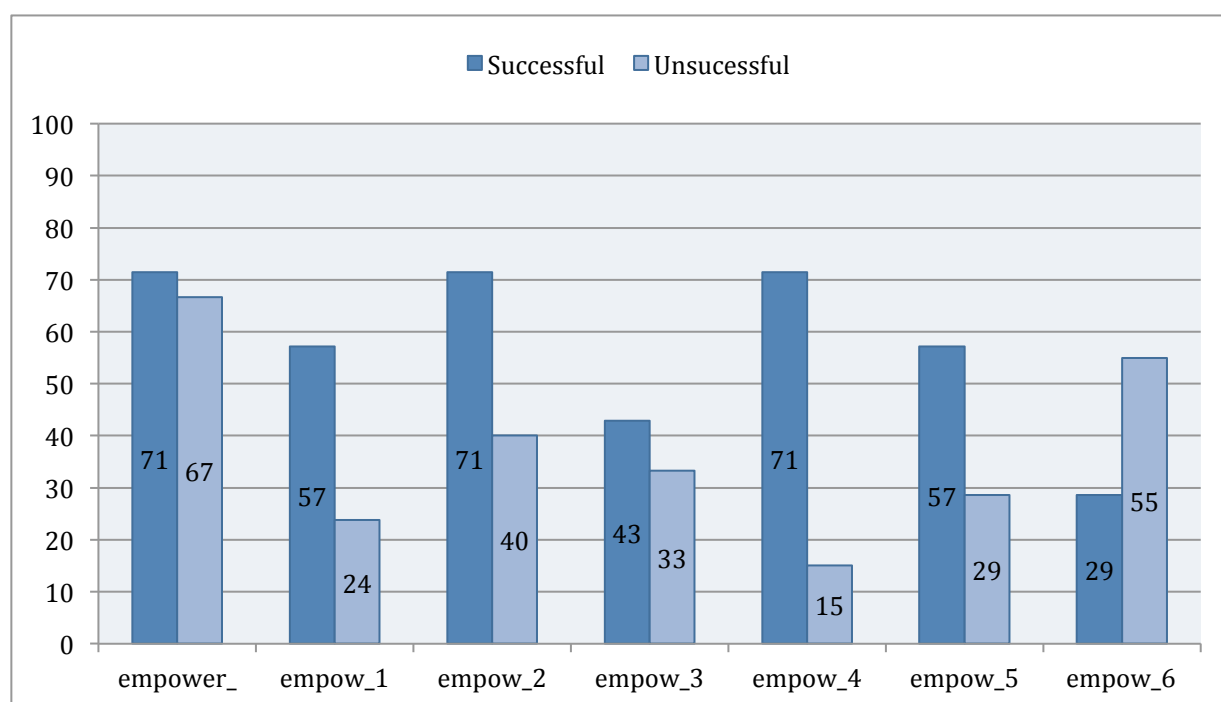


Figure 4.17 – Empower people for change, Percentage of respondents who answered "high" or "very high"

PRINCIPLE 6 - EMPOWER PEOPLE FOR CHANGE

	empower_	empow_1	empow_2	empow_3	empow_4	empow_5	empow_6
Pearson Chi-Square	11.670*	5.778	3.192	6.362	11.263*	10.933*	5.448
Fisher's Exact Test	9.757*	6.760	2.895	5.266	9.405*	13.303*	5.048
N of Valid Cases	28	28	27	28	27	28	27

Note: * $p < 0,05$

Table 4.8 – Empower people for change, Chi-square Statistics

Principle 7: Guide and motivate the change process

The data on the aggregated level of Principle 7 did, like the data for Principle 6, violate the assumption of the independent t-test regarding homogeneity of variance. Consequently, also in this case, we apply the variation of the independent t-test, Welch t-test. This test showed a statistically significant difference between the two performance groups in terms of their employment of the seventh change management principle,

“Guide and motivate the change process” ($t = 2.575$; $p = .017$). As seen in Table 4.2 the mean of the successful cases is greater than that of the unsuccessful cases. Thus, we consequently conclude that the companies involved in successful CBM&As guide and motivate the change process to a greater extent compared to the companies involved in unsuccessful CBM&As

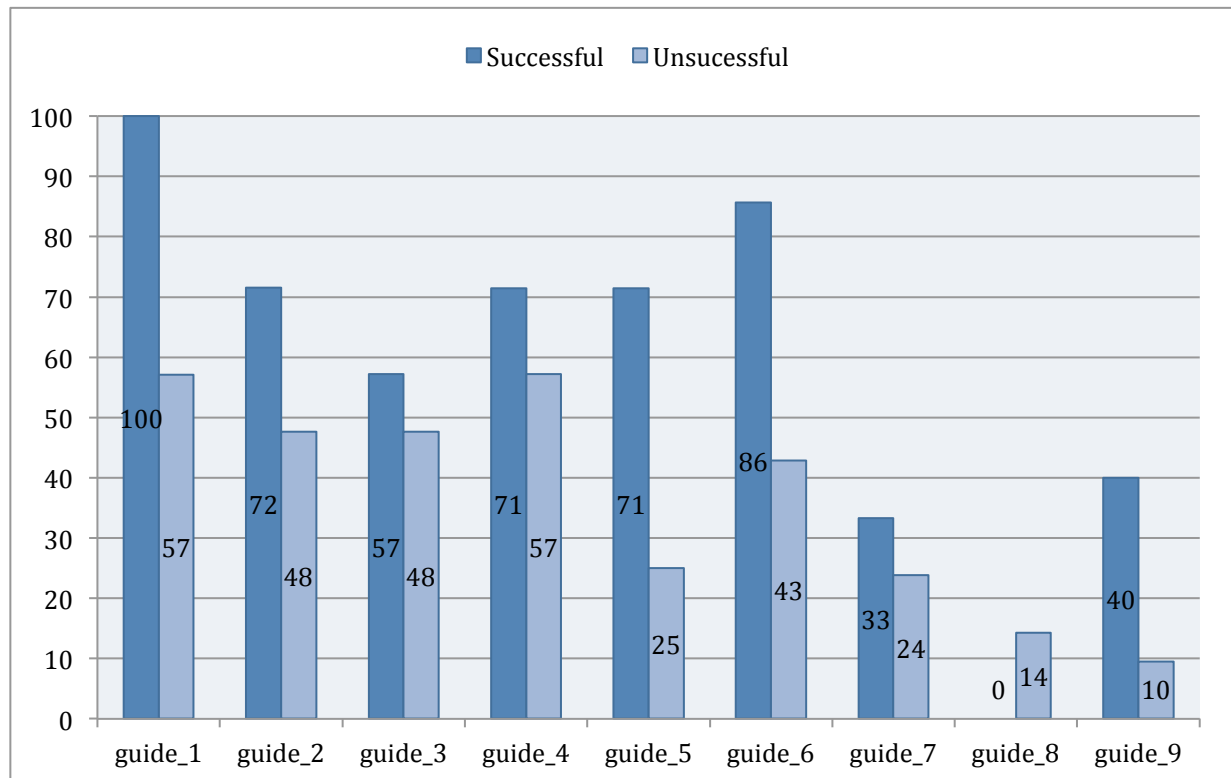


Figure 4.18 - Guide and motivate the change process, Percentage of respondents who answered "high" or "very high"

Examining the details of the differences by looking at the sub-dimensions in Figure 4.18 shows that there are some obvious differences. Regarding monitoring the process of the change (guide_1 and guide_2), companies that had success with their CBM&A did to a greater degree measure the success of the M&A and benchmark the progress. However, the only difference that was statistically significant was the extent to which the organizations had the means of measuring the success of the M&A ($p = .038$), which is displayed in Table 4.9. Regarding short-term wins, the two performance groups acted more or less similarly. Yet the short-term wins were to a greater extent unambiguous and clearly linked to the change initiative of the M&A in the successful cases compared to their counterparts. These differences were not statistically significant. Surprisingly, and not according to the literature’s advice, the short-term wins were not celebrated to a

great extent either in the successful cases or in the unsuccessful ones. Nonetheless, when they were celebrated, only a small fraction of the unsuccessful cases did celebrate publicly, while 40% of the successful cases used the celebrations to recognize individual contributions to a high or very high degree. Similarly, only 10% of the companies involved in unsuccessful CBM&As did the same. Neither were these results statistically significant as it is in evidence in Table 4.9.

PRINCIPLE 7 - GUIDE AND MOTIVATE THE CHANGE PROCESS

	guide_1	guide_2	guide_3	guide_4	guide_5	guide_6	guide_7	guide_8	guide_9
Pearson Chi-Square	8.581*	2.400	5.007	6.413	7.990	5.143	1.763	1.597	3.743
Fisher'sExact Test	7.050*	2.018	4.316	4.942	6.855	3.957	1.272	1.459	3.186
N of Valid Cases	28	28	28	28	27	28	27	26	26

Note: * $p < 0,05$

Table 4.9 - Guide and motivate the change process, Chi-square Statistics

Principle 8: Make change last

As it was the case for the two previous principles, the data on the aggregated level of Principle 8 violated the assumption of homogeneity of variance. We, therefore, employed Welch t-test in this case as well. The test showed a statistical significant difference in the mean score between the two performance groups in terms of their use of the eighth change management principle, “Make Change Last” ($t = 2.987$; $p = .006$). This result indicated that the companies involved in successful CBM&As make change last to a greater extent compared to the companies involved in unsuccessful CBM&As.

On a sub-dimensional level, the differences were most distinct in the extent to which the new approaches have been anchored in the organization’s policies, systems and practices, which is seen in Figure 4.19. That is that the successful cases anchor the new approaches in policies, systems and practices to a greater extent. However, no statistically significant differences were found on the sub-dimensional level of Principle 8 according to Table 4.10.

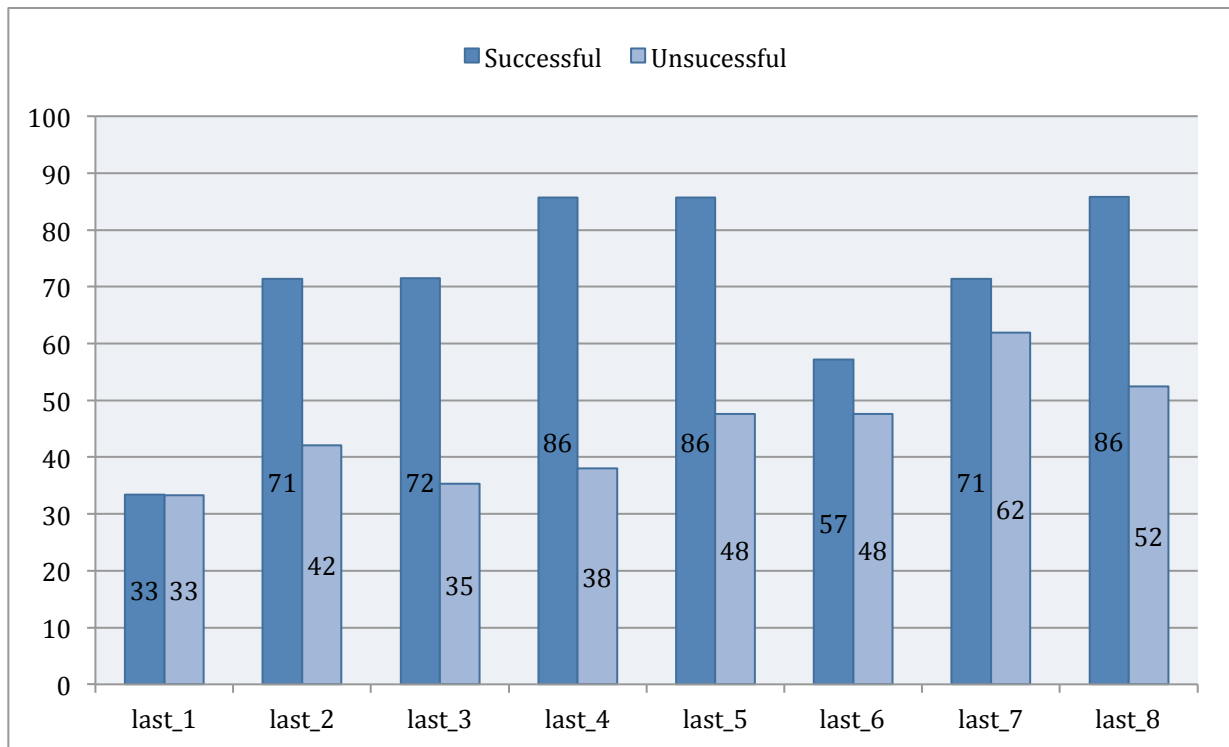


Figure 4.19 - Make change last, Percentage of respondents who answered "high" or "very high"

PRINCIPLE 8 - MAKE CHANGE LAST

	last_1	last_2	last_3	last_4	last_5	last_6	last_7	last_8
Pearson Chi-Square	6.509	4.262	3.947	5.556	5.989	1.689	5.007	3.919
Fisher'sExact Test	5.420	3.543	3.504	4.426	4.595	1.430	4.178	3.085
N of Valid Cases	27	26	24	28	28	28	28	28

Note: * $p < 0,05$

Table 4.10 - Make change last, Chi-square Statistics

4.2.3 Summary

In this section we have assessed the differences between successful CBM&A companies and unsuccessful CBM&A companies in terms of their use of change management principles. In order to answer RQ4 regarding how the use of change management principles differ between the two performance groups, several t-tests were carried out on an aggregated level, and several chi-square analyses on a sub-dimensional level.

The overall conclusion is that on an aggregated level, which is the level of the principles, there is a statistical significant difference in the use of Principle 4, "Develop a vision" ($t = 2.191$; $p = .038$), Principle 6, "Empower people for change" ($t = 4.489$; $p = .000$), Principle 7, "Guide and motivate the change process" ($t = 2.575$; $p = .017$), and Principle 8, "Make change last" ($t = 2.987$; $p = .006$) between successful CBM&A companies and unsuccessful CBM&A companies.

Regarding the fourth and eighth change management principle, we found no statistically significant differences in the mean scores on a sub-dimensional level, but only on an aggregated level. This implies that all the insignificant differences added up give a statistically significant difference. Within the sub-dimensions of Principle 6, we found statistically significant differences between the two performance groups in the extent to which the effects of the M&A on the company's structures and systems were recognized ($p = .009$), training and development opportunities were provided for the employees in relation to the M&A ($p = .026$), and compensation and performance-appraisal systems were aligned with the vision of the M&A ($p = .019$). Lastly, only the difference in the extent to which the organizations did have the means of measuring the success of the M&A was statistically significant ($p = .038$) in the seventh change management principle.

As mentioned in "3.7 Validity and Reliability", this project lacks internal validity due to the absence of a time-element. Consequently, we cannot conclude causality but only infer it. Therefore, we infer that in order to be successful in CBM&As companies have to develop a vision for the M&A, empower people for change, guide and motivate the change process and make change last through anchoring of the new approaches. We will return to this in the next chapter.

Chapter 5: Discussion and Conclusion

In this chapter, we will present the findings of the research we have conducted in order to answer our four research questions. Moreover, we will reflect on this thesis' limitations and the implications of our findings. Lastly, we propose suggestions for further research based on the thesis' results, limitations and implications.

5.1 Main findings

In the following, we will summarize the findings to our four research questions, which have guided the research. The two first questions required us to review the literature as they were phrased as: "According to literature, what role does change management play in cross-border mergers and acquisitions (CBM&A)?" and "According to literature, what are the principles of change management?". The next two questions required empirical investigations. The third questions was "To what extent do successful companies engage the principles of change management in CBM&As?", and the fourth was "How does the use of change management principles differ between successful and unsuccessful CBM&As?".

5.1.1 RQ1: According to literature, what role does change management play in cross-border mergers and acquisitions (CBM&A)?

In this thesis, we looked at M&A theory and categorized the literature in three main streams, with the aim to identify the factors that may explain the differences in performance between individual M&As: strategic fit, organizational fit, and integration. We presented the integration stream as the stream of literature in which change management plays the biggest role. The reason is that M&As and particularly the integration processes are viewed as the greatest changes that can happen to a business (Mirvis and Marks, 1992; DiGeorgio, 2002; Evans, Pucik and Barsoux, 2002). And in the process of integrating companies, many processes revolve around change, such as preparation of the employees for the change, as well as the schedule for the changes, putting new structure, policies and practices in place, and more (Evans, Pucik and Barsoux, 2002).

However, in spite of numerous authors mentioning a change in relation to M&A integration, we found no research, which focused on the linkage between M&A performance and change management. This was in spite the fact that the link has been acknowledged in practice (Evans, Pucik and Barsoux, 2002).

5.1.2 RQ2: According to literature, what are the principles of change management?

Next, we examined the change management literature through a four-step selection process we created in order to identify the principles. More specifically, we looked at teleological models that emphasize planned change or planned and emergent change, and by doing so, we identified eight change management principles.

The first principle, we identified, we named “Define the initiative”. We argued that this principle is mainly concerned with defining the change initiative by defining the business problem and/or opportunity through a process of assessing the company’s strengths, weaknesses and how the change will affect the company.

The second identified principle, “Challenge status quo”, is related to the first principle. It is about getting people to understand the need for change by minimizing and eliminating complacency, and motivating them to collaborate on the change initiative.

“Lead the change and build a change leader team” was identified as the third change management principle. It regards those who are in charge of the change and champion it. Leaders of the change should publicly commit to the change, commit personal time and attention to the process, assemble the needed resources, and take leadership of the change. Furthermore, a guiding coalition should be created so that the change has a broader base of support.

Principle 4 was named, “Develop a vision”. A vision is a central component in all leadership and is an attempt to articulate what a desired future for a company would be. Consequently, this principle regards the creation of a vision and the characteristics of an effective vision.

After developing the change vision it has to be communicated, therefore the fifth identified change management principle is “Communicate the change vision”. As it is

evident from the name the fifth principle is concerned with communicating the change vision, and namely how to do so effectively.

The sixth principle, we identified, was labeled “Empower people for change” because it was concerned with changing structures and eliminating obstacles in order to reinforce the change effort, and in that way empower the people. A number of ways to empower people for change were identified. These were enriching people’s jobs, provide training and development opportunities, and aligning compensation and performance-appraisal systems.

“Guide and motivate the change process” was identified as the seventh change management principle. The emphasis of the principle is on monitoring the process, creating short-term wins, and celebrating them.

Lastly, “Make change last”, which is about consolidating gains and using it to produce more change, was identified as the final change management principle.

5.1.3 RQ3: To what extent do successful companies engage the principles of change management in CBM&As?

The overall conclusion that was derived from the analysis of the extent of which successful companies engage the principles of change management in CBM&As is, that on the aggregated level, the successful companies used all the principles but one to a high degree, which is seen in Figure 4.1.

In six of the principles 100% of the respondents were found to engage the principles of change management to a high or very high extent. This was the case with the first principle, “Define the initiative” with 42.9% of the respondents stating that they employed the principle to a very high extent. The same was the case with “Lead the change and build a change leader team”, the third principle; the fourth principle, “Develop a vision”; the sixth principle, “Empower people for change”; and the seventh principle “Guide and motivate the change process “with 85.7 %, 71.4%, 0%, and 14.3% of the respondents, respectively, using the principle to a very high extent. Lastly, also the eighth principle was found to be employed to a high or very high extent, with 42.9% of the respondents answering the latter.

On the other end, regarding “Challenge status quo” and “Communicate the change vision”, 71.4 % and 28.6% of the respondents, respectively, indicated only a moderate degree of following the principle. However, the rest of the respondents in “Communicate the change vision” answered that the principle was employed to a high extent.

Therefore, overall, the eight management principles were employed to a great extent. Yet some minor divergences existed on the sub-dimensional level of the principles. Firstly, the companies were strongly misaligned in the question of involvement of different employees and middle managers when defining the M&A initiative. This, however, can be due to the confidential nature of M&As. Secondly, some sources of complacency were present in the successful CBM&As. As previously suggested, this is not surprising, since not all sources of complacency necessarily have to be eliminated in order to challenge status quo and create a sense of urgency. Thirdly, a low ratio of the companies agreed on the diversity of the members of the guiding coalition in terms of them belonging to different stakeholder groups. Fourthly, in communicating the change vision metaphors, analogies and examples were not utilized to a great degree, neither was the communication given through multiple channels to a great extent. Fifthly, rearranging the office space, and confrontation of bosses with inconsistent demands seemed not to be the case in many CBM&As. Lastly, the celebrations were the least supported characteristic of the short-term wins and it appeared that in most instances they were not public. Otherwise, on a sub-dimensional level the principles were greatly employed.

5.1.4 RQ4 - How does the use of change management principles differ between successful and unsuccessful CBM&As?

The findings presented in this thesis suggest that the use of change management principles between successful and unsuccessful CBM&As differ in four principles. On an aggregated level, which was the level of the principles, this was examined by running eight t-tests of which four showed to be statistically significant. In other words and more specific, the overall conclusion is that on an aggregated level of the principles, there is a statistical significant difference in the use of Principle 4, “Develop a vision” ($t = 2.191$; $p = .038$), Principle 6, “Empower people for change” ($t = 4.489$; $p = .000$), Principle 7, “Guide and motivate the change process” ($t = 2.575$; $p = .017$), and Principle 8, “Make

change last” ($t = 2.987$; $p = .006$) between successful CBM&A companies and unsuccessful CBM&A companies.

Regarding the fourth and eighth change management principle, we found no statistically significant differences in the mean scores on a sub-dimensional level, but only on an aggregated level. This implies that all the insignificant differences added up give statistically significant difference.

Within the sub-dimensions of Principle 6, we found statistically significant differences between the two performance groups in the extent to which the effects of the M&A on the company’s structures and systems were recognized ($p = .009$), training and development opportunities were provided for the employees in relation to the M&A ($p = .026$), and compensation and performance-appraisal systems were aligned with the vision of the M&A ($p = .019$). Additionally, only the difference in the extent to which the organizations did have the means of measuring the success of the M&A was statistically significant ($p = .038$) in the seventh change management principle.

5.2 Limitations

This thesis has some limitations, which are important to account for and be aware of when presenting the results and interpreting them. The limitations of our thesis can be divided into limitations concerning the research and limitations concerning the applied theory.

5.2.1 Research limitations

As mentioned in “3.4 Sampling”, we only obtained a response rate of 2.24% and an absolute number of 28 cases. This constitutes a problem, because very low return rates make it difficult to establish the representativeness of the sample because those responding may not represent the research sample (Ekinici, 2015). It is not known what population this sample is representative of. Furthermore, since we combined two samples as explained in “3.4 Sampling”, we introduced some sampling error. The error consists of the Danish companies being overrepresented in comparison with the American. However, we argue that the advantages of combining the samples far outweigh the added error. Nevertheless, the external validity decreases as a consequence of the non-response error and sampling error. Therefore, constraints are

placed on the generalizability of our research as the survey is potentially biased. Thus, the reader should be careful if trying to transfer our results into other contexts than the context of this research. Likewise, although we argue that successful and unsuccessful CBM&As statistically significantly differ in the extent to which they use some of the change management principles, we have to note that these results are not generalizable to the entire population. Nonetheless, the results can be used as a foundation for further research, which is needed to establish external validity of our results.

Secondly, due to our choice of a cross-sectional design and the weak internal validity hereof, we are not able to conclude causality. That means that we are not able to say that in order to get success in CBM&As the companies should employ the change management principles – and namely Principle 4, “Develop a vision”, Principle 6, “Empower people for change”, Principle 7, “Guide and motivate the change process”, and Principle 8, “Make change last”, since the results for these were statistically significant. However, we are able to infer that in fact there is causality between the change management principles and the performance of CBM&As, which we do. A longitudinal research design would be able to test this because it introduces a temporal dimension.

5.2.2 Theoretical limitations

In this thesis we identified change management principles from the rational school of change management literature that focuses on teleological theories and planned change. This school assumes that change is internally controlled and directed, and it gives precedence to planning towards organizational goals (Graetz and Smith, 2010). Often, the outcome is prescriptive change models and theories, which have often been criticized by other schools of thoughts.

Firstly, power and politics are being underplayed and ignored in the teleological models (Burnes, 2004; By, Hughes and Ford, 2016). None of our identified principles thoroughly focuses on the role of power and politics in an organization, which is the focus in the dialectical models. In such a research, change is explained in terms of the relative balance of power between the thesis and antithesis (Van de Ven and Sun, 2011). The role of power and politics in an organization in relation to CBM&A performance is an interesting subject, yet it is not the objective of this research, which is to provide principles and practical suggestions to how change should be managed.

A second criticism of this thesis' applied theory is that the leader is being overestimated and advocates a top-down, management-driven approach to change (Burnes, 2004; By, 2005; By, Hughes and Ford, 2016). As the teleological models and theories naturally focus on how change can be managed, the theories inevitably become leader-centric. There might be situation in which a bottom-up approach to change is required – and it is partly built into our principles by giving middle managers and employees a part in the change process – but in our specific context of M&As, which involves decisions on the uppermost strategic level, leader-centric theories are the most appropriate.

Thirdly, the teleological approaches are being criticized for being too rigid (Appelbaum et al., 2012; By, Hughes and Ford, 2016). Many of the models from which we identify the change management principles are models including steps that should be taken in sequence, implying that the steps are pre-requisite of one another. Consequently, not implementing the first step will make it difficult or impossible to implement the second step and so on so forth (Appelbaum et al., 2012). According to By, Hughes and Ford (2016) this constitutes an overemphasis upon taking a sequence of linear steps and an under emphasis of unique cultural contexts. Correspondingly, some studies suggest that organizations prefer to use approaches to change that stems from their culture, and when the prescriptions of the counter to the organization's culture they will either be ignored or be ineffective (Appelbaum et al., 2012). Our results, however, suggests that the prescriptions in the form of the change management principles are neither ignored nor ineffective.

That some steps are not relevant in certain contexts is the fourth criticism (Appelbaum et al., 2012). For instance, in some M&As there is a great deal of confidentiality, which will undermine some aspects of principle 1, "Define the initiative", and principle 5, "Communicate the change vision". This was evident from the result that employees and middle managers were not to a great extent involved in defining the M&A initiative. However, in order to overcome this limitation we have tried to operationalize the principles to the best of our abilities to fit in the context of CBM&As.

Lastly, the planned approach is criticized for treating change as a single, momentary disturbance that must be stabilized and controlled (Graetz and Smith, 2010). In response the emergent approach emphasize that change should be seen as a continuous,

open-ended process of adaptation to changing circumstances and conditions (Graetz and Smith, 2010). Consequently, such an approach will be more concerned about creating change readiness and focusing on the change recipient than leading the change process and focusing on the change agent (Armenakis and Harris, 2009). Admittedly, we could have focused more on creating change readiness since we neglect this dimension in our research, as the underlying theories we apply neglect it.

5.3 Implications

In the following we will reflect upon the implications of the findings presented in this thesis. Our results indicate that there is a difference in the extent to which successful CBM&A companies and unsuccessful CBM&A companies employ the principles of change management. This has important implications for management. Research shows, as mentioned in “Chapter 2: Literature Review” that the failure rates of M&As are as high as 80% with the rates for CBM&A being slightly lower. However, by employing the change management principles managers and organizations can reach their goals and create successful CBM&As. Consequently, the identified principles establish a prescriptive framework managers can use.

Furthermore, our research suggests that managers should focus on developing a vision, which is the fourth principle, since there was a statistical significant difference between the successful cases and the unsuccessful cases. In this way managers can unite employees behind an idea (Kanter et al., 1992), and break through all resistance, inertia and powers supporting status quo, while promoting the significant change initiatives (Kotter, 1995, 1996). Additionally, our results imply that managers should empower people for change by eliminating obstacles and in that way reinforce the change effort. Also the difference in the extent of the employment of this sixth principle was statistically significant between the two performance groups. The same was true for the differences in “Guide and motivate the change process” and “Make change last”. Managers may, therefore, focus on these principles also in CBM&A to gain success.

The results of our research, moreover, contribute to the understanding and validity of the planned and theological change management models from which we identified the eight change management principle. This is true because we found empirical support for some of the principles and there has been a call for empirical testing.

5.4 Suggestions for further research

By reflecting on the limitations and the results of our thesis, we are able to give some suggestions for further research.

As mentioned in above in “Limitations”, the representativeness of our sample is up for discussion at best. Therefore, in order to validate the results of our research, further research with a sample with higher response rates and external validity is needed. We suggest to follow our research design but using structured interviews to gather the data if the resources and a greater time frame are available, as this should increase the response rates. Moreover, we further suggest conducting the same research in a context other than with Danish and American companies in order to be able to generalize to a greater population. Additionally, we suggest further research to adopt a longitudinal research design. It is argued that such a design is needed to determine the actual causality and also to determine whether the sequence of the principles affect the performance of the CBM&A.

Lastly, interesting research could come from examining the relation between change readiness and CBM&A performance. Instead of focusing on the change agents, future research could focus on the change recipients. One way of doing so would be adopting Amenakis and Harris’ (2009) five key change beliefs of the change recipients, which are an expression for change readiness, and examining their relation to CBM&A performance.

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Appendix A: Journals and Scores

No.	Journal	Selective (N/Y)	Rank			Score				Impact Factor	Final Score	
			FT (Y/N)	ABS	ESS	ABDC	ABS	ESS	ABDC			Average
1	Academy of Management Review	N	Y	4*	0+	A*	5	5	4	4,667	7,475	6,071
2	Academy of Management Journal	N	Y	4*	0+	A*	5	5	4	4,667	6,448	5,557
3	Strategic Management Journal	N	Y	4*	0+	A*	5	5	4	4,667	3,341	4,004
4	Journal of International Business Studies	N	Y	4*	0	A*	5	4	4	4,333	3,564	3,949
5	Journal of Management Studies	N	Y	4	0	A*	4	4	4	4,000	3,763	3,882
6	Administrative Science Quarterly	N	Y	4*	0+	A*	5	5	3	4,333	3,333	3,833
7	California Management Review	N	Y	3	1	A	3	3	3	3,000	1,667	2,334
8	Harvard Business Review	N	Y	3	1	A	3	3	3	3,000	1,574	2,287
9	MIT Sloan Management Review	N	Y	3	1	-	3	3	0	2,000	1,529	1,765
10	Journal of Management	N	N	4*	0	A*	5	4	4	4,333	6,071	5,202
11	Academy of Management Annals	N	N	-	1	A*	0	3	4	2,333	7,769	5,051
12	International Journal of Management Reviews	N	N	3	1	A	3	3	3	3,000	3,857	3,429
13	Academy of Management Perspectives	N	N	3	2	A	3	2	3	2,667	3,384	3,025
14	Journal of Organizational Change Management	Y	N	2	-	B	2	0	2	1,333	0,462	0,898
15	Journal of Change Management	Y	N	-	-	-	0	0	0	0,000	0,000	0,000
16	Journal of World Business (Columbia)	N	N	4	1	A	4	3	3	3,333	2,388	2,861
17	Long Range Planning	N	N	3	2	A	3	2	3	2,667	2,718	2,692
18	Strategic Entrepreneurship Journal	N	N	4	1	A	4	3	3	3,333	2,000	2,667
19	Academy of Management Learning & Education	N	N	4	1	A*	4	3	4	3,667	1,586	2,626

20	Business Strategy & the Environment	N	N	3	2	B	3	2	2	2,333	2,542	2,438
21	Group Decisions and Negotiation	N	N	2	1	A	2	3	3	2,667	2,120	2,393
22	Asia-Pacific Journal of Management	N	N	3	2	A	3	2	3	2,667	2,091	2,379
23	Corporate Governance: An International Review	N	N	3	1	A	3	3	3	3,000	1,734	2,367
24	International Business Review	N	N	3	1	A	3	3	3	3,000	1,713	2,357
25	British Journal of Management	N	N	4	2	A	4	2	3	3,000	1,584	2,292
26	Business and Society	N	N	3	1	A	3	3	3	3,000	1,468	2,234
27	Management and Organization Review	N	N	3	-	A	3	0	3	2,000	2,442	2,221
28	Management International Review	N	N	3	1	A	3	3	3	3,000	1,118	2,059
29	Journal of Management Inquiry	N	N	3	2	A	3	2	3	2,667	1,446	2,056
30	Strategic Organization	N	N	3	2	A	3	2	3	2,667	1,400	2,033
31	Management Learning	N	N	3	2	A	3	2	3	2,667	1,208	1,937
32	Americal Behavioral Scientist	N	N	1	1	B	1	3	2	2,000	1,766	1,883
33	Global Strategy Journal	N	N	3	-	A	3	0	3	2,000	1,650	1,825
34	Journal of International Management	N	N	3	-	A	3	0	3	2,000	1,648	1,824
35	Management Decision	N	N	2	2	B	2	2	2	2,000	1,429	1,715
36	Management Communication Quarterly	N	N	2	-	B	2	0	2	1,333	2,085	1,709
37	Journal of Forecasting	N	N	2	1	A	2	3	3	2,667	0,705	1,686
38	Scandinavian Journal of Management	N	N	2	2	A	2	2	3	2,333	0,981	1,657
39	European Management Journal	N	N	2	2	B	2	2	2	2,000	1,222	1,611
40	Theory, Culture & Society	N	N	3	-	A	3	0	3	2,000	0,950	1,475
41	Sport Management Review	N	N	2	-	A	2	0	3	1,667	1,214	1,440
42	Negotiation Journal	N	N	2	1	B	2	3	2	2,333	0,400	1,367

43	Journal of Sport Management	N	N	2	-	A*	2	0	4	2,000	0,718	1,359
44	Australian Journal of Management	N	N	-	2	A	0	2	3	1,667	1,000	1,333
45	Group Dynamics: Theory, Research and Practice	N	N	2	-	B	2	0	2	1,333	1,214	1,274
46	European Management Review	N	N	3	-	C	3	0	1	1,333	0,963	1,148
47	International Studies of Management & Organizations	N	N	2	2	B	2	2	2	2,000	0,280	1,140
48	Technology Analysis & Strategic Management	N	N	2	-	B	2	0	2	1,333	0,942	1,138
49	International Journal of Conflict Management	N	N	-	2	A	0	2	3	1,667	0,524	1,095
50	Business Horizons	N	N	2	-	C	2	0	1	1,000	1,163	1,082
51	Project Management Journal	N	N	1	-	B	1	0	2	1,000	1,143	1,072
52	European Business Review	N	N	2	2	B	2	2	2	2,000	0,000	1,000
53	Jornal of General Management	N	N	2	2	B	2	2	2	2,000	0,000	1,000
54	Thunderbird International Business Review	N	N	2	2	B	2	2	2	2,000	0,000	1,000
55	Asia-Pacific Business Review	N	N	2	-	B	2	0	2	1,333	0,569	0,951
56	Policy Studies	N	N	2	-	B	2	0	2	1,333	0,486	0,910
57	European Journal of International Management	N	N	1	2	C	1	2	1	1,333	0,457	0,895
58	Advances in Strategic Management	N	N	2	-	C	2	0	1	1,000	0,682	0,841
59	Labour History (Australia)	N	N	2	-	A	2	0	3	1,667	0,000	0,833
60	M@n@gement	N	N	1	2	B	1	2	2	1,667	0,000	0,833
61	Europe Asia Studies	N	N	2	-	C	2	0	1	1,000	0,523	0,762
62	Leadership & Organization Development Journal	N	N	1	-	B	1	0	2	1,000	0,362	0,681
63	Journal of Business	N	N	-	-	A*	0	0	4	1,333	0,000	0,667
64	Journal of Management Education	N	N	2	-	B	2	0	2	1,333	0,000	0,667
65	Journal of Management History	N	N	1	-	A	1	0	3	1,333	0,000	0,667

66	Organization & Environment	N	N	2	-	B	2	0	2	1,333	0,000	0,667
67	Journal of Management & Organization	N	N	-	-	B	0	0	2	0,667	0,594	0,630
68	Journal of Asia-Pacific Business	N	N	1	-	C	1	0	1	0,667	0,569	0,618
69	Cross-Cultural Research	N	N	-	-	-	0	0	0	0,000	1,212	0,606
70	American Business Review	N	N	-	-	A	0	0	3	1,000	0,000	0,500
71	Corporate Governance: The International Journal	N	N	2	-	C	2	0	1	1,000	0,000	0,500
72	Multinational Business Review	N	N	2	-	C	2	0	1	1,000	0,000	0,500
73	Betriebwirtschaftliche Forschung und Praxis	N	N	-	-	C	0	0	1	0,333	0,360	0,347
74	Business Strategy Review	N	N	-	-	B	0	0	2	0,667	0,000	0,333
75	Gender in Management: an International Journal	N	N	1	-	C	1	0	1	0,667	0,000	0,333
76	International Journal of Business Performance Management	N	N	1	-	C	1	0	1	0,667	0,000	0,333
77	Journal of Business Strategy	N	N	-	-	B	0	0	2	0,667	0,000	0,333
78	Journal of East-West Business	N	N	1	-	C	1	0	1	0,667	0,000	0,333
79	Strategic Change	N	N	2	-	-	2	0	0	0,667	0,000	0,333
80	Journal of Managerial Issues	N	N	-	-	C	0	0	1	0,333	0,000	0,167
81	SAM Advanced Management Journal	N	N	-	-	C	0	0	1	0,333	0,000	0,167
82	Zeitschrift für Betriebswirtschaftliche Forschung	N	N	1	-	-	1	0	0	0,333	0,000	0,167
83	Schmalenbach Business Review	N	N	-	-	-	0	0	0	0,000	0,000	0,000
84	Zeitschrift für Betriebswirtschaft	N	N	-	-	-	0	0	0	0,000	0,000	0,000

Appendix B: Change Management Models

Author	Name of Paper	Year of Publication	Name of Change model
Alas	The Triangular Model for Dealing with Organizational Change	2007	The Triangular Model
Anderson and Anderson	Beyond Change Management	2001	The Nine-Phase Change Process Model
Armenakis et al.	Making change permanent: a model for institutionalizing change interventions	1999	Change Readiness model
Barnett and Pratt	From threat-rigidity to flexibility: Toward a learning model of autogenic crisis in organizations	2000	Autogenic crisis
Beer et al.	Why Change Programs Don't Produce Change	1990	Six Steps to Effective Change
Beeson and Davins	Emergence and accomplishment in organizational change	2000	The NAFIS Change Model

Breu and Benwell	Modelling individual transitions in the context of organisational transformation	1999	Transition model of change
Bridges	Managing organizational transitions	1986	-
Bullock and Batten	It's just a phase we're going through: a review and synthesis of OD phase analysis	1985	Integrative model for planned change
Burke	Organization Development: a Process of Learning and Change	1992	Burke-Litwin model
Burke	Organization Change: Theory and Practice	2008	Simpel Phase Model
Cameron and Green	Making Sense of Change Management	2004	-
Carnall	Managing Change in Organizations	1990	-

Chen	Revisiting organizational age, inertia, and adaptability: Developing and testing a multi-stage model in the nonprofit sector	2014	Multi-stage conceptual model of organizational change
Cummings and Huse	Organization Development and Change	1989	Eight-phase model
Dawson	Organizational change: A processual approach	1994	The processual approach
Dunellon	-	1986	-
Dunphy and Stace	The strategic management of corporate change	1993	The contingency model of change
Dyer	Strategies for Managing Change	1984	-
Fernandez and Rainey	Managing Successful Organizational Change in the Public Sector	2006	7 Factors

Ford	Open-Proccessional Change: Three Principles of Reciprocal-Relational Power	2006	The integrated triangle of open-proccessional change
Galpin	The human side of change: A practical guide to organization redesign	1996	Nine Wedges
Garvin	Learning in Action: A Guide to Putting the Learning Organization to Work	2000	The GE model
Greenwood and Hinnings	Understanding radical organizational change: Bringing together the old and the new institutionalism	1996	Model for Understanding Organizational Change
Greiner	Evolution and Revolution as Organizations Grow	1972	developmental model of organizational change
Hamel	Leading the Revolution	2000	The Insurrection model
Hammer and Champy	Reengineering the Corporation	1993	BRP

Hiatt	ADKAR: A model for change in business, government and our community. How to implement successful change in our personal lives and professional careers	2006	Prosci's five-stage model
Hinnings and Greenwood	The Dynamics of Strategic Change	1988	-
Hoadley and Lamos	Change Management: An Information Flow Approach	2012	Information Flow Model
Jick	Implementing Change	1991	Tactical Ten Step Model for Implementing Change
Judson	Changing behavior in organizations: Minimizing resistance to change	1991	Five Step Change Model
Kanter et al.	The Challenge of Organizational Change	1992	Ten Commandments
Kirkpatrick	Managing Change Effectively	2001	Step-by-step Change model

Kotter	Leading Change	1995	Eight-steps to Leading Change
Kouzes and Posner	The Leadership Challenge	2007	THE FIVE PRACTICES OF EXEMPLARY LEADERSHIP® MODEL
Latta	A process model of organizational change in cultural context (OC3 model)	2009	OC3 Model of Organizational Change
Lawrence	Leading Change – Insights Into How Leaders Actually Approach the Challenge of Complexity	2015	The Emerging Change model
Leclercq-Vandelannoitte	Contradiction as a medium and outcome of organizational change: a Foucauldian reading	2013	Political Model of Organizational Change
Leppit	Challenging the code of change: Part 1. Praxis does not make perfect	2006	Integrated Model
Lewin	Frontiers in Group Dynamics	1947	Three Step Model

Light	THE FOUR PILLARS OF HIGH PERFORMANCE	2005	RAND's six Steps
Lippitt, Watson and Westley	The Dynamics of Planned Change	1958	seven-phase model of Planned change
Luecke	Managing Change and Transition	2003	Seven Steps
McKinsey (Peters and Waterman)	Structure is not organization	1980	7-S Framework
Mento, Jones and Dirndorfer	A Change Management Process: Grounded in Both Theory and Practice	2002	12 Step Framework
Mintzberg and Quinn	The strategy process: Concepts, contexts, cases	1991	Mintzberg and Quinn's model of change
Nadler	Champions of Change: How CEOs and Their Companies are Mastering the Skills of Radical Change	1998	12 Action Steps

Nadler	Managing Transitions to Future States	1982	Nine Step Model
Nadler and Tushman	Beyond the Charismatic Leader: Leadership and Organizational Change	1990	Model of Institutionalizing Leadership of Change
Nadler-Tushman	A diagnostic model for organization behaviour	1977	Congruence model
Newman	Organizational transformation during institutional upheaval	2000	Inverted U-Model
Orlikowski and Hofman	An Improvisational Model for Change Management: The Case of Croupware Technologies	1997	An Improvisational Model for Managing Change
Parry et al.	Empirical Development of a Model of Performance Drivers in Organizational Change Projects	2014	ChangeTracking model
Pendlebury, Grouard and Meston	The Ten Keys to Successful Change Management	1998	Ten keys

Phillips	Enhancing the effectiveness of organizational change management	1982	Change Management Model
Post and Altman	Models of Corporate Greening: How Corporate Social Policy and Organizational Learning Inform Leading Edge Environmental Management	1992	The Corporate Greening Model
Prochaska & DiClemente	Changing for good: the revolutionary program that explains the six stages of change and teaches you how to free yourself from bad habits	1982	Transtheoretical model of change / Stages of change model
Ready and Conger	Enabling Bold Visions	2008	The Five-Phase Model for Enabling Visions
Schaffer and Evans	Ten Tasks of Change: Demystifying Changing Organizations	2001	Ten tasks of Change
Shanley	Navigating the change process: the experience of managers in the residential aged care industry	2007	Analytical model of change
Siegal et al.	Understanding the management of change	1996	The Managing Change model

Taffinifer	Big Change: A Route-Map for Corporate Transformation	1998	Transformation trajectory
Tichy	Managing Strategic Change: Technical, Political and Cultural Dynamics	1983	TPC Framework
Tischy And Ulrich	Revitalizing Organizations	1983	Model of Change Leadership
Trompenaars and Woolliams	A new framework for managing change across cultures	2002	Framework for managing change across cultures
Tushman and Romanelli	Organizational evolution: a metamorphosis model of convergence and reorientation	1985	Punctuated equilibrium model of organizational change
Ulrich	Human Resource Champions	1998	Seven-Step model
Vollman	The transformation imperative	1996	transformation imperative

Factors influencing organizational change efforts	2007	Complete model of Change
Organizational Diagnosis: six places to look for trouble with of without a theory	1976	Six-box model
Leading and coping with change	2004	Leading and coping with change model
A meta model of change	2009	Meta Model of Change

Appendix C: The 34 Teleological Change Models

Author	Name of Paper	Year of Publication	Name of Change model	Change Type	GS Citations
Kouzes and Posner	The Leadership Challenge	2007	THE FIVE PRACTICES OF EXEMPLARY LEADERSHIP® MODEL	Teleological	9228
Kotter	Leading Change	1995	Eight Steps to Leading Change	Teleological	7565
Lewin	Frontiers in Group Dynamics	1947	Three Step Model	Teleological	4373
Ulrich	Human Resource Champions	1998	Seven-Step model	Teleological	2318
Kanter et al.	The Challenge of Organizational Change	1992	Ten Commandments	Teleological	1646
Beer et al.	Why Change Programs Don't Produce Change	1990	Task Alignment Model for Change	Teleological	1534

Garvin	Learning in Action: A Guide to Putting 2000 the Learning Organization to Work	The GE model	Teleological	919
Fernandez and Rainey	Managing Successful Organizational Change in the Public Sector	2006 7 Factors	Teleological	584
Anderson and Anderson	Beyond Change Management	2001 The Nine-Phase Change Process Model	Teleological	497
Cameron and Green	Making Sense of Change Management	2004 -	Teleological	420
Judson	Changing behavior in organizations: Minimizing resistance to change	1991 Five Step Change Model	Teleological	327
Jick	Implementing Change	1991 Tactical Ten Step Model for Implementing Change	Teleological	300
Armenakis et al.	Making change permanent: a model for institutionalizing change interventions	1999 Change Readiness model	Teleological	267

Galpin	The human side of change: A practical guide to organization redesign	1996	Nine Wedges	Teleological	233
Nadler	Champions of Change: How CEOs and Their Companies are Mastering the Skills of Radical Change	1998	12 Action Steps	Teleological	225
Luecke	Managing Change and Transition	2003	Seven Steps	Teleological	215
Mento, Jones and Dirndorfer	A Change Management Process: Grounded in Both Theory and Practice	2002	12 Step Framework	Teleological	187
Bullock and Batten	It's just a phase we're going through: a review and synthesis of OD phase analysis	1985	Integrative model for planned change	Teleological	183
Lippitt, Watson and Westley	The Dynamics of Planned Change	1958	seven-phase model of Planned change	Teleological	179
Hiatt	ADKAR: A model for change in business, government and our community.	2006	Prosci's five-stage model	Teleological	176

Woodward and Hendry	Leading and coping with change	2004	Leading and coping with change model	Teleological	82
Tischy And Ulrich	Revitalizing Organizations	1983	Model of Change Leadership	Teleological	80
Pendlebury, Grouard and Meston	The Ten Keys to Successful Change Management	1998	Ten keys	Teleological	76
Light	THE FOUR PILLARS OF HIGH PERFORMANCE	2005	RAND's six Steps	Teleological	76
Nadler	Managing Transitions to Future States	1982	Nine Step Model	Teleological	69
Taffinifer	Big Change: A Route-Map for Corporate Transformation	1998	Transformation trajectory	Teleological	47
Phillips	Enhancing the effectiveness of organizational change management	1982	Change Management Model	Teleological	40

Kirkpatrick	Managing Change Effectively	2001	Step-by-step Change model	Teleological	31
Leppit	Challenging the code of change: Part 1.2006 Praxis does not make perfect		Integrated Model	Teleological	29
Ready and Conger	Enabling Bold Visions	2008	The Five-Phase Model for Enabling Visions	Teleological	19
Shanley	Navigating the change process: the experience of managers in the residential aged care industry	2007	Analytical model of change	Teleological	13
Ford	Open-Processional Change: Three Principles of Reciprocal-Relational Power	2006	The integrated triangle of open-processional change	Teleological	5
Dawson	Organizational change: A processual approach	1994	The processual approach	Teleological	N/A
Evans and Schaffer	Ten Tasks of Change: Demystifying Changing Organizations	2001	Ten tasks of Change	Teleological	N/A

Appendix D: Cover Letter

Dear Sir/Madam

We are a couple of masters-level students at Aalborg University, Faculty of Business in Denmark, who have created a survey for our Master's Thesis (see the link at the bottom of this e-mail).

Our study aims to investigate your experience with Mergers and Acquisitions (M&A). We are writing you as your company **INSERT ACQUIROR** merged with/acquired **INSERT TARGET** and we would like to get input on that specific M&A from a manager involved. Your co-operation and opinions are very important to the success of this survey.

We would appreciate if you could kindly spare a few minutes to answer the questionnaire. It will take you approximately **10-15 minutes** to complete it.

The answers from your questionnaire and others will be used for our Master's Thesis on the topic of M&A and Change Management. Your responses will be kept anonymous. Only members of the research team will have access to the information you provide.

We hope that you will find the questionnaire interesting. Please let us know if you have any questions regarding this study.

Survey: **INSERT LINK**

Thank you in advance for your kind collaboration and for submitting the survey by **29 April EOB**.

Best regards,
Anna Spetkova and Mathias Trier Birgisson
Aalborg University

Appendix E: Survey



Thank you for taking the time to answer our survey for our Master's Thesis regarding M&As.

Answering the questions should take approx. 10 minutes

Company details

Name of Company (Acquirer)

Size of Company (Number of Employees)

- (1) ☐ Small (<250)
- (2) ☐ Medium (250-499)
- (3) ☐ Large (500-1000)
- (4) ☐ Enterprise (>1000)

The Company's Primary Industry

Year of M&A

Country of Acquiree (Target Firm)

Your personal position in the company

M&A

Do you personally believe that your M&A was a success?

Yes
(1) ☐

No
(2) ☐

To which degree were the intended M&A goals achieved?

Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(6) ☐

To which degree, before the M&A, did you

	Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
Thoroughly analyze your strengths and weaknesses?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(6) ☐

	Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
Identify challenges and opportunities?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(6) ☐
Assess the impact of the M&A?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(6) ☐

To which degree were employees and middle-managers involved in the process of identifying the need and/or the opportunity to merge/acquire?

Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

To which degree did the employees understand why the M&A was important?

Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

How often did the organization emphasize that the M&A was necessary in front of the employees before the M&A?

Very Seldom	Seldom	Sometimes	Often	Very Often	Don't Know
(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

Approximately, what percentage of all managers were convinced that the M&A was absolutely necessary?

0-20%	21-40%	41-60%	61-80%	81-100%	Don't Know
(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

To what degree did the company clarify to the employees the consequences of not doing the M&A?

Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

Before the M&A, to which degree were the following the case in the organization?

	Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
The absence of a major and visible crisis	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Too many visible resources	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Low overall performance standards and goals	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Organizational structures that focus employees on narrow functional goals	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Internal measurement systems that focus on inappropriate performance indexes	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
A lack of sufficient performance feedback from external sources	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
A kill-the-messenger-of-bad-news, low candor, low confrontation culture	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Employees denying the need for a M&A	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Too much happy talk from senior management	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

To which degree did you have

	Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
a leader who owned and championed the M&A?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
a leader who was publicly committed to making the M&A succeed?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
a leader who put in the personal time and attention needed to make the M&A work?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

Did the leaders of the M&A

	Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
Believe that the M&A was the key to competitiveness?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Have the ability to articulate the belief that the M&A was the key to competitiveness?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Have the people-skills and organizational know-how to follow through with the M&A?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

Did the company establish and make use of a guiding coalition/a project group to head the M&A process?

Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

To which degree would you assess the team in charge of the M&A on these four characteristics:

	Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
Position Power	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Expertise	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Credibility	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Leadership Skills	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

To which degree were members of the team, which was ahead of the M&A, belong to different stakeholder-groups?

Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

To which degree

	Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
Did the company develop a vision for the M&A?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Did employees understand the outcome of the change in behavioral terms?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Did employees understand how the M&As would benefit themselves, customers and other stakeholders?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

To which degree did the vision of the M&A

	Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
Convey a picture of what the future would look like?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Appeal to the long-term interests of employees, customers and other stakeholders?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Comprise realistic and attainable goals?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Focus on manageable and coherent sets of goals?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Have the ability to adapt to changing circumstances?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Have the ability to be easily communicated to different levels?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

To which degree were more people than a sole leader involved with developing the vision for the M&A

Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

In the period of communicating the vision for the M&A, to which degree do you agree that the communication was

	Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
Simple (e.g avoiding jargon and technical terms)	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Utilized metaphors,	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

	Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
analogies and examples?						
Given through multiple sources and channels?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Repeated?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Personified in the actions of top-management?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Used to explain seeming inconsistencies between the change vision and what the leaders stand for and/or represent in their behavior?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Two-way communication?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

To which degree

	Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
Did the leaders of the change recognize the effects of the M&A on the company's structures and systems?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Did the company physically rearrange the office space due to the M&A?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Were the formal structures aligned with the M&A change vision?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Were more responsibilities or an increased variety in their assignments given to employees in relation to M&A?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Were training and	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

	Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
development opportunities provided for the employees in relation to the M&A?						
Were compensation and performance-appraisal systems aligned with the vision of the M&A?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Were bosses who refused to change and made demands inconsistent with the M&A change vision confronted?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

To which degree

	Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
Did the organization have the means of measuring the success of the M&A?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Did the organization plan to benchmark progress on both the results and the process of implementing the changes?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Did you plan for short-term wins (within 6-18 months)?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

To which degree were these short-term wins

	Not at All	Low Degree	Moderate Degree	High Degree	Very High Degree	Don't Know
Visible to employees?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

	Not at All	Low Degree	Moderat e Degree	High Degree	Very High Degree	Don't Know
Unambiguous?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Clearly linked to the change initiative of the M&A?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Celebrated?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

To which degree were the celebrations

	Not at All	Low Degree	Moderat e Degree	High Degree	Very High Degree	Don't Know
Public?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Used to recognize individual contributions?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

To which degree

	Not at All	Low Degree	Moderat e Degree	High Degree	Very High Degree	Don't Know
Has the company used the initial change momentum to initiate greater changes?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Were and are the criteria of promotion-decisions in accordance with the new practices from the vision of the M&A?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Was and is employee turnover managed in accordance with the new practices from the vision of the M&A?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

To which degree do you assess that the new approaches have been anchored in the organization's

	Not at All	Low Degree	Moderat e Degree	High Degree	Very High Degree	Don't Know
Culture?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Policies?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Systems?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Reporting Relationships?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐
Practices?	(1) ☐	(2) ☐	(3) ☐	(4) ☐	(5) ☐	(7) ☐

Appendix F: Chi-square tests and Fischer's Exact tests

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Performance_group_extreme * define_t	28	100,0%	0	0,0%	28	100,0%
Performance_group_extreme * defin_1	28	100,0%	0	0,0%	28	100,0%
Performance_group_extreme * defin_2	28	100,0%	0	0,0%	28	100,0%
Performance_group_extreme * defin_3	28	100,0%	0	0,0%	28	100,0%
Performance_group_extreme * csq_1	28	100,0%	0	0,0%	28	100,0%
Performance_group_extreme * csq_2	28	100,0%	0	0,0%	28	100,0%
Performance_group_extreme * csq_3	22	78,6%	6	21,4%	28	100,0%
Performance_group_extreme * csq_4	27	96,4%	1	3,6%	28	100,0%
Performance_group_extreme * csq_5	25	89,3%	3	10,7%	28	100,0%
Performance_group_extreme * csq_6	24	85,7%	4	14,3%	28	100,0%
Performance_group_extreme * csq_7	26	92,9%	2	7,1%	28	100,0%
Performance_group_extreme * csq_8	25	89,3%	3	10,7%	28	100,0%
Performance_group_extreme * csq_9	26	92,9%	2	7,1%	28	100,0%
Performance_group_extreme * csq_10	26	92,9%	2	7,1%	28	100,0%
Performance_group_extreme * csq_11	26	92,9%	2	7,1%	28	100,0%
Performance_group_extreme * csq_12	27	96,4%	1	3,6%	28	100,0%
Performance_group_extreme * csq_13	26	92,9%	2	7,1%	28	100,0%
Performance_group_extreme * lead_1	28	100,0%	0	0,0%	28	100,0%

Performance_group _extreme * lead_2	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * lead_3	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * lead_4	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * lead_5	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * lead_6	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * lead_7	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * lead_8	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * lead_9	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * lead_10	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * lead_11	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * lead_12	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * vision_1	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * vision_2	26	92,9%	2	7,1%	28	100,0%
Performance_group _extreme * vision_3	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * vision_4	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * vision_5	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * vision_6	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * vision_7	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * vision_8	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * vision_9	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * visio_1	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * com_1	28	100,0%	0	0,0%	28	100,0%

Performance_group _extreme * com_2	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * com_3	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * com_4	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * com_5	27	96,4%	1	3,6%	28	100,0%
Performance_group _extreme * com_6	25	89,3%	3	10,7%	28	100,0%
Performance_group _extreme * com_7	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * empower_	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * empow_1	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * empow_2	27	96,4%	1	3,6%	28	100,0%
Performance_group _extreme * empow_3	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * empow_4	27	96,4%	1	3,6%	28	100,0%
Performance_group _extreme * empow_5	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * empow_6	27	96,4%	1	3,6%	28	100,0%
Performance_group _extreme * guide_1	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * guide_2	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * guide_3	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * guide_4	28	100,0%	0	0,0%	28	100,0%
Performance_group _extreme * guide_5	27	96,4%	1	3,6%	28	100,0%
Performance_group _extreme * guide_6	28	100,0%	0	0,0%	28	100,0%

Performance_group_extreme * guide_7	27	96,4%	1	3,6%	28	100,0%
Performance_group_extreme * guide_8	26	92,9%	2	7,1%	28	100,0%
Performance_group_extreme * guide_9	26	92,9%	2	7,1%	28	100,0%
Performance_group_extreme * last_1	27	96,4%	1	3,6%	28	100,0%
Performance_group_extreme * last_2	26	92,9%	2	7,1%	28	100,0%
Performance_group_extreme * last_3	24	85,7%	4	14,3%	28	100,0%
Performance_group_extreme * last_4	28	100,0%	0	0,0%	28	100,0%
Performance_group_extreme * last_5	28	100,0%	0	0,0%	28	100,0%
Performance_group_extreme * last_6	28	100,0%	0	0,0%	28	100,0%
Performance_group_extreme * last_7	28	100,0%	0	0,0%	28	100,0%
Performance_group_extreme * last_8	28	100,0%	0	0,0%	28	100,0%

Performance_group_extreme * define_t

Crosstab

		define_t				Total
		2	3	4	5	
Performance_grou 1 p_extreme	Count	0	3	3	1	7
	Expected Count	,5	1,8	2,8	2,0	7,0
	% within Performance_grou p_extreme	0,0%	42,9%	42,9%	14,3%	100,0%
	% within define_t	0,0%	42,9%	27,3%	12,5%	25,0%
	% of Total	0,0%	10,7%	10,7%	3,6%	25,0%
2	Count	2	4	8	7	21
	Expected Count	1,5	5,3	8,3	6,0	21,0

	% within Performance_group_extreme	9,5%	19,0%	38,1%	33,3%	100,0%
	% within defin_1	100,0%	57,1%	72,7%	87,5%	75,0%
	% of Total	7,1%	14,3%	28,6%	25,0%	75,0%
Total	Count	2	7	11	8	28
	Expected Count	2,0	7,0	11,0	8,0	28,0
	% within Performance_group_extreme	7,1%	25,0%	39,3%	28,6%	100,0%
	% within defin_1	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	7,1%	25,0%	39,3%	28,6%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	2,554 ^a	3	,466	,438		
Likelihood Ratio	3,011	3	,390	,412		
Fisher's Exact Test	2,212			,506		
Linear-by-Linear Association	,354 ^b	1	,552	,640	,358	,154
N of Valid Cases	28					

a. 5 cells (62,5%) have expected count less than 5. The minimum expected count is ,50.

b. The standardized statistic is ,595.

Performance_group_extreme * defin_1

Crosstab

	defin_1				Total
	2	3	4	5	
Performance_group_extreme 1 Count	0	1	4	2	7

p_extreme	Expected Count	,3	1,5	3,3	2,0	7,0
	% within Performance_grou	0,0%	14,3%	57,1%	28,6%	100,0%
	p_extreme					
	% within defin_1	0,0%	16,7%	30,8%	25,0%	25,0%
	% of Total	0,0%	3,6%	14,3%	7,1%	25,0%
2	Count	1	5	9	6	21
	Expected Count	,8	4,5	9,8	6,0	21,0
	% within Performance_grou	4,8%	23,8%	42,9%	28,6%	100,0%
	p_extreme					
	% within defin_1	100,0%	83,3%	69,2%	75,0%	75,0%
Total	% of Total	3,6%	17,9%	32,1%	21,4%	75,0%
	Count	1	6	13	8	28
	Expected Count	1,0	6,0	13,0	8,0	28,0
	% within Performance_grou	3,6%	21,4%	46,4%	28,6%	100,0%
	p_extreme					
	% within defin_1	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	3,6%	21,4%	46,4%	28,6%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	,786 ^a	3	,853	,899		
Likelihood Ratio	1,038	3	,792	,899		
Fisher's Exact Test	,981			1,000		
Linear-by-Linear Association	,286 ^b	1	,593	,793	,403	,188
N of Valid Cases	28					

a. 6 cells (75,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -,535.

Performance_group_extreme * defin_2

Crosstab

		defin_2					Total
		1	2	3	4	5	
Performance_group_extreme 1	Count	0	0	0	3	4	7
	Expected Count	,3	,8	,8	3,3	2,0	7,0
	% within Performance_group_extreme	0,0%	0,0%	0,0%	42,9%	57,1%	100,0%
	% within defin_2	0,0%	0,0%	0,0%	23,1%	50,0%	25,0%
	% of Total	0,0%	0,0%	0,0%	10,7%	14,3%	25,0%
2	Count	1	3	3	10	4	21
	Expected Count	,8	2,3	2,3	9,8	6,0	21,0
	% within Performance_group_extreme	4,8%	14,3%	14,3%	47,6%	19,0%	100,0%
	% within defin_2	100,0%	100,0%	100,0%	76,9%	50,0%	75,0%
	% of Total	3,6%	10,7%	10,7%	35,7%	14,3%	75,0%
Total	Count	1	3	3	13	8	28
	Expected Count	1,0	3,0	3,0	13,0	8,0	28,0
	% within Performance_group_extreme	3,6%	10,7%	10,7%	46,4%	28,6%	100,0%
	% within defin_2	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	3,6%	10,7%	10,7%	46,4%	28,6%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	5,026 ^a	4	,285	,285		
Likelihood Ratio	6,355	4	,174	,227		
Fisher's Exact Test	3,995			,430		
Linear-by-Linear Association	4,091 ^b	1	,043	,063	,023	,019

N of Valid Cases	28					
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- a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,25.
b. The standardized statistic is -2,023.

Performance_group_extreme * defin_3

Crosstab

		defin_3					Total
		1	2	3	4	5	
Performance_group_extreme	1						
	Count	1	1	3	0	2	7
	Expected Count	,8	2,8	1,5	,8	1,3	7,0
	% within Performance_group_extreme	14,3%	14,3%	42,9%	0,0%	28,6%	100,0%
	% within defin_3	33,3%	9,1%	50,0%	0,0%	40,0%	25,0%
	% of Total	3,6%	3,6%	10,7%	0,0%	7,1%	25,0%
2	Count	2	10	3	3	3	21
	Expected Count	2,3	8,3	4,5	2,3	3,8	21,0
	% within Performance_group_extreme	9,5%	47,6%	14,3%	14,3%	14,3%	100,0%
	% within defin_3	66,7%	90,9%	50,0%	100,0%	60,0%	75,0%
	% of Total	7,1%	35,7%	10,7%	10,7%	10,7%	75,0%
Total	Count	3	11	6	3	5	28
	Expected Count	3,0	11,0	6,0	3,0	5,0	28,0
	% within Performance_group_extreme	10,7%	39,3%	21,4%	10,7%	17,9%	100,0%
	% within defin_3	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	10,7%	39,3%	21,4%	10,7%	17,9%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	5,196 ^a	4	,268	,276		
Likelihood Ratio	5,922	4	,205	,328		
Fisher's Exact Test	5,060			,216		
Linear-by-Linear Association	,453 ^b	1	,501	,621	,306	,103
N of Valid Cases	28					

a. 9 cells (90,0%) have expected count less than 5. The minimum expected count is ,75.

b. The standardized statistic is -,673.

Performance_group_extreme * csq_1

Crosstab						
		csq_1				Total
		2	3	4	5	
Performance_grou p_extreme	1					
	Count	0	0	5	2	7
	Expected Count	,8	1,3	3,0	2,0	7,0
	% within Performance_grou p_extreme	0,0%	0,0%	71,4%	28,6%	100,0%
	% within csq_1	0,0%	0,0%	41,7%	25,0%	25,0%
	% of Total	0,0%	0,0%	17,9%	7,1%	25,0%
2	Count	3	5	7	6	21
	Expected Count	2,3	3,8	9,0	6,0	21,0
	% within Performance_grou p_extreme	14,3%	23,8%	33,3%	28,6%	100,0%
	% within csq_1	100,0%	100,0%	58,3%	75,0%	75,0%
	% of Total	10,7%	17,9%	25,0%	21,4%	75,0%
Total	Count	3	5	12	8	28
	Expected Count	3,0	5,0	12,0	8,0	28,0

% within Performance_group_extreme	10,7%	17,9%	42,9%	28,6%	100,0%
% within csq_1	100,0%	100,0%	100,0%	100,0%	100,0%
% of Total	10,7%	17,9%	42,9%	28,6%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	4,444 ^a	3	,217	,279		
Likelihood Ratio	6,193	3	,103	,158		
Fisher's Exact Test	3,523			,325		
Linear-by-Linear Association	1,576 ^b	1	,209	,263	,155	,090
N of Valid Cases	28					

a. 6 cells (75,0%) have expected count less than 5. The minimum expected count is ,75.

b. The standardized statistic is -1,255.

Performance_group_extreme * csq_2

Crosstab

		csq_2					Total
		1	2	3	4	5	
Performance_group_extreme	1						
	Count	1	1	2	1	2	7
	Expected Count	1,8	,3	1,8	2,5	,8	7,0
	% within Performance_group_extreme	14,3%	14,3%	28,6%	14,3%	28,6%	100,0%
	% within csq_2	14,3%	100,0%	28,6%	10,0%	66,7%	25,0%
	% of Total	3,6%	3,6%	7,1%	3,6%	7,1%	25,0%
2							
		Count	6	0	5	9	21

	Expected Count	5,3	,8	5,3	7,5	2,3	21,0
	% within Performance_group_extreme	28,6%	0,0%	23,8%	42,9%	4,8%	100,0%
	% within csq_2	85,7%	0,0%	71,4%	90,0%	33,3%	75,0%
	% of Total	21,4%	0,0%	17,9%	32,1%	3,6%	75,0%
Total	Count	7	1	7	10	3	28
	Expected Count	7,0	1,0	7,0	10,0	3,0	28,0
	% within Performance_group_extreme	25,0%	3,6%	25,0%	35,7%	10,7%	100,0%
	% within csq_2	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	25,0%	3,6%	25,0%	35,7%	10,7%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	7,454 ^a	4	,114	,097		
Likelihood Ratio	7,053	4	,133	,220		
Fisher's Exact Test	6,569			,115		
Linear-by-Linear Association	,309 ^b	1	,578	,642	,353	,108
N of Valid Cases	28					

a. 7 cells (70,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -,556.

Performance_group_extreme * csq_3

Crosstab

	csq_3					Total
	1	2	3	4	5	

Performance_group_extreme	1	Count	0	1	0	1	5	7
		Expected Count	,6	1,0	1,0	1,9	2,5	7,0
		% within Performance_group_extreme	0,0%	14,3%	0,0%	14,3%	71,4%	100,0%
		% within csq_3	0,0%	33,3%	0,0%	16,7%	62,5%	31,8%
		% of Total	0,0%	4,5%	0,0%	4,5%	22,7%	31,8%
	2	Count	2	2	3	5	3	15
		Expected Count	1,4	2,0	2,0	4,1	5,5	15,0
		% within Performance_group_extreme	13,3%	13,3%	20,0%	33,3%	20,0%	100,0%
		% within csq_3	100,0%	66,7%	100,0%	83,3%	37,5%	68,2%
		% of Total	9,1%	9,1%	13,6%	22,7%	13,6%	68,2%
Total		Count	2	3	3	6	8	22
		Expected Count	2,0	3,0	3,0	6,0	8,0	22,0
		% within Performance_group_extreme	9,1%	13,6%	13,6%	27,3%	36,4%	100,0%
		% within csq_3	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
		% of Total	9,1%	13,6%	13,6%	27,3%	36,4%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	6,443 ^a	4	,168	,193		
Likelihood Ratio	7,711	4	,103	,192		
Fisher's Exact Test	5,353			,221		
Linear-by-Linear Association	3,101 ^b	1	,078	,092	,052	,031
N of Valid Cases	22					

a. 9 cells (90,0%) have expected count less than 5. The minimum expected count is ,64.

b. The standardized statistic is -1,761.

Performance_group_extreme * csq_4

Crosstab

		csq_4					Total
		1	2	3	4	5	
Performance_group_extreme 1	Count	0	1	3	2	1	7
	Expected Count	,8	1,8	2,1	1,6	,8	7,0
	% within Performance_group_extreme	0,0%	14,3%	42,9%	28,6%	14,3%	100,0%
	% within csq_4	0,0%	14,3%	37,5%	33,3%	33,3%	25,9%
	% of Total	0,0%	3,7%	11,1%	7,4%	3,7%	25,9%
2	Count	3	6	5	4	2	20
	Expected Count	2,2	5,2	5,9	4,4	2,2	20,0
	% within Performance_group_extreme	15,0%	30,0%	25,0%	20,0%	10,0%	100,0%
	% within csq_4	100,0%	85,7%	62,5%	66,7%	66,7%	74,1%
	% of Total	11,1%	22,2%	18,5%	14,8%	7,4%	74,1%
Total	Count	3	7	8	6	3	27
	Expected Count	3,0	7,0	8,0	6,0	3,0	27,0
	% within Performance_group_extreme	11,1%	25,9%	29,6%	22,2%	11,1%	100,0%
	% within csq_4	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	11,1%	25,9%	29,6%	22,2%	11,1%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	2,359 ^a	4	,670	,761		
Likelihood Ratio	3,119	4	,538	,761		
Fisher's Exact Test	2,368			,778		

Linear-by-Linear Association	1,441 ^b	1	,230	,276	,158	,073
N of Valid Cases	27					

- a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,78.
b. The standardized statistic is -1,200.

Performance_group_extreme * csq_5

Crosstab							
		csq_5					Total
		1	2	3	4	5	
Performance_group_extreme 1	Count	1	0	3	0	2	6
	Expected Count	1,2	1,4	1,0	1,2	1,2	6,0
	% within Performance_group_extreme	16,7%	0,0%	50,0%	0,0%	33,3%	100,0%
	% within csq_5	20,0%	0,0%	75,0%	0,0%	40,0%	24,0%
	% of Total	4,0%	0,0%	12,0%	0,0%	8,0%	24,0%
2	Count	4	6	1	5	3	19
	Expected Count	3,8	4,6	3,0	3,8	3,8	19,0
	% within Performance_group_extreme	21,1%	31,6%	5,3%	26,3%	15,8%	100,0%
	% within csq_5	80,0%	100,0%	25,0%	100,0%	60,0%	76,0%
	% of Total	16,0%	24,0%	4,0%	20,0%	12,0%	76,0%
Total	Count	5	6	4	5	5	25
	Expected Count	5,0	6,0	4,0	5,0	5,0	25,0
	% within Performance_group_extreme	20,0%	24,0%	16,0%	20,0%	20,0%	100,0%
	% within csq_5	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	20,0%	24,0%	16,0%	20,0%	20,0%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	9,923 ^a	4	,042	,034		
Likelihood Ratio	11,321	4	,023	,034		
Fisher's Exact Test	8,240			,034		
Linear-by-Linear Association	,518 ^b	1	,472	,530	,291	,098
N of Valid Cases	25					

a. 10 cells (100,0%) have expected count less than 5. The minimum expected count is ,96.

b. The standardized statistic is -,720.

Performance_group_extreme * csq_6

Crosstab

		csq_6					Total
		1	2	3	4	5	
Performance_group_extreme	1						
	Count	1	1	3	0	0	5
	Expected Count	1,0	1,7	1,5	,6	,2	5,0
	% within Performance_group_extreme	20,0%	20,0%	60,0%	0,0%	0,0%	100,0%
	% within csq_6	20,0%	12,5%	42,9%	0,0%	0,0%	20,8%
	% of Total	4,2%	4,2%	12,5%	0,0%	0,0%	20,8%
2	Count	4	7	4	3	1	19
	Expected Count	4,0	6,3	5,5	2,4	,8	19,0
	% within Performance_group_extreme	21,1%	36,8%	21,1%	15,8%	5,3%	100,0%
	% within csq_6	80,0%	87,5%	57,1%	100,0%	100,0%	79,2%
	% of Total	16,7%	29,2%	16,7%	12,5%	4,2%	79,2%
Total	Count	5	8	7	3	1	24
	Expected Count	5,0	8,0	7,0	3,0	1,0	24,0

% within Performance_group_extreme	20,8%	33,3%	29,2%	12,5%	4,2%	100,0%
% within csq_6	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
% of Total	20,8%	33,3%	29,2%	12,5%	4,2%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	3,450 ^a	4	,485	,562		
Likelihood Ratio	3,970	4	,410	,590		
Fisher's Exact Test	3,128			,590		
Linear-by-Linear Association	,018 ^b	1	,894	1,000	,546	,176
N of Valid Cases	24					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,21.

b. The standardized statistic is ,133.

Performance_group_extreme * csq_7

Crosstab

		csq_7					Total
		1	2	3	4	5	
Performance_group_extreme 1	Count	3	2	2	0	0	7
	Expected Count	2,7	2,2	1,1	,3	,8	7,0
	% within Performance_group_extreme	42,9%	28,6%	28,6%	0,0%	0,0%	100,0%
	% within csq_7	30,0%	25,0%	50,0%	0,0%	0,0%	26,9%
	% of Total	11,5%	7,7%	7,7%	0,0%	0,0%	26,9%
2	Count	7	6	2	1	3	19

	Expected Count	7,3	5,8	2,9	,7	2,2	19,0
	% within Performance_group_extreme	36,8%	31,6%	10,5%	5,3%	15,8%	100,0%
	% within csq_7	70,0%	75,0%	50,0%	100,0%	100,0%	73,1%
	% of Total	26,9%	23,1%	7,7%	3,8%	11,5%	73,1%
Total	Count	10	8	4	1	3	26
	Expected Count	10,0	8,0	4,0	1,0	3,0	26,0
	% within Performance_group_extreme	38,5%	30,8%	15,4%	3,8%	11,5%	100,0%
	% within csq_7	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	38,5%	30,8%	15,4%	3,8%	11,5%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	2,620 ^a	4	,623	,694		
Likelihood Ratio	3,530	4	,473	,679		
Fisher's Exact Test	2,513			,782		
Linear-by-Linear Association	,611 ^b	1	,434	,520	,283	,103
N of Valid Cases	26					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,27.

b. The standardized statistic is ,782.

Performance_group_extreme * csq_8

Crosstab

	csq_8					Total
	1	2	3	4	5	

Performance_group_extreme	1	Count	4	0	2	0	0	6
		Expected Count	1,7	2,2	1,4	,2	,5	6,0
		% within Performance_group_extreme	66,7%	0,0%	33,3%	0,0%	0,0%	100,0%
		% within csq_8	57,1%	0,0%	33,3%	0,0%	0,0%	24,0%
		% of Total	16,0%	0,0%	8,0%	0,0%	0,0%	24,0%
	2	Count	3	9	4	1	2	19
		Expected Count	5,3	6,8	4,6	,8	1,5	19,0
		% within Performance_group_extreme	15,8%	47,4%	21,1%	5,3%	10,5%	100,0%
		% within csq_8	42,9%	100,0%	66,7%	100,0%	100,0%	76,0%
		% of Total	12,0%	36,0%	16,0%	4,0%	8,0%	76,0%
Total		Count	7	9	6	1	2	25
		Expected Count	7,0	9,0	6,0	1,0	2,0	25,0
		% within Performance_group_extreme	28,0%	36,0%	24,0%	4,0%	8,0%	100,0%
		% within csq_8	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
		% of Total	28,0%	36,0%	24,0%	4,0%	8,0%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	8,292 ^a	4	,081	,066		
Likelihood Ratio	10,355	4	,035	,052		
Fisher's Exact Test	7,688			,052		
Linear-by-Linear Association	2,157 ^b	1	,142	,170	,099	,063
N of Valid Cases	25					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,24.

b. The standardized statistic is 1,469.

Performance_group_extreme * csq_9

Crosstab

		csq_9					Total
		1	2	3	4	5	
Performance_group_extreme 1	Count	2	2	3	0	0	7
	Expected Count	1,3	2,7	1,9	,5	,5	7,0
	% within Performance_group_extreme	28,6%	28,6%	42,9%	0,0%	0,0%	100,0%
	% within csq_9	40,0%	20,0%	42,9%	0,0%	0,0%	26,9%
	% of Total	7,7%	7,7%	11,5%	0,0%	0,0%	26,9%
2	Count	3	8	4	2	2	19
	Expected Count	3,7	7,3	5,1	1,5	1,5	19,0
	% within Performance_group_extreme	15,8%	42,1%	21,1%	10,5%	10,5%	100,0%
	% within csq_9	60,0%	80,0%	57,1%	100,0%	100,0%	73,1%
	% of Total	11,5%	30,8%	15,4%	7,7%	7,7%	73,1%
Total	Count	5	10	7	2	2	26
	Expected Count	5,0	10,0	7,0	2,0	2,0	26,0
	% within Performance_group_extreme	19,2%	38,5%	26,9%	7,7%	7,7%	100,0%
	% within csq_9	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	19,2%	38,5%	26,9%	7,7%	7,7%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	3,055 ^a	4	,549	,517		
Likelihood Ratio	3,991	4	,407	,522		
Fisher's Exact Test	2,630			,657		

Linear-by-Linear Association	,749 ^b	1	,387	,454	,261	,113
N of Valid Cases	26					

- a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,54.
b. The standardized statistic is ,866.

Performance_group_extreme * csq_10

Crosstab							
		csq_10					Total
		1	2	3	4	5	
Performance_group_extreme 1	Count	0	2	4	1	0	7
	Expected Count	1,6	1,9	1,9	1,1	,5	7,0
	% within Performance_group_extreme	0,0%	28,6%	57,1%	14,3%	0,0%	100,0%
	% within csq_10	0,0%	28,6%	57,1%	25,0%	0,0%	26,9%
	% of Total	0,0%	7,7%	15,4%	3,8%	0,0%	26,9%
2	Count	6	5	3	3	2	19
	Expected Count	4,4	5,1	5,1	2,9	1,5	19,0
	% within Performance_group_extreme	31,6%	26,3%	15,8%	15,8%	10,5%	100,0%
	% within csq_10	100,0%	71,4%	42,9%	75,0%	100,0%	73,1%
	% of Total	23,1%	19,2%	11,5%	11,5%	7,7%	73,1%
Total	Count	6	7	7	4	2	26
	Expected Count	6,0	7,0	7,0	4,0	2,0	26,0
	% within Performance_group_extreme	23,1%	26,9%	26,9%	15,4%	7,7%	100,0%
	% within csq_10	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	23,1%	26,9%	26,9%	15,4%	7,7%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	6,214 ^a	4	,184	,208		
Likelihood Ratio	7,854	4	,097	,183		
Fisher's Exact Test	5,468			,232		
Linear-by-Linear Association	,490 ^b	1	,484	,600	,301	,109
N of Valid Cases	26					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,54.

b. The standardized statistic is -,700.

Performance_group_extreme * csq_11

Crosstab

		csq_11					Total
		1	2	3	4	5	
Performance_group_extreme	1						
	Count	4	1	2	0	0	7
	Expected Count	3,8	1,6	,8	,5	,3	7,0
	% within Performance_group_extreme	57,1%	14,3%	28,6%	0,0%	0,0%	100,0%
	% within csq_11	28,6%	16,7%	66,7%	0,0%	0,0%	26,9%
	% of Total	15,4%	3,8%	7,7%	0,0%	0,0%	26,9%
2	Count	10	5	1	2	1	19
	Expected Count	10,2	4,4	2,2	1,5	,7	19,0
	% within Performance_group_extreme	52,6%	26,3%	5,3%	10,5%	5,3%	100,0%
	% within csq_11	71,4%	83,3%	33,3%	100,0%	100,0%	73,1%
	% of Total	38,5%	19,2%	3,8%	7,7%	3,8%	73,1%
Total	Count	14	6	3	2	1	26
	Expected Count	14,0	6,0	3,0	2,0	1,0	26,0

% within Performance_group_extreme	53,8%	23,1%	11,5%	7,7%	3,8%	100,0%
% within csq_11	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
% of Total	53,8%	23,1%	11,5%	7,7%	3,8%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	3,854 ^a	4	,426	,576		
Likelihood Ratio	4,312	4	,365	,551		
Fisher's Exact Test	3,382			,581		
Linear-by-Linear Association	,125 ^b	1	,724	,855	,457	,144
N of Valid Cases	26					

a. 9 cells (90,0%) have expected count less than 5. The minimum expected count is ,27.

b. The standardized statistic is ,353.

Performance_group_extreme * csq_12

Crosstab

		csq_12				Total
		1	2	3	4	
Performance_group_extreme	1					
	Count	3	4	0	0	7
	Expected Count	2,9	3,4	,3	,5	7,0
	% within Performance_group_extreme	42,9%	57,1%	0,0%	0,0%	100,0%
	% within csq_12	27,3%	30,8%	0,0%	0,0%	25,9%
	% of Total	11,1%	14,8%	0,0%	0,0%	25,9%
2	Count	8	9	1	2	20

	Expected Count	8,1	9,6	,7	1,5	20,0
	% within Performance_group_extreme	40,0%	45,0%	5,0%	10,0%	100,0%
	% within csq_12	72,7%	69,2%	100,0%	100,0%	74,1%
	% of Total	29,6%	33,3%	3,7%	7,4%	74,1%
Total	Count	11	13	1	2	27
	Expected Count	11,0	13,0	1,0	2,0	27,0
	% within Performance_group_extreme	40,7%	48,1%	3,7%	7,4%	100,0%
	% within csq_12	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	40,7%	48,1%	3,7%	7,4%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	1,219 ^a	3	,748	,894		
Likelihood Ratio	1,964	3	,580	,805		
Fisher's Exact Test	1,113			1,000		
Linear-by-Linear Association	,560 ^b	1	,454	,626	,338	,175
N of Valid Cases	27					

a. 6 cells (75,0%) have expected count less than 5. The minimum expected count is ,26.

b. The standardized statistic is ,749.

Performance_group_extreme * csq_13

Crosstab

	csq_13					Total
	1	2	3	4	5	

Performance_group_extreme	Count	2	3	2	0	0	7
	Expected Count	2,7	2,4	1,3	,3	,3	7,0
	% within Performance_group_extreme	28,6%	42,9%	28,6%	0,0%	0,0%	100,0%
	% within csq_13	20,0%	33,3%	40,0%	0,0%	0,0%	26,9%
	% of Total	7,7%	11,5%	7,7%	0,0%	0,0%	26,9%
2	Count	8	6	3	1	1	19
	Expected Count	7,3	6,6	3,7	,7	,7	19,0
	% within Performance_group_extreme	42,1%	31,6%	15,8%	5,3%	5,3%	100,0%
	% within csq_13	80,0%	66,7%	60,0%	100,0%	100,0%	73,1%
	% of Total	30,8%	23,1%	11,5%	3,8%	3,8%	73,1%
Total	Count	10	9	5	1	1	26
	Expected Count	10,0	9,0	5,0	1,0	1,0	26,0
	% within Performance_group_extreme	38,5%	34,6%	19,2%	3,8%	3,8%	100,0%
	% within csq_13	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	38,5%	34,6%	19,2%	3,8%	3,8%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	1,603 ^a	4	,808	,858		
Likelihood Ratio	2,094	4	,718	,858		
Fisher's Exact Test	2,014			,858		
Linear-by-Linear Association	,000 ^b	1	1,000	1,000	,562	,158
N of Valid Cases	26					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,27.

b. The standardized statistic is ,000.

Performance_group_extreme * lead_1

Crosstab

		lead_1				Total
		1	3	4	5	
Performance_grou 1 p_extreme	Count	0	0	2	5	7
	Expected Count	,3	,3	1,8	4,8	7,0
	% within					
	Performance_grou p_extreme	0,0%	0,0%	28,6%	71,4%	100,0%
	% within lead_1	0,0%	0,0%	28,6%	26,3%	25,0%
	% of Total	0,0%	0,0%	7,1%	17,9%	25,0%
2	Count	1	1	5	14	21
	Expected Count	,8	,8	5,3	14,3	21,0
	% within					
	Performance_grou p_extreme	4,8%	4,8%	23,8%	66,7%	100,0%
	% within lead_1	100,0%	100,0%	71,4%	73,7%	75,0%
	% of Total	3,6%	3,6%	17,9%	50,0%	75,0%
Total	Count	1	1	7	19	28
	Expected Count	1,0	1,0	7,0	19,0	28,0
	% within					
	Performance_grou p_extreme	3,6%	3,6%	25,0%	67,9%	100,0%
	% within lead_1	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	3,6%	3,6%	25,0%	67,9%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	,732 ^a	3	,866	1,000		
Likelihood Ratio	1,214	3	,750	1,000		
Fisher's Exact Test	1,108			1,000		

Linear-by-Linear Association	,383 ^b	1	,536	,696	,432	,229
N of Valid Cases	28					

a. 6 cells (75,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -,619.

Performance_group_extreme * lead_2

Crosstab

		lead_2				Total
		1	2	4	5	
Performance_grou p_extreme	1					
	Count	0	0	2	5	7
	Expected Count	,3	,3	2,3	4,3	7,0
	% within Performance_grou p_extreme	0,0%	0,0%	28,6%	71,4%	100,0%
	% within lead_2	0,0%	0,0%	22,2%	29,4%	25,0%
	% of Total	0,0%	0,0%	7,1%	17,9%	25,0%
2	Count	1	1	7	12	21
	Expected Count	,8	,8	6,8	12,8	21,0
	% within Performance_grou p_extreme	4,8%	4,8%	33,3%	57,1%	100,0%
	% within lead_2	100,0%	100,0%	77,8%	70,6%	75,0%
	% of Total	3,6%	3,6%	25,0%	42,9%	75,0%
Total	Count	1	1	9	17	28
	Expected Count	1,0	1,0	9,0	17,0	28,0
	% within Performance_grou p_extreme	3,6%	3,6%	32,1%	60,7%	100,0%
	% within lead_2	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	3,6%	3,6%	32,1%	60,7%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	,880 ^a	3	,830	1,000		
Likelihood Ratio	1,359	3	,715	1,000		
Fisher's Exact Test	1,151			1,000		
Linear-by-Linear Association	,828 ^b	1	,363	,557	,299	,188
N of Valid Cases	28					

a. 6 cells (75,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -,910.

Performance_group_extreme * lead_3

Crosstab

		lead_3				Total
		2	3	4	5	
Performance_grou p_extreme	Count	0	0	2	5	7
	Expected Count	,5	,8	1,8	4,0	7,0
	% within Performance_grou p_extreme	0,0%	0,0%	28,6%	71,4%	100,0%
	% within lead_3	0,0%	0,0%	28,6%	31,3%	25,0%
	% of Total	0,0%	0,0%	7,1%	17,9%	25,0%
2	Count	2	3	5	11	21
	Expected Count	1,5	2,3	5,3	12,0	21,0
	% within Performance_grou p_extreme	9,5%	14,3%	23,8%	52,4%	100,0%
	% within lead_3	100,0%	100,0%	71,4%	68,8%	75,0%
	% of Total	7,1%	10,7%	17,9%	39,3%	75,0%
Total	Count	2	3	7	16	28
	Expected Count	2,0	3,0	7,0	16,0	28,0

% within Performance_group_extreme	7,1%	10,7%	25,0%	57,1%	100,0%
% within lead_3	100,0%	100,0%	100,0%	100,0%	100,0%
% of Total	7,1%	10,7%	25,0%	57,1%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	2,048 ^a	3	,563	,637		
Likelihood Ratio	3,240	3	,356	,536		
Fisher's Exact Test	1,446			,903		
Linear-by-Linear Association	1,613 ^b	1	,204	,263	,155	,098
N of Valid Cases	28					

a. 6 cells (75,0%) have expected count less than 5. The minimum expected count is ,50.

b. The standardized statistic is -1,270.

Performance_group_extreme * lead_4

Crosstab

		lead_4				Total
		2	3	4	5	
Performance_group_extreme	Count	0	0	2	5	7
	Expected Count	,3	,5	2,8	3,5	7,0
	% within Performance_group_extreme	0,0%	0,0%	28,6%	71,4%	100,0%
	% within lead_4	0,0%	0,0%	18,2%	35,7%	25,0%
	% of Total	0,0%	0,0%	7,1%	17,9%	25,0%
2	Count	1	2	9	9	21

	Expected Count	,8	1,5	8,3	10,5	21,0
	% within Performance_group_extreme	4,8%	9,5%	42,9%	42,9%	100,0%
	% within lead_4	100,0%	100,0%	81,8%	64,3%	75,0%
	% of Total	3,6%	7,1%	32,1%	32,1%	75,0%
Total	Count	1	2	11	14	28
	Expected Count	1,0	2,0	11,0	14,0	28,0
	% within Performance_group_extreme	3,6%	7,1%	39,3%	50,0%	100,0%
	% within lead_4	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	3,6%	7,1%	39,3%	50,0%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	2,130 ^a	3	,546	,565		
Likelihood Ratio	2,811	3	,422	,565		
Fisher's Exact Test	1,861			,658		
Linear-by-Linear Association	1,957 ^b	1	,162	,267	,129	,098
N of Valid Cases	28					

a. 6 cells (75,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -1,399.

Performance_group_extreme * lead_5

Crosstab

	lead_5					Total
	1	2	3	4	5	

Performance_group_extreme	1	Count	0	0	0	3	4	7
		Expected Count	,3	,3	,5	3,5	2,5	7,0
		% within Performance_group_extreme	0,0%	0,0%	0,0%	42,9%	57,1%	100,0%
		% within lead_5	0,0%	0,0%	0,0%	21,4%	40,0%	25,0%
		% of Total	0,0%	0,0%	0,0%	10,7%	14,3%	25,0%
	2	Count	1	1	2	11	6	21
		Expected Count	,8	,8	1,5	10,5	7,5	21,0
		% within Performance_group_extreme	4,8%	4,8%	9,5%	52,4%	28,6%	100,0%
		% within lead_5	100,0%	100,0%	100,0%	78,6%	60,0%	75,0%
		% of Total	3,6%	3,6%	7,1%	39,3%	21,4%	75,0%
Total		Count	1	1	2	14	10	28
		Expected Count	1,0	1,0	2,0	14,0	10,0	28,0
		% within Performance_group_extreme	3,6%	3,6%	7,1%	50,0%	35,7%	100,0%
		% within lead_5	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
		% of Total	3,6%	3,6%	7,1%	50,0%	35,7%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	2,629 ^a	4	,622	,673		
Likelihood Ratio	3,482	4	,481	,673		
Fisher's Exact Test	2,522			,673		
Linear-by-Linear Association	2,201 ^b	1	,138	,174	,093	,071
N of Valid Cases	28					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -1,484.

Performance_group_extreme * lead_6

Crosstab

		lead_6					Total
		1	2	3	4	5	
Performance_group_extreme 1	Count	0	0	0	3	4	7
	Expected Count	,3	,3	1,5	2,5	2,5	7,0
	% within Performance_group_extreme	0,0%	0,0%	0,0%	42,9%	57,1%	100,0%
	% within lead_6	0,0%	0,0%	0,0%	30,0%	40,0%	25,0%
	% of Total	0,0%	0,0%	0,0%	10,7%	14,3%	25,0%
2	Count	1	1	6	7	6	21
	Expected Count	,8	,8	4,5	7,5	7,5	21,0
	% within Performance_group_extreme	4,8%	4,8%	28,6%	33,3%	28,6%	100,0%
	% within lead_6	100,0%	100,0%	100,0%	70,0%	60,0%	75,0%
	% of Total	3,6%	3,6%	21,4%	25,0%	21,4%	75,0%
Total	Count	1	1	6	10	10	28
	Expected Count	1,0	1,0	6,0	10,0	10,0	28,0
	% within Performance_group_extreme	3,6%	3,6%	21,4%	35,7%	35,7%	100,0%
	% within lead_6	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	3,6%	3,6%	21,4%	35,7%	35,7%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	4,000 ^a	4	,406	,446		
Likelihood Ratio	5,813	4	,214	,319		
Fisher's Exact Test	3,979			,446		

Linear-by-Linear Association	3,207 ^b	1	,073	,090	,047	,034
N of Valid Cases	28					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -1,791.

Performance_group_extreme * lead_7

		Crosstab					
		lead_7					
		1	2	3	4	5	Total
Performance_group_extreme	1						
	Count	1	0	1	2	3	7
	Expected Count	1,0	,8	1,3	2,3	1,8	7,0
	% within Performance_group_extreme	14,3%	0,0%	14,3%	28,6%	42,9%	100,0%
	% within lead_7	25,0%	0,0%	20,0%	22,2%	42,9%	25,0%
	% of Total	3,6%	0,0%	3,6%	7,1%	10,7%	25,0%
2	Count	3	3	4	7	4	21
	Expected Count	3,0	2,3	3,8	6,8	5,3	21,0
	% within Performance_group_extreme	14,3%	14,3%	19,0%	33,3%	19,0%	100,0%
	% within lead_7	75,0%	100,0%	80,0%	77,8%	57,1%	75,0%
	% of Total	10,7%	10,7%	14,3%	25,0%	14,3%	75,0%
Total	Count	4	3	5	9	7	28
	Expected Count	4,0	3,0	5,0	9,0	7,0	28,0
	% within Performance_group_extreme	14,3%	10,7%	17,9%	32,1%	25,0%	100,0%
	% within lead_7	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	14,3%	10,7%	17,9%	32,1%	25,0%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	2,294 ^a	4	,682	,753		
Likelihood Ratio	2,893	4	,576	,760		
Fisher's Exact Test	2,139			,829		
Linear-by-Linear Association	,910 ^b	1	,340	,435	,220	,085
N of Valid Cases	28					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,75.

b. The standardized statistic is -,954.

Performance_group_extreme * lead_8

Crosstab

		lead_8				Total
		2	3	4	5	
Performance_grou p_extreme	Count	0	2	1	4	7
	Expected Count	,3	1,3	2,3	3,3	7,0
	% within Performance_grou p_extreme	0,0%	28,6%	14,3%	57,1%	100,0%
	% within lead_8	0,0%	40,0%	11,1%	30,8%	25,0%
	% of Total	0,0%	7,1%	3,6%	14,3%	25,0%
2	Count	1	3	8	9	21
	Expected Count	,8	3,8	6,8	9,8	21,0
	% within Performance_grou p_extreme	4,8%	14,3%	38,1%	42,9%	100,0%
	% within lead_8	100,0%	60,0%	88,9%	69,2%	75,0%
	% of Total	3,6%	10,7%	28,6%	32,1%	75,0%
Total	Count	1	5	9	13	28
	Expected Count	1,0	5,0	9,0	13,0	28,0

% within Performance_grou p_extreme	3,6%	17,9%	32,1%	46,4%	100,0%
% within lead_8	100,0%	100,0%	100,0%	100,0%	100,0%
% of Total	3,6%	17,9%	32,1%	46,4%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	2,090 ^a	3	,554	,648		
Likelihood Ratio	2,433	3	,487	,648		
Fisher's Exact Test	2,294			,648		
Linear-by-Linear Association	,062 ^b	1	,803	1,000	,513	,191
N of Valid Cases	28					

a. 6 cells (75,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -,249.

Performance_group_extreme * lead_9

Crosstab

		lead_9				Total
		2	3	4	5	
Performance_grou 1 p_extreme	Count	0	1	2	4	7
	Expected Count	,8	1,0	3,0	2,3	7,0
	% within Performance_grou p_extreme	0,0%	14,3%	28,6%	57,1%	100,0%
	% within lead_9	0,0%	25,0%	16,7%	44,4%	25,0%
	% of Total	0,0%	3,6%	7,1%	14,3%	25,0%
2	Count	3	3	10	5	21

	Expected Count	2,3	3,0	9,0	6,8	21,0
	% within Performance_group_extreme	14,3%	14,3%	47,6%	23,8%	100,0%
	% within lead_9	100,0%	75,0%	83,3%	55,6%	75,0%
	% of Total	10,7%	10,7%	35,7%	17,9%	75,0%
Total	Count	3	4	12	9	28
	Expected Count	3,0	4,0	12,0	9,0	28,0
	% within Performance_group_extreme	10,7%	14,3%	42,9%	32,1%	100,0%
	% within lead_9	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	10,7%	14,3%	42,9%	32,1%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	3,259 ^a	3	,353	,434		
Likelihood Ratio	3,813	3	,282	,410		
Fisher's Exact Test	2,818			,462		
Linear-by-Linear Association	2,176 ^b	1	,140	,179	,105	,068
N of Valid Cases	28					

a. 6 cells (75,0%) have expected count less than 5. The minimum expected count is ,75.

b. The standardized statistic is -1,475.

Performance_group_extreme * lead_10

Crosstab

	lead_10			Total
	3	4	5	

Performance_group 1 _extreme	Count	1	3	3	7
	Expected Count	,8	3,5	2,8	7,0
	% within Performance_group _extreme	14,3%	42,9%	42,9%	100,0%
	% within lead_10	33,3%	21,4%	27,3%	25,0%
	% of Total	3,6%	10,7%	10,7%	25,0%
2	Count	2	11	8	21
	Expected Count	2,3	10,5	8,3	21,0
	% within Performance_group _extreme	9,5%	52,4%	38,1%	100,0%
	% within lead_10	66,7%	78,6%	72,7%	75,0%
	% of Total	7,1%	39,3%	28,6%	75,0%
Total	Count	3	14	11	28
	Expected Count	3,0	14,0	11,0	28,0
	% within Performance_group _extreme	10,7%	50,0%	39,3%	100,0%
	% within lead_10	100,0%	100,0%	100,0%	100,0%
	% of Total	10,7%	50,0%	39,3%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	,237 ^a	2	,888	1,000		
Likelihood Ratio	,232	2	,890	1,000		
Fisher's Exact Test	,634			1,000		
Linear-by-Linear Association	,000 ^b	1	1,000	1,000	,634	,257
N of Valid Cases	28					

a. 4 cells (66,7%) have expected count less than 5. The minimum expected count is ,75.

b. The standardized statistic is ,000.

Performance_group_extreme * lead_11

Crosstab

		lead_11				Total
		2	3	4	5	
Performance_grou p_extreme	1					
	Count	0	1	4	2	7
	Expected Count	,3	,8	4,0	2,0	7,0
	% within Performance_grou p_extreme	0,0%	14,3%	57,1%	28,6%	100,0%
	% within lead_11	0,0%	33,3%	25,0%	25,0%	25,0%
	% of Total	0,0%	3,6%	14,3%	7,1%	25,0%
2	Count	1	2	12	6	21
	Expected Count	,8	2,3	12,0	6,0	21,0
	% within Performance_grou p_extreme	4,8%	9,5%	57,1%	28,6%	100,0%
	% within lead_11	100,0%	66,7%	75,0%	75,0%	75,0%
	% of Total	3,6%	7,1%	42,9%	21,4%	75,0%
Total	Count	1	3	16	8	28
	Expected Count	1,0	3,0	16,0	8,0	28,0
	% within Performance_grou p_extreme	3,6%	10,7%	57,1%	28,6%	100,0%
	% within lead_11	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	3,6%	10,7%	57,1%	28,6%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	,444 ^a	3	,931	1,000		
Likelihood Ratio	,680	3	,878	1,000		
Fisher's Exact Test	,984			1,000		

Linear-by-Linear Association	,022 ^b	1	,882	1,000	,572	,230
N of Valid Cases	28					

a. 6 cells (75,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -,148.

Performance_group_extreme * lead_12

		Crosstab					
		lead_12					
		1	2	3	4	5	Total
Performance_group_extreme	1						
	Count	1	0	4	0	2	7
	Expected Count	,8	2,0	2,3	,8	1,3	7,0
	% within Performance_group_extreme	14,3%	0,0%	57,1%	0,0%	28,6%	100,0%
	% within lead_12	33,3%	0,0%	44,4%	0,0%	40,0%	25,0%
	% of Total	3,6%	0,0%	14,3%	0,0%	7,1%	25,0%
2	Count	2	8	5	3	3	21
	Expected Count	2,3	6,0	6,8	2,3	3,8	21,0
	% within Performance_group_extreme	9,5%	38,1%	23,8%	14,3%	14,3%	100,0%
	% within lead_12	66,7%	100,0%	55,6%	100,0%	60,0%	75,0%
	% of Total	7,1%	28,6%	17,9%	10,7%	10,7%	75,0%
Total	Count	3	8	9	3	5	28
	Expected Count	3,0	8,0	9,0	3,0	5,0	28,0
	% within Performance_group_extreme	10,7%	28,6%	32,1%	10,7%	17,9%	100,0%
	% within lead_12	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	10,7%	28,6%	32,1%	10,7%	17,9%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	6,193 ^a	4	,185	,160		
Likelihood Ratio	8,576	4	,073	,117		
Fisher's Exact Test	6,087			,145		
Linear-by-Linear Association	,606 ^b	1	,436	,497	,274	,100
N of Valid Cases	28					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,75.

b. The standardized statistic is -,778.

Performance_group_extreme * vision_1

Crosstab

		vision_1				Total
		1	3	4	5	
Performance_grou p_extreme	Count	0	2	3	2	7
	Expected Count	,3	2,3	3,3	1,3	7,0
	% within Performance_grou p_extreme	0,0%	28,6%	42,9%	28,6%	100,0%
	% within vision_1	0,0%	22,2%	23,1%	40,0%	25,0%
	% of Total	0,0%	7,1%	10,7%	7,1%	25,0%
2	Count	1	7	10	3	21
	Expected Count	,8	6,8	9,8	3,8	21,0
	% within Performance_grou p_extreme	4,8%	33,3%	47,6%	14,3%	100,0%
	% within vision_1	100,0%	77,8%	76,9%	60,0%	75,0%

	% of Total	3,6%	25,0%	35,7%	10,7%	75,0%
Total	Count	1	9	13	5	28
	Expected Count	1,0	9,0	13,0	5,0	28,0
	% within Performance_grou	3,6%	32,1%	46,4%	17,9%	100,0%
	p_extreme					
	% within vision_1	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	3,6%	32,1%	46,4%	17,9%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	,996 ^a	3	,802	,790		
Likelihood Ratio	1,181	3	,758	,790		
Fisher's Exact Test	1,354			,790		
Linear-by-Linear Association	,741 ^b	1	,389	,478	,280	,149
N of Valid Cases	28					

a. 6 cells (75,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -,861.

Performance_group_extreme * vision_2

Crosstab

		vision_2				Total
		1	3	4	5	
Performance_grou 1 p_extreme	Count	0	1	4	1	6
	Expected Count	,5	2,8	2,3	,5	6,0
	% within Performance_grou	0,0%	16,7%	66,7%	16,7%	100,0%
	p_extreme					

2	% within vision_2	0,0%	8,3%	40,0%	50,0%	23,1%
	% of Total	0,0%	3,8%	15,4%	3,8%	23,1%
	Count	2	11	6	1	20
	Expected Count	1,5	9,2	7,7	1,5	20,0
	% within Performance_group_extreme	10,0%	55,0%	30,0%	5,0%	100,0%
	% within vision_2 % of Total	100,0% 7,7%	91,7% 42,3%	60,0% 23,1%	50,0% 3,8%	76,9% 76,9%
Total	Count	2	12	10	2	26
	Expected Count	2,0	12,0	10,0	2,0	26,0
	% within Performance_group_extreme	7,7%	46,2%	38,5%	7,7%	100,0%
	% within vision_2	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	7,7%	46,2%	38,5%	7,7%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	4,499 ^a	3	,212	,218		
Likelihood Ratio	4,974	3	,174	,218		
Fisher's Exact Test	4,400			,184		
Linear-by-Linear Association	3,333 ^b	1	,068	,078	,045	,036
N of Valid Cases	26					

a. 6 cells (75,0%) have expected count less than 5. The minimum expected count is ,46.

b. The standardized statistic is -1,826.

Performance_group_extreme * vision_3

Crosstab

		vision_3					Total	
		1	2	3	4	5		
Performance_group_extreme	1	Count	0	0	0	6	1	7
		Expected Count	,5	,8	1,8	3,3	,8	7,0
		% within Performance_group_extreme	0,0%	0,0%	0,0%	85,7%	14,3%	100,0%
		% within vision_3	0,0%	0,0%	0,0%	46,2%	33,3%	25,0%
		% of Total	0,0%	0,0%	0,0%	21,4%	3,6%	25,0%
	2	Count	2	3	7	7	2	21
	Expected Count	1,5	2,3	5,3	9,8	2,3	21,0	
	% within Performance_group_extreme	9,5%	14,3%	33,3%	33,3%	9,5%	100,0%	
	% within vision_3	100,0%	100,0%	100,0%	53,8%	66,7%	75,0%	
	% of Total	7,1%	10,7%	25,0%	25,0%	7,1%	75,0%	
Total		Count	2	3	7	13	3	28
		Expected Count	2,0	3,0	7,0	13,0	3,0	28,0
		% within Performance_group_extreme	7,1%	10,7%	25,0%	46,4%	10,7%	100,0%
		% within vision_3	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
		% of Total	7,1%	10,7%	25,0%	46,4%	10,7%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	7,214 ^a	4	,125	,125		
Likelihood Ratio	9,727	4	,045	,075		
Fisher's Exact Test	6,152			,145		
Linear-by-Linear Association	4,167 ^b	1	,041	,062	,025	,019
N of Valid Cases	28					

- a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,50.
b. The standardized statistic is -2,041.

Performance_group_extreme * vision_4

Crosstab

		vision_4					Total
		1	2	3	4	5	
Performance_group_extreme 1	Count	0	0	0	4	3	7
	Expected Count	,3	,3	1,8	3,3	1,5	7,0
	% within Performance_group_extreme	0,0%	0,0%	0,0%	57,1%	42,9%	100,0%
	% within vision_4	0,0%	0,0%	0,0%	30,8%	50,0%	25,0%
	% of Total	0,0%	0,0%	0,0%	14,3%	10,7%	25,0%
2	Count	1	1	7	9	3	21
	Expected Count	,8	,8	5,3	9,8	4,5	21,0
	% within Performance_group_extreme	4,8%	4,8%	33,3%	42,9%	14,3%	100,0%
	% within vision_4	100,0%	100,0%	100,0%	69,2%	50,0%	75,0%
	% of Total	3,6%	3,6%	25,0%	32,1%	10,7%	75,0%
Total	Count	1	1	7	13	6	28
	Expected Count	1,0	1,0	7,0	13,0	6,0	28,0
	% within Performance_group_extreme	3,6%	3,6%	25,0%	46,4%	21,4%	100,0%
	% within vision_4	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	3,6%	3,6%	25,0%	46,4%	21,4%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	5,231 ^a	4	,264	,328		
Likelihood Ratio	7,125	4	,129	,203		
Fisher's Exact Test	5,207			,261		
Linear-by-Linear Association	4,214 ^b	1	,040	,063	,024	,019
N of Valid Cases	28					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -2,053.

Performance_group_extreme * vision_5

Crosstab						
		vision_5				Total
		2	3	4	5	
Performance_grou 1 p_extreme	Count	0	0	4	3	7
	Expected Count	,3	1,3	3,3	2,3	7,0
	% within Performance_grou p_extreme	0,0%	0,0%	57,1%	42,9%	100,0%
	% within vision_5	0,0%	0,0%	30,8%	33,3%	25,0%
	% of Total	0,0%	0,0%	14,3%	10,7%	25,0%
2	Count	1	5	9	6	21
	Expected Count	,8	3,8	9,8	6,8	21,0
	% within Performance_grou p_extreme	4,8%	23,8%	42,9%	28,6%	100,0%
	% within vision_5	100,0%	100,0%	69,2%	66,7%	75,0%
	% of Total	3,6%	17,9%	32,1%	21,4%	75,0%
Total	Count	1	5	13	9	28
	Expected Count	1,0	5,0	13,0	9,0	28,0

% within Performance_group_extreme	3,6%	17,9%	46,4%	32,1%	100,0%
% within vision_5	100,0%	100,0%	100,0%	100,0%	100,0%
% of Total	3,6%	17,9%	46,4%	32,1%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	2,564 ^a	3	,464	,593		
Likelihood Ratio	3,985	3	,263	,432		
Fisher's Exact Test	2,432			,593		
Linear-by-Linear Association	1,800 ^b	1	,180	,286	,142	,095
N of Valid Cases	28					

a. 6 cells (75,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -1,342.

Performance_group_extreme * vision_6

Crosstab

		vision_6					Total
		1	2	3	4	5	
Performance_group_extreme	1						
	Count	0	0	1	4	2	7
	Expected Count	,3	,5	2,3	2,8	1,3	7,0
	% within Performance_group_extreme	0,0%	0,0%	14,3%	57,1%	28,6%	100,0%
	% within vision_6	0,0%	0,0%	11,1%	36,4%	40,0%	25,0%
	% of Total	0,0%	0,0%	3,6%	14,3%	7,1%	25,0%
	2						
	Count	1	2	8	7	3	21

	Expected Count	,8	1,5	6,8	8,3	3,8	21,0
	% within Performance_group_extreme	4,8%	9,5%	38,1%	33,3%	14,3%	100,0%
	% within vision_6	100,0%	100,0%	88,9%	63,6%	60,0%	75,0%
	% of Total	3,6%	7,1%	28,6%	25,0%	10,7%	75,0%
Total	Count	1	2	9	11	5	28
	Expected Count	1,0	2,0	9,0	11,0	5,0	28,0
	% within Performance_group_extreme	3,6%	7,1%	32,1%	39,3%	17,9%	100,0%
	% within vision_6	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	3,6%	7,1%	32,1%	39,3%	17,9%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	3,284 ^a	4	,512	,577		
Likelihood Ratio	4,061	4	,398	,568		
Fisher's Exact Test	3,150			,650		
Linear-by-Linear Association	2,711 ^b	1	,100	,126	,072	,048
N of Valid Cases	28					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -1,646.

Performance_group_extreme * vision_7

Crosstab

		vision_7					Total
		1	2	3	4	5	
Performance_group_extreme 1	Count	0	0	1	4	2	7
	Expected Count	,3	,8	1,8	3,0	1,3	7,0
	% within Performance_group_extreme	0,0%	0,0%	14,3%	57,1%	28,6%	100,0%
	% within vision_7	0,0%	0,0%	14,3%	33,3%	40,0%	25,0%
	% of Total	0,0%	0,0%	3,6%	14,3%	7,1%	25,0%
2	Count	1	3	6	8	3	21
	Expected Count	,8	2,3	5,3	9,0	3,8	21,0
	% within Performance_group_extreme	4,8%	14,3%	28,6%	38,1%	14,3%	100,0%
	% within vision_7	100,0%	100,0%	85,7%	66,7%	60,0%	75,0%
	% of Total	3,6%	10,7%	21,4%	28,6%	10,7%	75,0%
Total	Count	1	3	7	12	5	28
	Expected Count	1,0	3,0	7,0	12,0	5,0	28,0
	% within Performance_group_extreme	3,6%	10,7%	25,0%	42,9%	17,9%	100,0%
	% within vision_7	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	3,6%	10,7%	25,0%	42,9%	17,9%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	2,806 ^a	4	,591	,652		
Likelihood Ratio	3,743	4	,442	,605		
Fisher's Exact Test	2,601			,708		
Linear-by-Linear Association	2,522 ^b	1	,112	,141	,081	,052
N of Valid Cases	28					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -1,588.

Performance_group_extreme * vision_8

Crosstab

		vision_8				Total
		2	3	4	5	
Performance_group 1 p_extreme	Count	0	1	5	1	7
	Expected Count	1,3	1,3	3,3	1,3	7,0
	% within Performance_group p_extreme	0,0%	14,3%	71,4%	14,3%	100,0%
	% within vision_8	0,0%	20,0%	38,5%	20,0%	25,0%
	% of Total	0,0%	3,6%	17,9%	3,6%	25,0%
2	Count	5	4	8	4	21
	Expected Count	3,8	3,8	9,8	3,8	21,0
	% within Performance_group p_extreme	23,8%	19,0%	38,1%	19,0%	100,0%
	% within vision_8	100,0%	80,0%	61,5%	80,0%	75,0%
	% of Total	17,9%	14,3%	28,6%	14,3%	75,0%
Total	Count	5	5	13	5	28
	Expected Count	5,0	5,0	13,0	5,0	28,0
	% within Performance_group p_extreme	17,9%	17,9%	46,4%	17,9%	100,0%
	% within vision_8	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	17,9%	17,9%	46,4%	17,9%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
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Pearson Chi-Square	3,056 ^a	3	,383	,391		
Likelihood Ratio	4,159	3	,245	,342		
Fisher's Exact Test	2,658			,463		
Linear-by-Linear Association	1,216 ^b	1	,270	,384	,193	,101
N of Valid Cases	28					

a. 7 cells (87,5%) have expected count less than 5. The minimum expected count is 1,25.

b. The standardized statistic is -1,103.

Performance_group_extreme * vision_9

		Crosstab					
		vision_9					
		1	2	3	4	5	Total
Performance_group_extreme	1	Count	0	0	0	7	7
		Expected Count	,3	,3	1,3	4,5	7,0
		% within Performance_group_extreme	0,0%	0,0%	0,0%	100,0%	100,0%
		% within vision_9	0,0%	0,0%	0,0%	38,9%	25,0%
		% of Total	0,0%	0,0%	0,0%	25,0%	25,0%
2		Count	1	1	5	11	21
		Expected Count	,8	,8	3,8	13,5	21,0
		% within Performance_group_extreme	4,8%	4,8%	23,8%	52,4%	100,0%
		% within vision_9	100,0%	100,0%	100,0%	61,1%	75,0%
		% of Total	3,6%	3,6%	17,9%	39,3%	75,0%
Total		Count	1	1	5	18	28
		Expected Count	1,0	1,0	5,0	18,0	28,0

% within Performance_group_extreme	3,6%	3,6%	17,9%	64,3%	10,7%	100,0%
% within vision_9	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
% of Total	3,6%	3,6%	17,9%	64,3%	10,7%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	5,185 ^a	4	,269	,267		
Likelihood Ratio	7,434	4	,115	,158		
Fisher's Exact Test	4,311			,427		
Linear-by-Linear Association	,818 ^b	1	,366	,470	,281	,165
N of Valid Cases	28					

a. 9 cells (90,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -,905.

Performance_group_extreme * visio_1

Crosstab

		visio_1					Total
		1	2	3	4	5	
Performance_group_extreme	Count	0	0	2	3	2	7
	Expected Count	,3	1,0	3,0	1,3	1,5	7,0
	% within Performance_group_extreme	0,0%	0,0%	28,6%	42,9%	28,6%	100,0%
	% within visio_1	0,0%	0,0%	16,7%	60,0%	33,3%	25,0%
	% of Total	0,0%	0,0%	7,1%	10,7%	7,1%	25,0%

2	Count	1	4	10	2	4	21
	Expected Count	,8	3,0	9,0	3,8	4,5	21,0
	% within Performance_group_extreme	4,8%	19,0%	47,6%	9,5%	19,0%	100,0%
	% within visio_1	100,0%	100,0%	83,3%	40,0%	66,7%	75,0%
	% of Total	3,6%	14,3%	35,7%	7,1%	14,3%	75,0%
Total	Count	1	4	12	5	6	28
	Expected Count	1,0	4,0	12,0	5,0	6,0	28,0
	% within Performance_group_extreme	3,6%	14,3%	42,9%	17,9%	21,4%	100,0%
	% within visio_1	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	3,6%	14,3%	42,9%	17,9%	21,4%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	5,600 ^a	4	,231	,252		
Likelihood Ratio	6,309	4	,177	,262		
Fisher's Exact Test	4,973			,275		
Linear-by-Linear Association	2,843 ^b	1	,092	,114	,068	,040
N of Valid Cases	28					

a. 9 cells (90,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -1,686.

Performance_group_extreme * com_1

Crosstab

	com_1	Total
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		1	2	3	4	5	
Performance_group_extreme	1 Count	0	1	0	2	4	7
	Expected Count	,3	,5	1,8	2,8	1,8	7,0
	% within Performance_group_extreme	0,0%	14,3%	0,0%	28,6%	57,1%	100,0%
	% within com_1	0,0%	50,0%	0,0%	18,2%	57,1%	25,0%
	% of Total	0,0%	3,6%	0,0%	7,1%	14,3%	25,0%
	2 Count	1	1	7	9	3	21
	Expected Count	,8	1,5	5,3	8,3	5,3	21,0
	% within Performance_group_extreme	4,8%	4,8%	33,3%	42,9%	14,3%	100,0%
	% within com_1	100,0%	50,0%	100,0%	81,8%	42,9%	75,0%
	% of Total	3,6%	3,6%	25,0%	32,1%	10,7%	75,0%
	Total Count	1	2	7	11	7	28
	Expected Count	1,0	2,0	7,0	11,0	7,0	28,0
Total	% within Performance_group_extreme	3,6%	7,1%	25,0%	39,3%	25,0%	100,0%
	% within com_1	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	3,6%	7,1%	25,0%	39,3%	25,0%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	7,463 ^a	4	,113	,088		
Likelihood Ratio	8,726	4	,068	,106		
Fisher's Exact Test	7,151			,086		
Linear-by-Linear Association	2,473 ^b	1	,116	,145	,082	,053
N of Valid Cases	28					

a. 7 cells (70,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -1,572.

Performance_group_extreme * com_2

Crosstab

		com_2					Total
		1	2	3	4	5	
Performance_group_extreme	1						
	Count	1	3	2	0	1	7
	Expected Count	,8	2,0	2,8	1,3	,3	7,0
	% within Performance_group_extreme	14,3%	42,9%	28,6%	0,0%	14,3%	100,0%
	% within com_2	33,3%	37,5%	18,2%	0,0%	100,0%	25,0%
	% of Total	3,6%	10,7%	7,1%	0,0%	3,6%	25,0%
2	Count	2	5	9	5	0	21
	Expected Count	2,3	6,0	8,3	3,8	,8	21,0
	% within Performance_group_extreme	9,5%	23,8%	42,9%	23,8%	0,0%	100,0%
	% within com_2	66,7%	62,5%	81,8%	100,0%	0,0%	75,0%
	% of Total	7,1%	17,9%	32,1%	17,9%	0,0%	75,0%
Total	Count	3	8	11	5	1	28
	Expected Count	3,0	8,0	11,0	5,0	1,0	28,0
	% within Performance_group_extreme	10,7%	28,6%	39,3%	17,9%	3,6%	100,0%
	% within com_2	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	10,7%	28,6%	39,3%	17,9%	3,6%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	5,717 ^a	4	,221	,197		
Likelihood Ratio	6,656	4	,155	,218		

Fisher's Exact Test	5,198			,242		
Linear-by-Linear Association	,295 ^b	1	,587	,672	,376	,149
N of Valid Cases	28					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is ,543.

Performance_group_extreme * com_3

Crosstab

		com_3					Total
		1	2	3	4	5	
Performance_group_extreme 1	Count	0	2	2	2	1	7
	Expected Count	,8	2,0	2,3	1,5	,5	7,0
	% within Performance_group_extreme	0,0%	28,6%	28,6%	28,6%	14,3%	100,0%
	% within com_3	0,0%	25,0%	22,2%	33,3%	50,0%	25,0%
	% of Total	0,0%	7,1%	7,1%	7,1%	3,6%	25,0%
2	Count	3	6	7	4	1	21
	Expected Count	2,3	6,0	6,8	4,5	1,5	21,0
	% within Performance_group_extreme	14,3%	28,6%	33,3%	19,0%	4,8%	100,0%
	% within com_3	100,0%	75,0%	77,8%	66,7%	50,0%	75,0%
	% of Total	10,7%	21,4%	25,0%	14,3%	3,6%	75,0%
Total	Count	3	8	9	6	2	28
	Expected Count	3,0	8,0	9,0	6,0	2,0	28,0
	% within Performance_group_extreme	10,7%	28,6%	32,1%	21,4%	7,1%	100,0%
	% within com_3	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	10,7%	28,6%	32,1%	21,4%	7,1%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	1,926 ^a	4	,749	,843		
Likelihood Ratio	2,548	4	,636	,803		
Fisher's Exact Test	2,151			,835		
Linear-by-Linear Association	1,385 ^b	1	,239	,333	,166	,080
N of Valid Cases	28					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,50.

b. The standardized statistic is -1,177.

Performance_group_extreme * com_4

Crosstab

		com_4					Total
		1	2	3	4	5	
Performance_group_extreme	1						
	Count	0	1	1	3	2	7
	Expected Count	,5	,8	1,8	3,0	1,0	7,0
	% within Performance_group_extreme	0,0%	14,3%	14,3%	42,9%	28,6%	100,0%
	% within com_4	0,0%	33,3%	14,3%	25,0%	50,0%	25,0%
	% of Total	0,0%	3,6%	3,6%	10,7%	7,1%	25,0%
2	Count	2	2	6	9	2	21
	Expected Count	1,5	2,3	5,3	9,0	3,0	21,0
	% within Performance_group_extreme	9,5%	9,5%	28,6%	42,9%	9,5%	100,0%
	% within com_4	100,0%	66,7%	85,7%	75,0%	50,0%	75,0%

	% of Total	7,1%	7,1%	21,4%	32,1%	7,1%	75,0%
Total	Count	2	3	7	12	4	28
	Expected Count	2,0	3,0	7,0	12,0	4,0	28,0
	% within Performance_group_extreme	7,1%	10,7%	25,0%	42,9%	14,3%	100,0%
	% within com_4	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	7,1%	10,7%	25,0%	42,9%	14,3%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	2,540 ^a	4	,638	,746		
Likelihood Ratio	2,889	4	,577	,790		
Fisher's Exact Test	2,577			,740		
Linear-by-Linear Association	1,180 ^b	1	,277	,336	,193	,095
N of Valid Cases	28					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,50.

b. The standardized statistic is -1,086.

Performance_group_extreme * com_5

Crosstab

		com_5					Total
		1	2	3	4	5	
Performance_group_extreme	Count	0	1	1	2	3	7
	Expected Count	,3	,8	1,0	2,6	2,3	7,0
	% within Performance_group_extreme	0,0%	14,3%	14,3%	28,6%	42,9%	100,0%

2	% within com_5	0,0%	33,3%	25,0%	20,0%	33,3%	25,9%
	% of Total	0,0%	3,7%	3,7%	7,4%	11,1%	25,9%
	Count	1	2	3	8	6	20
	Expected Count	,7	2,2	3,0	7,4	6,7	20,0
	% within Performance_group_extreme	5,0%	10,0%	15,0%	40,0%	30,0%	100,0%
	% within com_5	100,0%	66,7%	75,0%	80,0%	66,7%	74,1%
Total	% of Total	3,7%	7,4%	11,1%	29,6%	22,2%	74,1%
	Count	1	3	4	10	9	27
	Expected Count	1,0	3,0	4,0	10,0	9,0	27,0
	% within Performance_group_extreme	3,7%	11,1%	14,8%	37,0%	33,3%	100,0%
	% within com_5	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	3,7%	11,1%	14,8%	37,0%	33,3%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	,878 ^a	4	,928	,942		
Likelihood Ratio	1,120	4	,891	,942		
Fisher's Exact Test	1,508			,942		
Linear-by-Linear Association	,161 ^b	1	,688	,715	,433	,144
N of Valid Cases	27					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,26.

b. The standardized statistic is -,402.

Performance_group_extreme * com_6

Crosstab

		com_6					Total	
		1	2	3	4	5		
Performance_group_extreme	1	Count	1	1	0	3	1	6
		Expected Count	1,2	1,0	1,2	2,2	,5	6,0
		% within Performance_group_extreme	16,7%	16,7%	0,0%	50,0%	16,7%	100,0%
		% within com_6	20,0%	25,0%	0,0%	33,3%	50,0%	24,0%
		% of Total	4,0%	4,0%	0,0%	12,0%	4,0%	24,0%
	2	Count	4	3	5	6	1	19
Expected Count		3,8	3,0	3,8	6,8	1,5	19,0	
% within Performance_group_extreme		21,1%	15,8%	26,3%	31,6%	5,3%	100,0%	
% within com_6		80,0%	75,0%	100,0%	66,7%	50,0%	76,0%	
% of Total		16,0%	12,0%	20,0%	24,0%	4,0%	76,0%	
Total		Count	5	4	5	9	2	25
	Expected Count	5,0	4,0	5,0	9,0	2,0	25,0	
	% within Performance_group_extreme	20,0%	16,0%	20,0%	36,0%	8,0%	100,0%	
	% within com_6	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	
	% of Total	20,0%	16,0%	20,0%	36,0%	8,0%	100,0%	

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	2,796 ^a	4	,593	,695		
Likelihood Ratio	3,821	4	,431	,660		
Fisher's Exact Test	3,108			,607		
Linear-by-Linear Association	,645 ^b	1	,422	,485	,273	,106
N of Valid Cases	25					

a. 9 cells (90,0%) have expected count less than 5. The minimum expected count is ,48.

b. The standardized statistic is -,803.

Performance_group_extreme * com_7

Crosstab

		com_7					Total
		1	2	3	4	5	
Performance_group_extreme 1	Count	0	1	1	4	1	7
	Expected Count	,5	,8	3,3	1,5	1,0	7,0
	% within Performance_group_extreme	0,0%	14,3%	14,3%	57,1%	14,3%	100,0%
	% within com_7	0,0%	33,3%	7,7%	66,7%	25,0%	25,0%
	% of Total	0,0%	3,6%	3,6%	14,3%	3,6%	25,0%
2	Count	2	2	12	2	3	21
	Expected Count	1,5	2,3	9,8	4,5	3,0	21,0
	% within Performance_group_extreme	9,5%	9,5%	57,1%	9,5%	14,3%	100,0%
	% within com_7	100,0%	66,7%	92,3%	33,3%	75,0%	75,0%
	% of Total	7,1%	7,1%	42,9%	7,1%	10,7%	75,0%
Total	Count	2	3	13	6	4	28
	Expected Count	2,0	3,0	13,0	6,0	4,0	28,0
	% within Performance_group_extreme	7,1%	10,7%	46,4%	21,4%	14,3%	100,0%
	% within com_7	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	7,1%	10,7%	46,4%	21,4%	14,3%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	8,410 ^a	4	,078	,076		
Likelihood Ratio	8,484	4	,075	,112		

Fisher's Exact Test	7,595			,057		
Linear-by-Linear Association	1,738 ^b	1	,187	,230	,134	,071
N of Valid Cases	28					

a. 9 cells (90,0%) have expected count less than 5. The minimum expected count is ,50.

b. The standardized statistic is -1,318.

Performance_group_extreme * empower_

Crosstab

		empower_				Total
		2	3	4	5	
Performance_grou 1 p_extreme	Count	0	2	1	4	7
	Expected Count	,8	1,5	3,5	1,3	7,0
	% within Performance_grou p_extreme	0,0%	28,6%	14,3%	57,1%	100,0%
	% within empower_	0,0%	33,3%	7,1%	80,0%	25,0%
	% of Total	0,0%	7,1%	3,6%	14,3%	25,0%
2	Count	3	4	13	1	21
	Expected Count	2,3	4,5	10,5	3,8	21,0
	% within Performance_grou p_extreme	14,3%	19,0%	61,9%	4,8%	100,0%
	% within empower_	100,0%	66,7%	92,9%	20,0%	75,0%
	% of Total	10,7%	14,3%	46,4%	3,6%	75,0%
Total	Count	3	6	14	5	28
	Expected Count	3,0	6,0	14,0	5,0	28,0
	% within Performance_grou p_extreme	10,7%	21,4%	50,0%	17,9%	100,0%

% within empower_	100,0%	100,0%	100,0%	100,0%	100,0%
% of Total	10,7%	21,4%	50,0%	17,9%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	11,670 ^a	3	,009	,009		
Likelihood Ratio	11,644	3	,009	,016		
Fisher's Exact Test	9,757			,009		
Linear-by-Linear Association	3,403 ^b	1	,065	,084	,050	,037
N of Valid Cases	28					

a. 7 cells (87,5%) have expected count less than 5. The minimum expected count is ,75.

b. The standardized statistic is -1,845.

Performance_group_extreme * empow_1

Crosstab

		empow_1					Total
		1	2	3	4	5	
Performance_group_extreme	1						
	Count	0	2	1	3	1	7
	Expected Count	2,5	1,5	,8	1,5	,8	7,0
	% within Performance_group_extreme	0,0%	28,6%	14,3%	42,9%	14,3%	100,0%
	% within empow_1	0,0%	33,3%	33,3%	50,0%	33,3%	25,0%
	% of Total	0,0%	7,1%	3,6%	10,7%	3,6%	25,0%
2	Count	10	4	2	3	2	21
	Expected Count	7,5	4,5	2,3	4,5	2,3	21,0

	% within Performance_group_extreme	47,6%	19,0%	9,5%	14,3%	9,5%	100,0%
	% within empow_1	100,0%	66,7%	66,7%	50,0%	66,7%	75,0%
	% of Total	35,7%	14,3%	7,1%	10,7%	7,1%	75,0%
Total	Count	10	6	3	6	3	28
	Expected Count	10,0	6,0	3,0	6,0	3,0	28,0
	% within Performance_group_extreme	35,7%	21,4%	10,7%	21,4%	10,7%	100,0%
	% within empow_1	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	35,7%	21,4%	10,7%	21,4%	10,7%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	5,778 ^a	4	,216	,199		
Likelihood Ratio	7,897	4	,095	,158		
Fisher's Exact Test	6,760			,106		
Linear-by-Linear Association	3,812 ^b	1	,051	,070	,038	,019
N of Valid Cases	28					

a. 9 cells (90,0%) have expected count less than 5. The minimum expected count is ,75.

b. The standardized statistic is -1,952.

Performance_group_extreme * empow_2

Crosstab

	empow_2	Total
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		1	2	3	4	5	
Performance_group_extreme	1 Count	0	0	2	4	1	7
	Expected Count	,3	,8	2,6	2,3	1,0	7,0
	% within Performance_group_extreme	0,0%	0,0%	28,6%	57,1%	14,3%	100,0%
	% within empow_2	0,0%	0,0%	20,0%	44,4%	25,0%	25,9%
	% of Total	0,0%	0,0%	7,4%	14,8%	3,7%	25,9%
	2 Count	1	3	8	5	3	20
	Expected Count	,7	2,2	7,4	6,7	3,0	20,0
	% within Performance_group_extreme	5,0%	15,0%	40,0%	25,0%	15,0%	100,0%
	% within empow_2	100,0%	100,0%	80,0%	55,6%	75,0%	74,1%
	% of Total	3,7%	11,1%	29,6%	18,5%	11,1%	74,1%
	Total Count	1	3	10	9	4	27
	Expected Count	1,0	3,0	10,0	9,0	4,0	27,0
	% within Performance_group_extreme	3,7%	11,1%	37,0%	33,3%	14,8%	100,0%
	% within empow_2	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	3,7%	11,1%	37,0%	33,3%	14,8%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	3,192 ^a	4	,526	,616		
Likelihood Ratio	4,031	4	,402	,564		
Fisher's Exact Test	2,895			,715		
Linear-by-Linear Association	1,569 ^b	1	,210	,284	,152	,084
N of Valid Cases	27					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,26.

b. The standardized statistic is -1,253.

Performance_group_extreme * empow_3

Crosstab

		empow_3					Total
		1	2	3	4	5	
Performance_group_extreme	1						
	Count	0	0	4	0	3	7
	Expected Count	,3	,8	3,5	1,3	1,3	7,0
	% within Performance_group_extreme	0,0%	0,0%	57,1%	0,0%	42,9%	100,0%
	% within empow_3	0,0%	0,0%	28,6%	0,0%	60,0%	25,0%
	% of Total	0,0%	0,0%	14,3%	0,0%	10,7%	25,0%
2	Count	1	3	10	5	2	21
	Expected Count	,8	2,3	10,5	3,8	3,8	21,0
	% within Performance_group_extreme	4,8%	14,3%	47,6%	23,8%	9,5%	100,0%
	% within empow_3	100,0%	100,0%	71,4%	100,0%	40,0%	75,0%
	% of Total	3,6%	10,7%	35,7%	17,9%	7,1%	75,0%
Total	Count	1	3	14	5	5	28
	Expected Count	1,0	3,0	14,0	5,0	5,0	28,0
	% within Performance_group_extreme	3,6%	10,7%	50,0%	17,9%	17,9%	100,0%
	% within empow_3	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	3,6%	10,7%	50,0%	17,9%	17,9%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	6,362 ^a	4	,174	,169		
Likelihood Ratio	8,009	4	,091	,156		
Fisher's Exact Test	5,266			,199		
Linear-by-Linear Association	2,216 ^b	1	,137	,204	,102	,058
N of Valid Cases	28					

a. 9 cells (90,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -1,489.

Performance_group_extreme * empow_4

		Crosstab						
		empow_4					Total	
		1	2	3	4	5		
Performance_group_extreme	1	Count	0	0	2	1	4	7
		Expected Count	,8	1,8	2,3	,8	1,3	7,0
		% within Performance_group_extreme	0,0%	0,0%	28,6%	14,3%	57,1%	100,0%
		% within empow_4	0,0%	0,0%	22,2%	33,3%	80,0%	25,9%
		% of Total	0,0%	0,0%	7,4%	3,7%	14,8%	25,9%
2		Count	3	7	7	2	1	20
		Expected Count	2,2	5,2	6,7	2,2	3,7	20,0
		% within Performance_group_extreme	15,0%	35,0%	35,0%	10,0%	5,0%	100,0%
		% within empow_4	100,0%	100,0%	77,8%	66,7%	20,0%	74,1%
		% of Total	11,1%	25,9%	25,9%	7,4%	3,7%	74,1%
Total		Count	3	7	9	3	5	27

Expected Count	3,0	7,0	9,0	3,0	5,0	27,0
% within Performance_group_extreme	11,1%	25,9%	33,3%	11,1%	18,5%	100,0%
% within empow_4	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
% of Total	11,1%	25,9%	33,3%	11,1%	18,5%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	11,263 ^a	4	,024	,026		
Likelihood Ratio	12,545	4	,014	,022		
Fisher's Exact Test	9,405			,020		
Linear-by-Linear Association	9,670 ^b	1	,002	,002	,001	,001
N of Valid Cases	27					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,78.

b. The standardized statistic is -3,110.

Performance_group_extreme * empow_5

Crosstab

		empow_5					Total
		1	2	3	4	5	
Performance_group_extreme	Count	0	0	3	3	1	7
	Expected Count	1,5	1,8	1,3	2,3	,3	7,0
	% within Performance_group_extreme	0,0%	0,0%	42,9%	42,9%	14,3%	100,0%

	% within empow_5	0,0%	0,0%	60,0%	33,3%	100,0%	25,0%
	% of Total	0,0%	0,0%	10,7%	10,7%	3,6%	25,0%
	2 Count	6	7	2	6	0	21
	Expected Count	4,5	5,3	3,8	6,8	,8	21,0
	% within Performance_group_extreme	28,6%	33,3%	9,5%	28,6%	0,0%	100,0%
	% within empow_5	100,0%	100,0%	40,0%	66,7%	0,0%	75,0%
Total	% of Total	21,4%	25,0%	7,1%	21,4%	0,0%	75,0%
	Count	6	7	5	9	1	28
	Expected Count	6,0	7,0	5,0	9,0	1,0	28,0
	% within Performance_group_extreme	21,4%	25,0%	17,9%	32,1%	3,6%	100,0%
	% within empow_5	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	21,4%	25,0%	17,9%	32,1%	3,6%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	10,933 ^a	4	,027	,019		
Likelihood Ratio	13,303	4	,010	,013		
Fisher's Exact Test	9,634			,015		
Linear-by-Linear Association	6,041 ^b	1	,014	,019	,009	,007
N of Valid Cases	28					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -2,458.

Performance_group_extreme * empow_6

Crosstab

		empow_6					Total	
		1	2	3	4	5		
Performance_group_extreme	1	Count	0	3	2	1	1	7
		Expected Count	1,0	1,6	1,0	2,3	1,0	7,0
		% within Performance_group_extreme	0,0%	42,9%	28,6%	14,3%	14,3%	100,0%
		% within empow_6	0,0%	50,0%	50,0%	11,1%	25,0%	25,9%
		% of Total	0,0%	11,1%	7,4%	3,7%	3,7%	25,9%
2	Count	4	3	2	8	3	20	
	Expected Count	3,0	4,4	3,0	6,7	3,0	20,0	
	% within Performance_group_extreme	20,0%	15,0%	10,0%	40,0%	15,0%	100,0%	
	% within empow_6	100,0%	50,0%	50,0%	88,9%	75,0%	74,1%	
	% of Total	14,8%	11,1%	7,4%	29,6%	11,1%	74,1%	
Total	Count	4	6	4	9	4	27	
	Expected Count	4,0	6,0	4,0	9,0	4,0	27,0	
	% within Performance_group_extreme	14,8%	22,2%	14,8%	33,3%	14,8%	100,0%	
	% within empow_6	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	
	% of Total	14,8%	22,2%	14,8%	33,3%	14,8%	100,0%	

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	5,448 ^a	4	,244	,284		
Likelihood Ratio	6,263	4	,180	,346		
Fisher's Exact Test	5,048			,269		

Linear-by-Linear Association	,065 ^b	1	,799	,873	,462	,123
N of Valid Cases	27					

- a. 9 cells (90,0%) have expected count less than 5. The minimum expected count is 1,04.
b. The standardized statistic is ,255.

Performance_group_extreme * guide_1

Crosstab						
		guide_1				Total
		2	3	4	5	
Performance_grou 1 p_extreme	Count	0	0	3	4	7
	Expected Count	,5	1,8	3,3	1,5	7,0
	% within Performance_grou p_extreme	0,0%	0,0%	42,9%	57,1%	100,0%
	% within guide_1	0,0%	0,0%	23,1%	66,7%	25,0%
	% of Total	0,0%	0,0%	10,7%	14,3%	25,0%
2	Count	2	7	10	2	21
	Expected Count	1,5	5,3	9,8	4,5	21,0
	% within Performance_grou p_extreme	9,5%	33,3%	47,6%	9,5%	100,0%
	% within guide_1	100,0%	100,0%	76,9%	33,3%	75,0%
	% of Total	7,1%	25,0%	35,7%	7,1%	75,0%
Total	Count	2	7	13	6	28
	Expected Count	2,0	7,0	13,0	6,0	28,0
	% within Performance_grou p_extreme	7,1%	25,0%	46,4%	21,4%	100,0%
	% within guide_1	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	7,1%	25,0%	46,4%	21,4%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	8,581 ^a	3	,035	,038		
Likelihood Ratio	9,807	3	,020	,034		
Fisher's Exact Test	7,086			,045		
Linear-by-Linear Association	7,050 ^b	1	,008	,008	,004	,004
N of Valid Cases	28					

a. 6 cells (75,0%) have expected count less than 5. The minimum expected count is ,50.

b. The standardized statistic is -2,655.

Performance_group_extreme * guide_2

Crosstab								
		guide_2					Total	
		1	2	3	4	5		
Performance_group_extreme	1	Count	0	0	2	3	2	7
		Expected Count	,8	,5	2,0	2,5	1,3	7,0
		% within Performance_group_extreme	0,0%	0,0%	28,6%	42,9%	28,6%	100,0%
		% within guide_2	0,0%	0,0%	25,0%	30,0%	40,0%	25,0%
		% of Total	0,0%	0,0%	7,1%	10,7%	7,1%	25,0%
	2	Count	3	2	6	7	3	21
	Expected Count	2,3	1,5	6,0	7,5	3,8	21,0	
	% within Performance_group_extreme	14,3%	9,5%	28,6%	33,3%	14,3%	100,0%	
	% within guide_2	100,0%	100,0%	75,0%	70,0%	60,0%	75,0%	
	% of Total	10,7%	7,1%	21,4%	25,0%	10,7%	75,0%	

Total	Count	3	2	8	10	5	28
	Expected Count	3,0	2,0	8,0	10,0	5,0	28,0
	% within Performance_group_extreme	10,7%	7,1%	28,6%	35,7%	17,9%	100,0%
	% within guide_2	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	10,7%	7,1%	28,6%	35,7%	17,9%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	2,400 ^a	4	,663	,766		
Likelihood Ratio	3,546	4	,471	,674		
Fisher's Exact Test	2,018			,862		
Linear-by-Linear Association	2,118 ^b	1	,146	,207	,101	,056
N of Valid Cases	28					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,50.

b. The standardized statistic is -1,455.

Performance_group_extreme * guide_3

Crosstab

		guide_3					Total
		1	2	3	4	5	
Performance_group_extreme	Count	0	1	2	2	2	7
	Expected Count	1,0	,3	2,3	1,3	2,3	7,0
	% within Performance_group_extreme	0,0%	14,3%	28,6%	28,6%	28,6%	100,0%

2	% within guide_3	0,0%	100,0%	22,2%	40,0%	22,2%	25,0%
	% of Total	0,0%	3,6%	7,1%	7,1%	7,1%	25,0%
	Count	4	0	7	3	7	21
	Expected Count	3,0	,8	6,8	3,8	6,8	21,0
	% within Performance_group_extreme	19,0%	0,0%	33,3%	14,3%	33,3%	100,0%
	% within guide_3	100,0%	0,0%	77,8%	60,0%	77,8%	75,0%
Total	% of Total	14,3%	0,0%	25,0%	10,7%	25,0%	75,0%
	Count	4	1	9	5	9	28
	Expected Count	4,0	1,0	9,0	5,0	9,0	28,0
	% within Performance_group_extreme	14,3%	3,6%	32,1%	17,9%	32,1%	100,0%
	% within guide_3	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	14,3%	3,6%	32,1%	17,9%	32,1%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	5,007 ^a	4	,287	,340		
Likelihood Ratio	5,691	4	,223	,323		
Fisher's Exact Test	4,316			,383		
Linear-by-Linear Association	,227 ^b	1	,634	,757	,386	,115
N of Valid Cases	28					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -,476.

Performance_group_extreme * guide_4

Crosstab

		guide_4					Total	
		1	2	3	4	5		
Performance_group_extreme	1	Count	0	1	1	5	0	7
		Expected Count	1,0	,3	1,5	3,5	,8	7,0
		% within Performance_group_extreme	0,0%	14,3%	14,3%	71,4%	0,0%	100,0%
		% within guide_4	0,0%	100,0%	16,7%	35,7%	0,0%	25,0%
		% of Total	0,0%	3,6%	3,6%	17,9%	0,0%	25,0%
2	Count	4	0	5	9	3	21	
	Expected Count	3,0	,8	4,5	10,5	2,3	21,0	
	% within Performance_group_extreme	19,0%	0,0%	23,8%	42,9%	14,3%	100,0%	
	% within guide_4	100,0%	0,0%	83,3%	64,3%	100,0%	75,0%	
	% of Total	14,3%	0,0%	17,9%	32,1%	10,7%	75,0%	
Total	Count	4	1	6	14	3	28	
	Expected Count	4,0	1,0	6,0	14,0	3,0	28,0	
	% within Performance_group_extreme	14,3%	3,6%	21,4%	50,0%	10,7%	100,0%	
	% within guide_4	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	
	% of Total	14,3%	3,6%	21,4%	50,0%	10,7%	100,0%	

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	6,413 ^a	4	,170	,187		
Likelihood Ratio	7,835	4	,098	,144		
Fisher's Exact Test	4,942			,265		

Linear-by-Linear Association	,208 ^b	1	,649	,726	,408	,134
N of Valid Cases	28					

a. 9 cells (90,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -,456.

Performance_group_extreme * guide_5

		Crosstab					
		guide_5					
		1	2	3	4	5	Total
Performance_group_extreme	1						
	Count	0	0	2	5	0	7
	Expected Count	1,0	1,6	1,8	2,3	,3	7,0
	% within Performance_group_extreme	0,0%	0,0%	28,6%	71,4%	0,0%	100,0%
	% within guide_5	0,0%	0,0%	28,6%	55,6%	0,0%	25,9%
	% of Total	0,0%	0,0%	7,4%	18,5%	0,0%	25,9%
2	Count	4	6	5	4	1	20
	Expected Count	3,0	4,4	5,2	6,7	,7	20,0
	% within Performance_group_extreme	20,0%	30,0%	25,0%	20,0%	5,0%	100,0%
	% within guide_5	100,0%	100,0%	71,4%	44,4%	100,0%	74,1%
	% of Total	14,8%	22,2%	18,5%	14,8%	3,7%	74,1%
Total	Count	4	6	7	9	1	27
	Expected Count	4,0	6,0	7,0	9,0	1,0	27,0
	% within Performance_group_extreme	14,8%	22,2%	25,9%	33,3%	3,7%	100,0%
	% within guide_5	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	14,8%	22,2%	25,9%	33,3%	3,7%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	7,990 ^a	4	,092	,078		
Likelihood Ratio	10,162	4	,038	,060		
Fisher's Exact Test	6,855			,089		
Linear-by-Linear Association	4,829 ^b	1	,028	,033	,019	,013
N of Valid Cases	27					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,26.

b. The standardized statistic is -2,197.

Performance_group_extreme * guide_6

Crosstab

		guide_6					Total	
		1	2	3	4	5		
Performance_group_extreme	1	Count	0	0	1	6	0	7
		Expected Count	,8	,8	1,8	3,5	,3	7,0
		% within Performance_group_extreme	0,0%	0,0%	14,3%	85,7%	0,0%	100,0%
		% within guide_6	0,0%	0,0%	14,3%	42,9%	0,0%	25,0%
		% of Total	0,0%	0,0%	3,6%	21,4%	0,0%	25,0%
2		Count	3	3	6	8	1	21
		Expected Count	2,3	2,3	5,3	10,5	,8	21,0
		% within Performance_group_extreme	14,3%	14,3%	28,6%	38,1%	4,8%	100,0%

	% within guide_6	100,0%	100,0%	85,7%	57,1%	100,0%	75,0%
	% of Total	10,7%	10,7%	21,4%	28,6%	3,6%	75,0%
Total	Count	3	3	7	14	1	28
	Expected Count	3,0	3,0	7,0	14,0	1,0	28,0
	% within Performance_group_extreme	10,7%	10,7%	25,0%	50,0%	3,6%	100,0%
	% within guide_6	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	10,7%	10,7%	25,0%	50,0%	3,6%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	5,143 ^a	4	,273	,292		
Likelihood Ratio	6,628	4	,157	,274		
Fisher's Exact Test	3,957			,422		
Linear-by-Linear Association	2,973 ^b	1	,085	,105	,058	,041
N of Valid Cases	28					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,25.

b. The standardized statistic is -1,724.

Performance_group_extreme * guide_7

Crosstab

		guide_7				Total
		1	2	3	4	
Performance_group_extreme	Count	0	0	4	2	6
	Expected Count	,7	,4	3,3	1,6	6,0

	% within Performance_group_extreme	0,0%	0,0%	66,7%	33,3%	100,0%
	% within guide_7	0,0%	0,0%	26,7%	28,6%	22,2%
	% of Total	0,0%	0,0%	14,8%	7,4%	22,2%
	Count	3	2	11	5	21
	Expected Count	2,3	1,6	11,7	5,4	21,0
	% within Performance_group_extreme	14,3%	9,5%	52,4%	23,8%	100,0%
2	% within guide_7	100,0%	100,0%	73,3%	71,4%	77,8%
	% of Total	11,1%	7,4%	40,7%	18,5%	77,8%
	Count	3	2	15	7	27
Total	Expected Count	3,0	2,0	15,0	7,0	27,0
	% within Performance_group_extreme	11,1%	7,4%	55,6%	25,9%	100,0%
	% within guide_7	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	11,1%	7,4%	55,6%	25,9%	100,0%
	Count	3	2	15	7	27

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	1,763 ^a	3	,623	,742		
Likelihood Ratio	2,831	3	,418	,568		
Fisher's Exact Test	1,272			1,000		
Linear-by-Linear Association	1,312 ^b	1	,252	,324	,198	,127
N of Valid Cases	27					

a. 6 cells (75,0%) have expected count less than 5. The minimum expected count is ,44.

b. The standardized statistic is -1,146.

Performance_group_extreme * guide_8

Crosstab

		guide_8				Total
		1	2	3	4	
Performance_grou 1 p_extreme	Count	1	2	2	0	5
	Expected Count	1,3	1,2	1,9	,6	5,0
	% within					
	Performance_grou p_extreme	20,0%	40,0%	40,0%	0,0%	100,0%
	% within guide_8	14,3%	33,3%	20,0%	0,0%	19,2%
	% of Total	3,8%	7,7%	7,7%	0,0%	19,2%
2	Count	6	4	8	3	21
	Expected Count	5,7	4,8	8,1	2,4	21,0
	% within					
	Performance_grou p_extreme	28,6%	19,0%	38,1%	14,3%	100,0%
	% within guide_8	85,7%	66,7%	80,0%	100,0%	80,8%
	% of Total	23,1%	15,4%	30,8%	11,5%	80,8%
Total	Count	7	6	10	3	26
	Expected Count	7,0	6,0	10,0	3,0	26,0
	% within					
	Performance_grou p_extreme	26,9%	23,1%	38,5%	11,5%	100,0%
	% within guide_8	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	26,9%	23,1%	38,5%	11,5%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	1,597 ^a	3	,660	,770		
Likelihood Ratio	2,069	3	,558	,722		
Fisher's Exact Test	1,459			,751		
Linear-by-Linear Association	,128 ^b	1	,721	,812	,455	,178
N of Valid Cases	26					

- a. 6 cells (75,0%) have expected count less than 5. The minimum expected count is ,58.
b. The standardized statistic is ,357.

Performance_group_extreme * guide_9

Crosstab

		guide_9				Total
		1	2	3	4	
Performance_grou 1 p_extreme	Count	0	1	2	2	5
	Expected Count	1,0	1,3	1,9	,8	5,0
	% within Performance_grou p_extreme	0,0%	20,0%	40,0%	40,0%	100,0%
	% within guide_9	0,0%	14,3%	20,0%	50,0%	19,2%
	% of Total	0,0%	3,8%	7,7%	7,7%	19,2%
2	Count	5	6	8	2	21
	Expected Count	4,0	5,7	8,1	3,2	21,0
	% within Performance_grou p_extreme	23,8%	28,6%	38,1%	9,5%	100,0%
	% within guide_9	100,0%	85,7%	80,0%	50,0%	80,8%
	% of Total	19,2%	23,1%	30,8%	7,7%	80,8%
Total	Count	5	7	10	4	26
	Expected Count	5,0	7,0	10,0	4,0	26,0
	% within Performance_grou p_extreme	19,2%	26,9%	38,5%	15,4%	100,0%
	% within guide_9	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	19,2%	26,9%	38,5%	15,4%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
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Pearson Chi-Square	3,743 ^a	3	,291	,340		
Likelihood Ratio	4,162	3	,245	,405		
Fisher's Exact Test	3,186			,367		
Linear-by-Linear Association	3,095 ^b	1	,079	,131	,064	,046
N of Valid Cases	26					

a. 6 cells (75,0%) have expected count less than 5. The minimum expected count is ,77.

b. The standardized statistic is -1,759.

Performance_group_extreme * last_1

		Crosstab					
		last_1					
		1	2	3	4	5	Total
Performance_group_extreme	1						
	Count	0	0	4	1	1	6
	Expected Count	,2	1,1	2,7	1,8	,2	6,0
	% within Performance_group_extreme	0,0%	0,0%	66,7%	16,7%	16,7%	100,0%
	% within last_1	0,0%	0,0%	33,3%	12,5%	100,0%	22,2%
	% of Total	0,0%	0,0%	14,8%	3,7%	3,7%	22,2%
2	Count	1	5	8	7	0	21
	Expected Count	,8	3,9	9,3	6,2	,8	21,0
	% within Performance_group_extreme	4,8%	23,8%	38,1%	33,3%	0,0%	100,0%
	% within last_1	100,0%	100,0%	66,7%	87,5%	0,0%	77,8%
	% of Total	3,7%	18,5%	29,6%	25,9%	0,0%	77,8%
Total	Count	1	5	12	8	1	27
	Expected Count	1,0	5,0	12,0	8,0	1,0	27,0
	% within Performance_group_extreme	3,7%	18,5%	44,4%	29,6%	3,7%	100,0%

% within last_1	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
% of Total	3,7%	18,5%	44,4%	29,6%	3,7%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	6,509 ^a	4	,164	,179		
Likelihood Ratio	7,299	4	,121	,158		
Fisher's Exact Test	5,420			,249		
Linear-by-Linear Association	1,468 ^b	1	,226	,305	,173	,105
N of Valid Cases	27					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,22.

b. The standardized statistic is -1,212.

Performance_group_extreme * last_2

Crosstab

		last_2				Total
		1	2	3	4	
Performance_group 1 p_extreme	Count	0	0	2	5	7
	Expected Count	1,1	1,1	1,3	3,5	7,0
	% within Performance_group p_extreme	0,0%	0,0%	28,6%	71,4%	100,0%
	% within last_2	0,0%	0,0%	40,0%	38,5%	26,9%
	% of Total	0,0%	0,0%	7,7%	19,2%	26,9%
2	Count	4	4	3	8	19
	Expected Count	2,9	2,9	3,7	9,5	19,0

	% within Performance_group_extreme	21,1%	21,1%	15,8%	42,1%	100,0%
	% within last_2	100,0%	100,0%	60,0%	61,5%	73,1%
	% of Total	15,4%	15,4%	11,5%	30,8%	73,1%
Total	Count	4	4	5	13	26
	Expected Count	4,0	4,0	5,0	13,0	26,0
	% within Performance_group_extreme	15,4%	15,4%	19,2%	50,0%	100,0%
	% within last_2	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	15,4%	15,4%	19,2%	50,0%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	4,262 ^a	3	,235	,260		
Likelihood Ratio	6,236	3	,101	,199		
Fisher's Exact Test	3,543			,295		
Linear-by-Linear Association	3,318 ^b	1	,069	,082	,046	,030
N of Valid Cases	26					

a. 7 cells (87,5%) have expected count less than 5. The minimum expected count is 1,08.

b. The standardized statistic is -1,822.

Performance_group_extreme * last_3

Crosstab

	last_3					Total
	1	2	3	4	5	
Performance_group_extreme 1 Count	0	0	2	3	2	7

oup_extreme	Expected Count	1,2	,6	2,0	2,0	1,2	7,0
	% within Performance_gr	0,0%	0,0%	28,6%	42,9%	28,6%	100,0%
	oup_extreme						
	% within last_3	0,0%	0,0%	28,6%	42,9%	50,0%	29,2%
	% of Total	0,0%	0,0%	8,3%	12,5%	8,3%	29,2%
2	Count	4	2	5	4	2	17
	Expected Count	2,8	1,4	5,0	5,0	2,8	17,0
	% within Performance_gr	23,5%	11,8%	29,4%	23,5%	11,8%	100,0%
	oup_extreme						
	% within last_3	100,0%	100,0%	71,4%	57,1%	50,0%	70,8%
Total	% of Total	16,7%	8,3%	20,8%	16,7%	8,3%	70,8%
	Count	4	2	7	7	4	24
	Expected Count	4,0	2,0	7,0	7,0	4,0	24,0
	% within Performance_gr	16,7%	8,3%	29,2%	29,2%	16,7%	100,0%
	oup_extreme						
	% within last_3	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	16,7%	8,3%	29,2%	29,2%	16,7%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	3,947 ^a	4	,413	,468		
Likelihood Ratio	5,493	4	,240	,411		
Fisher's Exact Test	3,503			,478		
Linear-by-Linear Association	3,565 ^b	1	,059	,061	,040	,024
N of Valid Cases	24					

a. 10 cells (100,0%) have expected count less than 5. The minimum expected count is ,58.

b. The standardized statistic is -1,888.

Performance_group_extreme * last_4

Crosstab

		last_4					Total	
		1	2	3	4	5		
Performance_group_extreme	1	Count	0	0	1	4	2	7
		Expected Count	,8	,8	2,0	2,0	1,5	7,0
		% within Performance_group_extreme	0,0%	0,0%	14,3%	57,1%	28,6%	100,0%
		% within last_4	0,0%	0,0%	12,5%	50,0%	33,3%	25,0%
		% of Total	0,0%	0,0%	3,6%	14,3%	7,1%	25,0%
2	Count	3	3	7	4	4	21	
	Expected Count	2,3	2,3	6,0	6,0	4,5	21,0	
	% within Performance_group_extreme	14,3%	14,3%	33,3%	19,0%	19,0%	100,0%	
	% within last_4	100,0%	100,0%	87,5%	50,0%	66,7%	75,0%	
	% of Total	10,7%	10,7%	25,0%	14,3%	14,3%	75,0%	
Total	Count	3	3	8	8	6	28	
	Expected Count	3,0	3,0	8,0	8,0	6,0	28,0	
	% within Performance_group_extreme	10,7%	10,7%	28,6%	28,6%	21,4%	100,0%	
	% within last_4	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	
	% of Total	10,7%	10,7%	28,6%	28,6%	21,4%	100,0%	

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	5,556 ^a	4	,235	,243		
Likelihood Ratio	6,734	4	,151	,240		
Fisher's Exact Test	4,426			,303		
Linear-by-Linear Association	3,321 ^b	1	,068	,082	,046	,028

N of Valid Cases	28					
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- a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,75.
b. The standardized statistic is -1,822.

Performance_group_extreme * last_5

Crosstab

		last_5					Total
		1	2	3	4	5	
Performance_group_extreme	1						
	Count	0	0	1	2	4	7
	Expected Count	,5	,8	1,8	2,3	1,8	7,0
	% within Performance_group_extreme	0,0%	0,0%	14,3%	28,6%	57,1%	100,0%
	% within last_5	0,0%	0,0%	14,3%	22,2%	57,1%	25,0%
	% of Total	0,0%	0,0%	3,6%	7,1%	14,3%	25,0%
2	Count	2	3	6	7	3	21
	Expected Count	1,5	2,3	5,3	6,8	5,3	21,0
	% within Performance_group_extreme	9,5%	14,3%	28,6%	33,3%	14,3%	100,0%
	% within last_5	100,0%	100,0%	85,7%	77,8%	42,9%	75,0%
	% of Total	7,1%	10,7%	21,4%	25,0%	10,7%	75,0%
Total	Count	2	3	7	9	7	28
	Expected Count	2,0	3,0	7,0	9,0	7,0	28,0
	% within Performance_group_extreme	7,1%	10,7%	25,0%	32,1%	25,0%	100,0%
	% within last_5	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	7,1%	10,7%	25,0%	32,1%	25,0%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	5,989 ^a	4	,200	,232		
Likelihood Ratio	6,654	4	,155	,281		
Fisher's Exact Test	4,595			,330		
Linear-by-Linear Association	4,765 ^b	1	,029	,041	,016	,012
N of Valid Cases	28					

a. 7 cells (70,0%) have expected count less than 5. The minimum expected count is ,50.

b. The standardized statistic is -2,183.

Performance_group_extreme * last_6

Crosstab							
		last_6					Total
		1	2	3	4	5	
Performance_group_extreme	1						
	Count	0	0	3	2	2	7
	Expected Count	,5	,5	2,5	2,0	1,5	7,0
	% within Performance_group_extreme	0,0%	0,0%	42,9%	28,6%	28,6%	100,0%
	% within last_6	0,0%	0,0%	30,0%	25,0%	33,3%	25,0%
	% of Total	0,0%	0,0%	10,7%	7,1%	7,1%	25,0%
2	Count	2	2	7	6	4	21
	Expected Count	1,5	1,5	7,5	6,0	4,5	21,0
	% within Performance_group_extreme	9,5%	9,5%	33,3%	28,6%	19,0%	100,0%
	% within last_6	100,0%	100,0%	70,0%	75,0%	66,7%	75,0%
	% of Total	7,1%	7,1%	25,0%	21,4%	14,3%	75,0%
Total	Count	2	2	10	8	6	28
	Expected Count	2,0	2,0	10,0	8,0	6,0	28,0

% within Performance_group_extreme	7,1%	7,1%	35,7%	28,6%	21,4%	100,0%
% within last_6	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
% of Total	7,1%	7,1%	35,7%	28,6%	21,4%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)	Point Probability
Pearson Chi-Square	1,689 ^a	4	,793	1,000		
Likelihood Ratio	2,638	4	,620	,805		
Fisher's Exact Test	1,430			1,000		
Linear-by-Linear Association	,918 ^b	1	,338	,452	,228	,103
N of Valid Cases	28					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,50.

b. The standardized statistic is -,958.

Performance_group_extreme * last_7

Crosstab

		last_7					Total	
		1	2	3	4	5		
Performance_group_extreme	1	Count	0	0	2	4	1	7
		Expected Count	,5	,8	1,3	2,3	2,3	7,0
		% within Performance_group_extreme	0,0%	0,0%	28,6%	57,1%	14,3%	100,0%
		% within last_7	0,0%	0,0%	40,0%	44,4%	11,1%	25,0%
		% of Total	0,0%	0,0%	7,1%	14,3%	3,6%	25,0%
2	Count	2	3	3	5	8	21	

	Expected Count	1,5	2,3	3,8	6,8	6,8	21,0
	% within Performance_group_extreme	9,5%	14,3%	14,3%	23,8%	38,1%	100,0%
	% within last_7	100,0%	100,0%	60,0%	55,6%	88,9%	75,0%
	% of Total	7,1%	10,7%	10,7%	17,9%	28,6%	75,0%
Total	Count	2	3	5	9	9	28
	Expected Count	2,0	3,0	5,0	9,0	9,0	28,0
	% within Performance_group_extreme	7,1%	10,7%	17,9%	32,1%	32,1%	100,0%
	% within last_7	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	7,1%	10,7%	17,9%	32,1%	32,1%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	5,007 ^a	4	,287	,339		
Likelihood Ratio	6,116	4	,191	,289		
Fisher's Exact Test	4,178			,391		
Linear-by-Linear Association	,123 ^b	1	,725	,865	,444	,132
N of Valid Cases	28					

a. 8 cells (80,0%) have expected count less than 5. The minimum expected count is ,50.

b. The standardized statistic is -,351.

Performance_group_extreme * last_8

Crosstab

		last_8					Total
		1	2	3	4	5	
Performance_group_extreme	Count	0	0	1	3	3	7
	Expected Count	.5	.8	1.5	2.8	1.5	7.0

	% within Performance_group_extreme	0,0%	0,0%	14,3%	42,9%	42,9%	100,0%
	% within last_8	0,0%	0,0%	16,7%	27,3%	50,0%	25,0%
	% of Total	0,0%	0,0%	3,6%	10,7%	10,7%	25,0%
	2 Count	2	3	5	8	3	21
	Expected Count	1,5	2,3	4,5	8,3	4,5	21,0
	% within Performance_group_extreme	9,5%	14,3%	23,8%	38,1%	14,3%	100,0%
	% within last_8	100,0%	100,0%	83,3%	72,7%	50,0%	75,0%
	% of Total	7,1%	10,7%	17,9%	28,6%	10,7%	75,0%
Total	Count	2	3	6	11	6	28
	Expected Count	2,0	3,0	6,0	11,0	6,0	28,0
	% within Performance_group_extreme	7,1%	10,7%	21,4%	39,3%	21,4%	100,0%
	% within last_8	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total	7,1%	10,7%	21,4%	39,3%	21,4%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	3,919 ^a	4	,417	,494		
Likelihood Ratio	4,875	4	,300	,453		
Fisher's Exact Test	3,085			,610		
Linear-by-Linear Association	3,488 ^b	1	,062	,090	,040	,027
N of Valid Cases	28					

a. 9 cells (90,0%) have expected count less than 5. The minimum expected count is ,50.

b. The standardized statistic is -1,868.

Appendix G: T-tests and Levene's Test for Equality of Variance

Group Statistics

	Performance_group _extreme	N	Mean	Std. Deviation	Std. Error Mean
defin_average	1	7	3,893	,4532	,1713
	2	21	3,571	,7589	,1656
csq_average	1	7	2,7073	,42063	,15899
	2	19	2,5695	,70887	,16263
lead_average	1	7	4,3571	,33923	,12822
	2	21	3,9563	,61329	,13383
vision_average	1	7	4,1302	,36827	,13919
	2	21	3,4862	,74093	,16168
com_average	1	7	3,5850	,87361	,33019
	2	20	3,1571	,79458	,17767
empower_average	1	7	3,7755	,16198	,06122
	2	20	2,8690	,86046	,19240
guide_average	1	5	3,5111	,16851	,07536
	2	21	2,9815	,87689	,19135
last_average	1	7	3,9898	,36696	,13870
	2	19	3,1607	1,04811	,24045

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)				
defin_aver age	Equal variances assumed	1,426	,243	1,05 2	26	,303				
	Equal variances not assumed			1,34 9	17,7 95	,194				
csq_avera ge	Equal variances assumed	1,557	,224	,480	24	,635				

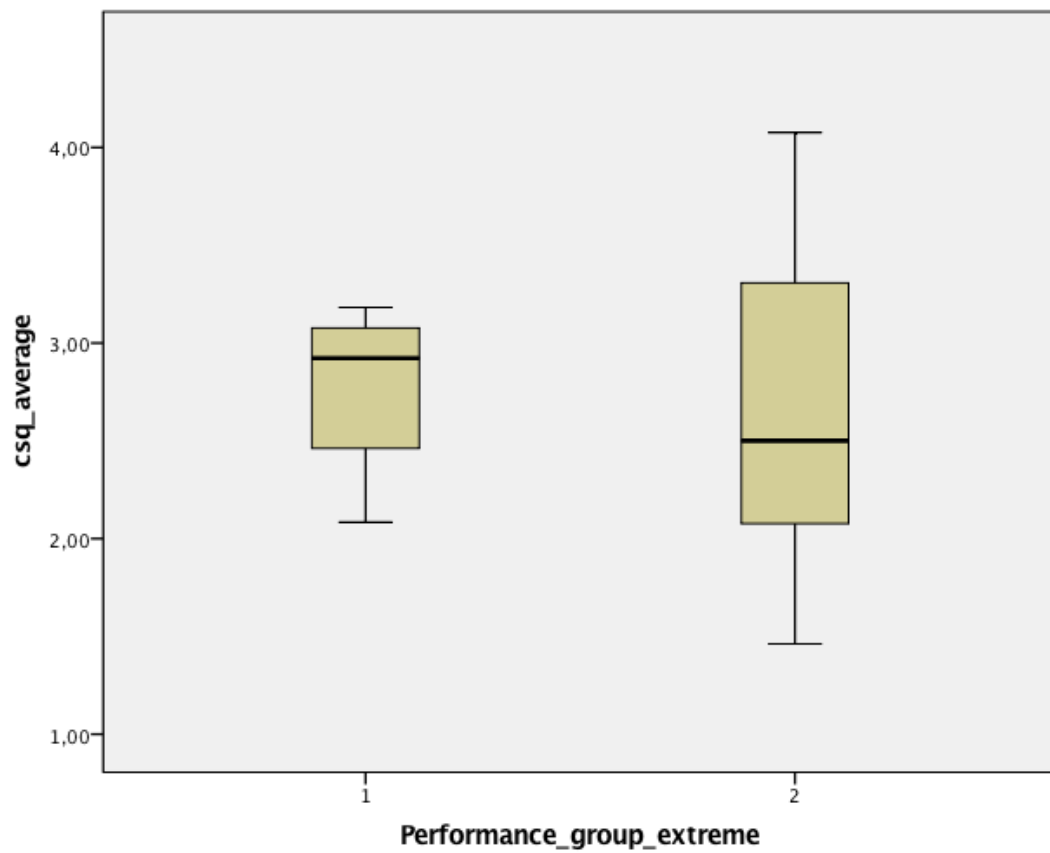
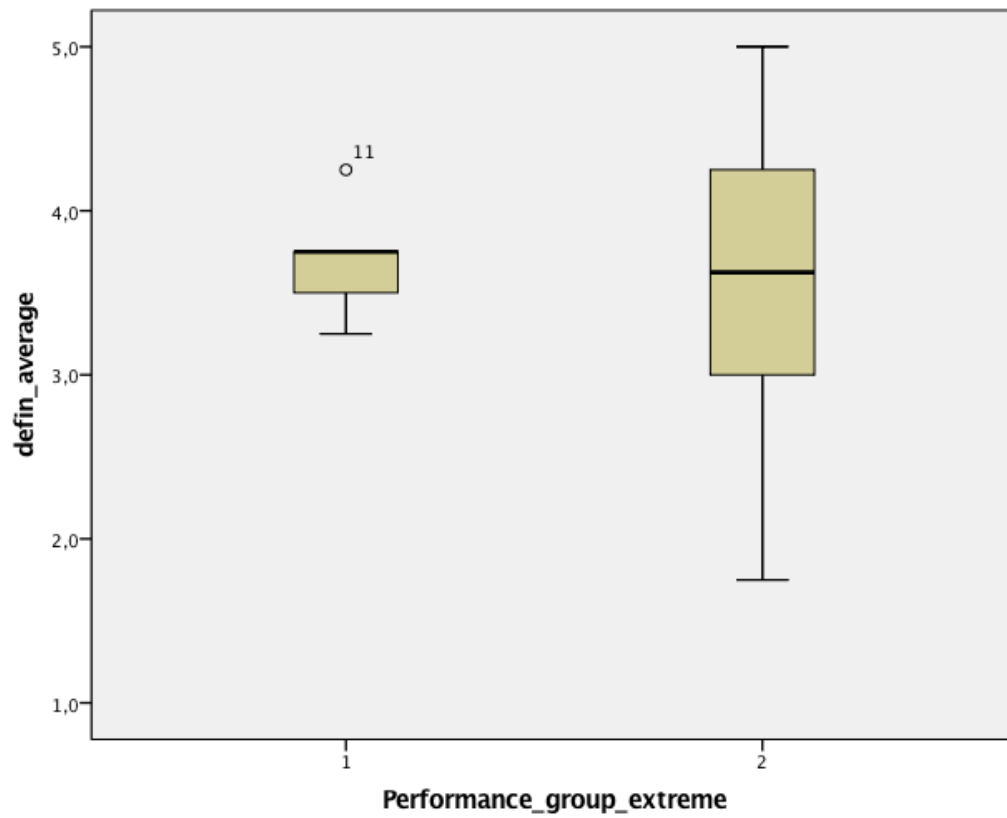
	Equal variances not assumed			,606	18,4 07	,552				
lead_aver age	Equal variances assumed	1,138	,296	1,63 4	26	,114				
	Equal variances not assumed			2,16 2	19,3 17	,043				
vision_ave rage	Equal variances assumed	2,857	,103	2,19 1	26	,038				
	Equal variances not assumed			3,01 8	21,4 17	,006				
com_aver age	Equal variances assumed	,090	,767	1,19 7	25	,243				
	Equal variances not assumed			1,14 1	9,72 0	,281				
empower_ average	Equal variances assumed	7,671	,010	2,73 6	25	,011				
	Equal variances not assumed			4,48 9	22,3 18	,000				
guide_ave rage	Equal variances assumed	5,046	,034	1,32 5	24	,198				
	Equal variances not assumed			2,57 5	23,8 20	,017				
last_avera ge	Equal variances assumed	6,865	,015	2,02 5	24	,054				

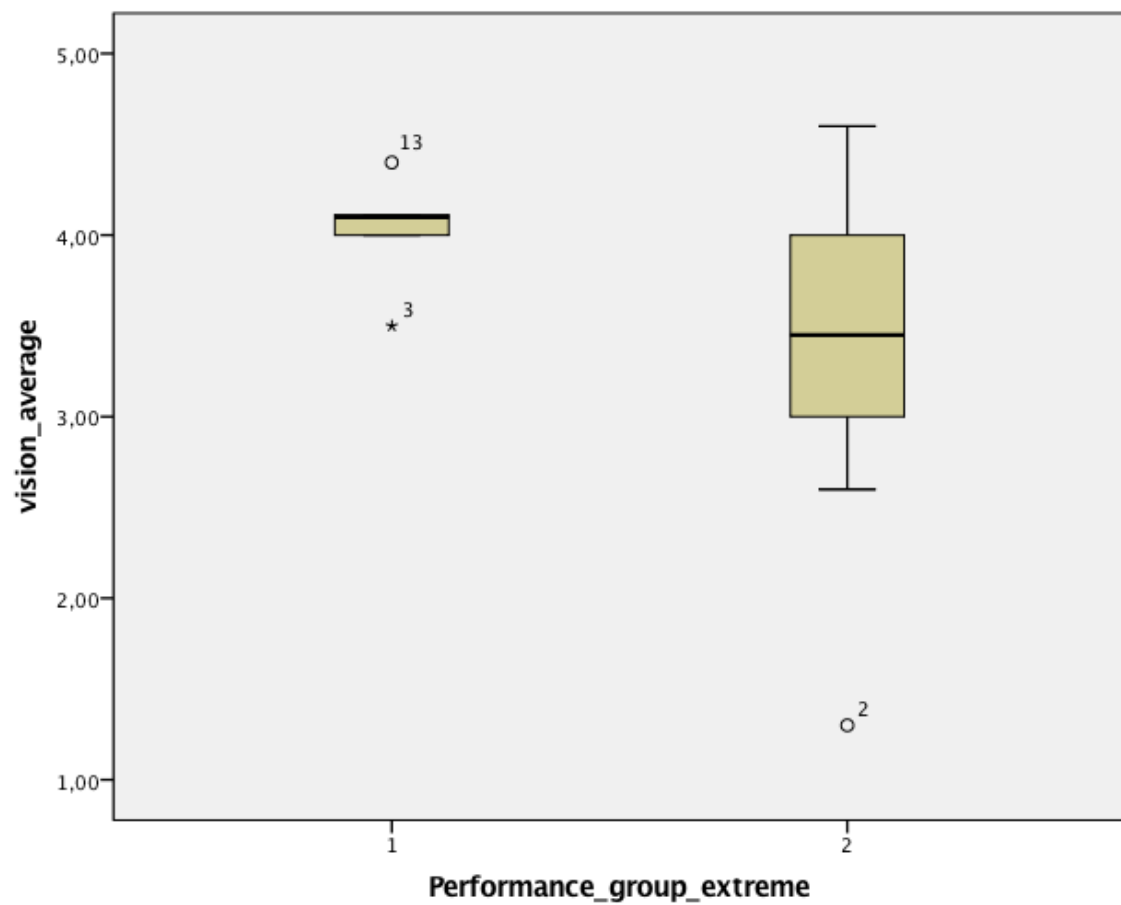
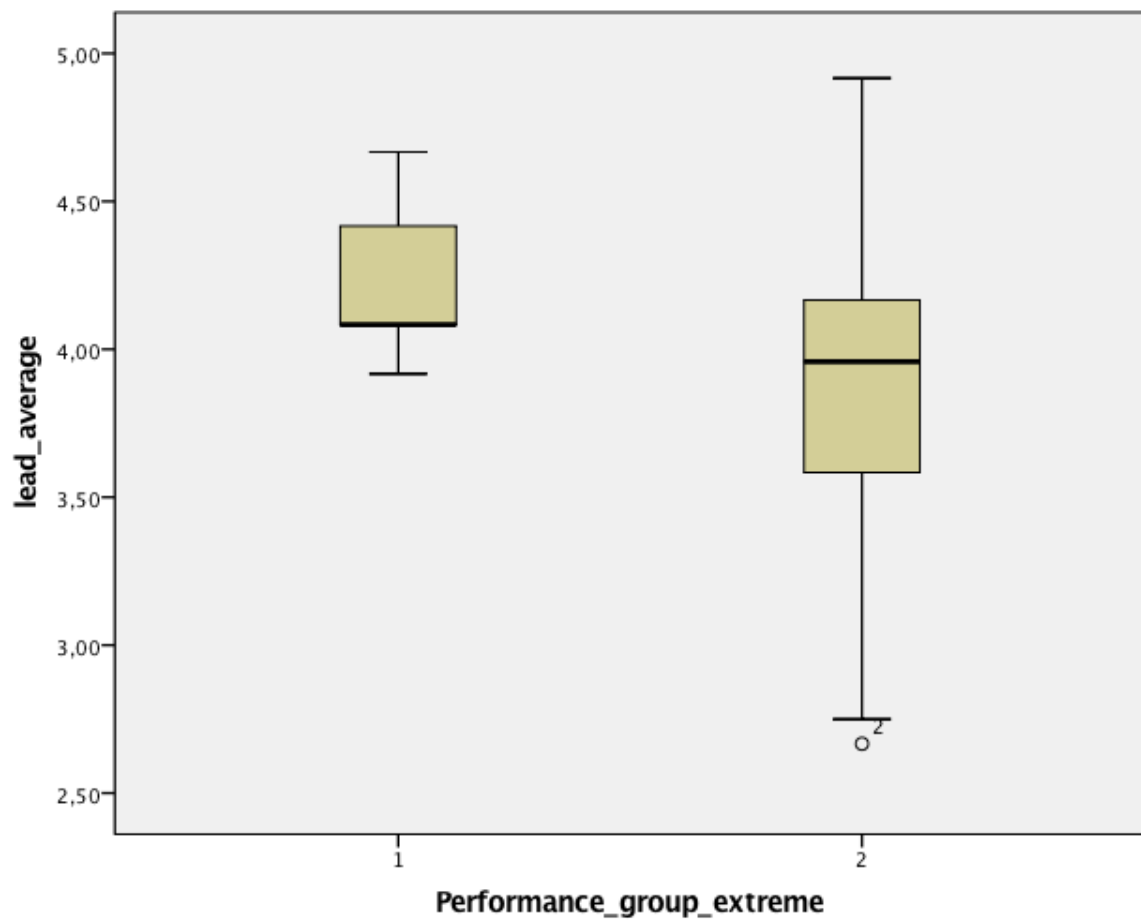
Equal variances not assumed			2,98 7	24,0 00	,006				
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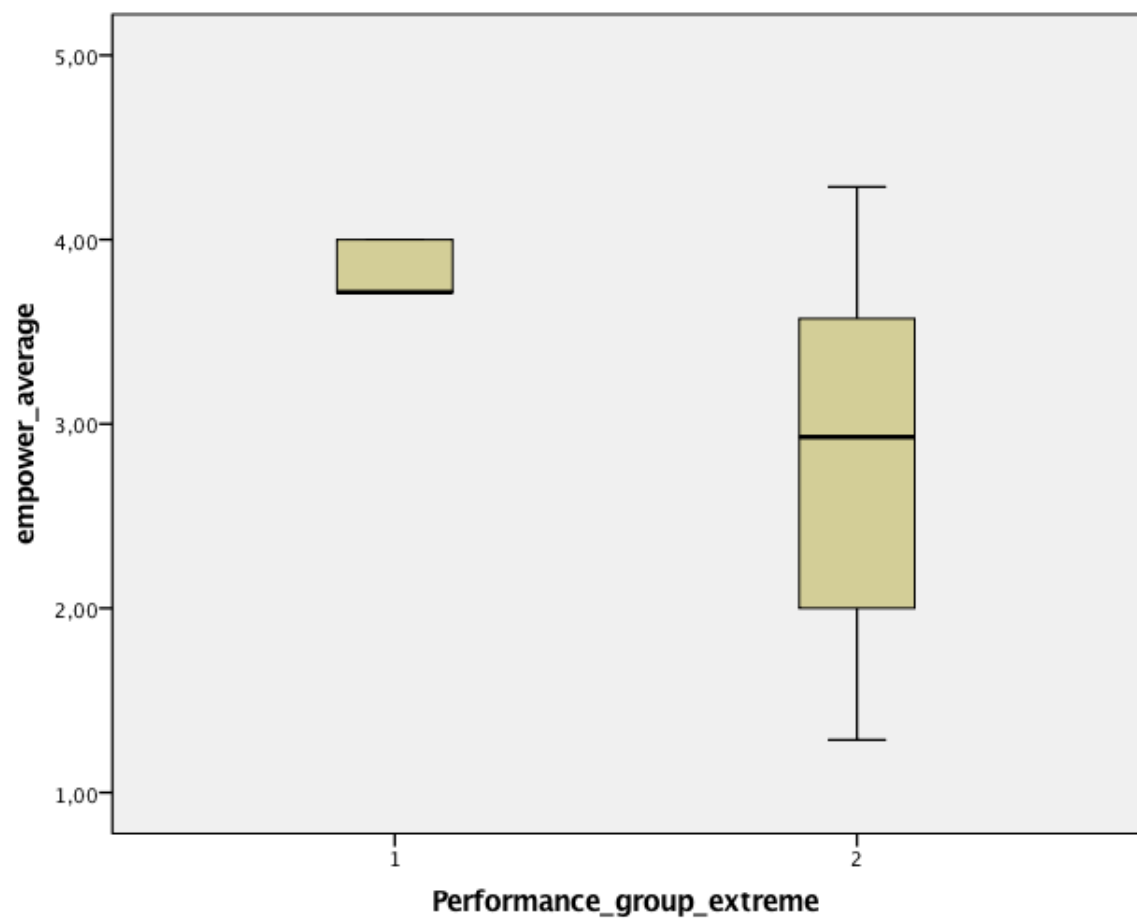
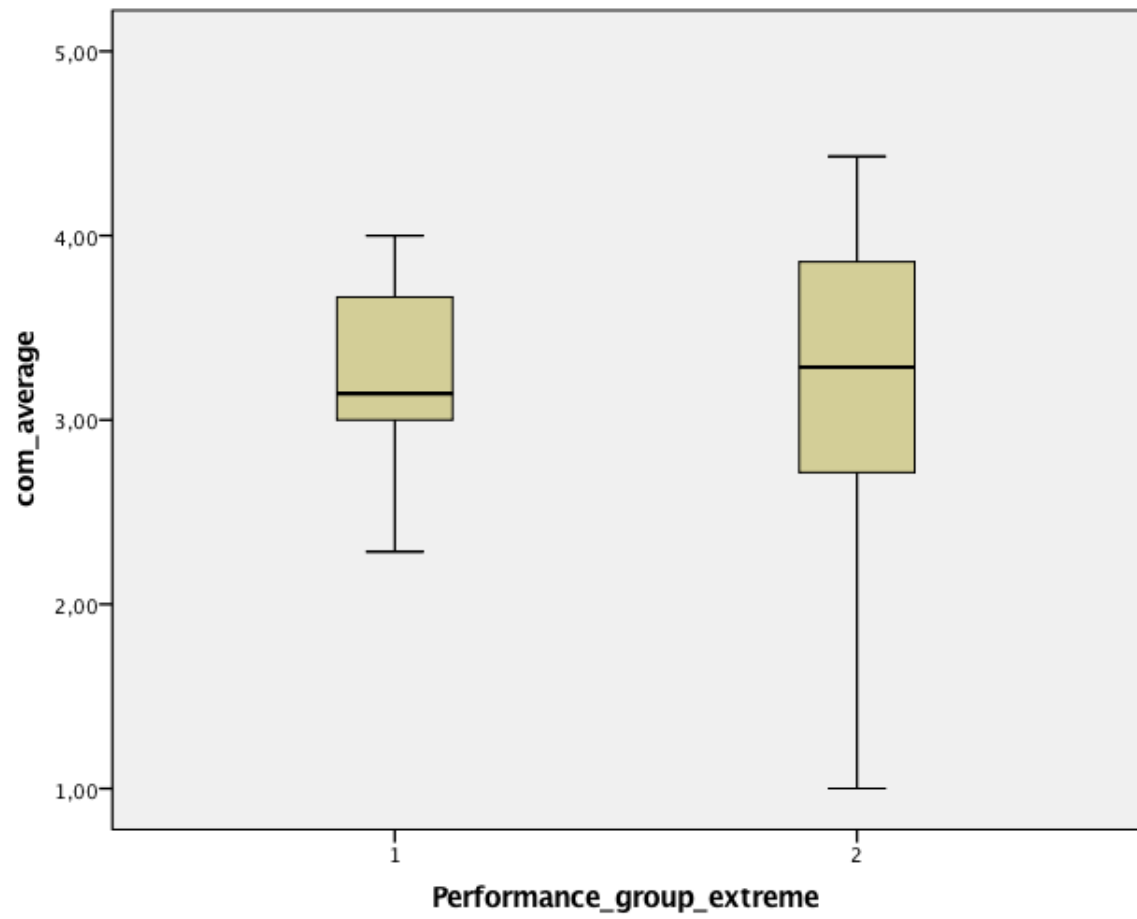
Independent Samples Test

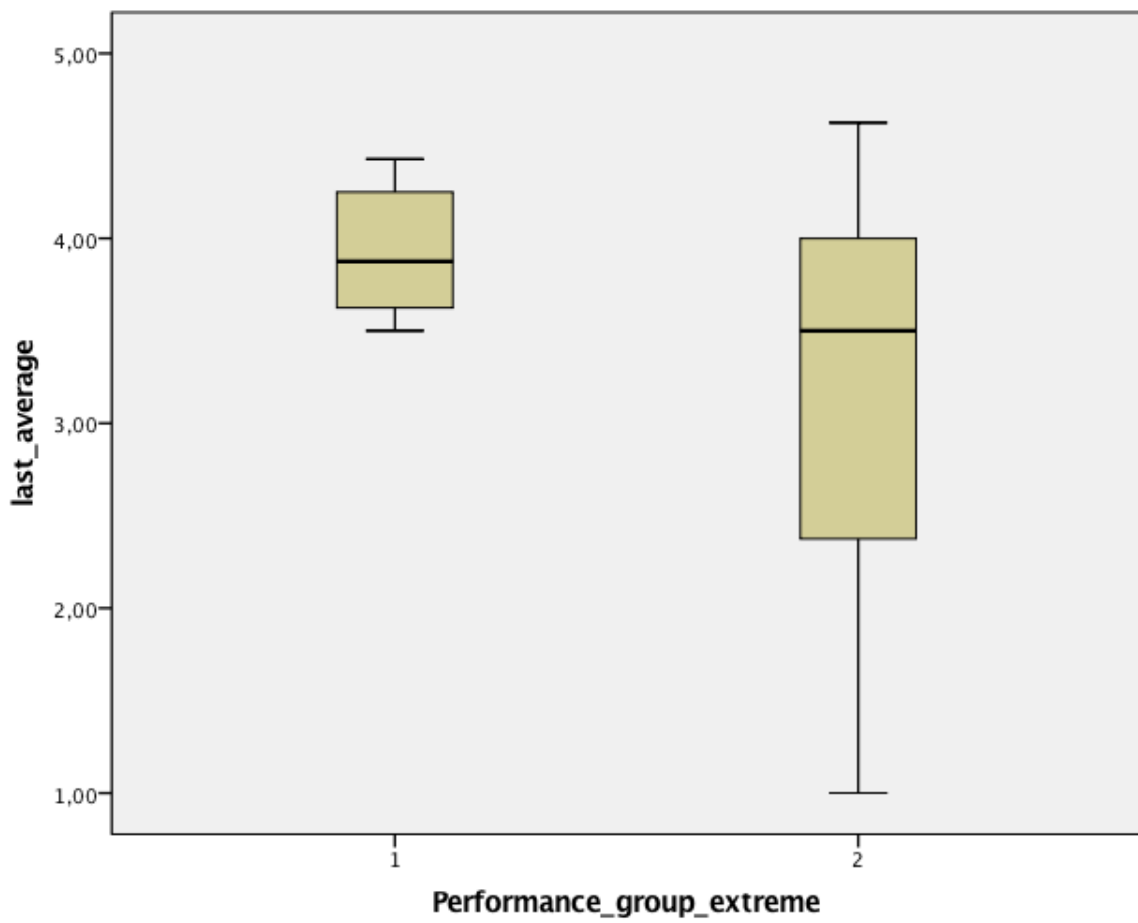
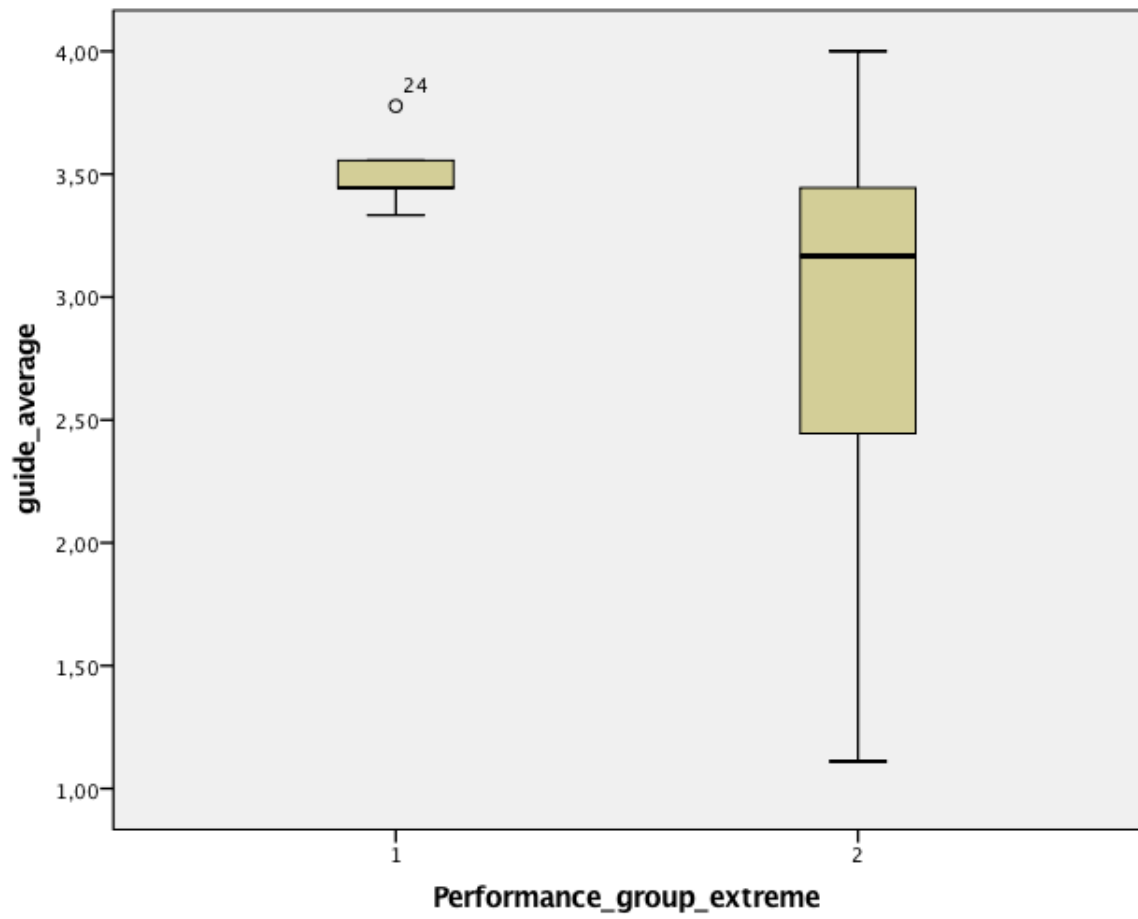
		t-test for Equality of Means			
		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
				Lower	Upper
defin_average	Equal variances assumed	,3214	,3056	-,3068	,9496
	Equal variances not assumed	,3214	,2382	-,1795	,8224
csq_average	Equal variances assumed	,13782	,28692	-,45434	,72999
	Equal variances not assumed	,13782	,22743	-,33923	,61487
lead_average	Equal variances assumed	,40079	,24529	-,10341	,90500
	Equal variances not assumed	,40079	,18534	,01330	,78828
vision_average	Equal variances assumed	,64392	,29393	,03972	1,24811
	Equal variances not assumed	,64392	,21335	,20076	1,08707
com_average	Equal variances assumed	,42789	,35758	-,30856	1,16435
	Equal variances not assumed	,42789	,37496	-,41085	1,26663
empower_average	Equal variances assumed	,90646	,33126	,22421	1,58871
	Equal variances not assumed	,90646	,20191	,48807	1,32485
guide_average	Equal variances assumed	,52963	,39980	-,29552	1,35478
	Equal variances not assumed	,52963	,20566	,10501	,95425
last_average	Equal variances assumed	,82908	,40944	-,01597	1,67413
	Equal variances not assumed	,82908	,27759	,25617	1,40199

Appendix H: Test of assumption of no significant outliers



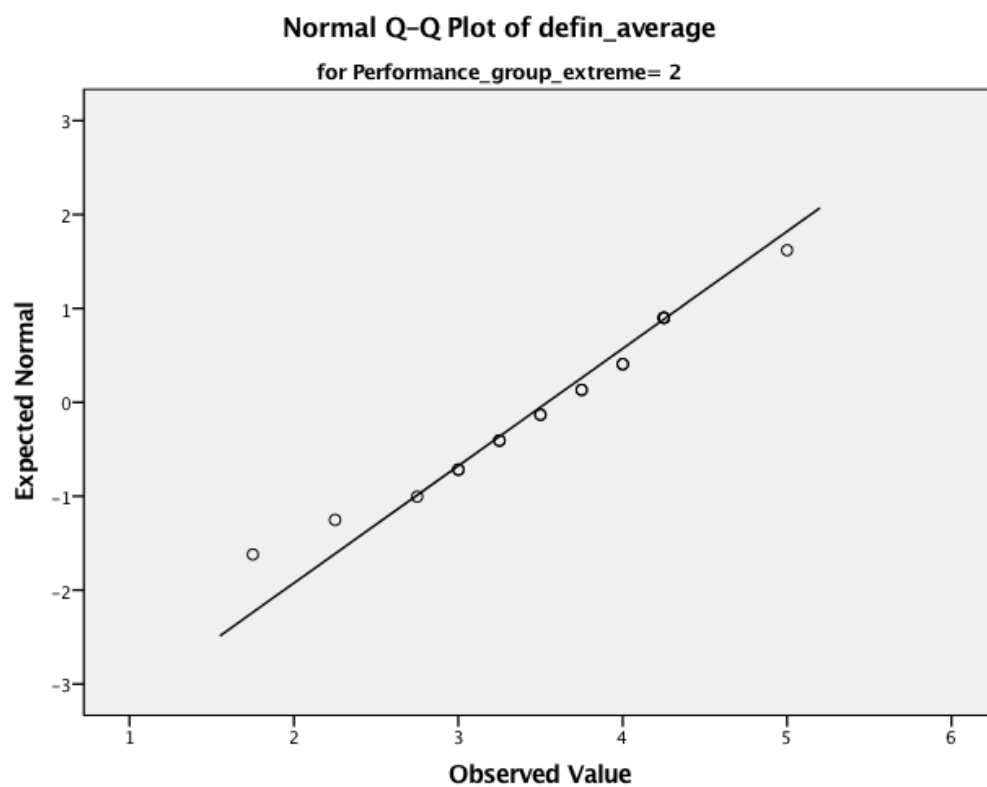
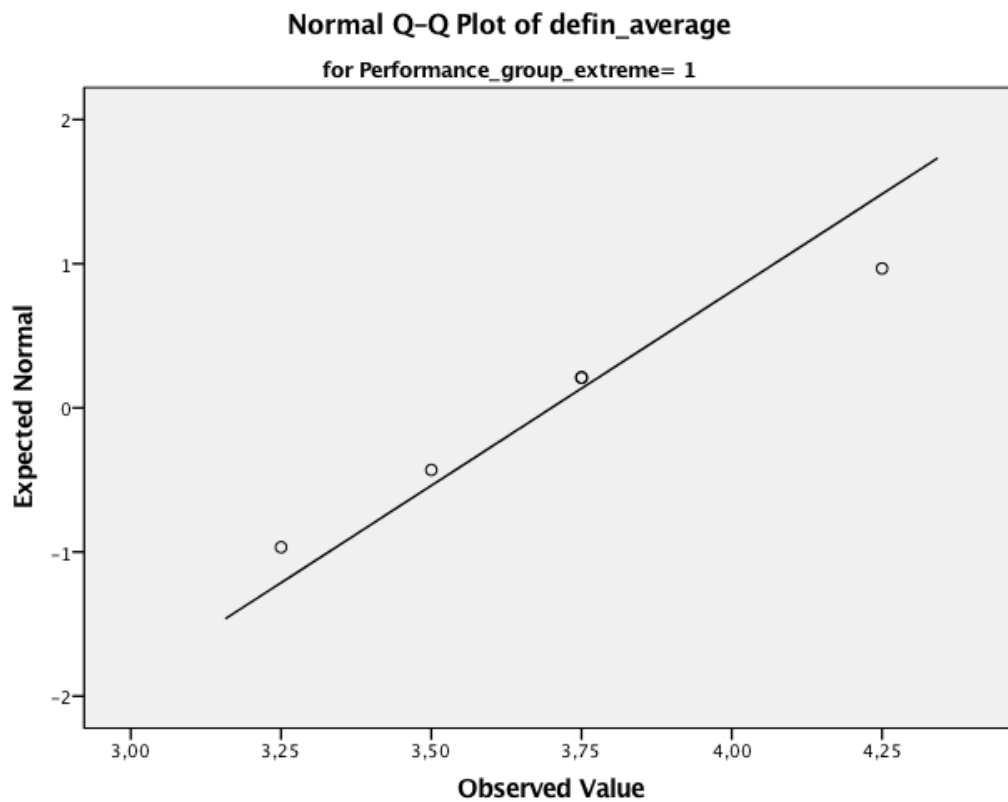


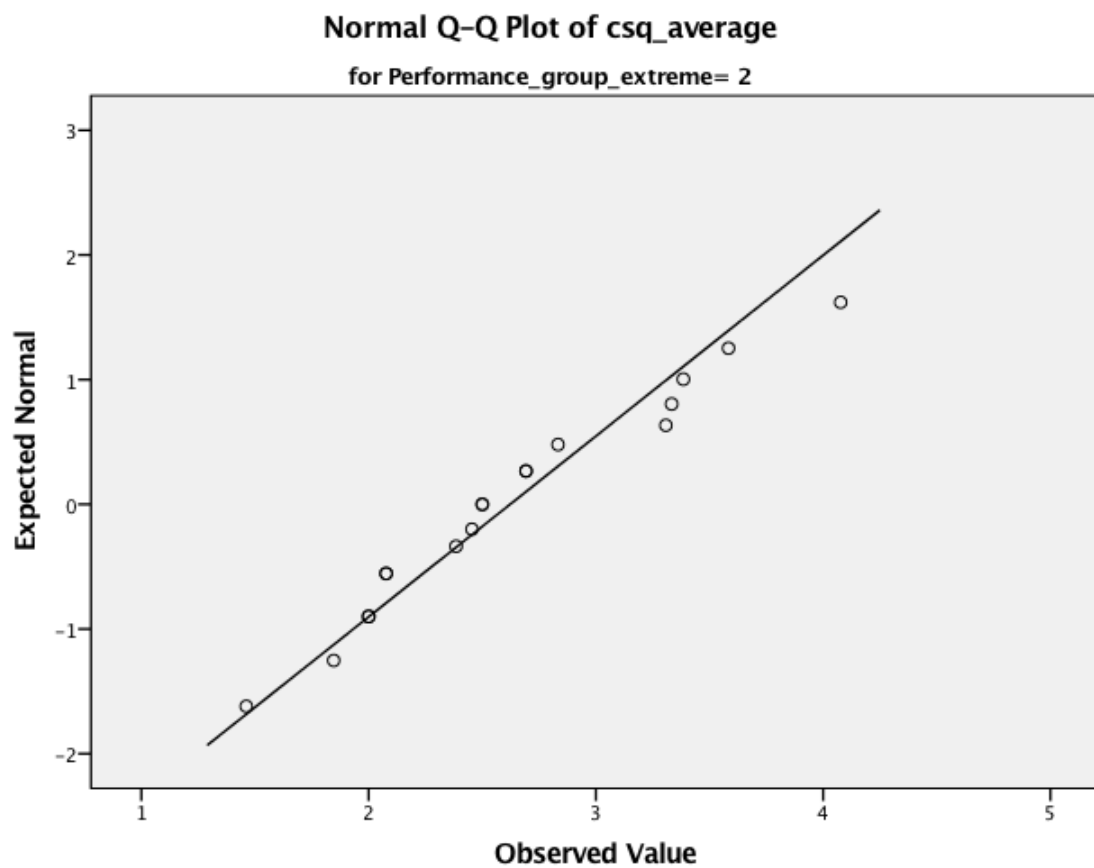
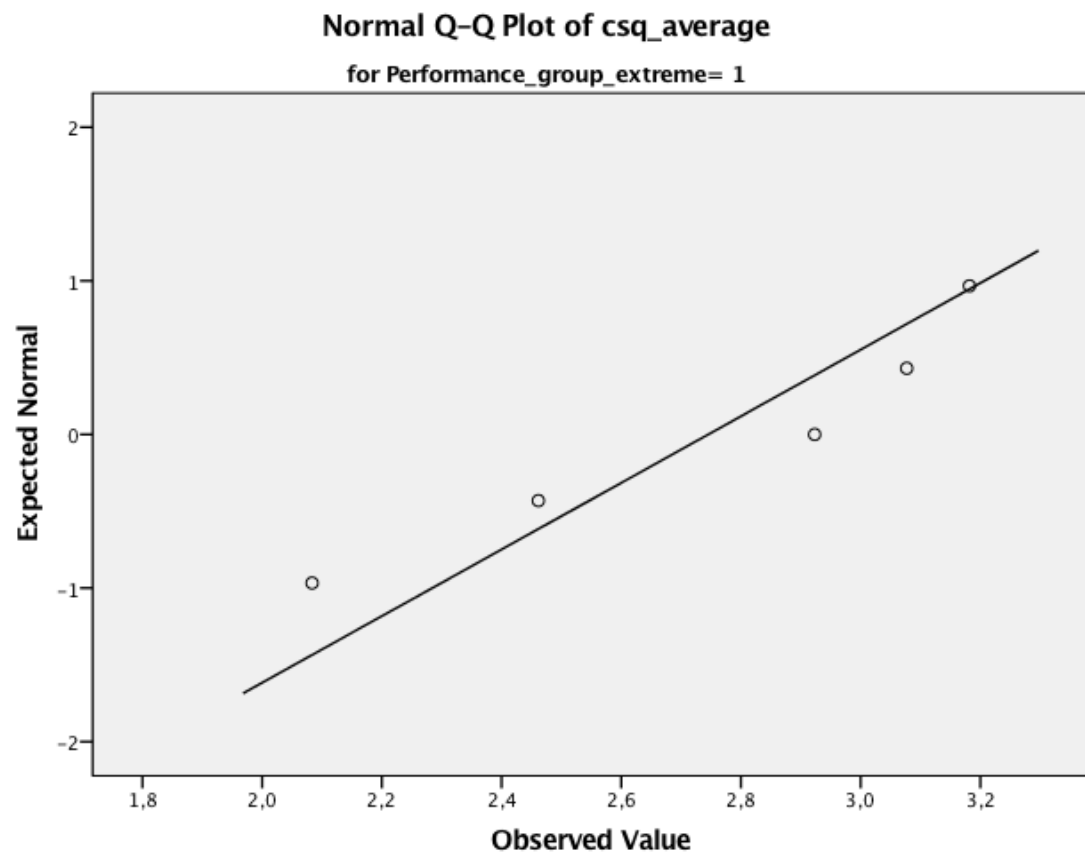


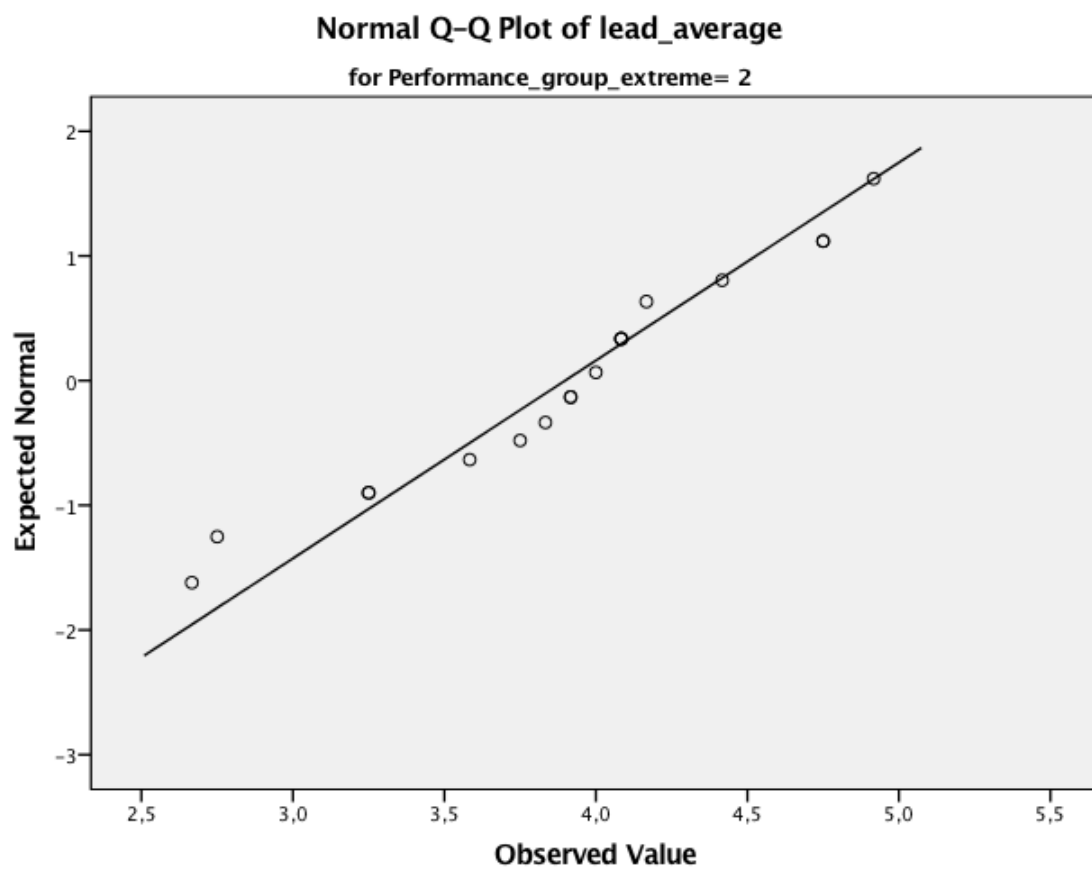
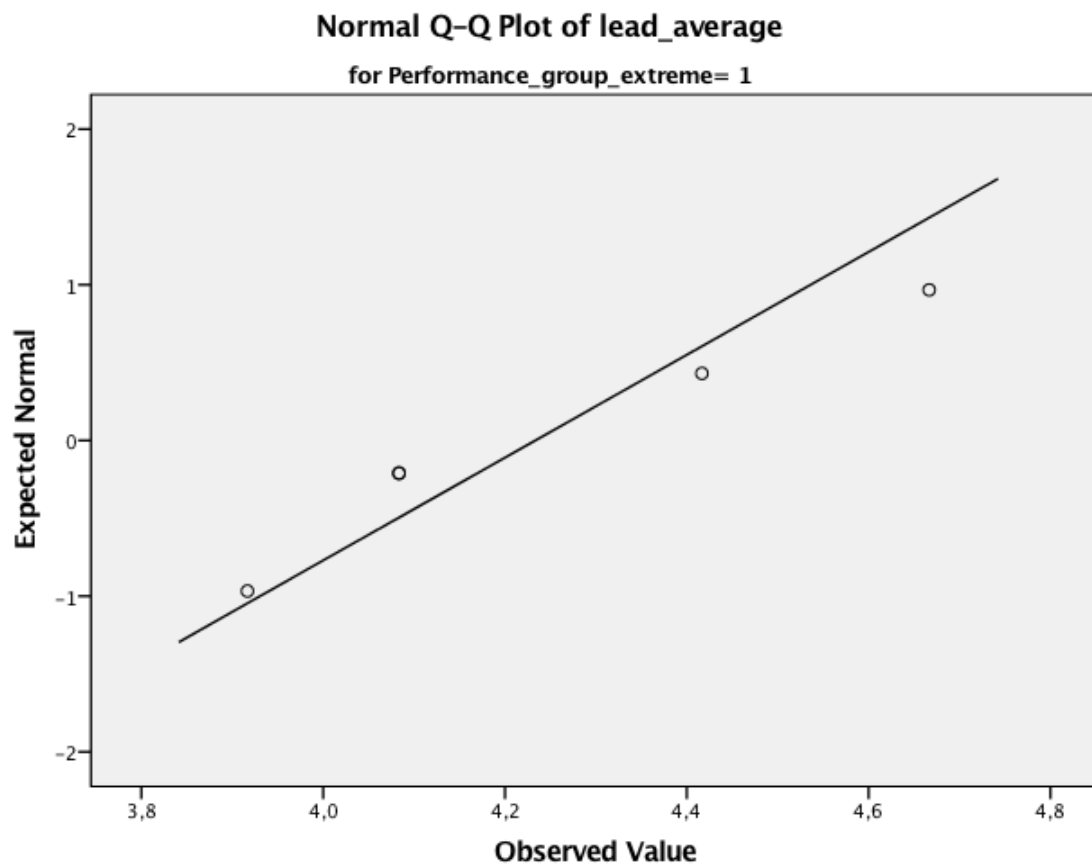


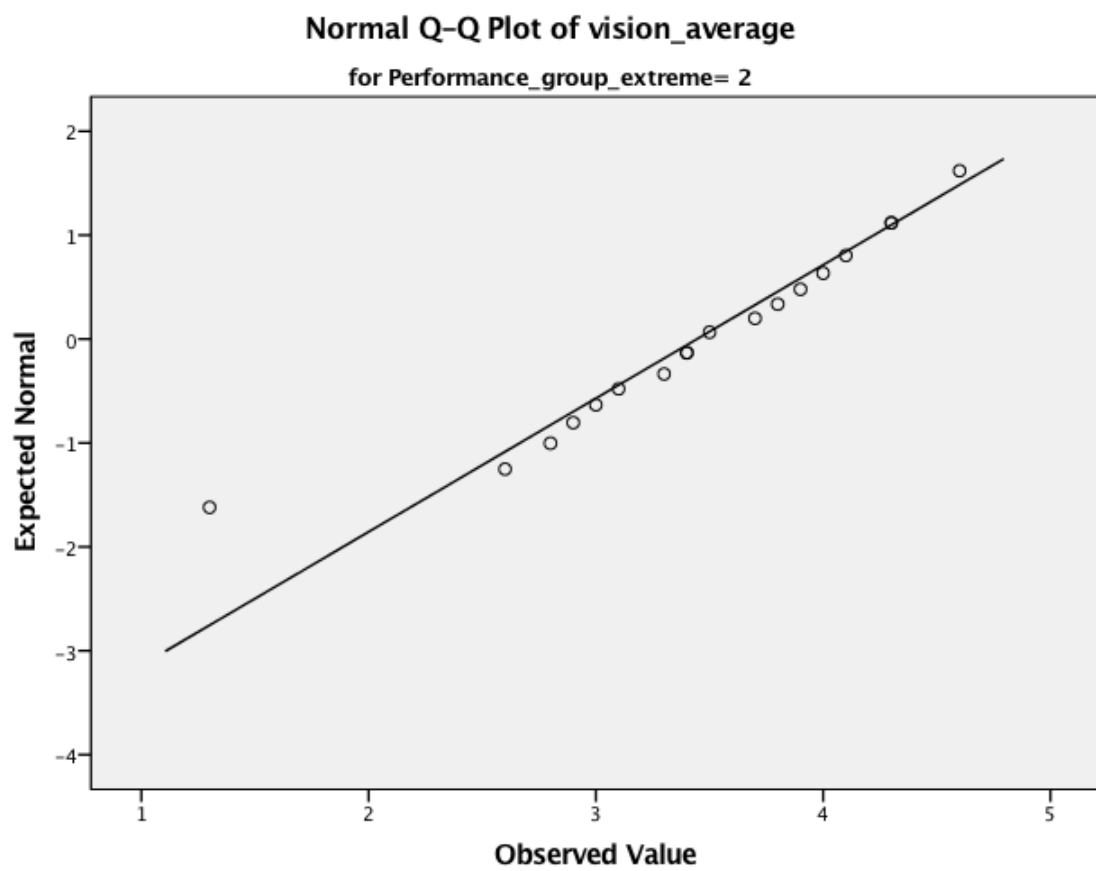
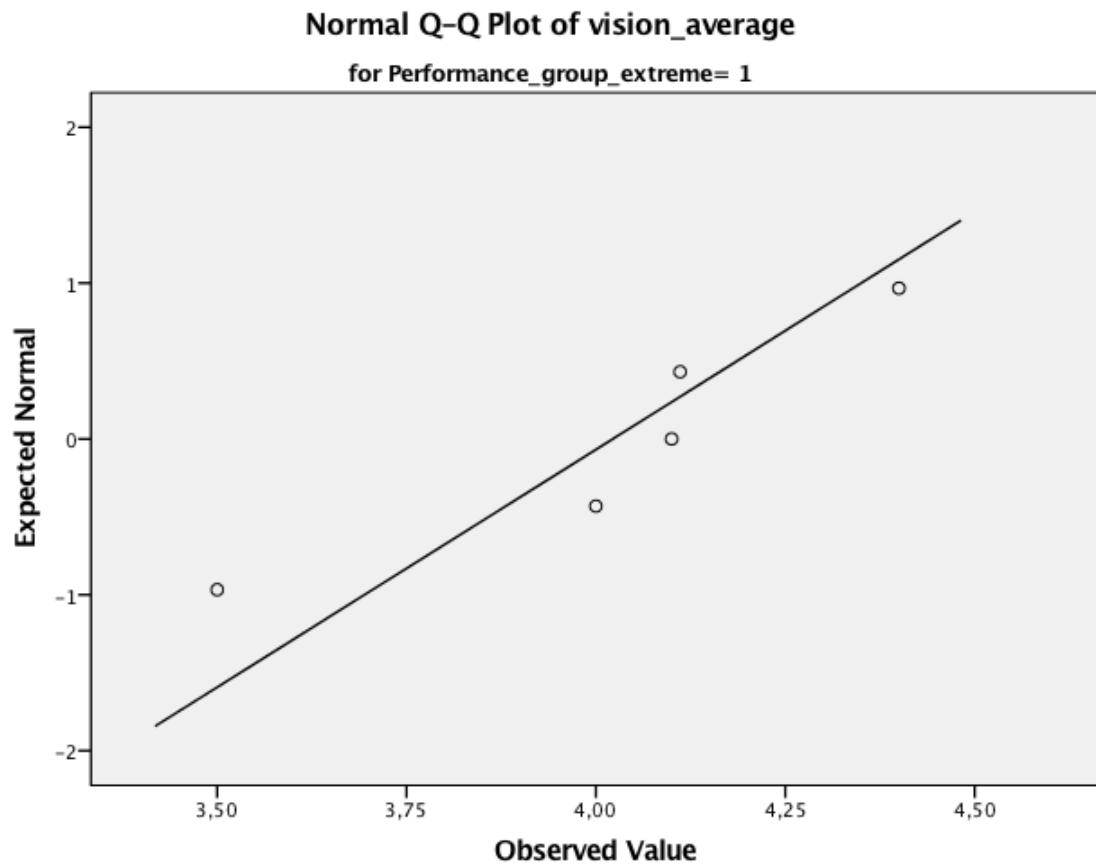
Appendix I: Test of assumption of normal distribution

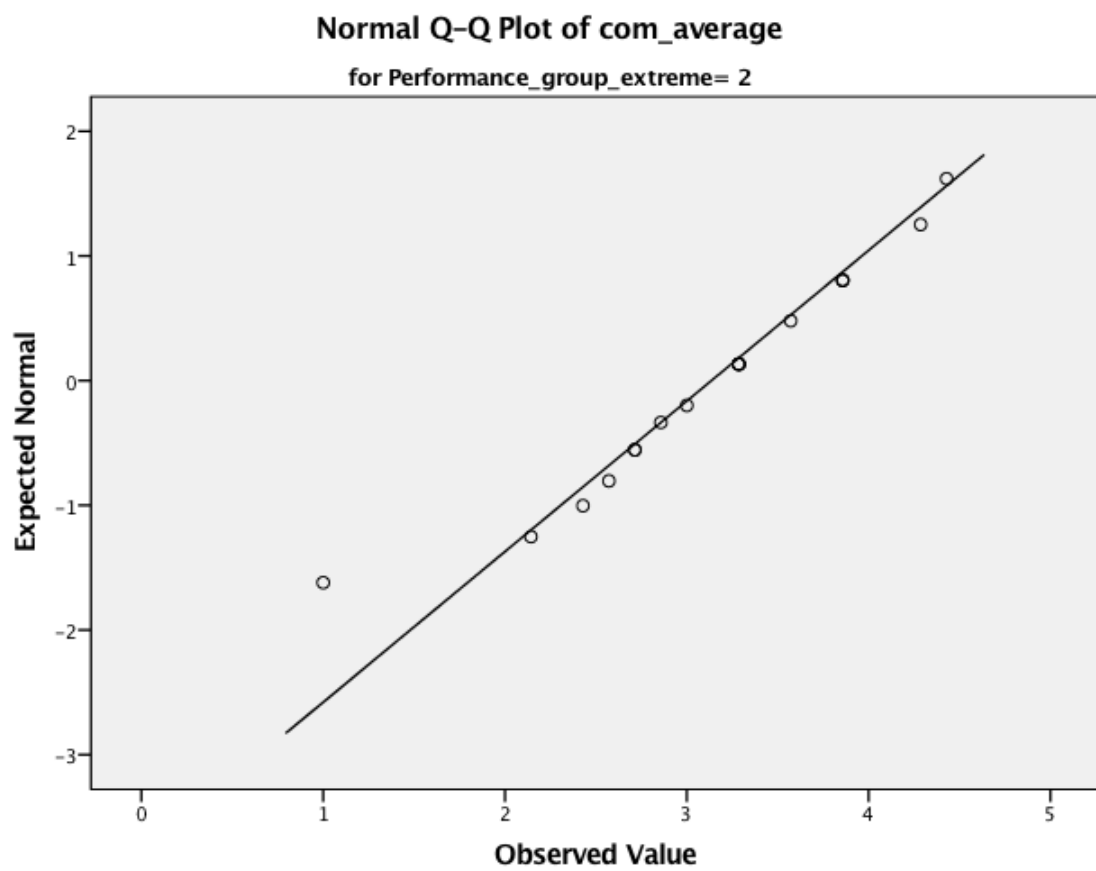
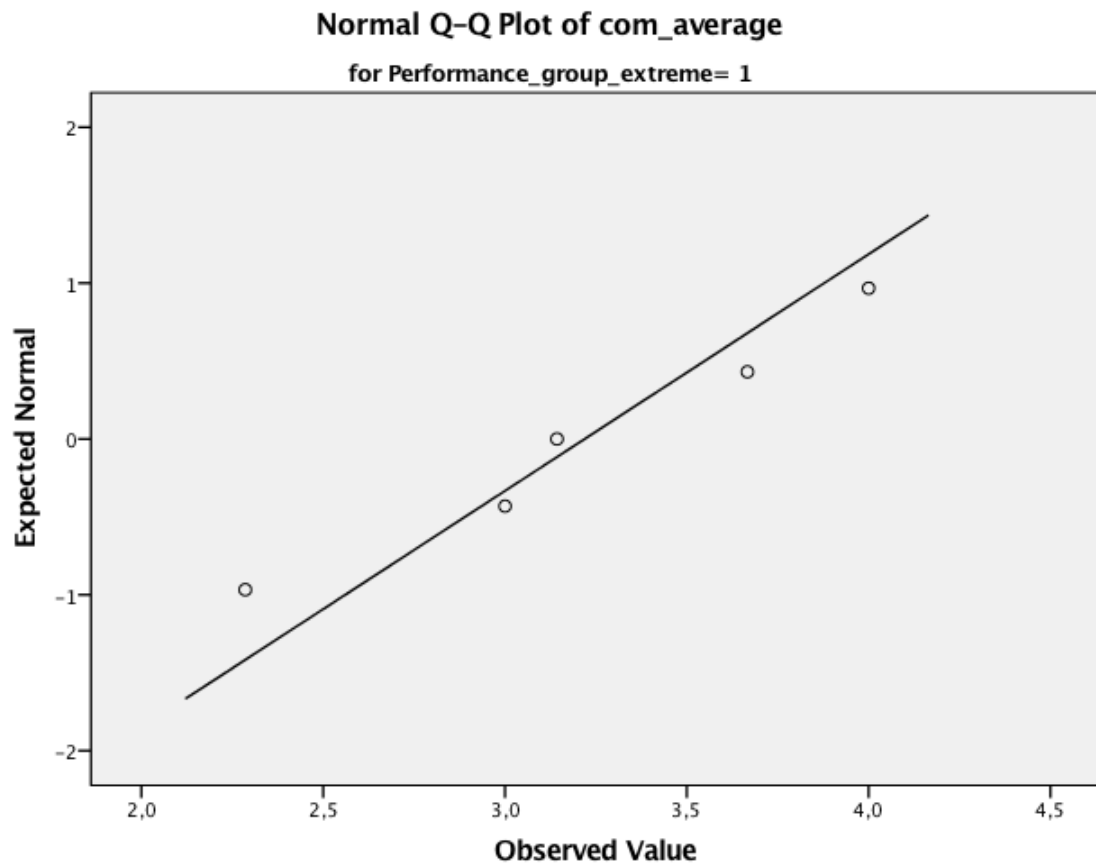
Normal Q-Q Plots

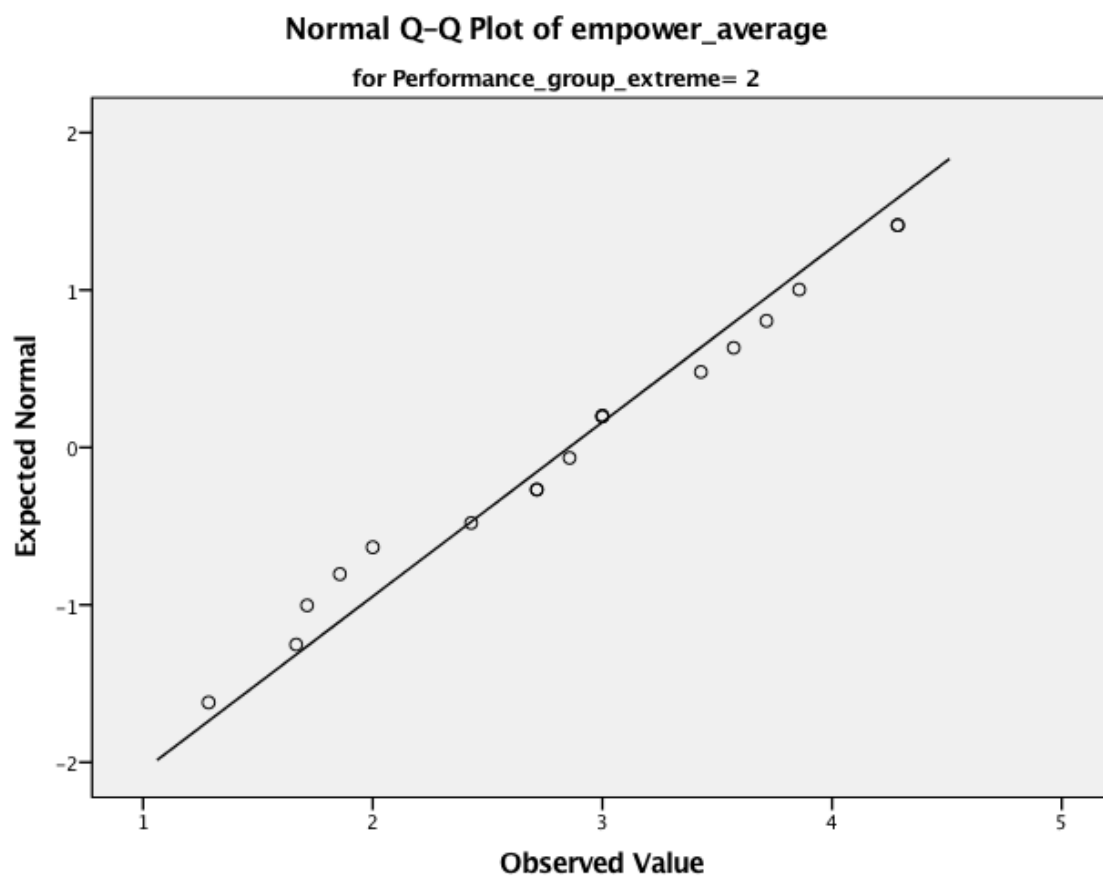
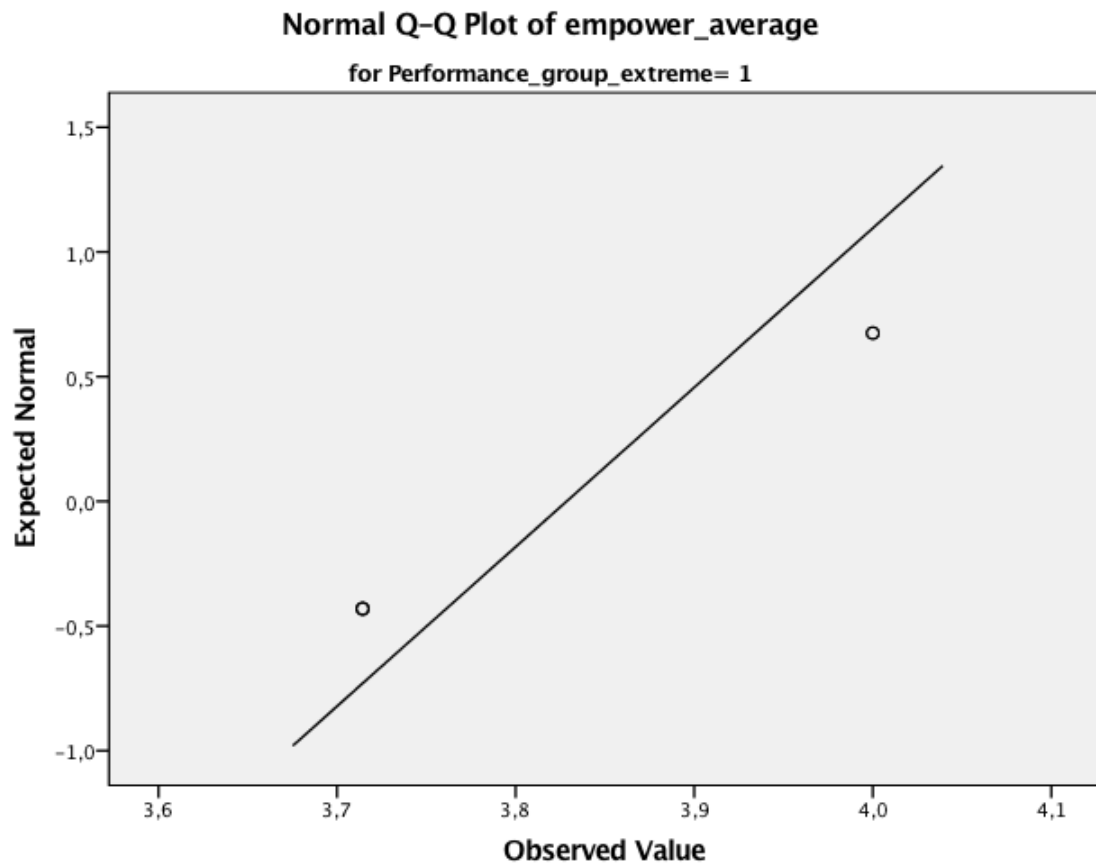


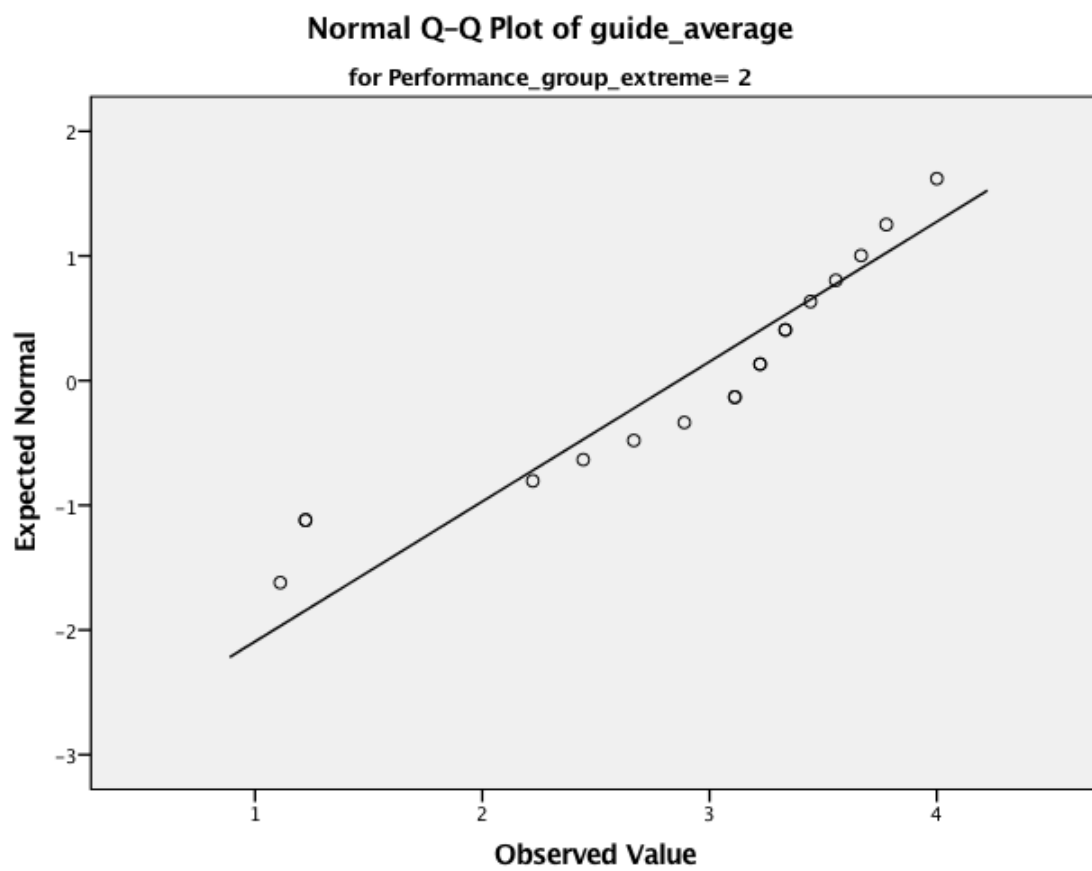
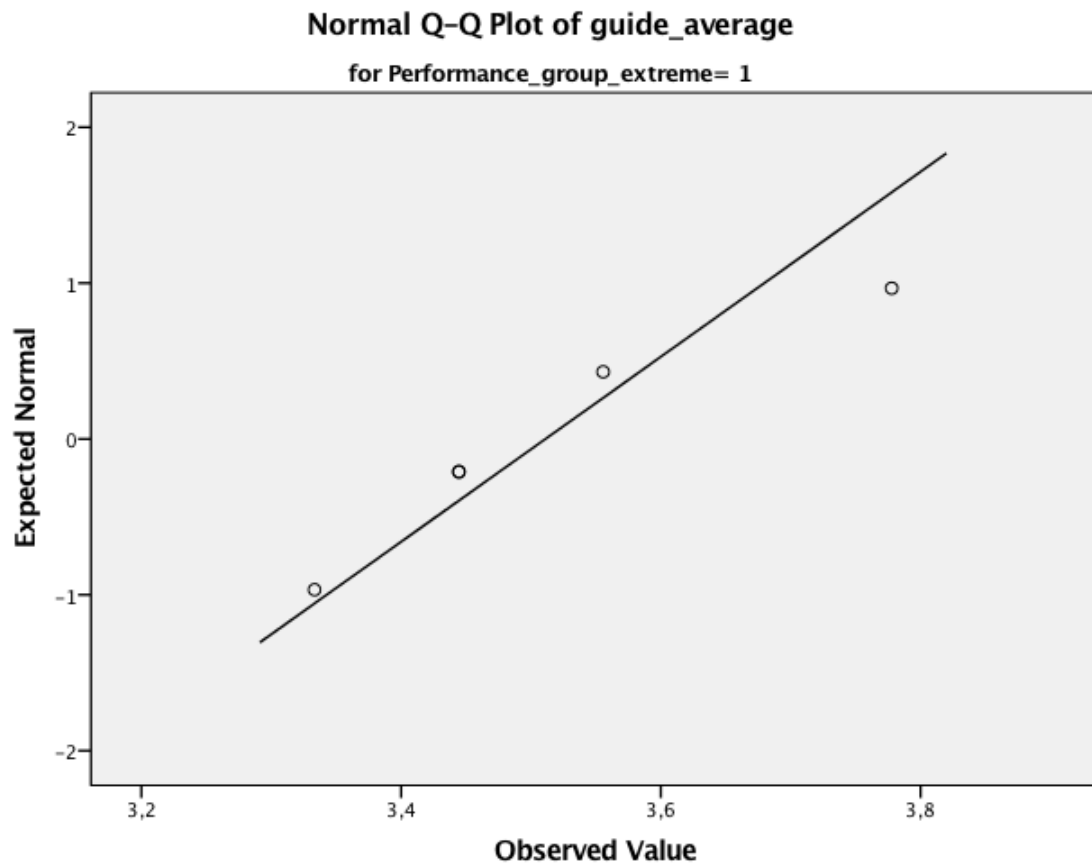


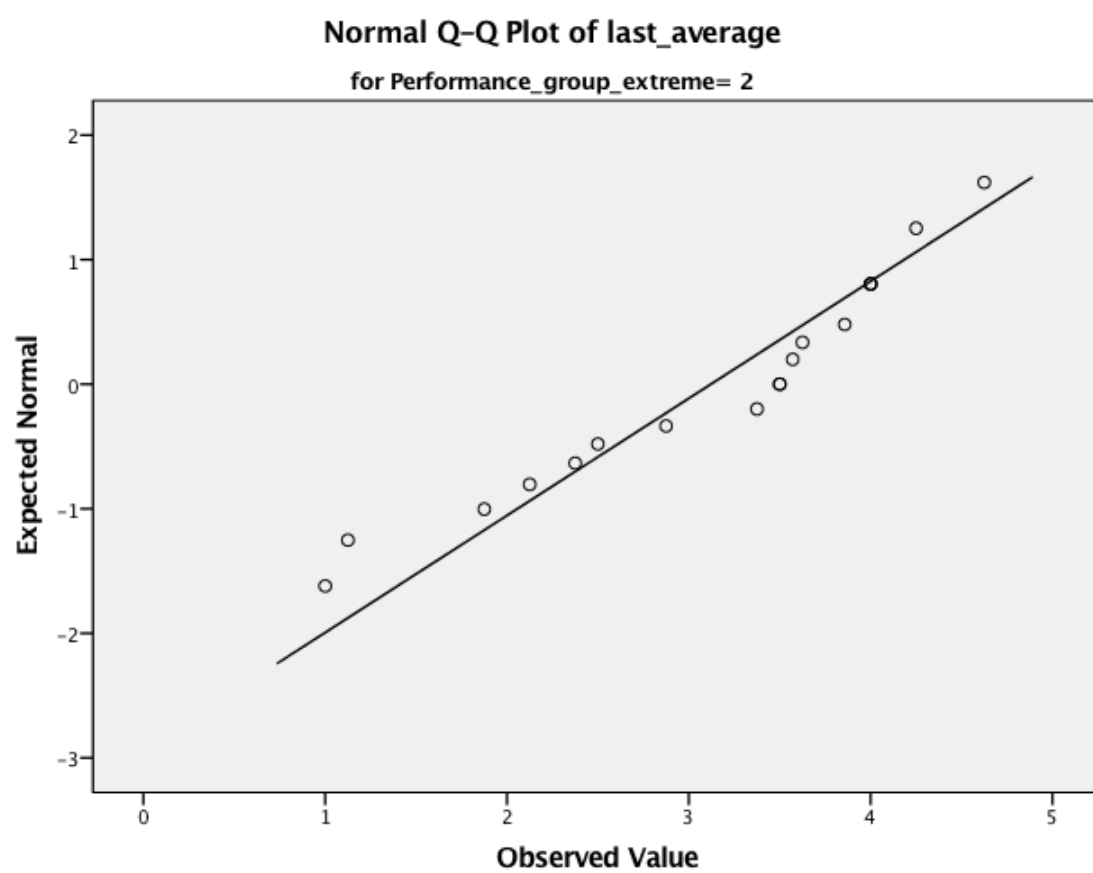
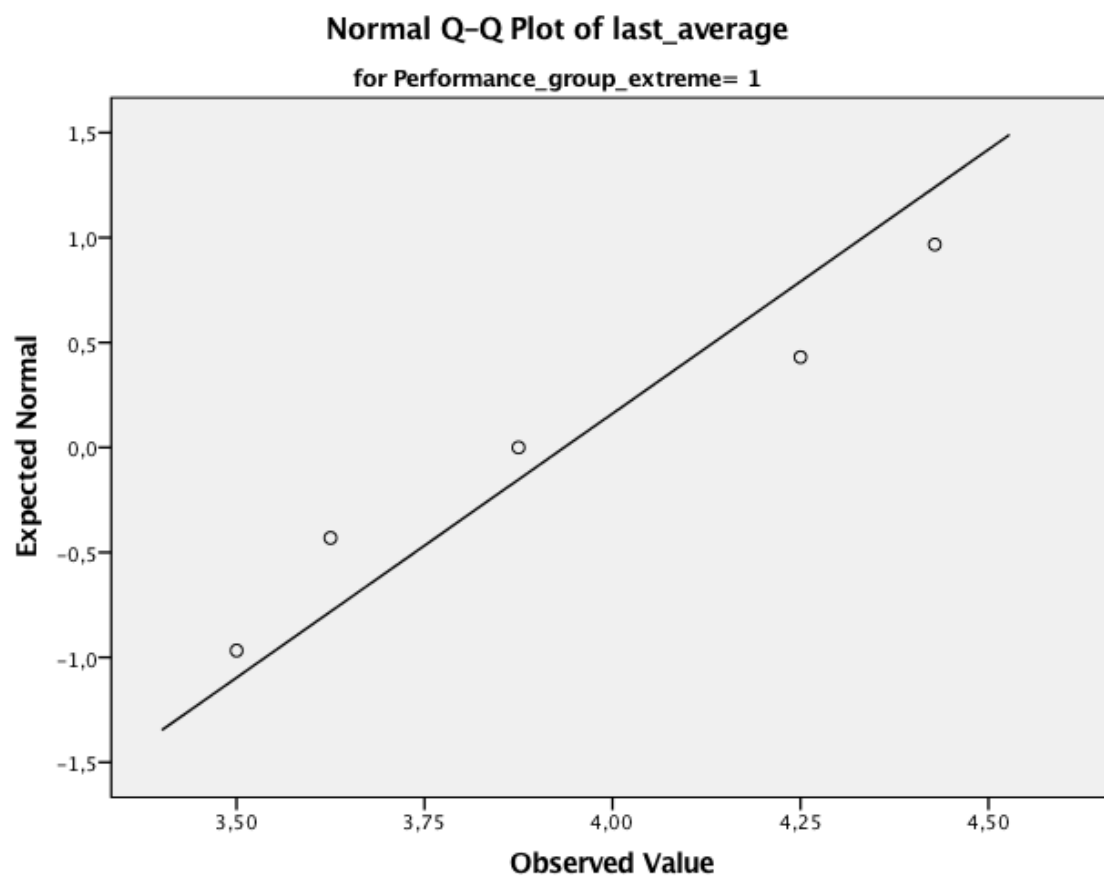












Appendix J: Mann-Whitney U Test

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
vision_average	28	3,6472	,71931	1,30	4,70
Performance_group_extreme	28	1,75	,441	1	2

Mann-Whitney Test

Ranks

	Performance_group_extreme	N	Mean Rank	Sum of Ranks
vision_average	1	7	20,79	145,50
	2	21	12,40	260,50
	Total	28		

Test Statistics^a

	vision_average
Mann-Whitney U	29,500
Wilcoxon W	260,500
Z	-2,338
Asymp. Sig. (2-tailed)	,019
Exact Sig. [2*(1-tailed Sig.)]	,017 ^b

a. Grouping Variable:
Performance_group_extreme

b. Not corrected for ties.

Appendix K: Overview of Variables

Define the Initiative	
Variable	Operationalization
define_t	To which degree, before the M&A, did you - Thoroughly analyze your strengths and weaknesses?
defin_1	To which degree, before the M&A, did you - Identify challenges and opportunities?
defin_2	To which degree, before the M&A, did you - Assess the impact of the M&A?
defin_3	To which degree were employees and middle-managers involved in the process of identifying the need and/or the opportunity to merge/acquire?
Challenge status quo	
Variable	Operationalization
csq_1	To which degree did the employees understand why the M&A was important?
csq_2	How often did the organization emphasize that the M&A was necessary in front of the employees before the M&A?
csq_3	Approximately, what percentage of all managers were convinced that the M&A was absolutely necessary?
csq_4	To what degree did the company clarify to the employees the consequences of not doing the M&A?
csq_5	Before the M&A, to which degree were the following the case in the organization? - The absence of a major and visible crisis
csq_6	Before the M&A, to which degree were the following the case in the organization? - Too many visible resources
csq_7	Before the M&A, to which degree were the following the case in the organization? - Low overall performance standards and goals
csq_8	Before the M&A, to which degree were the following the case in the organization? - Organizational structures that focus employees on narrow functional goals
csq_9	Before the M&A, to which degree were the following the case in the organization? - Internal measurement systems that focus on inappropriate performance indexes
csq_10	Before the M&A, to which degree were the following the case in the organization? - A lack of sufficient performance feedback from external sources
csq_11	Before the M&A, to which degree were the following the case in the organization? - A kill-the-messenger-of-bad-news, low candor, low confrontation culture
csq_12	Before the M&A, to which degree were the following the case in the organization? - Employees denying the need for a M&A
csq_13	Before the M&A, to which degree were the following the case in the organization? - Too much happy talk from senior management
Lead the change and build a change leader team	

Variable	Operationalization
lead_1	To which degree did you have - a leader who owned and championed the M&A?
lead_2	To which degree did you have - a leader who was publicly committed to making the M&A succeed?
lead_3	To which degree did you have - a leader who put in the personal time and attention needed to make the M&A work?
lead_4	Did the leaders of the M&A - Believe that the M&A was the key to competitiveness?
lead_5	Did the leaders of the M&A - Have the ability to articulate the belief that the M&A was the key to competitiveness?
lead_6	Did the leaders of the M&A - Have the people-skills and organizational know-how to follow through with the M&A?
lead_7	Did the company establish and make use of a guiding coalition/a project group to head the M&A process?
lead_8	To which degree would you assess the team in charge of the M&A on these four characteristics: - Position Power
lead_9	To which degree would you assess the team in charge of the M&A on these four characteristics: - Expertise
lead_10	To which degree would you assess the team in charge of the M&A on these four characteristics: - Credibility
lead_11	To which degree would you assess the team in charge of the M&A on these four characteristics: - Leadership Skills
lead_12	To which degree were members of the team, which was ahead of the M&A, belong to different stakeholder-groups?

Develop a vision

Variable	Operationalization
vision_1	To which degree - Did the company develop a vision for the M&A?
vision_2	To which degree - Did employees understand the outcome of the change in behavioral terms?
vision_3	To which degree - Did employees understand how the M&As would benefit themselves, customers and other stakeholders?
vision_4	To which degree did the vision of the M&A - Convey a picture of what the future would look like?
vision_5	To which degree did the vision of the M&A - Appeal to the long-term interests of employees, customers and other stakeholders?
vision_6	To which degree did the vision of the M&A - Comprise realistic and attainable goals?
vision_7	To which degree did the vision of the M&A - Focus on manageable and coherent sets of goals?
vision_8	To which degree did the vision of the M&A - Have the ability to adapt to changing circumstances?
vision_9	To which degree did the vision of the M&A - Have the ability to be easily communicated to different levels?
visio_1	To which degree were more people than a sole leader involved with developing the vision for the M&A

Communicate the change vision	
Variable	Operationalization
com_1	In the period of communicating the vision for the M&A, to which degree do you agree that the communication was - Simple (e.g avoiding jargon and technical terms)
com_2	In the period of communicating the vision for the M&A, to which degree do you agree that the communication was - Utilized metaphors, analogies and examples?
com_3	In the period of communicating the vision for the M&A, to which degree do you agree that the communication was - Given through multiple sources and channels?
com_4	In the period of communicating the vision for the M&A, to which degree do you agree that the communication was - Repeated?
com_5	In the period of communicating the vision for the M&A, to which degree do you agree that the communication was - Personified in the actions of top-management?
com_6	In the period of communicating the vision for the M&A, to which degree do you agree that the communication was - Used to explain seeming inconsistencies between the change vision and what the leaders stand for and/or represent in their behavior?
com_7	In the period of communicating the vision for the M&A, to which degree do you agree that the communication was - Two-way communication?
Empower people for change	
Variable	Operationalization
empower_	To which degree - Did the leaders of the change recognize the effects of the M&A on the company's structures and systems?
empow_1	To which degree - Did the company physically rearrange the office space due to the M&A?
empow_2	To which degree - Were the formal structures aligned with the M&A change vision?
empow_3	To which degree - Were more responsibilities or an increased variety in their assignments given to employees in relation to M&A?
empow_4	To which degree - Were training and development opportunities provided for the employees in relation to the M&A?
empow_5	To which degree - Were compensation and performance-appraisal systems aligned with the vision of the M&A?
empow_6	To which degree - Were bosses who refused to change and made demands inconsistent with the M&A change vision confronted?
Guide and motivate the change process	
Variable	Operationalization
guide_1	To which degree - Did the organization have the means of measuring the success of the M&A?
guide_2	To which degree - Did the organization plan to benchmark progress on both the results and the process of implementing the changes?
guide_3	To which degree - Did you plan for short-term wins (within 6-18 months)?
guide_4	To which degree were these short-term wins - Visible to employees?

guide_5	To which degree were these short-term wins - Unambiguous?
guide_6	To which degree were these short-term wins - Clearly linked to the change initiative of the M&A?
guide_7	To which degree were these short-term wins - Celebrated?
guide_8	To which degree were the celebrations - Public?
guide_9	To which degree were the celebrations - Used to recognize individual contributions?

Make change last	
Variable	Operationalization
last_1	To which degree - Has the company used the initial change momentum to initiate greater changes?
last_2	To which degree - Were and are the criteria of promotion-decisions in accordance with the new practices from the vision of the M&A?
last_3	To which degree - Was and is employee turnover managed in accordance with the new practices from the vision of the M&A?
last_4	To which degree do you assess that the new approaches have been anchored in the organization's - Culture?
last_5	To which degree do you assess that the new approaches have been anchored in the organization's - Policies?
last_6	To which degree do you assess that the new approaches have been anchored in the organization's - Systems?
last_7	To which degree do you assess that the new approaches have been anchored in the organization's - Reporting Relationships?
last_8	To which degree do you assess that the new approaches have been anchored in the organization's - Practices?