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Post-merger integration leader and acquisition success: A theoretical model of perceived linkages to success of mergers and acquisitions

A DISSERTATION

SUBMITTED TO THE FACULTY OF THE SCHOOL OF EDUCATION

OF THE UNIVERSITY OF ST. THOMAS

By

Asha Prasangi De Alwis

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

DOCTOR OF EDUCATION

UNIVERSITY OF ST. THOMAS

We certify that we have read this dissertation and approve it as adequate in scope and quality.

We have found it complete and satisfactory in all respects, and that any and all revisions required by the final examining committee have been made.

Dissertation Committee

John P. Conbere, Ed.D., Committee Chair

Alla Heorhiadi, Ph.D., Ed.D., Committee Member

David W. Jamieson, Ph.D., Committee Member

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Abstract

It had become very clear that the post-merger integration process play an important role in realizing acquisition synergies identified at the outset of a merger thereby increasing the likelihood of merger success. While the general breadth of the topic post-merger integration is quite large, this study is focused more narrowly on the post-merger integration leadership. The extant literature of post-merger leadership identified a menu of leader competencies which were deemed important and were perceived to have a favorable influence on merger success.

Leveraging on previous research, this study posited and tested a theory which examined whether or not a select set of post -merger integration (PMI) leader competencies positively influence merger success. The multiple case study based findings along with other potential explanations of the study outcomes are discussed. The findings also help the PMI leader selection process by delineating a set of empirically tested set of leader competencies which may result in influencing merger success.

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Chapter I

Research Problem

The general topic of this research was the post-merger integration (PMI) process. This process refers to a host of activities undertaken to combine two previously separate organizations into one, after the merger agreement is completed. PMI activities are regarded as one of the critical components responsible for capturing synergies identified at the outset of the merger (Zollo & Singh, 2004). Carefully planned and thoughtfully executed merger integrations were cited as one of the means of reducing merger failures. An analysis of practices undertaken by recent merging companies have shown an increased utilization of planned post-merger integration activities (Birkinshaw, Bresman, & Hakanson, 2000; Epstein, 2004; Lajoux, 2006; Marks & Mirvis, 2000; Pautler, 2003; Picot, 2002; Sirower & Stark, 2001). The maturity of merger integration as a subject matter was evidenced not only by the number of organizations opting to use planned merger integration activities but also by the increasing number of management consultancies offering post-merger integration services and publications in both academic and practitioner journals (Adolph et al., 2001; Epstein, 2004; Simpson, 2000; Sirower & Stark, 2001; Tinlin, Dier, Dailey, & Herd, 2009).

This research focused more narrowly on PMI leadership, which was a subset of the broader post-merger integration process described above. While merger integration management was extensively studied, the role of merger integration leadership had received relatively less attention. Even within the merger integration leadership studies, not many studies were available

that takes the perspective of validating the seemingly long list of prescriptive managerial and leadership characteristics attributed to PMI leaders.

This study builds on the current literature of merger integration leadership. The researcher attempted to contribute important and timely knowledge towards the literature by discovering whether and how the prescribed leadership characteristics translate into influencing merger success. The PMI leadership subject matter was also of personal interest to the researcher due to her direct experience with M&A activities such as financing, valuating, and planning of merger integrations.

One aspect of contributions already made to the knowledge and practice of merger integration leadership has focused on the organizational structures of integration teams. The structural configurations of post-merger integration hierarchies vary (Marks & Mirvis, 2000; Picot, 2002). For example, some organizations opt for establishing dedicated integration management departments while others follow a temporary committee structure. There were also other organizations that involved specialized external consultants to augment their optimal transition management teams. Experts generally recommended that the PMI activities be led by a *team* as opposed to one individual. The team may be headed by an influential leader within the acquiring organization (Ashkenas & Francis, 2000; Shelton, 2003; Sirower & Stark, 2001).

The common denominator of all the PMI team configurations mentioned above are such that, at the helm resided a top level executive often chosen by the CEO and/or Board of Directors who was freed from the daily responsibilities of his or her original position and is now given the full-time task of transition management. The underlying leadership strategy for this arrangement was to allow the CEO to continue to lead the recently merged company from the front while the

appointed integration leader led from the back during this complex and tumultuous time of merger integration (Epstein, 2004; Shelton, 2003; Sirower & Stark, 2001). In the context of PMI, this arrangement is a form of division of leadership labor. That is, the CEO remained the ultimate decision maker and motivator of the integration process while also continuing to be in charge of the ongoing business. The appointed upper level integration leader on the other hand, was to act as a temporary CEO to the critical combination effort. His task was to fuse the previously separate entities into one in a manner that allows the acquirer to harvest the synergies the merger promised. By appointing an upper level leader with well-developed strategic and interpersonal skills, the acquirer attempted to reduce the risk of merger failure.

Regardless of the name given to the integration team, whether they were called PMI teams, senior leaders, coordinators, steering committees or combination coordination councils, the composite group provided important oversight, direction and tone to the merger integration. Such guidance was important because the merger integration phase typically begins to shape the new company and its ability to deliver the synergies promised at the signing of the deal.

The announcement of an M&A is often followed by a period of wide spread uncertainty among members of both organizations. The uncertainties range from potential job losses to *merger induced changes* that may have an impact on what was perceived to be normal organizational routines. Lowered trust, commitment, and productivity as well as increased absenteeism and turnover are likely resulted due to these uncertainties (Buono, Bowditch, & Lewis, 1985; Ivancevich, Schweiger, & Power, 1987; Nahavandi & Malekzadeh, 1988). The above difficulties may put additional strain on the already difficult task of integrating previously separate organizations. The integration leaders therefore, must be capable of managing both

operational and emotional aspects of post-merger integration (Hammer & Falik, 2004; Marks, 2006; Shelton, 2003).

The current PMI experts offer little tangible advice beyond that of "move decisively in the first hundred days," "pay attention to culture," and "communicate-communicate-communicate" (Sirower & Stark, 2001, p. 34). However, some focus their attention on the distinguishing character attributes of PMI leaders and claim that specific leadership characteristics had a positive impact on the merger integration activities and thus help influence overall merger success. Among these prescriptive characteristics were; proven general management skills, highly developed interpersonal and communication skills, ability to recognize and address both technical and psychological issues, and leaders heightened comfort with chaos and uncertainty that arise during the highly charged and complex environment of merger integration. These leaders were also said to be courageous, politically astute, trusted and respected by all levels of employees and adept in emotional and cultural intelligence (Ashkenas & Francis, 2000; Covin, Kolenko, Sightler, & Tudor, 1997; Lind & Stevens, 2004; Shelton, 2003).

The selection of the PMI leadership must be considered more carefully, because the mere assignment of an individual or group does not equate their effectiveness in conducting position related duties proficiently (Ashkenas, DeMonaco, & Francis, 1998; Marks & Mirvis, 2000; Shelton, 2003; Sirower & Stark, 2001; Veiga, Lubatkin, Calori, & Very, 2000). The influence of PMI leader competencies on merger integration had received intuitive validity and thus was widely perceived as one factor that affects merger success. Despite the appointment of seemingly competent leaders to oversee integrations, some mergers fail while others succeed.

Thus far, there are no known studies in the acquisition integration leadership literature that seek to empirically validate the claim that PMI leadership competencies do influence merger success.

Research Purpose

The idea of PMI leadership competencies had received mostly conceptual development and little empirical attention. An analysis of the literature on the post-merger leader role offered a list of prescriptive characteristics of a successful PMI leader. Despite acquirers growing propensity to use planned integration activities and the appointment of seemingly competent integration leaders, achieving merger success continued to encounter serious challenges (Ashkenas et al., 1998; Buono & Bowditch, 1989; Quah & Young, 2005). The reasons for merger failures were poorly understood, particularly from a management control point of view. Specifically, the purpose of this research was to examine if PMI leaders with select competencies were more capable of guiding the multi-faceted post integration activities, thereby increasing the likelihood of merger success.

Research Question

There was no research the researcher could discover, that explored the relationships between select PMI leader characteristics and their effect on influencing merger success.

Therefore, this research attempted to answer the following question: How do PMI leaders' Emotional Intelligence and their culture specific competencies influence merger success?

Definition of Terms

Several of the key terms integral to this research are defined below:

Merger & Acquisitions: In this study the terms *mergers* and *acquisitions* are used

interchangeably to refer to the same; combination of previously independent organizations after

they have come under common ownership (Lajoux, 2006).

Merger success: The achievement of financial and strategic outcomes identified at the

outset of the merger. Typically, the appropriate performance measures included meeting of the

financial and synergistic expectations that were identified at the time of the deal. It was assumed

that an organization's ability to create long-term cash flow ultimately drove value creation thus,

merger success. The discipline of finance, which takes a deterministic view, defined cash-flows

as derived from Return on Invested Capital (ROIC) and revenue growth. On a micro level, they

were two variables which fed into a quantifying financial equation. However, in this study, the

value creation (i.e., long term cash flow generation) was expanded to include not only the two

variables mentioned earlier but also the actions such as managerial interventions in allocating

capital, physical and human resources to generate long-term cash-flow. As such, merger success

need not always be in terms of profit maximization but also in the generation of most good for

the firm (Angwin, 2007). Further explanation of how merger success is measured in this

research is found in 0Theoretical Model section.

Merger failure: Failing to reach projected financial and synergistic expectations and in

extreme cases, a resale, liquidation or divestiture.

Management control point of view: Methods by which potential can be realized using

management action.

Integration: Combination of elements that results in wholeness.

Post-merger integration: The process of achieving inter-firm coordination, system control and other combining elements that will enable the two companies to function as one. This term incorporates any procedural, physical, managerial and socio-cultural integration activities resulting due to a merger or acquisition (Shrivastava, 1986).

Post-merger integration manager: An individual or team depending on the temporary management architecture adapted by merging organizations. If an individual, PMI manager refers to the person in charge of the oversight of integration efforts necessary to combine two separate entities into a functioning whole. In a team situation, PMI manager will be the final decision maker by rank, experience or otherwise. In either case, the integration manager will be a top management team member who was most involved with the integration activities of the focal merger.

Organizational culture: A pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems (Schein, 2011).

Managing culture: Actions relating to locating and reducing cultural disparities.

Cultural due diligence: Culture specific research and analysis activities undertaken during the early phase of mergers and acquisitions. The goal was to discover and/or assess the culture related inter-organizational similarities and differences which may subsequently impact integration efforts and synergy capture.

PMI leader organizational cultural competence: The integration and transformation of knowledge about individuals and groups of people into leader's behaviors and attitudes in a manner which enable him/her to work effectively in organizational situations (NASW, 2001).

Emotional intelligence: The greater capacity of some individuals than others to carry out sophisticated information processing about emotions and emotion-relevant stimuli and to use this information as a guide to thinking and behavior (Mayer, Salovey, & Caruso, 2008).

Goleman defined emotional intelligence as "the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships" (1998, p. 317). (Although this research utilized Daniel Goleman's EI measurement method, the researcher considered both definitions of EI as provided by Daniel Goleman as well as Salovey & Mayer.)

Empirical indicators: Indicators that are used to measure the values of the units included in a theoretical model. The value of the unit produced by an empirical indicator may be a "number" such as a test score, position on a scale or a dial reading. This value could also be a "category" such as present or absent, central or peripheral, dominant or submissive (Dubin, 1978).

Chapter II – Literature Review

This section attempted to sketch in an area of intellectual activity within the subject matter of mergers & acquisitions integration and its leadership. This research used the terms *merger* and *acquisition* interchangeably to refer to the combination of previously independent organizations after they have come under common ownership (Lajoux, 2006). This generic view is not always accepted within the research and business community citing the differences between the processes by which the two entities are united. For instance, a *merger* implies a consensual element to the joining of entities (i.e., non-hostile, merger of equals) while an *acquisition* refers to acquiring of a controlling interest of assets of the target company with or without the consent of the target company (Davies, Bannock, Uncles, & Trot, 2003). Given this study is firmly situated in the purposeful post-merger integration leadership, the researcher continued to use the terms interchangeably to refer to the combination of previously independent organizations after they had come under common ownership.

The literature review is structured as follows: First, an overall review of the post-merger integration was conducted under the thematic subcategories of Strategy, Human Resources and Culture. Next, specific attention was given to PMI leader role related literature. This is followed by a brief introduction to the conceptual roots of Emotional Intelligence and Organizational Culture along with their application to PMI studies. The chapter concludes with a summary of the literature review.

Post-Merger Integration

One important subset of thinking within the body of extant literature on M&As is concerned with post-merger integration (Birkinshaw et al., 2000; De Noble, Gustafson, & Hergert, 1988; Epstein, 2004; Koch, 2002; Marks & Mirvis, 2000; Pribilla, 2002; Shrivastava, 1986). Given the multidimensional nature of the topic, the researcher loosely subdivided the selected literature under three categories; Strategy, Human Resource (HR), and Culture. The research categorized under the strategy perspective includes studies that focused on management action, methods of integration, and capability transfer etc. Human Resource focused on studies that capture the human side of integration, conflict resolution, and communication. Culture perspective summarized the findings of the post-merger integration studies whose main focus was on organizational or international culture.

Strategy. The selected studies under the strategic perspective were in agreement that post-merger synergistic benefit realization was made viable through successful integration efforts (Haspeslagh & Jemison, 1991; Larsson & Finkelstein, 1999; Pablo, 1994; Shrivastava, 1986). In their study Larsson & Finkelstein (1999) proposed and tested an integrative model as to how the synergy realization was a function of "similarity and complementarity of the two merging entities, the extent of interaction and coordination during the organizational integration process, and the lack of employee resistance to the combined entity" (p. 1). Their study is different from others in that they pooled multiple synergy realization perspectives such as economics, finance, strategy, organizational theory, and human resource management into one robust process-oriented model. Their study found that similarities in the management styles of merging entities tend to reduce employee resistance during organization combination phase (Larsson & Finkelstein, 1999).

Three seminal works, identified as such by the collective research community, by Haspeslagh and Jemison (1991), Marks and Mirvis (1998), and Nahavandi and Malekzadeh (1988), have attempted to demystify the linkage between integration management and merger success by focusing on the modes by which merging firms can combine previously separate entities into one cohesive whole. Although each of the three studies utilized different terms to express the modes, the underlying conceptual consistencies remained largely intact (Ellis, 2004; Ellis & Lamont, 2004). Collectively they proposed four integration modes or typologies, namely a) preservation, b) symbiotic, c) absorption, and d) transformation (Haspeslagh & Jemison, 1991; Marks & Mirvis, 1998; Nahavandi & Malekzadeh, 1988). The preservation mode allows the acquired entity to remain largely intact thus requiring very little change. The means by which this mode make way for merger success was through a) less intrusion by acquirer, and b) allowing the acquired firm to maintain their own resources and capabilities (Larsson, Brousseau, Driver, & Sweet, 2004). The second integration mode identified within the three collective works was called *symbiotic*, in which the integration efforts purposefully attempted to marry the core competencies of both firms. The merger success in this case was dependent on how best the integration efforts were able to fuse the best of both organizations. The absorption mode, as the name suggests, called for the consolidation of the acquired entity into the acquiring firm. This invariably required a significant amount of change on the part of the acquiring firm (Larsson et al., 2004). The link through which the absorption mode contributed to merger success was through speed and effectiveness of the integration activities. The last mode by which merging firms could achieve merger success was called transformation. This mode assumed that both acquiring and acquired firms go through significant amount of change during the integration such that they give up their respective operational and cultural capabilities in exchange of

something completely new (Ellis, 2004; Ellis & Lamont, 2004). Achieving merger success through this mode required that the combining organizations had a clear vision for the future, a blueprint for the new organizational structure, involved leadership of both firms in the integration activities, and lastly established a temporary transition management structure to oversee integration efforts (Ellis, 2004, p. 118).

The above research work conducted to identify the processual modes of merger integration had made a significant contribution to the overall merger integration literature. Collectively the authors provided a blue print through which one was able to categorize the complex field of merger integration. This descriptive framework resulted in motivating increased intellectual activity within the topic of merger integration process (Ellis & Lamont, 2004).

Building on the integration modes described above, a second study by Ellis and Lamont (2004), examined whether differences existed in terms of how the integration process was managed across the four integration modes. First, the authors identified an exhaustive list of the critical process dimensions prescribed in all four integration approaches (i.e., general operating environment, preliminary planning, and transition management). The study results indicated that differences did exist in all three process dimensions as incorporated by the integration approaches; absorption, symbiotic and transformation (Ellis, 2004; Ellis & Lamont, 2004). For example, merging entities employing a *transformation approach* to integration efforts tend to have a more extensive and formal integration management structure than those organizations employing an *absorption* or *symbiotic* approach (Ellis, 2004). Although such a result was expected in terms of the *transformation* approach, the authors found it surprising that the *symbiotic* approach, which sought to combine the best of both organizations, did not have an

extensive transition management structure in place. The study's contribution to the extant literature indicated that "the emphasis placed on the various process dimensions does, in fact, vary depending upon the chosen integration approach, although not entirely in ways consistent with guidelines prescribed by the three sets of researchers (Ellis, 2004, p. 128).

Larsson et al., (2004), who studied case surveys of 61 mergers and acquisitions, found that 60-70 percent of merger success (success defined as synergy realization) was explained by three factors of success, namely, a) high strategic potential of the merger, b) high organizational integration, and c) low employee resistance (Larsson et al., 2004). According to the authors, the businesses appeared to have learned the key strategic and organizational integration factors that contributed to success while continue to struggle in learning to decrease employee resistance. Collectively, the authors offered advice in managing the latter. In particular, their study recommended a *co-competence and motivational approach* to merger synergy capture which they believe was the key ingredient in achieving merger success. Although not without difficulties, the key source of this approach's advantage stem from its management of the human side of M&A as they advocate for compromise, mutual respect, and inter-firm learning.

Shrivastava (1986) claimed that though rapid organizational growth can certainly be achieved through M&A, the ability to sustain the growth and performance firmly resides on how well the entities are integrated following the merger. To this end, he was one of the first researchers who initially identified three types of post-acquisition integration approaches: a) procedural, b) physical, and c) managerial/sociocultural which provided a framework for identifying integration needs in merging organizations. Shrivastava's three approaches do not contradict with the four integration approaches of Larsson et al., (2004), discussed earlier. The latter was a refinement and extension of Shrivastava's work. Procedural integration involved the

combination of systems procedures and rules while physical integration focused on the resource consolidation such as assets and equipment. Managerial/sociocultural integration according to Shrivastava was the most difficult and least examined aspect and it involved integration issues related to transfer of managers, changes in organization structure, development of consistent organizational culture, gaining of commitment and motivation from personnel, and unified guide to strategic decision making (Shrivastava, 1986). Despite the proposition that there were three integration types, the author held that they are neither recommended nor required for every merger situation. Instead, he recommended that organizations determine the optimal degree of integration required based on the "objectives of the merger" and "size and form of the merging companies" (Shrivastava, 1986, p. 73). Shrivastava's study still remain among the early critical works pertaining to post-merger integration literature and his call for greater understanding and exploration of the managerial/sociocultural issues of integration continued to garner much academic and practitioner attention. This study sought to respond to Shrivastava's specific call for merger integration activities from a managerial perspective. As such, this research took on an integration management leadership perspective with particular attention given to characteristics within managerial control.

Lastly, according to Pablo (1994) previous research had identified a variety of situational factors that contribute to corporate leader's decision making about the level of integration necessary following a merger. She summarized these factors as task, cultural and political. Given extant literature have not tested how these factors empirically manifest, Pablo sought to assess how and to what extent, these factors influenced managers' judgments about the level of integration. For the 56 executives included in her study, task related factors played a dominant role in managers' decision making models while cultural and political factors were also deemed

important. Her findings suggested a method by which company leaders can deliberately manage the integration process by viewing integration design decisions via multiple lenses (Pablo, 1994). More specifically, Pablo stated that when planning and implementing integrations, decision makers should first explicitly identify all three factors relevant to the acquisition and then specify the weights that should be attached to each factor. From a business policy point of view, Pablo's work is important because it demonstrated how the executive decision making that leads to planning and implementation of merger integrations could influence merger performance.

Human Resource. The identification and management of *human factors* of mergers continue to be an important research interest. This is because disruption of merger integration plans as well as merger success was attributed to personal, interpersonal, group and intergroup dynamics (Buono et al., 1985; Cartwright & Cooper, 1990; Ivancevich et al., 1987; Marks, 1982; Marks & Mirvis, 1985). In a 1999 survey, Hubbard found that more than half the respondents cited personnel problems as contributing factor for disappointing post-merger financial results (Pribilla, 2002). He explained further that employee inaction due to fear, withdrawal into internal resignation or even exiting the company for the competition, all lead to the same disastrous consequences of declines in productivity and customer focus that ultimately result in merger failure.

Most research argued in favor of creating a formal internal communication mechanism from the onset of the merger news release in order to limit employee anxiety and distress which is likely to be fueled by rumors and other sources (Ivancevich et al., 1987; Marks, 1982).

Although this early intervention was likely to mitigate anxiety, other researchers found evidences of continued heightened employee anxiety levels even with proactive information sharing (Buono, Weiss, & Bowditch, 1989; Marks, 1982). For example, Marks (1982) found that

regardless of the openness and level of communication, members of an acquired organization will typically still maintain feelings of suspicion and never feel fully informed. According to Buono, Weiss and Bowditch (1989) ongoing formal communication efforts are more successful if they are also supplemented by direct intervention by top level management. For example, the authors suggested that the top level management demonstrate earnest interest in interacting with employees and learning how much information they [employees] already have and what they still need to know. The authors believed that close interaction with employees by the top management help generate a two way communication system in which employees not only informed but also given an opportunity to raise questions and air their fears. While not all employee input and suggestion may be incorporated into follow-up actions by top management, the two way communication system was thought to a) show concern for human and professional issues on the ground (i.e., mitigate any adversarial us vs. them relationship), and b) proactively limit the dissemination of information that distort truth and manipulate people. Therefore, the authors held that the resultant reduction in employee anxiety levels serve as an important enabler in building employee support towards the merger integration efforts.

Another strand within the human resource related merger integration literature focused on the physical, psychological and behavioral effects on employees such as stress and anxiety (Ivancevich et al., 1987; Marks & Mirvis, 1985, 1992). Merger related stressors range from potential job loss, changes in roles-salaries and benefits, derailed career paths, changes in organizational power, prestige, and loss of organizational culture and identity. In their work Ivancevich et al. (1987) found that the *uncertainty, duration, and imminence*, collectively identified as *stress responses*, were responsible for influencing the stress intensity. To mitigate the inevitable merger related stress, the authors outlined guidelines and interventions which

ought to be taken by the merging organization (i.e., executives, HR professionals) and individual employees. Included among the organizational interventions were the timely management of rumors, accurate and realistic communication especially by top management, as well as stress management and individual counseling services provided via HR. The authors also suggested that the organizations create transition management teams composed of influential executives and managers to make essential decisions and interventions to reduce employee stress and maintain the integrity of the combined organization.

The Ivancevich et al. (1987) study was important within the post-merger integration literature in that it provided a menu of interventions that can be carried out by management from the early due diligence stage of the deal to actual integration. Furthermore, the study took the stance that management of the merger stress is a joint responsibility which ought to be shouldered by management, HR professionals and individual employees alike. The limitation of the study's proposals stem not from the authors' findings but the management themselves in that they may not give necessary time or the priority to address what may seem as soft issues.

Culture. Organizational culture congruence plays a determining role in the success of merger integrations. Building on the original work of Berry (1980), the authors Nahavandi and Malekzadeh (1988) described a conceptual model with four modes of post-merger acculturation which are as follows; assimilation happens when the acquired organization willingly relinquishes its culture and identity by adapting the acquirer's culture; integration happens when both the acquirer and the acquired company culture and identity are preserved; separation happens when minimal cultural exchange persists to ensure both cultures remain completely separated; and lastly deculturation happens when the acquired company disintegrates as a cultural entity yet refuses to be assimilated into the culture of acquirer. The authors proposed

that the degree of congruence between the two merging organization's preferred modes of acculturation will ultimately determine the level of acculturative stress and thereby the resulting effect on overall merger implementation (Nahavandi & Malekzadeh, 1988). For example, if both acquiring and the acquired organizations agree on the mode of acculturation to pursue, then minimal acculturation stress was to follow. Per the authors, this reduced acculturation stress facilitates overall merger integration activities. In contrast, if no agreement was reached as to the acculturation mode, then high acculturative stress was likely which results in complications during merger integration activities.

Nahavandi and Malekzadeh's (1988) study is important in that it provided a conceptual clarity, lexicon and process orientation to a complex phenomenon merger related acculturation. In addition, this study drew attention to how culture induced post-merger problems may be managed though the agreed upon acculturation modes. For instance, the four modes described earlier may be viewed as alternative manifestations of organizational culture in the context of a merger. For cultural integration to take hold in the combined organization, the acquirer and acquired organizations must first identify their preferred modes (critical reflection), second come to an agreement on the mode (building rapport) and third, work through acculturation stress (conflict resolution), however small it may be. Also, the findings encouraged merger leaders to think critically and creatively about the cultural fit alternatives early on in the deal along with when and where to anticipate future challenges.

Echoing a similar idea as above, Buono, Weiss and Bowditch (1989) documented the viability of cultural pluralism in a merger combination effort where cultural diversity and cultural subgroups were allowed to exist within the context of a shared strategy for growth and organizational success. They argued against efforts for total assimilation into the dominant

culture because the perceived lack of understanding of or attention placed on the others' culture was likely to create cultural conflict, high management turnover, and overall difficulty in achieving merger synergies. Whether the merger-induced cultural integration sought was total assimilation, cultural blending or cultural pluralism, the authors recommended organizations resort to an incremental and iterative process, bearing in mind that shared understanding of the new culture takes time to form and many individuals of all levels of hierarchy must be involved in the process (Buono et al., 1989). Both Buono et al., and Nahavandi and Malekzadeh (1988) studies stressed the importance of pre-deal assessment of the level of intercompany cultural similarities to understand, decide, and develop desired cultural integration efforts.

Leveraging on the work of Nahavandi and Malekzadeh, Elsass and Veiga (1994) posited that the post-merger acculturation mode achieved was a result of the tension between the forces of a) organizational integration, and b) cultural differentiation. This tension, believed to create stress and resistance to change, must be addressed by the acquiring company management in order to achieve overall merger success (Elsass & Veiga, 1994). For example, in a horizontal merger of equals, the tension to maintain one's own culture/identity may be high. This was because the deeply held belief of both companies that each of their successes was due in part of their respective cultures. At the same token, the need for organizational integration also remains high because the post-merger performance depends on the how well the previously separate entities were fused together. The authors predicted that under the above circumstance (i.e., both cultural differences and perceived need to integrate are high), any pressure by the acquiring organization to continue to integrate in the hope that eventually cultures would merge only exacerbate tension. Employing Kurt Lewin's force field perspective, the authors offered a solution whereby management based their actions focused more on minimizing cultural

differentiation (i.e., per Lewin, maximizing driving forces) rather than increasing organizational integration (i.e., per Lewin, minimizing resisting forces).

Using a longitudinal field experiment approach Schweiger and Goulet (2005) found that cultural distance between combining firms can be bridged during the early stages of acquisition integration process. Deep level cultural learning interventions were found to be most effective as opposed to surface level or no cultural learning interventions as the former provided the depth of learning necessary to benefit integration outcomes. This study was an important and unique contribution to the integration literature first, in that it addressed the topic of how to go about managing cultural differences in combining firms, and second that it did so by employing longitudinal-experimental methodology which had not been used to study this topic.

Anecdotal and empirical evidence had long identified cultural incompatibility as a barrier to realizing post-acquisition outcomes. Cultural differences were found to be negatively related to stock market performance (Chatterjee, Lubatkin, Schweiger, & Weber, 1992), positively related to target company top management team turnover (Lubatkin, Schweiger, & Weber, 1999), positively related to high integration costs (Blake & Mouton, 1985; Weber, 1996), and lastly, positively related to potential of unresolved conflicts (Bijlsma-Frankema, 2001).

Some research attention had been given to the study of the counter argument that cultural differences did have a beneficial impact on post acquisitions including positive financial performance (Bjorkman, Stahl, & Vaara, 2007; Marks, 1997; Morosini, Shane, & Singh, 1998). Morosini, Shane and Singh examined 52 cross border acquisitions and found a positive association with cultural differences and acquisition performance. The researchers explained that over time, the culturally distant acquisition combinations were likely to provide previously

nonexistent mechanisms, such as new routines and repertoires, which had the potential to enhance the combined organizational performance. This view was antithetic to the conventional belief that acquisitions with close cultures perform better than those that are not. In a similar vein, Bjorkman et al., (2007) investigated the benefits of cultural differences in terms of capability transfers and thus positive post-acquisition performance. Both studies were valuable to current research in that they provided empirical support that with correct circumstances and effort, even the perceived culture incompatibility can lead to post acquisition synergy capture.

In sum, the above review summarized the research into post-merger integration, codified above into strategy, human resource, and culture. It also helped emphasize the potential benefits and complexities involved in creating value though M&A. Balancing the necessary level of organizational integration was a fundamental challenge that affected merger success. It was therefore, important to understand better whether and how post-merger integration leaders contribute to the overall process of acquisition integration and the success of the merger.

PMI Role

M&As are predominantly driven by rational financial and economic models. While financial factors such as purchase prices, cost savings, revenue increases contributed to merger success or failure, research had also found non-financial contributors such as overall strategy, culture, integration, and leadership to also play a key role in post-merger synergy capture. Within the contributions made by the subset, integration, the execution of a well-designed integration plan by a capable leader was suggested as one of the methods to promote merger success (Ashkenas et al., 1998; Epstein, 2004; Shelton, 2003; Tetenbaum, 1999). In their study of merger successes of the mostly conglomerate deals done in the 1960s and 1970s, Ravencraft

and Scherer (1987) argued that profit declines were likely due to a loss of managerial control by the acquiring firm or due to the use of the acquired firm as a cash cow. Studies conducted by the management consulting firm, the McKinsey and Company, on a variety of successful merger integration projects indicated that there were three decisive factors that contributed to merger success; a) strong leadership, b) high aspiration, and c) shared performance culture (Koch, 2002). Since the specific focus of this research centered around the competencies of PMI leaders and their influence on merger success, the following segment of the literature review attempted to maintain a leadership and managerial relevance. As such, research works that explicitly considered traits, roles and integration actions pursued by integration leaders are discussed below.

According to Mintzberg (1973), managerial work consists of unrelenting, highly openended activities that are characterized by brevity, variety and fragmentation. This definition also applied to post-merger integration leaders. The integration leader role consisted of two components: *project management* which included administrative, operational and technical matters and *people management* which included handling political, cultural, personal and emotional matters arising due to the merger. Therefore, at its broadest, the role of the integration leader was to manage the integration activities to enhance post-merger organizational capacity, and help adapt to new capabilities while also minimizing interpersonal and intercultural friction. Although merger integration leaders were utilized to oversee organizational combination efforts in the past few decade their impact on merger success had produced mixed results (Ashkenas & Francis, 2000; Epstein, 2004; Shelton, 2003).

The sense of stewardship was directly applicable to the role of integration leader.

According to Senge (1990) a leader's sense of stewardship operated on two levels: stewardship

for the people they lead and the stewardship for the larger purpose or the mission that lie behind the enterprise. In terms of the stewardship for the people, the integration leader is called on to grapple with the psychological, anxiety and resistance related system wide reverberations. As to the stewardship for the larger purpose, the integration leader was responsible for the role of effective alignment of previously separate entities to capture the merger promise.

Upon review of best practices literature and their own experience, Thach and Nyman (2001) introduced a leadership skill set which they believed when developed will support the leaders themselves, their employees and their organizations through a successful merger integration process. The model, illustrated in Figure 1, included six leadership skill categories which are explained below.

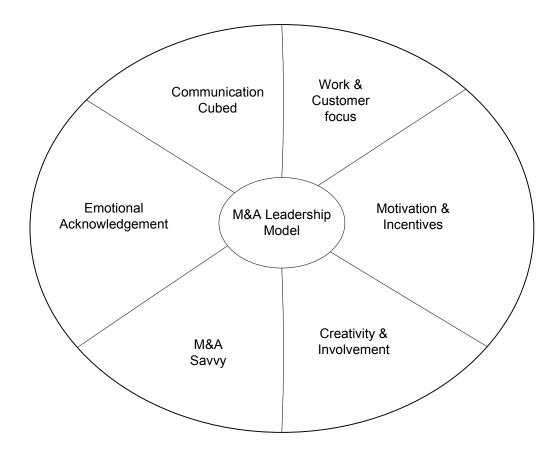


Figure 1. Thack and Nyman M&A Leadership Model (2001, p. 148).

The category, *emotional acknowledgement*, encouraged that the merger leaders permit, engage, and encourage the overt discussion of the range of emotions stemming from a merger. To be effective, leaders must first be able to handle the emotional fallout that may stem from the announcement of the merger prior to encouraging self and others to move forward with integration tasks. In other words, the leaders must recognize and deal with his/her own emotions while also providing the employees a process to vent and discuss their emotions. The authors also recommend specific actions by leaders such as learning to a) recognize that there are usually positives to a merger and thus help employees consider some of these opportunities, b) provide support tools and processes to deal with emotions, and c) avoid *you must* [focus on work, not get angry etc.] statements.

Maintaining two-way communication was considered an essential skill during the merger integration leadership. Termed *communication cubed* in their model, the tripling of all formal and informal communications between company leaders and employees were to act as a feedback mechanism which in turn informs sound decision making.

The third skill category, work and customer focus, called on the leader to keep employees focused on work and meeting customer needs. Thach and Nyman (2001) held that the leaders should first deal with employee concerns as effectively as possible so that they were not distracted from the day-to-day work of meeting customer needs during the merger integration phase. The authors advised that the leaders a) renegotiate performance objectives, b) follow-up more frequently with employees regarding work project status checks and deadlines [while not becoming micro-managers], c) understand the possibility of [employee] emotional fallout after the merger announcement thus be available to provide support and focus, and d) reassure customers/suppliers/regulatory offices and community members that their needs continue to be met during the merger transition.

The category *motivation and incentives* encouraged the leaders to develop the skill to talk to key talent in an attempt to re-recruit their commitment, provide them with challenging assignments, and reassure that the employees are valued by providing them generous positive feedback.

In their experience, the category *creativity and involvement* is often overlooked during merger transition periods. The authors recommend that the merger leaders take advantage of this unique transition time to encourage employees to be innovative in possibly transforming the existing business processes for better. This not only allots dedicated time for change related

brainstorming but also makes best use of the likely decreased employee workloads during the initial merger combination phase.

Lastly, the sixth skill category of Thach and Nyman (2001) model called on the leaders to be *merger savvy* as it pertains to understanding the organizational dynamics and types of activities that follow after a merger announcement. Part of this savvy included a) understanding that it is not going to be business as usual, b) expecting that company politics will increase as employees jockey for positions in the combined organization and c) realizing that some of the above maybe directed at the leaders themselves. The authors recommended that the leaders a) conduct periodic assessments (informal discussions, short surveys) to evaluate the concerns of the employees in order to proactively problem solve, b) focus on protecting the bottom-line of the organization and meeting customer needs, c) realize that the leaders themselves will make more mistakes during this transition time due to high stress and uncertainty, d) push for speed in decision making, communication and integration, and finally e) build relationships with the acquired company personnel in order to learn about their strategy, work processes and how the leader can assist in the successful combination of the two organizations.

Thach and Nyman contributed to the PMI leader competency literature by offering a targeted skill set for leaders to rely on during the pre-combinations and merger integration phases. The six category model included skills that would support the leader himself/herself as well as their employees during the transition. Furthermore, their advice could be used by leaders in both acquiring and acquired company leaders.

Michael Shelton (2003), a practitioner with the leading management consulting company, McKinsey & Company, focused on the designation and empowerment of integration leaders. As

it pertained to designation, the author called for the appointment of an upper level executive who was capable of influencing corporate opinion. Apart from proven project management skills, the leader should also be politically astute, courageous, possess excellent instinct and be comfortable working cross functionally. The author argued in favor of pre and ongoing empowerment of the designated leader by the president, CEO and the Board of Directors. This was because the temporary nature of the merger leader position often gives rise to anxiety about one's own career trajectory thereby distracting the merger leader's attention from the complex task at hand. More often than not, merger leader candidates were experienced in-house leaders who already had defined responsibilities. The candidate was likely requested to give up his/her current position to assume the leadership of the merger integration activities which in the least would last one year. Naturally, the perspective candidate would be concerned about his or her career's future once the integration assignment is complete. To this end, Shelton proposed that the CEO, while explaining the importance of the integration management role, also assure the candidate what his or her career progression would be after the integration assignment. The CEO's empowerment of the merger leader also comes in the form of trust in the leader's ability, providing of adequate authority and resources to do the job and on occasion stepping in to champion the efforts of the integration team (Shelton, 2003).

In a study conducted by two members of consultancies specializing in M&A, Lind and Stevens (2004) found that the leadership style and actions made a difference in post deal success or failure. Although the study stratified the leadership style requirements according to four merger types, three style variables stood out as a set of common denominators that were applicable to any type of merger. They were a) pace or urgency of decision and actions, b) relational style, and c) control or authority. Their study also identified clear vision,

thoughtfulness, open mindedness, reflection, and ability to inspire others as exceptional characteristics of successful merger integration leaders.

The Covin, Kilenko, Sightler and Tudor (1997) study sought to identify leadership styles associated with employee post-merger satisfaction. They organized the *leadership styles* under two broad categories; leader power-influence, and leader behaviors. The power-influence approach explained the leader effectiveness according to the source and amount of power available to the leader and the method by which the leader exerted this power on the followers. The behavior approach to leadership styles on the other hand focused on the actions of the integration leaders as opposed to their traits. The findings confirmed that leadership styles did impact merger satisfaction thus should be considered when appointing merger integration leadership. The study results also showed that transformational leadership, a measure of leader behavior, had the highest positive correlation with merger satisfaction. Referent power, as opposed to coercive power, demonstrated the strongest association to post-merger employee satisfaction. Although the study was conducted at a single site, thus rendering its results unique to that site, the study continued to be noteworthy because it provided empirical evidence that post-merger employee attitudes were influenced by leadership styles and they are likely to critically impact the success of the mergers (Covin et al., 1997).

An integration leader's management of the dynamics within the integration team was also an important facet of this study. This is especially imperative when the integration is managed by a large team. An example of the need for integration leaders within team intervention is described next. In their study, Buono, Weiss and Bowditch (1989) referred to *merger myopia* in which over time, managers' modus operandi becomes problem solving and crisis management in order to gain the feel of *being in control* during this highly turbulent integration period. The

consequent result of the absence of careful vetting of alternative solutions and premature closure of merger related issues, though provide an illusion of successful integration would in fact prove less effective in the longer term. When merger-myopia is observed within the integration team, the merger leader ought to intervene by assisting the team members cope with the perceived or real loss of control (Buono et al., 1989). More often than not, merger teams consisted of highly trained professionals and functional experts who require little direction and supervision by the leader. Intervening within the integration team to facilitate coping would require the integration leader to exercise covert leadership (i.e., unobtrusive actions that infuses traditional management tasks such as controlling, coordinating, directing etc.) as it best provides the protection, support and fresh frame of reference necessary to channel the energies of the team towards useful plans and actions (Buono et al., 1989; Mintzberg, 1998).

Some literature encouraged the integration lead position to be occupied by upper level executives (Ashkenas & Francis, 2000; Beckhard & Harris, 1987; Covin et al., 1997; Ivancevich et al., 1987; Koch, 2002; Shelton, 2003). Collectively, they supported this idea because the higher ranking position itself, not just the person, supplied much of the authority, structure and coordination. This statement should not be interpreted to mean that the *person* occupying the position is not important. Despite the executive status, the integration leader should be able to navigate both as a first-line supervisor and a hands-off executive with remarkable ability because managing without understanding of what is being managed is an invitation to crisis (Mintzberg, 1998; Shelton, 2003).

In summary the above analysis identified stream of literature that focused on PMI leader role related criteria; leadership skills and managerial traits. A variety of PMI leader criteria that were directly related to leader effectiveness or assist the leader effectiveness were discussed. It

was clear that the power influence of the leader, his/her business acumen, project and people management skills as well as ability to manage strong emotions and stress in self and others all played an important role in the leaders ability to conduct merger integration related activities.

Emotional Intelligence

Although the historical development of emotional intelligence (EI) could be traced back to 1920s (Sparrow & Knight, 2006), the concept was formerly introduced as a topic of study within the discipline of psychology in 1990s by Salovey, DiPaolo and Mayer (Mayer, 2006; Mayer, DiPaolo, & Salovey, 1990; Salovey & Mayer, 1990). This concept is presently also studied within the disciplines of education, human resources, management and psychiatry. The evolution of EI naturally led to divisions among its users as it pertained to the definition of EI. Given the variety of EI theories, this study will only focus on two of the main streams of thought, one championed by Salovey and Mayer, and the other by Daniel Goleman.

The definition of EI favored by Salovey and Mayer was steeped in scientific literature and focused on mental abilities, skills or capacities (Mayer, 2006). They recommend that the term EI be limited to refer to abilities at the intersection of emotions and intelligence as opposed to an eclectic mix of positive traits. As such, their *ability* based conception of EI (i.e., *ability model*) was "specifically limited to the set of abilities involved in reasoning about emotions and using emotions to enhance reasoning" (Mayer, Salovey, & Caruso, 2008, p. 514). According to Salovey and Mayer emotional intelligence is "the ability to perceive emotions, the ability to access and generate emotions so as to assist thought, to understand emotions and emotional meanings, and to reflectively regulate emotions so as to promote both better emotion and thought" (Mayer & Salovey, 1997, p. 22). Although they believed EI to operate in a unitary

fashion, the authors subdivided their view of EI into four interrelated abilities (Mayer, 2006; Mayer, Salovey, & Caruso, 2000). Their model is shown in Figure 2 below.

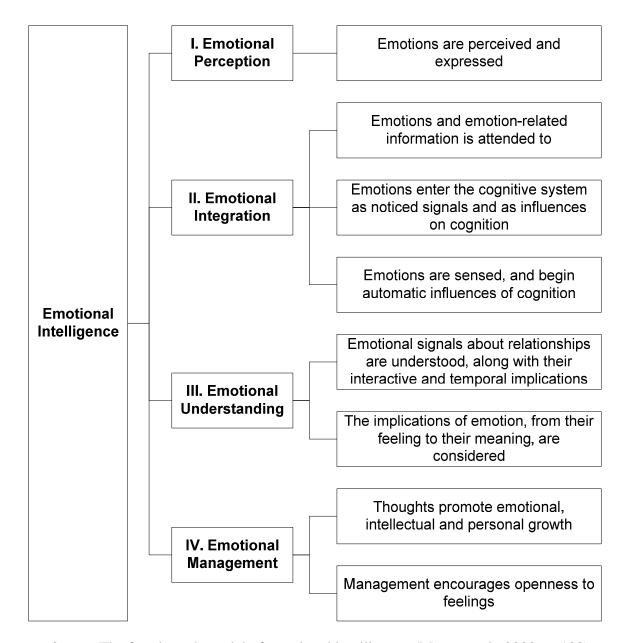


Figure 2. The four branch model of emotional intelligence (Mayer et al., 2000, p. 108).

The first branch of their model was the ability to *perceive* and *identify* emotion. This basic function called for an individual's capacity to recognize and input information from the emotion system. The second branch of the model, *emotional integration*, concerned with

emotional facilitation. This focused on how emotional information entered the cognitive system and altered cognition to assist thought. The third branch, *emotional understanding*, involved the cognitive processing of the information. In general, it referred to an individual's ability to understand and reason with emotion with an eye towards problem solving. The fourth and last branch of their model, *emotional management*, concerned with emotional self-management and management of emotions in others. This called for the person's ability to cope with various states of mood instability while considering different emotional paths and choosing among them (Mayer et al., 2000, p. 109).

The tool by which they measured the level of EI, Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), was geared to measure the four areas of EI abilities. Salovey and Mayer were openly critical of other investigators of EI such as Daniel Goleman and Reuven Bar-On because they included both *abilities* and *positive personality attributes* such as assertiveness, self-regard and adaptability in their constructs of EI. According to Salovey and Mayer, the mixing of related (i.e., abilities) and unrelated (i.e., positive personality attributes) variables overly broaden the construct of EI thereby leading to misunderstanding of the original concept and research (Mayer, 2006; Mayer et al., 2000).

A markedly different second approach to defining EI was offered by Daniel Goleman. His definition stated that EI is the "capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships" (Goleman, 1998, p. 317). He viewed EI based on *competencies* that enabled people to demonstrate intelligent use of their emotions in managing themselves and working effectively with others (Boyatzis, Goleman, & Rhee, 2000; Goleman, 2001a). Given the *competencies* incorporated both *abilities* and *personality traits*, the Goleman et al. view was designated a

mixed model of EI. Their most recently revised EI framework, represented below in Figure 3, consisted of four major clusters, a) self-awareness, b) self-management, c) social awareness, and d) relationship management. To Goleman et al., self-awareness meant knowing one's internal states, preferences, resources and intuitions. As a result, self-management referred to managing one's internal states, impulses and resources. The social awareness cluster referred to how one handled relationships and awareness of other's feelings, needs and concerns. And lastly, the relationship management cluster referred to the skill or adeptness at inducing desirable responses into others. The four clusters were further subdivided into twelve competency subscales as shown in Figure 3 below (Boyatzis, 2010). The tool by which Goleman et al. measure the emotional intelligence is called the Emotional and Social Competency Inventory (ESCI).

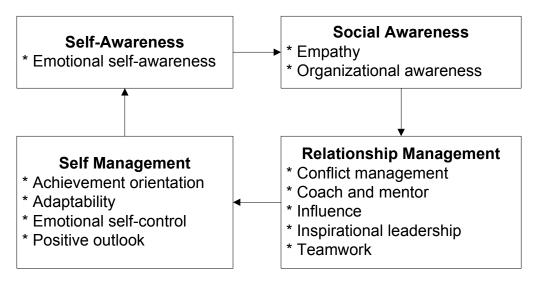


Figure 3. Goleman's framework of EI clusters and competencies (Boyatzis, 2010, p. 6).

The twelve competency subscales organized within the four clusters are identified in detail below (Boyatzis, 2010, p. 4). Goleman et al.'s EI model recommended the use of validated multi-rater ESCI tool in order to measure an individual's level of EI.

• Emotional self-awareness: Recognizing one's emotions and their effects;

- Emotional self-control: Keeping disruptive emotions and impulses in check;
- Adaptability: Flexibility in handling change;
- Achievement orientation: Striving to improve or meeting a standard of excellence;
- Positive outlook: Persistence in pursuing goals despite obstacles and setbacks;
- Empathy: Sensing others' feelings and perspectives, and taking an active interest in their concerns;
- Organizational awareness: Reading a group's emotional currents and power relationships;
- Coach and mentor: Sensing others' development needs and bolstering their abilities;
- Inspirational leadership: Inspiring and guiding individuals and groups;
- Influence: Wielding effective tactics for persuasion;
- Conflict management: Negotiating and resolving disagreements;
- Teamwork: Working with others toward shared goals. Creating group synergy in pursuing collective goals.

Goleman maintained that his role as one of the EI theorists was to propose a theory of performance that builds on the basic EI model. Specifically, he adapted the Salovey and Mayer EI model into a version that explored implications for the workplace while keeping a firm eye towards identifying the active ingredients in outstanding performance (Goleman, 1998, 2001a).

In particular, Goleman defined *emotional competence* as "a learned capability based on emotional intelligence, which results in outstanding performance at work" (Goleman, 2001a, p. 27).

Furthermore, Goleman (2001b) believed that the four major clusters of EI identified in his EI model were shared by all the main EI theorists although terms used to refer to them defer. This claim was vehemently rejected by Salovey and Mayer (Mayer, Salovey, & Caruso, 2004). Salovey and Mayer maintained that Goleman's views EI not as a set of *abilities* (i.e., thus, not as intelligence) but as a constellation of *personality attributes* (Mayer, 2006, p. 18) thus making his view EI not about intelligence.

Emotional Intelligence within Post-Merger Integration Studies

Despite the conceptual rivalries explained above, this researcher opted to consider a broad based definition of EI thus included the ability based definition provided by Salovey and colleagues as well as the definition mixed model definition provided by Goleman et al. The ability model offered a set of traits that were steeped in strong cognitive reasoning (Mayer et al., 2000). Comparatively, Goleman's mixed model offered an EI construct that related to cognition and behavior. This researcher held that the inclusion of both EI definitions complemented this research because it helped capture a wider array of potentially useful information regarding EI manifestations in PMI leaders.

According to the ability model of EI "some individuals have a greater capacity than others to carry out sophisticated information processing about emotions and emotion-relevant stimuli and to use this information as a guide to thinking and behavior" (Mayer et al., 2008, p. 503). Like Goleman and others, they too considered EI to be an important variable that showed

validity for predicting socially relevant outcomes. In a similar vein, Sutton, a researcher in Management Science, suggested that "people with emotional intelligence who are skilled at taking the perspectives of the people they encounter and at responding to their needs and feelings are pleasant to be around and well suited for leadership positions" (Sutton, 2007, p. 19).

The need to possess emotional intelligence by a PMI leader is likely greater due to the position's heavy involvement with organizational members, stakeholders and even customers of both merging organizations. Per Sparrow and Knight (2006) EI was essential for self-management, management of relationships with others, facilitating relationships between others and developing others. Among some of the outward qualities of effective PMI leader were accessibility, warmth and shrewdness about other humans and how they work (Marks & Mirvis, 2000; Shelton, 2003; Tetenbaum, 1999; Thach & Nyman, 2001). Collectively, the researchers believed that such qualities increased the leader's capacity to relate to others better and in some cases be more effective in surfacing and challenging mental models of the organizational members who might be resistant to impending change. The aforementioned desired competencies of PMI leaders were thought to increase the level of effective leadership performance thereby positively impacting the merger integration efforts.

In the context of PMI, the integration leader should possess a disposition that was consistent with the requirements of the position and its tasks which were largely multi-faceted. The thought process that led to this study's research question held that the well-developed emotional intelligence of a merger manager would be able to stay on top of the group dynamics influencing the organization combination efforts thereby allowing proactive fostering and maintenance of the ecology necessary to unite previously separate entities into an integrated whole. According to Marks and Mirvis (2000), transition team members and leadership required

sensitivity to deal with egos, anxieties, and needs of people who were above, below, and beside them in the organization. Furthermore, they argued for precluding the institution of such managers with dominating personalities, harmful communication styles and poor interpersonal skills.

Employing a sense-making perspective, the work of Vaara (2003) identified four specific characteristics of post integration decision making at the upper echelons that were likely to be impediments to effective organizational integration. The irrational tendencies of the leadership that slowed the progress of integration were a) inherent ambiguity concerning integration issues, b) cultural confusion in social interaction and communication, c) organizational hypocrisy in integration decision making, and d) politicization of integration issues. Vaara's study described how the above impediments confronted corporate leaders and business unit managers, even among themselves. If left unattended, these impediments to integration efforts would likely lead the merger to failure. Similar work conducted by Shelton (2003) asserted that deadlocks, such as those mentioned earlier, can result in loss of momentum in integration efforts thus jeopardizing the synergy capture. An emotionally intelligent integration leader is likely to be aware of such organizational tendencies and thus would be able to change at least some elements of the irrational tendencies. Such proactive action would help remove potential impediments to effective organizational integration.

The literature on who was ideally suited for PMI leader roles emphasized the importance of the ideal candidate's heightened sense of emotional and cultural intelligence (Ashkenas & Francis, 2000). The authors stated that it was critical to select an integration leader who could "appreciate the emotional and cultural issues involved, handle them personally and help others deal with them constructively" (p. 116). Although the integration leader was not limited to the

aspects concerning the people side of integrations, the authors argued that their special capability provided a much needed counterbalance at the decision making table where financial and strategic considerations tend to take center stage. As it pertained to the application of emotional and cultural intelligence during combination activities, the authors believed the key was to demonstrate *balance*. That is, integration activities should not be allowed to degenerate into unfocused gripe sessions or personal lobbying. Instead, effective integration managers should create opportunities for people to vent while also helping them move on.

In his study, Mirvis (1985) focused on strategic and tactical conflicts found in the top management team negotiations of a merger integration process between a conglomerate and a small manufacturing firm. The imposing of acquirer's financial planning, accounting and other control systems coupled with the differences in organizational strategies, structures and cultures between the integrating parties explained the strategic and tactical conflicts. Mirvis gave particular attention to tracing the underlying emotional reactions of the two merging parties which he believed also contributed to conflicts. To this end, he analyzed a) the feeling of loss versus gain in the two firms, b) each party's sense of uncertainty and threat, and c) their moves towards proactive and reactive control underlying the integration activities. Mirvis's research was important to this study because it provided an empirical example of how human reactions infused by emotion could escalate conflict thereby re-shaping and re-directing even the most well planned integration activities. He predicted that unless all parties could come to understand and work through their emotional reactions to the integration activities, any efforts such as interventions to develop shared goals, to explore cultural differences and ameliorate cultural conflict and to focus energies on mutual problem solving, were likely to be ineffective.

Organizational Culture

Culture was defined here as general shared social understanding, resulting in commonly held assumptions and views of the world among organizational members (Schein, 1983). It was the position of this study that the careful and proper attention given to culture specific issues would in effect enable one of the primary conditions necessary to achieve merger success. This was because the resultant cultural acceptance and mutual respect was likely to reinforce combination activities thereby increasing the interdependencies between the combined organizations (Birkinshaw et al., 2000).

Schein's definition and analysis of culture was utilized in this study. Schein defined organizational culture as the pattern of basic assumptions that a given group has invented, discovered or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be considered valid, and therefore, to be taught to new members as the correct way to perceive, think and feel in relation to these problems (Schein, 1990). As shown in Figure 4, culture manifested itself in three interconnected levels: a) observable artifacts, b) espoused values, and c) shared tacit assumptions. According to Schein, the three culture levels were linked in that artifacts were manifestations of values while values were expressions of core assumptions.

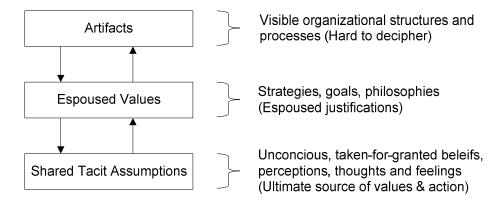


Figure 4. Schein's three levels of culture (Schein, 1999, p. 16).

As it pertained to assessment of culture, Schein favored the method of *structured individual or group interviews* as opposed to *surveys or questionnaires*. While useful, surveys and questionnaires according to Schein only revealed cultural artifacts or organizational climate (Schein, 2006). Furthermore, when assessing culture within an organization, he encouraged that the culture analysis efforts to be tied to a *clearly defined business need* such as a business problem to be solved, a new strategy etc. This was because "the culture has an impact on how the organization performs, and the focus should initially be on where performance needs to be improved" (Schein, 2006, p. 633). Once the interview based cultural assessment process had identified the *core cultural assumptions* of the organization, Schein advocated that these *assumptions* should then be evaluated based on whether they provide *strength* or *constraint* to the pre-identified business need.

Organizational Culture in Post-Merger Integration Studies

Incompatible culture continued to top the list of reasons for many failed mergers (Ashkenas et al., 1998; Bligh, 2006; Cameron & Mora, 2003; Davenport, 1998; Marks & Mirvis, 2000; Nahavandi & Malekzadeh, 1988). Some researchers argued that cultural differences were

a factor in poor post-acquisition financial performance because such differences had a high tendency in creating problems which ultimately lead to lower profits (Chatterjee et al., 1992; Datta, 1991; Elsass & Veiga, 1994). Therefore, failure to designate an integration leader who was capable of effectively grappling with organizational cultural dynamics could paralyze the chances of acquisition success from the outset. The book *Mergers & Productivity* (Kaplan, 2000), which was a compilation of retrospective case studies of high profile mergers in a variety of industries, concluded that a merger's success or failure was dependent upon the acquirer's thorough understanding of the target, its corporate culture and its workforce and wage structures prior to the acquisition. It is then possible to increase the chances of merger success by instituting a merger leader at the core of the integration process that was capable of predicting, addressing, and managing merger induced cultural issues.

Cultural integration was crucial for the success of the merger (Cameron & Mora, 2003; Epstein, 2004; Marks, 1997). When a fit between culture and employee was present, it gave rise to employee identity with the organizational culture. This alignment of identity therefore, encouraged employee commitment, satisfaction, productivity, and longevity (Cartwright & Cooper, 1990; Veiga et al., 2000). Just as the positive cultural fit could lead to merger success, a negative fit could reduce overall merger performance likely due to reduced morale, job dissatisfaction, acts of sabotage, high turnover and absenteeism (Cartwright & Cooper, 1990). To a greater extent, the PMI leader should have the capacity to manage the internal working environment of the merged organization as it pertains to culture. To a lesser extent, the PMI leader should at least support and not dismiss, downplay or undermine the importance of cultural integration efforts. It is assumed here that this would increase employee satisfaction and

productivity and decrease turnover and absenteeism thereby positively contributing to the continued wellbeing of the merged organization.

M&A research had also delved into examining the role of leadership in facilitating post-merger cultural change (Bligh, 2006; Marks, 1997; Nguyen & Kleiner, 2003; Trice & Beyer, 1991). Collectively the findings had important implications for post-merger leadership in that they identified desired leader actions and characteristics that promote cultural integration. As it pertains to leader actions, Bligh (2006) suggested providing organizational members an outlet for loss and renewal, acknowledging the importance of relatively mundane yet symbolic actions, and utilizing employee input into post-merger culture changes. Leader characteristics most cited included empathy, honest communication and knowledge of culture both conceptual and practical.

In their work Buono et al., (1989) expressed that integration related communication needs were quantitatively and qualitatively different from the typical business communication requirements. According to them, the two basic types of communication that should be included in the merger integration efforts include: a) communication to keep organizational members informed about the merger, its ramifications and its implementation, and b) communication to facilitate getting the work done. They also stressed the benefits of incorporating two-way communication methods where the information flows not only from management to employees (i.e., newsletter, presentations, workshops, hot-lines) but also from employees to management (i.e., survey feedback). The underlying implication of this work was that it required the merger leaders to continually assess how much information the organizational members already had and what they still need to know. Therefore, in addition to communication skills, the leader's sensing

ability, empathy, willingness to listen, negotiation skill and flexibility in conflict resolution skills became part of the essential repertoire of skills desired of an effective PMI leader.

In their work on lessons for post-merger integration success, De Noble, Gustafson and Hergert (1988) suggested that leaders focus on *sources* and not *symptoms* of combination issues. They used an example of the management pressure to consummate the merger quickly might result in significantly less attention given to integration issues. Instead they advocated that organizations take a proactive view of the acquisition integration process during the pre-merger negotiation phase rather than a defensive/reactive approach after the deal had been signed. They believed that by identifying and communicating the specifics of integration issues as openly as possible at an early stage of the acquisition could mitigate such feelings of mistrust and alienation that may impede merger success. The De Noble et al. (1988) study therefore contributed the culture specific PMI leader literature by emphasizing the importance of cultural competency of the PMI leaders as well as including them in the merger activities early on as opposed to after the deal is signed.

In his work, Teerikangas (2004) mentioned the importance of systems thinking in the context of mergers and acquisitions as he believed it was linked to merger success. Instead of viewing the *system* as an additive relationship (i.e., the whole is greater than a sum of its parts) he favored the perspective of a *whole*, where the parts were richly connected. He felt that almost unilateral attention was given to financial evaluation. Although its importance was noted, his research findings consistently showed post integration issues almost always revolved around issues that were neglected upfront. He believed the underlying cause for such neglect was the *mental models* guiding today's organizations which held important only those aspects that were directly traceable to financial performance as opposed to softer, less traceable elements such as

culture, leadership and other human elements. He argued that the overlooked elements cannot be maneuvered away. As long as they remain unseen, un-surfaced and unaddressed, they would continue to impact the organization negatively thus leading to potential merger failure.

Teerikangas's work was important to this study because it highlighted the importance of leadership balancing both financial and non-financial elements related to merger integration activities in order to achieve desired merger induced synergies. The ability to see financial and non-financial elements as necessary parts of a *system* would allow the leaders to maintain focus on the non-financial elements of merger integration which had a tendency to be neglected to the point of exclusion.

Literature Review Summary

This chapter attempted to etch in a snapshot of the intellectual activity pertaining to postmerger integration and the role of PMI leader. The general topic of post-merger integration was
examined using the categories of strategy, HR and culture while the specific topic of PMI leader
role was studied to identify the skills and characteristics of PMI leaders as identified by the
academic and practitioner community. As a whole, the body of work presented above provided
evidence which indicated the importance of merger integration activities in achieving the
synergies identified at the outset of a merger. Furthermore, the examination of leader skills and
characteristics also was instrumental in shaping the theory explored in this research as it helped
identify the potential link between specific PMI leader competencies and merger success.

Chapter III – Methodology

This study was designed in a theory testing point of view. The researcher first posited a theory using the *research question* as its basis. The theory proposed was tested using the *positivistic multiple case study methodology*. In particular, Yin's (2009) multiple case methodology was employed in this study. A *case* within the context of this study consisted of a PMI leader who led a successful merger. According to Yin's three case study *type* classifications, this study is considered an *explanatory* multiple case study. *Explanatory* case studies are concerned with research questions that attempted to investigate *how* and *why* something happened. Such case studies therefore implied a need for tracing operational links between the elements of the phenomenon being studied (Yin, 2009, p. 9).

The theory testing nature of the proposed research required the adoption of the *replication logic* (Yin, 2009, p. 54) also known as the use of multiple experiments or cases. A replication was desired by the researcher because findings from a single case may not be as robust to support or refute the theory proposed. The Figure 5 illustrated the replication approach to multiple case study methodology that was utilized in this research.

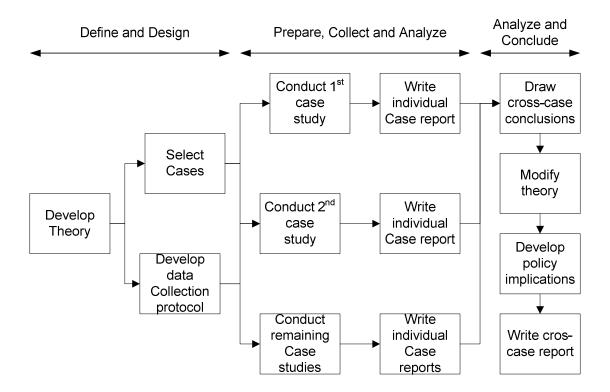


Figure 5. Replication approach to multiple case study (Yin, 2009, p. 57).

The figure above illustrated the operational overview of the methodology which was adopted within this study. It began with the development of the proposed theory and case selection. These steps were described in detail in upcoming sections. Each case study was a *whole* study meaning that each underwent its own data collection, analysis and findings while following the overall protocols identified. The findings and conclusions of each individual case were written into individual reports. The individual reports indicated whether or not the relationship predicted in the theory was demonstrated. Lastly, the cross case report indicated whether the theory was supported or not.

Research Design Rationale

The research strategy, positivistic multiple case study, was selected because case studies typically attempted to examine contemporary phenomenon in its real-life context as opposed to natural science experiments where the phenomena of interest might be deliberately removed from the context (Yin, 1981). The case study methodology's ability to maintain the real-life context therefore enabled the researcher to examine the obvious and subtle details in a holistic manner. For example, the researcher was able to observe first-hand important activities such as group behavior, merger induced change dynamics, and managerial processes which further illuminated the dynamics associated with PMI. Furthermore, Yin (2009) suggested that case study method was also appropriate when relevant behaviors under investigation ought not to be manipulated by the researcher. Given that the goal of the researcher was to investigate the contemporary phenomenon within the context in which it occurred while also not controlling the behaviors of the research subjects, the case study research strategy was most appropriate for the this study.

In addition to real-life context, an in-depth investigation was undertaken to examine the perceived relationship between the PMI leaders select competencies and their influence on merger success. This was necessary due to two reasons. First, the extant literature provided insufficient and inconclusive evidence to validate or falsify the existence of such a relationship. Second, the phenomenon under investigated was broad and complex, thus made it difficult to delineate the boundaries of the theory proposed. The unclear boundaries existed because there were multiple reasons for merger success, above and beyond those that were considered by the proposed theory. An in-depth investigation allowed the researcher to a) create an accurate rendition of the facts of the case, b) identify some consideration of alternative explanations of the

facts, and c) proceed to make conclusions based on a single explanation that appeared most congruent with the facts (Yin, 1981). As a research strategy, the case study method therefore allowed the researcher the freedom to deliberately delve into examining contextual conditions which might be highly pertinent to the investigation (Yin, 2003). This strength of the case study methodology made it most appropriate for the proposed study.

The ability to use multiple data collection methods also guided this researcher's choice in selecting the positivistic multiple case study design. Typically, case studies used data that were quantitative, qualitative or both (Yin, 1981). This study used both quantitative and qualitative data collection methods which included personal interviews, validated survey, statistics and analysis of documents germane to the investigation. The multiple data collection methods produced a rich amount of data available for triangulation.

Research Design

As was indicated earlier, a *case* within this research was composed of a PMI leader who led a successful merger. Yin advocated that case study designs should cover five design components (Yin, 2009). The elements of his design components in this study are summarized below.

- 1. Study's question: How do PMI leaders' Emotional Intelligence and their culture specific competencies influence merger success?
- Study's proposition: All else being equal, the PMI leaders' high Emotional
 Intelligence and culture specific competencies helped increase the likelihood of merger success.

- 3. Unit of analysis: Yin used the term *unit of analysis* to refer to a case. Dubin (1976), a recognized scholar in quantitative theory building in applied sciences, used the term *unit of analysis* to refer to the elements composing the proposed theory. This research used Dubin's definition. As such, the units of analysis of this study were; self-awareness, social awareness, self-management, relationship management, cognitive awareness of culture, application of culture knowledge, and management of differences born out of culture.
- 4. Logic links between data and proposition: The researcher used the seven *units of analysis* (Dubin, 1976) identified below (in Theoretical Model) to show the links supporting the study's proposition.
- Criteria for interpretation of data: The upcoming Table 9 in section Theoretical
 Model demonstrated this process.

Case Selection Criteria

As was described earlier this study adopted Yin's replication logic therefore used multiple cases to test the theory. Within the replication logic, Yin (2009) identified two possibilities of case selection namely literal replication and theoretical replication. This study employed the literal replication which was also known as confirmatory case selection. This literal method deliberately chose cases on the basis of similarity in results or exemplary outcomes (Yin, 2009, p. 59). For example, exemplary outcomes in the context of this study included that all cases selected had a PMI leader and the merger was perceived a success. In other words, a case was represented by a PMI leader who led a successful merger. Selecting multiple such cases that corroborated each other required the researcher to have prior knowledge

of the outcomes of each case chosen. Given this research question sought to answer *how* and *why* something happened, the prior knowledge of the outcomes did not impede the research objective. The *how* and *why* were uncovered by focusing on the conditions under which the *exemplary outcomes* came to be from case to case.

The four *literal* replication features imbedded within the case selection process were as follows:

- 1. Formal integration management structure existed;
- 2. Designated formal PMI leader was present;
- Merger was a success as defined earlier in Chapter 1, in the discussion of Definition of Terms;
- 4. The time period of the transactions considered was between 2005 and 2010. The five year period was deemed appropriate due to the reasonable expectation that the details of the integrations were a) likely fresh in the memory of participant, and b) the participants were still affiliated with the acquiring organization. The latter was deemed important by the researcher because it maintained the necessary inroads to the organization and its members thus facilitating data collection activities.

Participant Selection

Study participants were individuals recognized as merger integration leaders that also were part of successful mergers as defined in this study. To this end, a purposive sampling technique was utilized to construct the targeted group of participants. Potential participants were

first identified as presenters of the Conference Board's 2010 Post-Merger Integration Conference in New York. An introductory e-mail was sent to prospective participants briefly explaining the study purpose and inquiring whether or not they would consider participating in a study if one were to be conducted (Appendix A). Once favorable responses were received, the researcher followed-up with a larger group of perspective study participants with the consent form (Appendix D) and began the data collection. A snowball technique was also used to further expand the possible pool of research participants. To that end, the researcher requested the consented PMI leaders to recommend others of their professional network who might be interested in participating in this study. In addition, the researcher also relied on her network of professional contacts to locate study participants.

As was described in section Theoretical Model, participants that were aware the PMI leader's work was also sourced for the purpose of peer interviews. To this end, the researcher requested the PMI leader to nominate up to four peers, direct reports or superiors from his organization. The researcher followed-up with the nominees to collect necessary information.

Theory Development

This research utilized Lynham's codification of Dubin's eight-step theory development model in order to develop the theory (Lynham, 2002). Dubin's two-phased theory building cycle which included an eight step process is depicted in Figure 6 below.

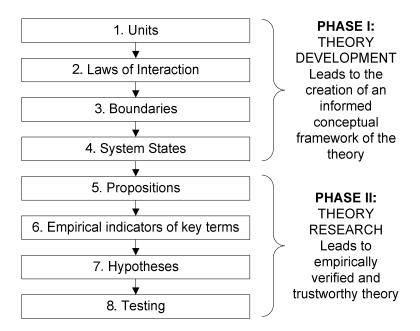


Figure 6. Overview of Dubin's theory building method.

Per Lynham (2002), the first four steps of Dubin's theory building method constituted the theoretical development phase of the research cycle while the remaining steps constituted the operationalization of the theory being developed. Step one called for the identification of the units of the theory. The *units* represented the "things or variables whose interactions constitute the subject matter, or phenomenon, that is the attention of the theory" (Lynham, 2002, p. 245). The theory proposed in this study included a total of seven units. They would be identified and described in the next section. Step two, *laws of interaction*, required the researcher to specify how the *units* identified interact or relate to one another. To this end, the researcher proposed that PMI leaders that demonstrated higher than average levels of select competencies had a tendency to positively influence merger success. The third step, *boundaries*, in Dubin's theory building process required the researcher to identify the domain within which the proposed theory would hold true. Within this study, the theory held true when an organization engaged in merger integrations had a) appointed a dedicated leader with proven managerial skills, b) the leader had

the formal authority to make integration related decisions, c) the leader was provided the necessary resources (i.e., structure, teams, time, and money), and d) principal executive leadership supported the leader and his integration efforts. In addition, the theory explored also assumed the merger was a success as the term is defined within this research.

The final step of phase one, step four, called on the researcher to specify the *system states* of the theory. Dubin referred to *system state* as being a condition of the theory proposed where the units take on characteristic values (Dubin, 1976). In other words, the *system states* or values taken on by the units provided the basis upon which the prediction of the theory was possible. For example, within this study, the *unit*, self-awareness, had the characteristic value of being high as in the PMI leader having a high level of self-awareness as opposed to a lower level. The *unit*, cognitive awareness of culture, had the characteristic value of being present within the PMI leader as opposed to being absent. Together the *units* and their characteristic values assigned represented the *system states* and they provided the basis upon which the prediction of the proposed theory possible.

The phase two of Dubin's theory building cycle or the steps five through eight represented the operational side of the process (Lynham, 2002). Step five, specified the *propositions* of the proposed theory. It required the researcher to identify the logical deductions that could be made from the theory. Dubin considered the *propositions* to be "true logical statements of the proposed theory and not necessarily the true statements about the real world that the theory represented" (Dubin, 1976, p. 25). This study's theory predicted that all else being equal, the PMI leader's high Emotional Intelligence and culture specific competencies help increase the likelihood of merger success.

Step six required the researcher to identify *empirical indicators* of the proposed theory thereby making it subjected to testing. An *empirical indicator* "is an operation employed by the researcher to secure measurements of value on a *unit*" (Dubin, 1978, p. 182). In other words, the researcher pre-defined a given unit's *value* and its (i.e., *value's*) *measuring procedure*.

According to Dubin, the value of a given *unit* produced by an *empirical indicator* included a test score, a dial reading, or an ordinal position of a scale. It also could be a category like *present* or *absent, central* or *peripheral*, and *dominant* or *submissive*. For example, in the context of this study the *empirical indicator* of the *unit* self-awareness was the ESCI score of a given leader that is higher than the survey's (i.e., ESCI) norm score.

The step seven called on the researcher to convert the empirical indicators of the theory's propositions into testable *hypotheses*. The final step, step eight, called on the researcher to "engage in the actual *testing* of the theory through a thoughtfully specified research plan of ongoing data gathering to enable adequate verification and/or continuous refinement of the theory" (Lynham, 2002, p. 246). Dubin's steps seven and eight were not implemented within this study. Instead, the proposed theory was tested and validated utilizing the existence of the *empirical indicators* at levels pre-determined to be supportive of the theory's proposition.

Theoretical Model

There were many contributors to merger success. They ranged from the organization's strategic motivation, deal's clear relation to the core business, economic pricing of the deal, prudent cash-debt financing, efficient integration planning, and even an arbitrary advantage such as luck (Lajoux, 2006). This research focused only on the meaningful contribution of postmerger integration leadership's influence in making mergers a success.

While the PMI leader focused extant literature identified a long list of prescriptive leader competencies, this research narrowly focused on only few. This was due in part for the analytic ease the simplification provided for theory testing research. Moreover, the study of related works by academics and practitioners enabled the researcher to perceive broad patterns within the said list of leader competencies. This outlook, coupled with the researcher's preference to explore a leader's culture specific competencies resulted in selecting only few leader competencies towards testing among many.

Per Dubin (1976) *theory* was "an attempt of man to model some aspect of the empirical world" (p. 26). He explained further that the underlying need for this modeling was either a) "that the real world is so complex that it needs to be conceptually simplified in order to understand it" or b) "that observation by itself does not reveal ordered relationships among empirically detected entities" (p. 26). The researcher developed a causal model isolating specific PMI leader competencies and merger success. The overarching conceptual roots of the selected competencies were separated into two broad categories: a) emotional intelligence, and b) culture specific competencies. The four select competencies within the broad conceptual category of emotional intelligence included the PMI leader's self-awareness, social awareness, self-management, and relationship management. The broad culture specific competency category included three competencies namely, the PMI leader's cognitive awareness of culture, application of culture knowledge and active management of differences born out of culture. The Figure 7 shown below is a graphical representation of this study's theory.

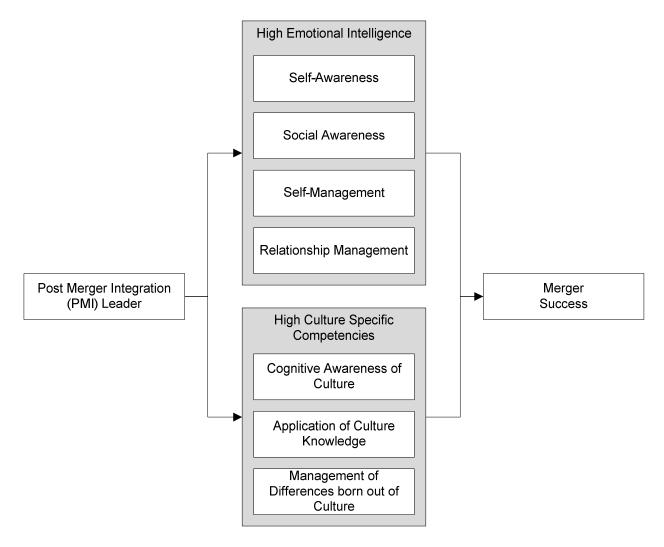


Figure 7. Overview of proposed theory.

The theory demonstrated the proposition that all else being equal, the use of PMI leaders with these specific competencies results in the outcome of merger success. The researcher argued that the latter, merger success, was possible because a number of select leader competencies operated. In other words, the theory proposed suggests that a positive relationship exists between merger success and PMI leaders who demonstrate high levels of select competencies. As was indicated earlier, a multitude of factors might influence the outcome of a merger. This researcher modeled only one possible factor (PMI leader competencies) why a merger may succeed thus simplifying a complex dynamic into a narrower, more testable scope.

In general, the operational validity of the proposed theory was measured by quantifying the existence of each of the identified competencies by the PMI leaders. The methods of data collection and analysis as well as how the researcher determined how the proposed theory was supported would be discussed in detail in the next section.

Units of Analysis. Within the context of theory building, Dubin defined a theory's variables whose interactions constituted the subject matter of interest as *units* (Dubin, 1976). This was a sharp difference of definition from Yin (2009) who referred to the same term, in a research methodology context, to refer to a case. The researcher utilized Dubin's definition of *units* to explain the variables of the theory.

This study's theory was composed of seven units, a) self-awareness, b) social awareness, c) self-management, d) relationship management, e) cognitive awareness of culture, f) application of culture knowledge, and g) management of differences born out of culture. These units were further bounded by the two of the four specific case selection criteria, PMI leader and merger success. The relationship among these seven units and the two case selection criteria together constituted the researcher's theory. Dubin (1976) referred to this interaction between units of analysis as *laws of interaction* which also was the second of his seven step theory building method. Seen from Dubin's view, the system modeled by the proposed theory consisted of two fundamental *laws of interaction*. The first, there was a positive relationship between the culture specific competencies of the PMI leader and the likelihood of merger success. The second, a positive relationship also existed between a PMI leader's high emotional intelligence (i.e., combined competencies of self-awareness, social awareness, self-management and relationship management) and the likelihood of merger success. The proceeding four segments identified in detail how the researcher collected, analyzed, and evaluated the data of the theory's

units and two case criteria in order to determine if the factors presumed by the theory were a) present or absent and b) if present, at what levels (high-medium-low).

Measurement of Case Criterion, PMI Leadership. As was indicated earlier in the section titled case selection criteria, one of the requirements of the case selection guideline was the presence of a dedicated leader who oversaw the merger integration process. PMI leadership played a major role within the researcher's theory because it delineated the domain within which the proposed theory was operational. Given this criterion was already incorporated in the purposeful case selection process, the researcher did not include it as part of her theory's units of analysis. While cursory inspection was given to this criterion at the case selection process, the researcher opted to examine this criterion more thoroughly given its importance to the theory. As such, the following segment explained in detail how the case criterion PMI leadership was evaluated within this study.

The existence of an *assigned leadership position* (Northouse, 2007) dedicated to the role of overseeing post-merger integration activities was a critical component of the proposed theory. This was because the theory inherently assumed that the person with EI and culture specific competencies also occupied a formal leadership position. The purposeful installation of this specific organizational role was also seen as evidence of top management's commitment and support to take merger integration seriously. Furthermore, the joining of *task* (i.e., merger integration) and *authority* (i.e., decision making) under one dedicated formal leader provided a better impetus towards effective merger management thus, increased the potential for merger success.

The PMI leader therefore, was a formal leader within the organization who occupied a position of leadership and had explicit responsibilities of post-acquisition management and oversight. For the purposes of this research an individual fulfilling the above definition of a formal leader was considered a PMI leader. The measurement of this criterion was a simplistic verification of the fact that the person occupying the role was a formal leader within the organization. The data collection method constituted an organizational document review. In particular, the leader's position title as it appeared on business cards, job descriptions, and organizational charts were utilized to ascertain the information necessary to verify this criterion. Examples of actual position titles of the PMI leaders currently found within organizational settings vary. They included titles such as integration managers, department heads, directors or vice presidents of integration to name a few. Once again, the goal of the verification was to confirm if a) a said PMI leader occupied an officially assigned formal leadership position within the organization, and b) the leader's responsibilities included activities related to merger integration leadership.

Measurement of Case Criterion, Merger Success. While the criterion merger success played an important role in this study's theory its use during the case selection process precluded the researcher from also including it as a unit of analysis of the theory. Initial conversations with the PMI leader and secondary data analyses were used during the case selection phase in order to gauge the merger success as defined in this study. Given its importance to the theory, the researcher opted to evaluate this case criterion, merger success, more rigorously thereby verifying that merger success was indeed demonstrated according to Dubin's (1978) theory testing guidelines. This process is described in detail below.

As was described earlier in the introduction section titled definition of terms, *merger success* was defined throughout this research as the achievement of financial and strategic outcomes identified by each organization's top management at the outset of a merger. Compared to most *merger success* related research that focused primarily on the delivery of financial expectations such as increases in stock price, net income or economic value of the merged enterprise over time, this research opted to consider the delivery of both financial and strategic expectations when considering the achievement of merger success (Zappa, 2008). Examples of *strategic expectations* included access to new customer bases, geographic expansion, new product portfolio, overcapacity reduction, and access to intellectual property. A more detailed expression of the financial and strategic expectations is forthcoming in the upcoming section which described the taxonomy utilized to measure merger success.

The researcher utilized two data collection methods, namely document analysis and PMI leader interview to facilitate the confirmation of this case criterion. Document analysis was the primary source of compiling the list of pre-defined financial and strategic expectations identified by each one of the merging organizations at the time of acquisition. Both *primary* and *secondary* sources of documents were analyzed. *Primary sources* included data produced by the acquiring organization itself such as online press releases, annual reports, and financial results. *Secondary sources* were those produced by business media outlets such as Bloomberg L. P., Reuters Group Limited, Wall Street Journal, Financial Times, stock analyst reports, and press releases by acquired organization.

PMI leader interview was also utilized to collect evidences towards confirmation of this criterion of the theory. At first glance, interviewing the PMI leader to ascertain information towards confirming merger success may appear counterintuitive. This was because one can

argue that the PMI leader would be compelled to only proclaim evidences that supported the achievement of synergistic expectations, thereby skewing the data. While this possibility did exist and cannot be fully avoided, the researcher maintained that the potential skewing of data is reduced given the PMI leader's self-report information was triangulated with the data discovered via primary and secondary document analysis.

The taxonomy of merger success utilized was identified and defined in a study conducted by Duncan Angwin (2007). He classified merger related synergistic expectations into four distinct motive archetypes which are defined below. The researcher opted to utilize Angwin's framework in measuring merger success because it factored in both financial and strategic expectations in the process of defining merger success.

- Exploitation: Leverage the acquisition synergies brought on by combining with the acquired firm to increase acquirer value with a high degree of certainty.
- Exploration: Prospect new territories of latent value and for future opportunities with low certainty of improving returns to the acquirer but with big potential.
- Preservation: Attempt to defend the acquirer's competitive situation through
 control of potential new competitors. Although the acquisition may not result in
 an immediate positive return, it may protect current and future cash flows as well
 as future strategic options.
- Survival: Attempt to prevent the acquirer's end or take-over through acquisition.

The measurement of the case criterion, merger success, was conducted in three steps.

Step one, generated the pre-defined financial and strategic expectations lists of the mergers on a

case by case basis. This was accomplished through the document analysis and summarized responses to PMI leader interview questions (Please see Appendix G). Findings of these two data collection processes were combined to generate a comprehensive list of financial and strategic expectations of the mergers on a case by case basis. Step two, confirmed if the espoused financial strategic expectations at the outset of the merger have indeed been achieved. The researcher utilized the same data collection methods to validate these claims. Step three, compared the list of confirmed expectations, against the taxonomy of merger success shown in Table 1 below. The merger was considered a success if the presence of at least two of the merger success criteria were confirmed present within any combination of the four merger success archetypes.

Table 1

Merger success archetypes and criteria

Merger Success	Success Criteria
Archetype	
	Increased economies of scale and scope, gain control over value chain,
	elimination of redundant functions, reduction of costs, new customer base,
Exploitation	broadening of product portfolio, globalization, access to intellectual
Exploitation	property, HR and technology, increased revenue, access to target company
	cash and borrowing capacity, gain access to manufacturing capacity and
	suppliers, enhance reputation in the marketplace
	Sequential acquisitions as an organizational learning tool or as a prologue to
Exploration	a larger acquisition later, access to product portfolio diversification, new
_	customer base, quick access to geographic expansion
	Eliminated competition by acquiring privately held and start-up companies,
Preservation	gained dominance in the market place through acquiring in a competitor's
	main market thereby reducing the competitor's potential for acquisitions
	Reaction to industry consolidation, acquisition to grow the firm to a critical
	size, merge to create sufficient critical mass for a product/industry to take
Survival	off, merger due to sustained financial under-performance, acquire in order
	to reinvent business model thereby fundamentally refocusing company's
	direction

Source: Adapted from (Angwin, 2007)

Measurement of PMI Leader's Emotional Intelligence Units of Analysis. This research utilized the multi-rater Emotional and Social Competency Inventory (ESCI) to evaluate the level of emotional intelligence of the PMI leaders. This validated behavioral measure was created by the Hay Group, a global management consulting company, in partnership with two of the prominent mixed model (i.e., ability and personality trait) EI theorists, Daniel Goleman and Richard Boyatzis. The researcher purposely selected a multi-rater tool to avoid potential distortions that might occur when using tools that only included self-report data. The ESCI utilized in this study required a minimum of four peer raters for each individual PMI leader being evaluated.

Four of the seven units of analysis in this study's theory fell within the broader category of EI. The four EI specific units of analysis were a) self-awareness, b) self-management, c) social awareness, and d) relationship management. These four units of analysis were an exact match to the four clusters described in Goldman's EI model. Henceforth, the researcher opted to refer to the four clusters of Goleman's EI model as EI specific units of analysis. This was done to avoid confusion to the reader.

Goleman's descriptions of the four EI specific units of analysis are defined below (Boyatzis, 2010, p. 5).

- Self-awareness: Knowing one's internal states, preferences, resources and intuitions;
- Self-management: Managing one's internal states, impulses and resources;
- Social awareness: How one handles relationships and awareness of other's feelings, needs and concerns;

 Relationship management: The skill or adeptness at inducing desirable responses in others.

As was described in detail in the four EI specific units of analysis together housed the twelve EI subscale competencies or behaviors as represented in Table 2 below.

Table 2

ESCI clusters and competencies version 3.0

ESCI Cluster	Subscale Competencies
Self-awareness	Emotional self-awareness
Self-management	Achievement orientation, Adaptability, Emotional self-control,
Sen-management	Positive outlook
Social awareness	Empathy, Organizational awareness
Dalationship management	Conflict management, Coach & Mentor, Influence, Inspirational
Relationship management	leadership, Teamwork
C (D (2010)	

Source: (Boyatzis, 2010)

The administration of the multi-rater ESCI was as follows. The inventory composed of two sub-surveys; a self-survey intended for PMI leader and a multi-rater survey intended for peer raters. Each PMI leader was given the self-survey portion of the inventory. They were asked to identify and nominate at least four additional raters who were familiar with their work. Once the peer rater candidates were identified, the researcher contacted and requested the peers to fill in the multi-rater portion of the ESCI.

Both sub-surveys followed the exact same response format which was a 5 category Likert scale plus a *don't know* option. The sub-surveys included 68 questions which were organized into four sections. These four sections were the exact same four EI specific units of analysis (self-awareness, self-management, social awareness, and relationship management) utilized in this research. The respondents were to rate how frequently they demonstrated each of the twelve competencies within themselves (if respondent was the PMI leader) or the person they are rating.

Once completed surveys were received, the researcher then utilized the ESCI scoring key and technical manual provided by the Hay Group to calculate ESCI results. Per confidentiality agreement with the Hay Group, the tool ESCI, its scoring guide or the technical manual were not published in this dissertation.

Data analysis step I. Given this research was conducted employing a multiple case study strategy, ESCI results were calculated for each case. A sample result of ESCI scores by case study is represented in Table 3 below.

Table 3
Sample result of ESCI scores of a case study following ESCI data analysis step I

EI specific Units of Analysis	Competency Scale	C- 1 Self	C- 1 Other	N-M Self	N-SD Self	N-M Other	N-SD Other
Self-awareness	Emotional self- awareness	Ben	Other	3.79	0.52	3.72	0.34
	Achievement orientation			4.29	0.49	4.28	0.33
Self-management	Adaptability			4.09	0.45	4.01	0.32
J	Emotional self-control			3.94	0.54	4.15	0.41
	Positive outlook			4.15	0.51	4.15	0.34
	Empathy			3.95	0.45	3.92	0.36
Social awareness	Organizational awareness			4.19	0.47	4.25	0.31
	Conflict management			3.86	0.47	3.88	0.33
Dalationahin	Coach & mentor			4.02	0.58	3.97	0.44
Relationship	Influence			3.89	0.49	3.91	0.36
management	Inspirational leadership			3.94	0.54	3.94	0.43
	Teamwork			4.27	0.44	4.23	0.37

Note: C-1 = Case study 1, N-M = Norm Mean, N-SD = Norm Standard Deviation.

The above table depicts how ESCI results were summarized for each case included in this study. The *case study* columns represented the results calculated after the researcher had administered the ESCI to PMI leaders and peers. The *self*-scores were the results of the subsurvey given to principal participant, in this case the PMI leader. The *other*-scores were the

results of the multi-rater portion of the sub-survey. The *norm* columns represented the ESCI norm group data which were extracted from the ESCI technical manual. The 2010 norm group data shown above were derived from a database that contained 62,055 assessments of 5,761 managers. These data were collected over the period of years 2001 through 2008 ("ESCI technical manual," 2010). This norm group data were used in a later step for a statistical analysis.

Data analysis step II. This stage began the process of transforming and summarizing the ESCI scores into a format that was most useful for analyzing and displaying research results. First, self-scores and other-scores were combined to calculate a new aggregated score. This was done because the researcher was not interested in comparing results between self and other but only interested in comparing totality (i.e., aggregated) of PMI leader results against the totality of ESCI norm group data. In order to arrive at a single aggregated score, a weight was assigned to each case study's self and other scores based on the number of participants of the ESCI. For example, if the ESCI scores of a case study consisted of one PMI leader and four peer raters, then the weight for self-scores would be 1/5 and the weight for other-scores would be 4/5. This aggregated score calculation was done for both case study and norm scores. In keeping with mathematical principles, one should calculate the (ESCI) aggregate norm related means and standard deviations (SDs) employing a special mathematical equation which is described in Appendix H.

The rationale behind the assignment of weights when generating *aggregate scores* was as follows. The assignment of weights to the scores based on the ratio of each case's survey participants (i.e., number of self to others) helps standardize the data. In other words, the assignment of weights as described above allowed the ratios between *self* and *other* of the two

data sets (i.e., *norm* data and *case study* data) to be proportionally identical. As a result, the subsequent statistical comparisons were more meaningful. If the weighting were to be omitted, the statistical comparisons may be biased. In order to obtain unbiased results, the influence of *self*-scores on the *aggregated scores* had to be identical in both data sets (i.e., case study and norm data).

In Table 4 below, a sample result of *aggregated scores* of a case study is shown following the step II of the ESCI data analysis process. The *case study* and *norm* columns now consisted of *aggregate scores* as opposed to *self* and *other* scores. As mentioned earlier at the beginning of step II of data analysis, the scores were aggregated because the research interest was to compare the *case study* and *norm* scores and not *self* and *other* scores. The equations employed to convert norm data into aggregate norm data is listed in Appendix H.

Table 4

Aggregated scores of a case study following ESCI data analysis step II

El angaific Units of		C-1	N-M	N-SD
EI specific Units of Analysis	Competency Scale	Aggregate	Aggregate	Aggregate
Alialysis		score	score	score
Self-awareness	Emotional self-			
Sen-awareness	awareness			
	Achievement			
	orientation			
Self-management	Adaptability			
-	Emotional self-control			
	Positive outlook			
	Empathy			
Social awareness	Organizational			
	awareness			
	Conflict management			
	Coach & mentor			
Relationship management	Influence			
	Inspirational leadership			
	Teamwork			

Note: C-1 = Case study 1, N-M = Norm Mean, N-SD = Norm Standard Deviation.

Data analysis step III. This stage was a further continuation of the process of transforming and summarizing the ESCI scores into a final result format. Thus far, each case study's results table comprised of both EI specific units of analysis and their corresponding competency scales. Step III rolled up the competency scales under each of the four EI specific units of analysis. To do so, a simple average was calculated at each EI unit of analysis level. For example, the self-management unit of analysis had four corresponding competencies. The average was calculated by dividing the sum of the four competency aggregate scores by four. This calculation was done to both the case study and norm aggregate scores and result in unit scores. An example of a case study's results following the completion of step III of the ESCI data analysis is shown in Table 5 below.

Table 5

An example of a case study's results following the ESCI data analysis step III

EI specific Units of Analysis	C-1 Unit Score	N-M Unit Score	N-SD Unit Score
Self-awareness			
Self-management			
Social awareness			
Relationship management			

Note: C-1 = Case study 1, N-M = Norm Mean, N-SD = Norm Standard Deviation.

Data analysis step IV. The fourth and next to last stage of ESCI data analysis focused on the logic and mathematics utilized in the process of comparing case study results to the norm results.

Table 6

An example of the final ESCI results format for a given case study

EI specific	\mathbf{A}	В	C	D	${f E}$	\mathbf{F}	G
Units of Analysis	C-1 Unit Score	N-M Unit Score	N-SD Unit Score	Difference sgn(A - B)	z-score	p	Z-test $p \le \alpha$
Self-awareness							_
Self-							_
management							
Social							
awareness							
Relationship							
management							

Note: C-1 = Case study 1, N-M = Norm Mean, N-SD = Norm Standard Deviation, sgn(A-B) = the sign of the difference between column A and column B, p = Probability value associated with the z-score.

 $*\alpha = 0.05$

The Table 6 shown above is an example of the final ESCI results format for a given case study. The columns A, B, and C consisted of *case study unit scores*, *norm unit scores*, and *standard deviations of norm unit scores* respectively. In column D, *case study unit scores* were subtracted from *norm unit scores*. This subtraction was done because it paved the way for the researcher to subsequently compare the *case study* results to *norm* results. For example, if the difference was positive, then the research results provided evidence supporting the proposed theory's EI specific unit of analysis. And if the difference was negative, then the research results would not support the EI specific unit of analysis. Since the actual difference between two scores will not influence the degree of support for or against the proposed theory, the *signum* function (i.e., *sgn*) was applied to the difference in order to indicate support or non-support of the proposed theory by the numbers +1 and -1 respectively.

In the next phase, significance testing was employed to answer the question whether or not the observed difference be attributed to chance? In other words the researcher was interested in understanding the strength by which the results observed support or did not support this study's theory. To that end, the z-test was conducted. The columns E through G represented the z-test process. First a z-score was calculated by taking the difference between the two unit scores divided by the SD of the norm. The mathematical formula employed is described in Appendix I. The z-score is a measure of difference represented in standard deviation units (Gravetter & Wallnau, 2009). Once the z-score is derived, the researcher then employed the ztable to locate the probability value associated with the derived z-score. This probability value was represented by a p value. In order to complete the significance testing process, the p value must be compared to a predetermined probability threshold (α). This probability threshold helped the researcher to make a decision about the *significance* of this study's results. The researcher assigned probability threshold, called alpha (α), was set at 0.05. For example, the research results were considered *significant*, if the p values is less than or equal to alpha. In other words, there would only be a less than or equal to 5 percent chance that the significant study results occurred due to chance. The column G of Table 6 was used to represent whether or not a case study's results were considered significant. A significant result was assigned the number 1 and a *non-significant* result the number 0.

Data analysis step V. The last step of data analysis presented the cross-case study ESCI results for each unit of analysis as shown in Table 7 below.

Table 7

An example of the cross-case study ESCI results for each unit of analysis

EI Units of Analysis	Case 1	Case 2	Case 3	Case 4	Literally Replicated ?
Self-awareness					
Self-management					_
Social awareness					
Relationship management					

The data presented in the Table 7 above summarized the case study specific results in Table 6. In particular, the above Table 7 included the Columns D of all case studies' Table 6. Furthermore, Table 7 also showed whether or not literal replications of cross-case results were achieved. Once the corresponding *cross-case literal replication* was achieved, then the researcher concluded that the corresponding unit of analysis supported the claim of the proposed theory. If however, a *cross-case literal replication* was not achieved, then the researcher concluded that the corresponding unit of analysis did not support the researcher's theory.

Measurement of PMI Leader's Culture Specific Units of Analysis. This research employed Schein's definition of culture. Given this research anticipated to measure the PMI leader's culture specific competency; a further clarification of the *culture* definition is warranted. According to Schein, "culture is an abstraction, yet the forces that are created in social and organizational situations that derive from culture are powerful. "If we don't understand the operation of these forces, we become victim to them" (Schein, 2011, p. 349). Therefore, a PMI leader's culture specific competency was defined as taking an active role in such situations that required taking a cultural perspective or seeing the world through cultural lenses. Per Schein, such a capacity required an individual to be competent in *cultural analysis* where the individual

was able to perceive and decipher the cultural forces that operated in groups, organizations, and occupations.

Three units of analysis of the proposed theory focused on the PMI leader's culture specific competencies. They included the leader's cognitive awareness of culture, application of culture knowledge at work, and active management of differences born out of culture. In this section, the term *PMI leader's culture specific competency* referred to all three culture related units of analysis unless specifically identified otherwise.

The three culture specific competencies were categorized into separate units of analysis as a necessary step for constructing and presenting a testable theory. The researcher assumed that these three units were both distinct and interrelated. For example, cognitive awareness of culture comprised nuances of consciousness regarding application of culture knowledge and vice versa. Furthermore, management of culture born differences involved delicate awareness of culture knowledge (i.e., Cognitive awareness of culture) and subtleties of culturally informed behavior (i.e., Application of culture knowledge).

Two semi-structured interviews which included both open-ended and Likert scaled questions were utilized to collect data pertaining to PMI leader's culture specific competencies. One interview focused on the PMI leaders and the other with any one of the leader's peers, direct reports or superiors who were aware of the leader's work. The PMI leader was requested to nominate possible candidates for the peer interview. The researcher triangulated both sources of interview data during the data analysis phase. In order to eliminate potential coercion and maintain confidentiality, the names of the peer participants who actually participated in the interviews were not shared with the respective PMI leaders.

The interview guides used during the data collection process by the PMI leaders and peers are shown in Appendix E and Appendix F respectively. A pilot test was conducted to assess and refine the culture questionnaire prior to being administered to the study participants. The questions in the interview guides were grouped under 1 of 3 subsections depending on the culture specific unit of analysis being measured. As mentioned earlier some questions were purposely phrased in a quantitative tone using a five point Likert scale. The researcher chose to include these questions for analytic ease. A detailed explanation of the scoring and interpretation of the questionnaire results can be found in Appendix J.

Similarly, the peer interview guide (i.e., Appendix F) also included open-ended questions and Likert scale questions. The peer interview guide was different from the PMI leader interview guide such that it only included questions relating to two and not three culture specific units of analysis. The unit *cognitive awareness culture* was omitted from the peer interview guide because it was unlikely that useful data could be derived by asking *others* of the leader's level of culture related knowledge.

In the event the researcher was unable to secure interviews with the peers, direct reports or superiors of the PMI leader to supplement leader's culture competency related data, predetermined corroborative data already available from the multi-rater ESCI were used. The specific ESCI data points of interest included the peer responses to subscale competencies a) empathy, b) adaptability c) influence, d) inspirational leadership, and e) conflict management. Although not directly interchangeable to the three culture specific units of analysis identified in the proposed theory, the ESCI subscales a through e identified above resembled the personal qualities, behaviors, and administrative actions desired of a culturally competent PMI leader as defined in this study. In the event that the ESCI subscales were utilized to supplement data

related PMI leader's culture specific units of analysis, then each subscale had to demonstrate ESCI scores at or above its corresponding norm group. Again, the select ESCI subscale competency data were used only when repeated attempts to secure peer interviews failed.

Appendix J described the data analysis and interpretation process of the culture related units of this study. The analysis and scoring specific to the open-ended questions were described in Appendix K. An example of how the final results were interpreted and displayed is presented below in Table 8.

Table 8

Final results of the culture-specific competency questionnaire

Culture specific Units of Analysis	Case 1	Case 2	Case 3	Case 4	Literally Replicated ?
Cognitive awareness of culture					
Application of culture					
knowledge					
Management of differences born					
out of culture					

The above table summarized the cultural competency results of the cases included in this study. Each culture related unit of analysis were considered supported if all cases demonstrated results that were at or higher than the results interpreting criteria used.

Overall, the data collection within the measurement of a PMI leader's culture specific competency included two semi-structured interviews with Likert scale questions. In some instances it included select corroborative data from the multi-rater ESCI.

A summary of the data collection and analysis processes as well as the method of evaluating the validity of this study's theory is shown in Table 9 below.

Table 9

Overview of criteria for data collection and interpreting findings

Case Criteria & Unit of Analysis	How to collect data	How to analyze	Empirical indicators	How to decide if theory is supported
a. PMI Leader	Document review	Scan documents to confirm leadership position is formally assigned; leader possesses the power to influence/drive PMI in their organizations.	PMI leader occupies a formal leadership position within the organization, position grade level is managerial or higher	PMI leader role is formally assigned with explicitly stated merger integration duties
b. Merger Success	Primary and secondary document review, interview with PMI leader	Track emerging themes and trends of document analysis and interview response to identify if merger success was achieved	Presence of merger success criteria underpinning the four archetypes of merger success taxonomy as shown in Table 1	Confirmed achievement of at least two merger success criteria belonging to any combination of the four merger success archetypes
Emotional Intelligen	ce Specific Units of	Analysis:		
 Self-awareness Self-management Social awareness Relationship management 	Emotional & Social Competency Inventory (ESCI)	Use ESCI scoring guide and technical manual	Case study specific ESCI results	The corresponding cross- case sum total in Table 7 is a positive number
Culture Specific Unit	ts of Analysis:			
5. Cognitive awareness of culture6. Application of culture knowledge7. Management of differences	Semi-structured interviews, multi- rater responses of select ESCI competency subscales	Sort interview responses and field notes to create common themes and emerging patterns, Use ESCI scoring guide and technical manual	Demonstrated presence or absence of the corresponding competencies by the PMI leaders, multi-rater ESCI scores for the select competency subscales	Demonstrated presence of corresponding competencies by the PMI leaders, ESCI scores for select competency subscales match or exceed the norm group

Data Collection

Data collection methods included the use of validated multi-rater ESCI, two semi-structured interviews, and document analysis. The specific details of how these methods were applied to this study were discussed above at each unit of analysis level. The purpose of this section therefore was twofold. One, to briefly clarify the rationale behind the construction of semi-structured interviews as they pertained to culture specific units of analysis and two, to articulate the rationale for the inclusion of *other* questions as seen in Appendix G.

The bulk of the semi-structured interviews focused on gathering information pertaining to the measurement of a PMI leader's culture specific competencies. According to Schein (1999), culture was largely an unconscious process (i.e., assumptions were tacit and out of awareness) thus making it difficult to study using methods such as surveys. He suggested the use of individual or group interviews instead. The researcher therefore, chose a semi-structured interview method which included both open-ended and Likert scale questions under each of the three select culture competencies of this study's theory. The interview guides (See Appendix E and Appendix F) were tested using a pilot group of participants. Changes were made to the original interview guides thus refining them before collecting the data from the target population. The intent of the open-ended questions was to elicit stories as well as to gauge the leader's content specific knowledge. Using the stories and the interview question scoring guide (Appendix J) as catalysts, the researcher sought to identify whether and how the PMI leaders demonstrated the select competencies.

A second semi-structured interview with leader's peers was also planned for the collecting data pertaining to PMI leader's cultural competency. This data were used to

supplement the self-reported data collected from the PMI leader interview. This enabled the triangulation of the entire culture competency related data set. The semi-structured peer interview guide (See Appendix F) only included two of the three select culture competency themes. This was because the third competency theme, PMI leader's cognitive awareness of culture, could not be meaningfully measured via third party input.

The researcher also requested the study participants to provide a copy of their job descriptions. This document was used to glean how the organization as a whole viewed the function of the integration leader through a scan of its contents, especially *responsibilities* and *qualifications*. This information helped the composition of each case summary.

Though not directly applicable to the testing of the theory, the researcher gathered the following data which she believed prove useful in the composition of individual case reports.

The two data points of interest included the identification of the nature (size, organizational chart, departmental vision etc.) of the PMI team and the perceived belief of the chief executive of the organization concerning the PMI role (Yunker, 1983). The underlying reason for collecting data pertaining to the nature of the PMI team was to gain insight into the level of resources made available to the team in carrying out their espoused responsibilities. To this end, the researcher requested the research participants to share their experiences or documentation. The documentation included items such as organizational chart of the integration team, evidence of integration planning such as the plan itself, planning meeting agenda, reports, e-mails and departmental vision, mission and values. The researcher also was interested in understanding how the chief executive officer of the organization views the PMI leader role. Specifically, the researcher was interested in discovering if the mandate entrusted upon the PMI leader by the executive was conciliatory or adversarial in nature (Yunker, 1983, p. 142). The researcher

utilized the PMI leader interview to gather this evidence. An executive's conciliatory mandate constituted an expectation of the PMI leader to be helpful, avoid destructive criticism and be tactful in implementing merger integration activities. An adversarial mandate on the other hand constituted an expectation of the PMI leader to report faults and failings of the integration efforts with subsequent interest in eliminating perceived resistances.

The researcher predicted that a conciliatory mandate and ample availability of organizational resources would help create a positive work environment for the PMI leader and his team thus increasing the likelihood of their overall effectiveness. Once again, the above two data points were only be used in the composition of individual case reports as they provide a rich backdrop to each individual case study. The unavailability of this data does not impact the testing of this study's theory.

Validity of the Research

Yin (2009) described four criteria for measuring the quality of research designs which included: a) construct validity, b) internal validity, c) external validity, and d) reliability. *Construct validity* referred to "identifying correct operational measures for the concepts being studied" (Yin, 2009, p. 40). In essence, construct validity tested if the measures utilized in the study indeed measure what the study stated it was measuring. Per Yin (2009), the appropriateness of the measures used to test the theory in turn affords the researcher reasonable legitimacy when making inferences from the study results. The following steps were taken to maintain construct validity of this research. In the data collection phase, this study utilized semi-structured interviews and a validated multi-rater EI survey to gather data from the integration leaders. In addition, the researcher sought contributions from the leader's superiors (i.e., chief

executive) and peers as well as relevant information gleaned from the review of organizational documents. Furthermore, an additional step was taken during the case report composition phase in order to maintain construct validity. To that end, the integration leaders were given an opportunity to review their summary case reports prior to including them in the study.

Internal validity of the research design was established if conditions described in the theory do indeed lead to the outcome described (Yin, 2009). For example, the high levels of PMI leader's select competencies (i.e., in Yin's terms, conditions described) positively influenced post-merger success (i.e., in Yin's terms, outcome described). Per Yin (2009), the test of internal validity was only applicable to explanatory or causal studies. Since this research was fashioned in an explanatory multiple case study design, the researcher was required to maintain internal validity. The pattern matching technique utilized in the data analysis phase aided in maintaining internal validity. For example, the convergence of patterns across multiple replication cases allowed the researcher to make inferences, which as a consequence supported the existence of a relationship between conditions and outcome described.

At a macro level, this study was formulated to test one factor's (i.e., PMI leaders with select competencies) contribution towards influencing merger success. As such, the internal validity's, "attempt to establish causal relationship, whereby certain conditions are believed to lead to other conditions" (Yin, 2009, p. 40) is kept intact. The definition of *causal relationship* employed here by the researcher meant to refer to the fact that a relationship appeared to exist. It could be possible that there was some other variable, not tested in the theory that caused the outcome.

External validity referred to the capacity of generalizing study findings to other situations beyond the immediate cases utilized (Yin, 2009). In particular, it referred to the extent to which this study's results provide a correct basis for explanation of other situations. Yin's case study methodology claimed that generalizations of study results may be made to the broader theory, that is theory derived from the use of specific cases in this study, and not larger populations, that is cases not used in the study.

Yin (2009) suggested that the *replication logic* could be used to strengthen the generalizability of results. For example, external validity could be increased if a multiple case design was used as opposed to single case study, because the findings in one case study could likely be replicated by the findings of the second, third or even fourth case study. The multiple case study design adopted in this research allowed the researcher to replicate the theory testing process on multiple people and locations. Since a pattern confirming this study's theory emerged through the replication of cases, the external validity was considered stronger.

Reliability involved the study's ability to "demonstrate that the operations of the study, such as data collection, can be repeated with the same results" (Yin, 2009, p. 40). In essence it referred to the ability to consistently and repeatedly yielding the same results using the same study procedures. To that end, this study maintained "a chain of evidence" (Yin, 2009, p. 122) and a "case study database" (Yin, 2009, p. 118). These sources allowed other interested investigator an opportunity to review evidence and process employed in gathering the information necessary to produce written case reports. Contents of the database included interview notes, digital copies of document reviewed, digital recording of interviews where available, narratives of open-ended questions where available and other case specific documents collected etc.

Chapter IV – Findings

The research question underlying this study has been: How do PMI leaders' Emotional Intelligence and their culture specific competencies influence merger success? To explore this question the researcher proposed a theory which identified some PMI leader competencies that may influence merger success. The theory which included seven units of analysis was tested using the positivistic case study method.

The results presented in this chapter were based on four case studies. Each case study focused on a PMI leader who steered a successful merger integration effort. Three out of the four cases represent a company that is publicly traded while the fourth case was based on a privately held family owned holding company. The participant structure on all cases consisted of one PMI leader and four peers of the leader. A demographic overview of the study participants are shown in Table 10. Data were collected using a validated multi-rater Emotional Intelligence survey, culture specific questionnaire, interviews, and document analysis.

Table 10

Demographic overview of research participants

Participants	Gender	Race	Functional Area	Geographic Location	Representative Organization
Case 1					
Leader A	Male	Caucasian	HR	Midwest State	Acquirer
Peer A1	Male	Caucasian	Finance	Midwest State	Acquirer
Peer A2	Female	Asian	Operations	Western State	Acquired
Peer A3	Male	Caucasian	IT	Midwest State	Acquirer
Peer A4	Male	Caucasian	Management	Overseas	Acquirer
Case 2					
Leader B	Male	Caucasian	HR	Midwest State	Acquirer
Peer B1	Female	Caucasian	Management	Western State	Acquirer
Peer B2	Female	Caucasian	Executive	Midwest State	Acquirer
Peer B3	Male	Caucasian	Operations	Midwest State	Acquirer
Peer B4	Female	Caucasian	Management	Overseas	Acquired
Case 3					
Leader C	Male	African American	HR	Midwest State	Acquirer
Peer C1	Female	Caucasian	Operations	Midwest State	Acquired
Peer C2	Female	Caucasian	HR	South West State	Acquirer
Peer C3	Female	African American	Operations	Southern State	Acquired
Peer C4	Female	Hispanic	Operations	Southern State	Acquirer
Case 4					
Leader D	Male	Caucasian	Finance	Southern State	Acquirer
Peer D1	Female	Caucasian	Executive	Midwest State	Acquirer
Peer D2	Female	Caucasian	Finance	Midwest State	Acquirer
Peer D3	Male	Caucasian	Risk Management	Midwest State	Acquirer
Peer D4	Female	Caucasian	Operations	Southern State	Acquired

In the following, each case is discussed individually by providing an overview of the case details and its participants. In addition, a high level result summary is presented focusing on the two case criteria and seven units of analysis tested in each case. This chapter will conclude with a cross-case analysis and findings summary.

As was indicated in Chapter Three, the use of PMI leader and merger success as case selection criteria precluded the researcher from re-using them as units of analysis of the theory. Given the importance of these two criteria to the overall theory, the researcher opted to demonstrate in detail how these criteria were met within each of the cases. As such, all upcoming case result summaries would include both the two case criteria and the theory's units of analysis. The seven units of analysis can be summarized into two broader categories; emotional intelligence and culture specific competencies. For the purposes of brevity and ease of readership the researcher opted to present the results utilizing these two broad category formats.

Case 1

Description. The PMI leader of this case was identified as leader A. He is the vice president of integration at a publicly traded medical equipment company. The company's manufacturing operations were spread worldwide and it marketed its products in more than 120 countries. The company which continues to grow through acquisitions and targeted divestures is operated under two broad medical equipment related business segments. In the fourth quarter of 2010 the company created an additional third business segment by acquiring the assets of a seller for a reported x billion.

Among many acquisition types, an asset purchase may have a special impact on the follow-on integration process. A typical asset purchase type of acquisition structure required the acquirer to purchase only a portion of seller's assets and liabilities. For example, a acquirer could only purchase a product line of a seller which may include the product manufacturing plants, technology, product specific human capital etc. It is likely that such a purchase not

include the migration of the core functions that supported the product line such as accounting & finance, information technology, regulatory reporting etc. From an integration standpoint, an asset purchase likely required the acquirer to maintain close contact with the seller for ongoing support throughout an agreed upon duration of time. The support was intended to help the buyer lay the necessary ground work that facilitates the fusing of newly purchased assets into the acquirer's core business. Case 1, was set in an environment where the acquirer retained the support of the seller for y number of years at a cost of \$z million.

Leader A's company managed its business operations in a decentralized manner. A decentralized organizational structure often relied on "shared" decision making made by "teams" at different levels of business. As such, each of the acquirer's many divisions and business units had some autonomy in operating their business. The corporate headquarters, which consisted of multiple functional groups such as HR, finance, tax, compliance, IT etc., provided the said services to the business divisions and units. The decentralized elements, corporate headquarters, business divisions and business units were interconnected by a common vision, mission and culture.

At the time of this study, leader A was the vice president of integration and had been with the company for many years with much of his tenure in the functional group of human resources. Prior to his current position at the headquarters, he had the opportunity to work in different business divisions in the US and abroad. Among the positions he held in the past range from general manager to vice president of global human resources. The leader's work experience in the company's various business divisions as well as the corporate headquarters had given him a unique perspective in understanding the nuances that make the company a success. Leader A began his current role in the fourth quarter of 2011, reported directly to a C-suite executive, and

had many other employees that report to him. His fourteen member core PMI team included five members from the acquired organization. The leader was satisfied with the budgetary and other resources allocated to him to carry out his mission. He also felt the company leadership team expected him to take an overall persuasive and consensus building approach to the integration. When asked about the nature of the communications with the C-suite (i.e. access, frequency, openness etc.) he responded, "I have a very open-communication with the [C-suite leader's name] and have incredible autonomy in managing the integration" (Leader A, personal communication February 29, 2012).

Leader A provided the researcher with the names and contact information of his peers for this study. All four peers of leader A participated in the semi-structured interview and completing the multi-rater portion of the ESCI survey. They all had responsibilities related to the integration effort and worked closely with leader A. One of the four peer participants joined the company as a result of the recent acquisition.

Theoretical Units Summary. The Table 11 shown below is an overview of the results of Case 1. The sections that follow the table explained the analysis processes which led to the case results on a case criteria and unit of analysis basis.

Table 11

Overview of Case 1 criteria and theoretical unit summary

Case Criteria & Unit of Analysis	Data Source	Empirical indicators found	Criteria confirmed or Units supported ?
a. PMI Leader	Interviews, document review	Formal leader of company with explicit integration responsibilities	Yes
b. Merger Success	Leader interview, document review	Findings satisfy three success archetypes listed in Table 1.	Yes
Emotional Intelligence	e Specific Units of	Analysis:	
1. Self-awareness		Leader score > norm score, result statistically significant	Yes
2. Self-management	ECCI C	Leader score > norm score, result not statistically significant	Yes
3. Social awareness	ESCI Survey	Leader score > norm score, result statistically significant	Yes
4. Relationship management		Leader score > norm score, result statistically significant	Yes
Culture Specific Unit	s of Analysis:	, ,	
5. Cognitive awareness of culture		Leader interview responses indicate high cognitive awareness of culture	Yes
6. Application of culture knowledge	Interviews, culture questionnaire	Leader & peers agree or strongly agree with Likert scale statements, Interview responses were consistent with Likert scale responses	Yes
7. Management of differences born out of culture		Leader & peers agree or strongly agree with Likert scale statements, Interview responses were consistent with Likert scale responses	Yes

PMI leader. Since leader A a) was the vice president of integration at major company, b) was a full time employee with formal authority to facilitate the integration of the recent merger, and c) occupied a position of leadership, manager level or higher, the researcher concluded that this case criterion was confirmed.

Merger success. When measuring merger success, the focus was on the achievement of both financial and strategic outcomes set forth by the acquiring company at the outset of the merger. To aid this process the researcher adopted a four category success archetype system which was outlined earlier in Table 1 within the methodology chapter. The four archetypes were exploitation, exploration, preservation, and survival. Each archetype included a set of specific financial and strategic metrics which indicated success. According to the results analysis criteria outlined in Table 9, at least two success archetypes identified must be met in order for the criterion to be confirmed. Data collected via leader interview and document review (press releases, stock market data and equity research notes produced by investment advisory firms) provided a variety of merger success indicators. These fell into three of the four success archetypes identified. The following is a summary of the case specific financial and strategic metrics which were found:

In support of the archetype *exploitation* the following financial and strategic metrics were found; a) broadened the product portfolio, b) accessed new intellectual property and manufacturing capacity, c) increased revenue (likely ~30% addition into operating margin, tax benefits), and d) regained sales momentum and growth opportunities which had declined previously due to economic conditions.

The empirical indicators which embodied the success archetype *exploration* include a) quick access to geographic expansion (emerging markets etc.), b) inorganic entry into a new segment of the medical equipment market space, and c) prologue into subsequent acquisitions within the market sub-space.

The data analysis process also uncovered the presence of success archetype, *preservation*. For example, with the acquisition of this market leading product line, the acquirer likely defended its competitive situation. This was because by moving first, the acquirer disallowed the other competitors a chance of an acquisition.

Given multiple financial and strategic metrics which spanned across three success archetypes were identified (minimum of two required), this case criterion was considered to be verified.

Leader A's emotional intelligence. Steps I through III of the data analysis of the ESCI survey for Case 1 was described in Appendix L. The results following the step IV of the data analysis process is presented in Table 12 below. This table showed whether or not the results of case study 1 (i.e., C-1) exceed the *norm* results (column D) and if the observed results were statistically significant (column G).

Table 12

Leader A's ESCI results

EI specific	A	В	C	D	E	F	G
Units of Analysis	C-1 Unit Score	N-M Unit Score	N-SD Unit Score	Difference sgn(A - B)	z-score	p	Z-test $p \le \alpha$
Self-awareness	4.253	3.722	0.345	1	3.442	0.001	1
Self- management	4.380	4.147	0.355	1	1.471	0.071	0
Social awareness	4.480	4.085	0.339	1	2.611	0.005	1
Relationship management	4.467	3.986	0.389	1	2.760	0.003	1

Note: C-1 = Case study 1, N-M = Norm Mean, N-SD = Norm Standard Deviation, sgn(A-B) = the sign of the difference between column A and column B, <math>p = Probability value associated with the z-score.

 $^{*\}alpha = 0.05$

The columns A, B, and C consisted of *case study 1 unit scores*, *norm unit scores*, and *standard deviations of norm unit scores* respectively. While column A represent leader A's specific results, columns B and C represent *norm* related scores which were obtained from the ESCI technical manual and further processed to meet the results comparison needs of this study. Column D indicated if the *case study 1* results met or exceeded the *norm* by subtracting column A (*unit score*) from column B (*norm unit score*). The expression of +1 represents a positive result which meant that the *case* results exceeded the *norms*. A negative indication, expressed in -1, meant the *case study 1* result was below that of the *norm*. According to column D of Table 12, leader A clearly exhibits *unit scores* that exceed that of the *norm* group. In other words, leader A's EI specific competency levels were higher in relation to the validated multi-rater survey *norm* group. As such, all four EI specific units of analysis of *case study 1* provided evidence supporting this study's theory.

As was described in the section Theoretical Model under data analysis step IV, the researcher also opted to perform a statistical significance test. Such a test helps determine if the observed results (ex: results in column D) occurred due to chance. Columns E, F, and G present different phases of the significant test (z-test). A detailed analysis of the *z-test* was provided in Appendix I. Z-scores calculated for each unit of analysis are presented in column E. Column F presents the corresponding probability value (p value) that is associated with the z-score. Column G presents the z-test where the z-score's associated p value (column F) is compared to this study's predetermined probability threshold alpha (α) of 0.05. For example, a research result was considered *significant*, if the corresponding p value was less than or equal to *alpha*. The last column (column G) showed the outcome of the test. An indication of the number +1 showed that

the observed unit of analysis results was statistically significant. An indication of 0 denoted that the corresponding result was not statistically significant.

In summary, all four EI specific units of analysis scores of leader A were higher than that of the *norm scores* as indicated in column D. In addition, three out of the four units of analysis outcomes were statistically significant as shown in column G. Accordingly, the likelihood that the results of these three units of analysis happened by chance is at most 5%. The non-statistically significant result produced for the EI unit, self-management, meant that there was more than 5% probability that this theory-supporting result occurred due to chance.

Leader A's culture specific competence. The researcher's theory consisted of three culture specific units of analysis. A culture questionnaire that included Likert scale questions and interviews which aimed at probing deeper into the subject matter were employed to collect the pertinent data. Leader A and all four of his peers contributed to the data collection process. The leader and peer culture questionnaire responses could be found in Appendix P and Appendix Q respectively. The data analysis process specific to the culture questionnaire and interview were described in detail in the Theoretical Model section. The culture specific units of analysis results of leader A are presented in Table 13 below.

Table 13

Results of leader A's culture specific units of analysis

Culture specific Units of Analysis	C-1 Aggregate score
Cognitive awareness of culture	51/60 pts
Application of culture knowledge	4.280
Management of differences born out of culture	4.000

Note: C-1 = Case study 1, pts. = Points.

The unit, cognitive awareness of culture, was tested using a set of open-ended questions posed only to the leader. Peer data on this unit were intentionally not collected because no useful data about the leader's cognitive awareness could be gathered by this means. According to the scoring method adapted (Appendix K) leader A was awarded 51 points out of the maximum possible 60 points. This score indicated support towards the researcher's theory. Leader A also supported the researcher's theory in units, application of culture knowledge and management of culture born differences with aggregate scores that were at or higher than 4.0.

Leader A attributed much of his cognitive learning about culture to have taken place due to "fair amount of foreign travel" and various "work related assignments." In particular his career at the current employer allowed him to gain exposure into multiple functional areas such as HR, general management (production), distribution channel and materials management etc. The time spent at different functional areas of the company had given the leader a unique understanding of the total company culture as well as different sub-cultures of the decentralized organization. Furthermore, he also attributed his expatriate assignment in country X as a plant manager and his role as a global HR lead to also have contributed to his knowledge about international cultures.

Leader A was unable to identify specific authors who write about culture. This probing question was intentionally placed in the interview to further investigate leader A's conceptual understanding of culture. Instead he referred to a book by stating, "I am probably dating myself here but the book *Good to great* by Jim Collins really resonates with me and I always keep going back to it" (Leader A, personal communication February 29, 2012). He most passionately referenced a work experience during his expatriate assignment where he heavily utilized specific takeaways from this book. Although leader A demonstrated remarkable grasp of the subject

matter of the book in question during the course of the interview, the researcher did not award any points towards the specific interview question because Jim Collins was not pre-identified as an author of choice in the interview scoring guide. Nevertheless, the leader accumulated a total of 51 out of a possible 60 points in the interview segment which focused on the cognitive awareness of culture.

The unit, application of culture knowledge sought to investigate leader A's ability to turn his cognitive awareness of culture into actions during the integration efforts. This was evaluated using a Likert-scale culture questionnaire as well as open ended questions for probing further into the Likert questions. The leader and four peers contributed to the data collection process. An aggregate score of 4.28 was calculated for the unit. The process by which score was generated is explained in Appendix R.

The responses to the open-ended questions pertaining to above unit were consistent with the Likert-scale responses. Select peer statement excerpts which were aimed at reinforcing support towards leader A's application of culture knowledge are as follows:

"He is respectful even when he is frustrated-keeps a level head." "[He is] calm and consistent, I'm yet to see him agitated." "One of the things I see him do well is to adjust his communication style and understand the different styles of stakeholders whether they are at the top or bottom of the food chain." "He is a very disciplined individual who has a broad understanding of how to run a business. He didn't pick his team but he knows how to get the best out of the team." "[He] understands [company name]. [Company name] is fiercely decentralized and it takes skill to leverage differences between groups.

He has passion for it [building inclusive culture] and cares for it. That really helps him in this role."

Furthermore, the peers found leader A's interpersonal, listening, negotiation and general management skills to be vital in his ability to take on culture integration processes. Given this unit's aggregate score of 4.28 was higher than the minimum required (4.00), the researcher concluded that case study 1 supported the theory in the unit, application of culture knowledge.

The results from the data which analyzed the unit, management of differences born out of culture, demonstrated support towards the researcher's theory with an aggregate score of 4.0. The responses to open-ended questions complemented this quantitative score generated from the responses to Likert-scale questionnaire. The following are a compilation of leader A's responses when asked what strategies he had used to mitigate merger failure due to culture issues.

"[Understanding] the rate of change is number one; how much how quick. Build trust first [with acquiring company members] and then trust in the people driving the change." "Ours is a strength based organization. Our culture emphasizes growth and accountability as fundamental to success of people. Naturally [we] have an appreciation for best practices and value that. The new company brings some clearly superior practices. We [acquiring company] do a pretty good job at incorporating them as it's critical to achieving business goals." "Finding opportunity outside the formal integration [activities] to improve relationship is also key. I go out of my way to connect...bond [with members of the acquired company] at every organizational level. This gives me a chance to understand cultural norms which can be life lines [in upcoming integration efforts]."

Some peer statements which demonstrated support towards the unit management of differences born out of culture are as follows:

"He listens well and learns from others. Often he draws people in. It's not us versus them." "He assimilates very well even to other functions like IT, regs [regulatory] or accounting. His style is, I dive deep, deep, deep, and deep as deep could be and then I get out." "He does not come in wielding an axe, he's not afraid of it, but won't use it right away." "He is not an avoider. Differences that come up [during integration] are discussed. It's not just I [referring to leader A] got it done, he really delves into the problem and checks if this is the right thing for the business going forward." "His whole job is conflict resolution [laughter]. He is super human [thus] not fatigued by this [PMI role] yet."

Leader A's aggregate score for the unit, management of differences born out of culture, was 4.0. This demonstrated that he had the competency to manage such issues during the integration. The researcher came across an interesting dilemma during the step I of the result calculation process. When asked the question (number 14 on peer interview guide) whether or not the leader addressed the culture related differences with due respect and delicacy (a Likert-scale question), one of the leader's peers opted to answer the question in the following manner. "If the person came from [acquired company name], then I would give him a 4 [i.e. agree]. If it's one of us [acquiring company], then I would give him a 2 [i.e. disagree]" (Peer A4, personal communication March 7, 2012). This response posed a dilemma for the researcher because the scoring guide adopted did not include the possibility of two responses to Likert questions. The researcher proceeded in the following manner. Upon also considering peer A4's open-ended responses to the same unit as well as peer A4's verbal comments to the Likert question number

14, the researcher determined to utilize the higher response in calculating the peer contribution to the *unit score*. All in all, with a unit score of 4.0, leader A portrayed a higher competence in the ability to manage differences born out of culture.

Case Study 1 Summary. All findings of the seven units of the theory tested met or exceeded the results analysis criteria adopted. As such, case study 1 supported the theory of this research.

Case 2

Description. The PMI leader of this case was identified as leader B. He was the senior director of Human Resources at a publicly traded medical technology company. This global company had grown steadily with a mixture of its own internal research and development prowess as well as acquisitions. With a presence in over 120 countries, this company generated an estimated 40% of its overall business in international sales. In the fourth quarter of 2008 the company acquired an internationally based firm for a reported \$x\$ million.

One of the unique features of this acquisition integration process was the added dynamic of having to incorporate international culture (along with corporate culture). From the acquirer's point of the view, the overt differences include; language, time zones, and regional business etiquette.

Yet another dynamic was added to the ongoing international integration activities when the acquirer made a subsequent related acquisition of a U.S. company. Leader B was assigned the integration activities of the subsequent acquisition as well. The company leadership made this decision because both acquisitions were ultimately to be housed under a newly created

business franchise. As such, leader B was charged with the task of facilitating the integrations of both international and domestic acquisitions simultaneously.

Much of leader B's tenure with the acquirer was spent within the functional area of human resources. Prior to becoming the senior director of HR of the current business division, he was responsible for the merger integration and planning activities of another division of the acquiring company. He also was well adept in managing international assignments due to his current and previous career experience. Leader B had direct access to the CEO of the organization throughout the first three months of the integration process. The weekly meetings included but were not limited to providing status updates on the on-going integration. Although the frequency of the meetings decreased after the first three months, leader B felt he had sufficient access and continued support of the C-suite management in implementing the integration tasks. Although he did experienced delays from time to time, the leader did receive necessary resources such as finances, technical support etc. to implement the integrations.

Leader B was not part of the due diligence team of the merger. He did acknowledge taking on additional fact finding initiatives to supplement his knowledge and understanding of the acquisition. According to the leader, the acquirer's due diligence team typically consist of members that represent technical areas such as finance, legal, and operations. Although he believed HR was included in the due diligence at some level, no pertinent information was relayed to the leader. In an ideal case, leader B preferred being included in the due diligence activities and as such stated the following:

"I think we [acquirer] are missing out on a good opportunity here. We have been very lucky with our profits that we seem to have developed a dangerous case of organizational

arrogance. At the moment, more of our involvement [i.e., PMI leader] in the due diligence phase does not seem to click with them [referring to upper management]" (Leader B, personal communication November 14, 2011).

As part of data collection activities, leader B was asked to provide the names of four peers who were aware of his work. All four peers participated in the semi-structured interview and completed the multi-rater portion of the ESCI survey. One of the four peers joined the company as a direct result of the first acquisition and is housed in the acquired firm's country of origin. The remaining three peers had been in the medical device company for many years. One of these members in particular had the responsibility of assisting leader B with the integration activities of the second related acquisition (Firm based in the U.S.) which was added on to leader B's on-going integration efforts.

Theoretical Units Summary. A high level overview of case 2 findings is presented in Table 14 below. A detailed analysis of what lead to the determination of the case results are presented in the sections below.

Table 14

Overview of Case 2 case criteria and theoretical unit summary

Case Criteria & Unit of Analysis	Data Source	Empirical indicators found	Criteria confirmed or Units supported ?
a. PMI Leader	Interviews, document review	Formal leader of company with explicit integration responsibilities	Yes
b. Merger Success	Leader Findings satisfy three success archetypes listed in Table 1. document review		Yes
Emotional Intelligence	e Specific Units of	Analysis:	
1. Self-awareness		Leader score > norm score, result statistically significant	Yes
2. Self-management	77.07.0	Leader score > norm score, result not statistically significant	Yes
3. Social awareness	ESCI Survey	Leader score > norm score, result not statistically significant	Yes
4. Relationship management		Leader score > norm score, result not statistically significant	Yes
Culture Specific Unit	s of Analysis:	, ,	
5. Cognitive awareness of culture		Leader interview responses indicate high cognitive awareness of culture	Yes
6. Application of culture knowledge	Interviews, culture questionnaire	Leader & peers agree or strongly agree with Likert scale statements, Interview responses were consistent with Likert scale responses	Yes
7. Management of differences born out of culture		Leader & peers agree or strongly agree with Likert scale statements, Interview responses were consistent with Likert scale responses	Yes

PMI leader. Given leader B, a) was a senior director of human resources position at the medical technology company, b) was a full time employee with formal authority to facilitate the merger integration processes of the product division he represented, and c) occupied a leadership

position managerial level or higher, he met the requisite PMI leader criterion. Therefore, *case study* 2 satisfied this case selection criterion which was directly applicable to this study's theory.

Merger success. The data sources, document reviews and leader interviews were used to identify the financial and strategic metrics that embodied the empirical indicators of merger success. The four category merger success archetype was described in Table 1. In order for the merger to be considered a success, at least two of the success archetypes must be present. Data collected and analyzed were able to identify financial and strategic metrics that fell into three of the four success archetypes which were as follows:

Metrics that satisfied the archetype *exploitation* include; a) inorganically gained access to a spot for being in the running for receiving the first FDA approved *xyz* product in a very competitive market space, b) received R&D tax credit from the acquired firm's home country, c) widened product portfolio, d) acquired intellectual property, research and development capacity and highly skilled human capital, e) increased revenue streams, and f) enhanced company reputation (goodwill) in the marketplace.

The success archetype *exploration* was met because this acquisition a) was a prologue to subsequent acquisitions, b) provided immediate access into new markets, especially with the *xyz* product line, and c) delivered product line diversification.

The empirical indicators which satisfied the success archetype *preservation* include, a) the elimination of competition by purchasing a direct rival, b) preservation of company's competitive ranking by disallowing other rival companies the opportunity to buy the target (An estimated hefty premium of 10 times the target's annual sales was said to have been paid for the acquisition in order to secure the deal), and c) gained quick access to target's product offerings

which bolstered the acquirer's recently launched franchise thereby making it the provider of industry's broadest range of tools and therapies.

Given three success archetypes were identified (minimum of two required) this case criterion was considered confirmed.

Leader B's emotional intelligence. As was indicated earlier in 0ESCI data analysis process contained multiple data analysis steps. A summary of steps I though III which essentially organized the survey responses into a comparable statistical data format were provided in Table 37. The results of data analysis step IV is presented is Table 15 below.

Table 15

Leader B's ESCI results

EI specific	A	В	С	D	E	F	G
Units of Analysis	C-2 Unit Score	N-M Unit Score	N-SD Unit Score	Difference sgn(A - B)	z-score	p	Z-test $p \le \alpha$
Self-awareness	4.073	3.722	0.345	1	2.277	0.011	1
Self- management	4.197	4.147	0.355	1	0.315	0.377	0
Social awareness	4.320	4.085	0.339	1	1.554	0.060	0
Relationship management	4.081	3.986	0.389	1	0.546	0.292	0

Note: C-2 = Case study 2, N-M = Norm Mean, N-SD = Norm Standard Deviation, sgn(A-B) = the sign of the difference between column A and column B, <math>p = Probability value associated with the z-score.

Leader B's EI specific units of analysis results are presented in column A of table above. Column's B and C were populated with the validated survey's *norm* group results which were adjusted according to the mathematical formula described in Appendix H. As was indicated in Table 37, this mathematical treatment was necessary to maintain meaningfulness of the results. The difference between the *unit scores* of leader B (i.e., column A) and ESCI *norm* group are

 $^{*\}alpha = 0.05$

presented in column D. A positive difference was denoted with the number +1 while a negative result was denoted by the number -1. The column D results indicated that leader B scored higher than the survey's *norm score* at each of the EI specific unit of analysis. In effect, *case study* 2 supported the EI specific units of analysis of the researcher's theory.

The next phase of the data analysis process focused on testing the statistical significance of the *case* 2 results. This test helped determine if the observed results in column D occurred due to chance. The researcher adopted the z-test for statistical significance testing. Columns E through G presented key stages of the z-test process. First, a z-score was calculated at each of the EI specific unit of analysis level using the mathematical function described in Appendix I. These results are presented in column E. Column F represented the probability value associated with the z-score which were obtained from the z-table. The z-test compares the probability value (*p value*) associated with the calculated z-score (i.e. column F) against this study's predetermined probability threshold, alpha, of 0.05. The *case study* 2 results indicated in column D are considered *significant*, if the *p* values are less than or equal to *alpha*. The outcomes of the z-tests were denoted using +1 or 0 which indicated statistical significance or lack thereof respectively.

According to Table 15 column G, only the EI unit of analysis, self-awareness, was found statistically significant. This meant that the likelihood of the unit, self-awareness demonstrating its support towards the theory due to chance was less than 5%. The z-test results for the remaining units of analysis indicated that there were more than 5% chances that the theory supporting results of column D occurred due to chance.

Leader B's culture specific competence. Data pertaining to the culture specific units of analysis were obtained from the interviews and culture questionnaire. The leader and all four peers contributed their inputs to the data collection process. Their responses to the culture questionnaire were summarized in Appendix P and Appendix Q respectively. Leader B's culture specific unit of analysis results are presented in Table 16 below.

Table 16

Results of leader B's culture specific units of analysis

Culture specific Units of Analysis	C-2 Aggregate score
Cognitive awareness of culture	53/60pts
Application of culture knowledge	4.220
Management of differences born out of culture	4.333

Note: C-2 = Case study 2, pts. = Points.

Leader B's cognitive awareness of culture was measured utilizing a set of open-ended questions which was posed only to the leader. According to the scoring criteria described in Appendix K, leader B was awarded 53 points out of the 60 points maximum. Given the leader scored more than the study's minimum of 40 points, the researcher concluded that leader B supported the theory in the unit, cognitive awareness of culture. With *aggregate scores* higher than the study's minimum of 4.0, the leader B also supported researcher's theory in units, application of culture knowledge and management of culture born differences.

Leader B's first exposure to culture dated to an early age where he remembered growing up in a "strict German catholic family." At age 15, he spent time in Mexico where he developed an interest in Mexican culture and Spanish language. He continued this interest all throughout high school by learning to read and speak Spanish. Multiple study abroad opportunities during high school, undergraduate and graduate school also helped expand his culture awareness. When asked to identify any particular authors who write about culture, leader B was able to recall up to

eight authors all of which were not part of the pre-identified culture authors. He acknowledged that although much of his academic career was spent grounded in cultural anthropology, he cannot remember the specific names at this time. The overarching subject matter focus of the authors he did identify by name was strategy and leadership. This probing question about culture authors was purposefully included in the interview to delve deeper into the understanding of the leader's cognitive awareness of culture. Although no points were awarded to leader B on this specific question, he was able to accumulate a total of 53 points out of 60 points possible.

The unit, application of culture knowledge, focused on gauging the leader's ability to transfer his intellectual awareness of culture into practice. Data for this segment of the evaluation were collected from the interview and questionnaire responses of the leader and four of his peers. The calculated *aggregate score* for this unit of analysis was 4.22 which was higher than this study's minimum of 4.0. The process of calculating the aggregate score was explained in Appendix R.

The responses to open-ended questions within the unit, application of culture knowledge, corroborated with the Likert scale questions responses. Peer statements which helped confirm the leader's ability to apply culture knowledge during the integration activities were as follows:

"I strongly agree that [Leader B] tries to understand the implicit elements of [acquired company] culture, he doesn't just scratch the surface he goes deep." "He is often out there feeling the culture, learning the business or getting more involved." "[He is] always learning and I think it's a part of who he is, he's an avid reader of articles and books even after being out of school for so long". "He has a good sense of humor and uses it to form relationships." He is very passionate about what he does and able to establish trust [with

others] quickly." "He understands [organizational] politics very well and sometimes even uses it in a respectful way."

According to the peers leader B's interpersonal, listening and communication skills were an asset to his role as an integration leader. Furthermore, his ability to be resourceful, organized, accountable and adaptable was also mentioned as attributes which made working with leader B a pleasant experience for the peers. With an *aggregate score* of 4.22 and corroborating open-ended question responses, leader B showed sufficient ability in applying culture knowledge during merger integration activities. As such, the researcher concluded that leader B supported this study's theory in the unit application of culture knowledge.

The *aggregate score* for the unit, management of differences born out of culture, was 4.33. This was calculated using the responses to Likert scale questions posed to both the leader and four of his peers. This result was later triangulated with the responses to open-ended questions. The researcher identified a pattern of responses which aligned with the favorable quantitative *aggregate score* of 4.33. Few peer statements which demonstrated support towards this unit of analysis are as follows:

"I think [name of acquirer] as a company could do a better job at culture integration. It definitely is in the top of mind for [leader B] and he is more focused on it than anyone else I know. He can't always make it the priority because things get in the way."

"[Leader B] is very sensitive to the feelings of others and somewhat empathetic. When people become childish, and believe me it happens, he does not put up with it." "He tries very hard to resolve problems [silence] a lot of one-on-one conversations to get people to open up and talk." "Sometimes it's hard when he is not on location [due to international

acquisition] but he makes a tremendous effort to still learn what's going on and have a pulse of what's happening by being there in person when he can, on phone or simply by asking for information." "He is very, very, very sensitive to the cultural integration. He makes sure information is disseminated in both languages and always uses [native language of foreign acquisition] first."

When asked what strategies were used to mitigate potential culture related merger failures, leader B responded in the following manner.

"I do an assessment as quickly as possible. For example, a short survey is given to the management team within the first 30 days of the announcement of the deal. It's hard when you don't have access to that information pre-deal. This [management survey within 30 days] gives me a chance to get a quick idea of what's important and then prep [prepare] the management team accordingly. I follow-up with an organization wide survey soon after which we are completing right now. You see, the financial aspect gets too much focus and people think culture issues are easy to fix as long as strategy and numbers [financial metrics] are there. This [way of thinking] is furthest from the truth. Culture eats strategy for lunch" (Leader B, personal communication November 14, 2011).

The quantitative scores for all three culture specific units of analysis for leader B were higher than the study's minimum. Furthermore, the responses to probing open-ended questions contained descriptions that were consistent with the favorable quantitative scores. Therefore, the researcher concluded that case 2 supported the three culture specific units of analysis of this study's theory.

Case Study 2 Summary. All seven units of the theory posited met or exceeded the minimum results analysis requirements adopted by this research. Furthermore, two of the four case selection criteria that were directly applicable to theory were also confirmed. In effect, the researcher concluded that case study 2 supported the theory presented in this study.

Case 3

Description. The PMI leader of this case was identified as leader C. He occupied a senior human resources manager position at a publicly traded pharmacy benefit management (PBM) company. The company was among the largest PBM companies in North America. In the second quarter of 2009 the company acquired a PBM division of another entity for a reported \$x\$ billion.

The acquirer had experience in successfully integrating previous acquisitions. At this organization, the integration activities were managed by a core team of leaders who represent different functional categories such as finance, HR, IT etc. Each functional category leader had the autonomy to organize a sub-team through which related integration activities were performed. Leader C was responsible for overseeing all HR related merger integration activities. He worked alongside a core team of HR professionals some of whom were housed in different geographic locations.

Leader C had over 21 years of work experience in the functional area of human resources. Prior to his current position as a senior HR manager, he held various other HR positions in different geographic locations of the acquirer's organization where he gained valuable knowledge of the various subcultures of this large organization. Prior to joining the acquirer, leader C had experience working in the financial services industry.

According to leader C, the integration team was convened after the merger had been announced to the public. As a result, he was not involved in the due diligence phase of the merger process. He also did not experience any noticeable disadvantage in not being part of the due diligence activities and as such stated the following:

"We have had so many acquisitions and integrations within the last several years.

Although each one [acquisition] is different, there are some basic similarities in the integration processes. We build on our previous knowledge of what worked and what didn't work. That has worked for us so far" (Leader C, personal communication October 17, 2011).

The leader was satisfied with the amount of financial, human, and technical resources that were made available for the HR integration activities. As was mentioned earlier, this acquirer's integration team was structured as a core team of functional area heads where leader C represented HR. The head of the core team had direct access to the C-suite while leader C did not. He felt that the C-suite leadership expected the acquirer culture to take a more prominent in the integration efforts of the two entities. He also recalled specific instances where company leadership requested the integration leaders to identify the differences of the two organizations if any, in an attempt to formally assess the need for change.

Per the researcher's request, leader C provided contact information of four of his peers.

All four contributed their inputs to the data collection process. One peer participant, who was also part of the integration team, joined this PBM company as a direct result of the acquisition.

Theoretical Units Summary. A brief summary of the case 3 results are presented in the Table 17 below. The sections that follow explained in detail the data analysis process and the logic which governed the determination of support for the overall theory tested.

Table 17

Overview of Case 3 case criteria and theoretical unit summary

Case Criteria & Unit of Analysis	Data Source	Empirical indicators found	Criteria confirmed or Units supported ?
a. PMI Leader	Interviews, document review	Formal leader of company with explicit integration responsibilities	Yes
b. Merger Success	Leader interview, document review	Findings satisfy three success archetypes listed in Table 1.	
Emotional Intelligence	e Specific Units of	Analysis:	
1. Self-awareness		Leader score > norm score, result statistically significant	Yes
2. Self-management	Eddid	Leader score > norm score, result statistically significant	Yes
3. Social awareness	ESCI Survey	Leader score > norm score, result statistically significant	Yes
4. Relationship management	64 1 .	Leader score > norm score, result statistically significant	Yes
Culture Specific Unit	s of Analysis:	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
5. Cognitive awareness of culture		Leader interview responses indicate high cognitive awareness of culture	Yes
6. Application of culture knowledge	Interviews, culture questionnaire	Leader & peers agree or strongly agree with Likert scale statements, Interview responses were consistent with Likert scale responses	Yes
7. Management of differences born out of culture		Leader & peers agree or strongly agree with Likert scale statements, Interview responses were consistent with Likert scale responses	Yes

PMI leader. Leader C was a senior human resources manager at a publicly traded pharmacy benefit management company. Among his other responsibilities as a HR manager, he had the formal authority to engage in merger integration activities. The researcher deemed this case criterion to be confirmed if the two empirical indicators of; a) formal managerial leadership position, and b) explicit integration authority were met. Given both empirical indicators were satisfied, the researcher determined the case criterion PMI leader was confirmed.

Merger success. The data sources, document review and leader interview were used to identify the empirical indicators which determined the merger success. The researcher included both financial and strategic outcomes that were identified by the acquiring company at the outset of the merger as components of the empirical indicators of success. Merger success was evaluated using a four category success archetype system which was described in Table 1. Each of the four categories consisted of a list of possible financial and strategic metrics. For this case criterion to be confirmed, at least two of the success archetypes had to be met. The data analysis process was able to identify three out of the four success archetypes which are described below.

In support of the archetype *exploitation*, the following strategic and financial metrics were found; a) Increased economies of scale due to size driven cost advantages such as increased usage levels, purchasing leverage and product offerings etc., b) increased economies of scope due to reduction of average costs, c) enhanced company's existing product offerings, d) encountered tax benefits due to the structure of the transaction, e) added an approximately 25 million more customers to its base, f) leveraged distribution platforms of both companies to scale up sales, g) increased company market share, and h) made synergistic improvements to the acquirer's in-house consumer behavior related health information system due to combination of the two data warehouses.

The presence of the success archetype *exploration* was met because this merger was a prologue to subsequent related acquisitions.

The data analysis process also discovered the presence of the *preservation* archetype. To that end, the following financial and strategic metrics were found; a) re-established acquirer's top raking (by revenue) in the fiercely competitive PBM market, b) eliminated #4 ranking competitor by purchasing it, and c) established business continuity in a consolidating market.

After the acquisition was announced to the public, the stock price of the acquirer rose 15.8% higher from its previous day's closing price. From a financial markets point of view such an increase typically indicated the (stock) market's favorable outlook on the potential financial success of the merger. According to company documents, the acquirer's profits rose 8% in the fourth quarter of 2009 as a direct result of the acquisition. Given three success archetypes were identified (minimum of two required) the researcher concluded that this case criterion which was directly applicable to the theory was verified.

Leader C's emotional intelligence. The leader and four of his peers participated in the multi-rater ESCI survey. The data were first analyzed according to the technical manual provided by the survey distributor, the Hay Group. Next, they were further analyzed and formatted according to the data analysis steps I through III which were described in detail in the Table 40. Data analysis step IV organized the results into a format that was conducive for determining if the EI units support the researcher's theory. A summary of the ESCI results following the data analysis step IV is presented in Table 18 below.

Table 18

Leader C's ESCI results

EI specific	A	В	С	D	E	F	G
Units of Analysis	C-3 Unit Score	N-M Unit Score	N-SD Unit Score	Difference sgn(A - B)	z-score	p	Z-test $p \le \alpha$
Self-awareness	4.150	3.722	0.345	1	2.773	0.003	1
Self- management	4.598	4.147	0.355	1	2.848	0.002	1
Social awareness	4.600	4.085	0.339	1	3.403	0.001	1
Relationship management	4.501	3.986	0.389	1	2.956	0.002	1

Note: C-3 = Case study 3, N-M = Norm Mean, N-SD = Norm Standard Deviation, sgn(A-B) = the sign of the difference between column A and column B, <math>p = Probability value associated with the z-score.

The *unit score* presented in column A of the table above represent leader C's ESCI scores after both *self* and *peer* data have been combined. The columns B and C were populated with the survey's *norm* group data. As was described in Table 40, the *norm* group data underwent a similar mathematical treatment that was performed on the data of *case 3*. The rationale for this treatment was to maintain consistency between the two data sets thereby making subsequent comparisons more meaningful. Column D helped determine whether or not leader C's scores were higher in relation to the survey's *norm* scores. This was determined by simply subtracting the *unit norm scores* from the scores of leader C. A positive difference which was denoted with number +1 indicated that the leader scored higher than the *norm*. A negative difference which was denoted with the number -1 indicated that the leader scored lower than the *norm*. Per column D of Table 18, all four of leader C's unit scores were higher than that of the survey *norm*. This case's EI specific units of analysis supported the researcher's theory.

 $^{*\}alpha = 0.05$

Columns E through G of the Table 18 above focused on testing the statistical significance of the case study 3 results. In other words, the researcher opted to test whether or not the observed results in column D occurred due to chance by employing the z-test. First, z-scores were calculated at each of the EI unit of analysis levels (displayed in column E) utilizing the mathematical function described in Appendix I. Column F presented the probability value (*p value*) associated with the corresponding z-scores which were obtained using the z-table.

Column G referred to the z-test, where each *p value* was compared to this study's pre-determined *alpha* of 0.05. The z-test results which are displayed in column G indicated that all four of the EI units of analysis results were statistically significant. In other words, there was less than 5% chance that the results of case 3 occurred due to chance.

Leader C's culture specific competence. Three of the seven units of analysis of the researcher's theory focused on culture specific competences. The data which were used to evaluate the three culture specific units were obtained from both the leader and peer interviews. Each interview included open-ended as well as Likert scale questions. One peer was unable to participate in the interview due to scheduling difficulties. Data were analyzed according to the criteria described in Appendix J and Appendix K. The results of leader C's culture specific units of analysis are presented in Table 19 below.

Table 19

Results of leader C's culture specific units of analysis

Culture specific Units of Analysis	C-3 Aggregate score
Cognitive awareness of culture	53/60pts
Application of culture knowledge	4.733
Management of differences born out of culture	4.689

Note: C-3 = Case study 3, pts. = Points.

Leader C's cognitive awareness of culture were evaluated using a set of open-ended questions (Appendix E) posed only to the leader. Data pertaining to this unit were not collected from the peers because no meaningful information can be gleaned from it. The responses were evaluated according to the scoring criteria outlined in Appendix K. Leader C was awarded 53 points out the 60 points possible. Given his score exceeded the minimum threshold of 40 points, the researcher concluded that support towards the theory by the unit, cognitive awareness of culture, has been met.

The second culture related unit of analysis focused on the leader's ability to apply his cognitive culture knowledge in merger integration related activities. The unit specific Likert-scale question responses obtained from the leader and peers were used to calculate the aggregate score. Following the scoring guide described in Appendix J, an aggregate score of 4.68 was calculated for leader C. The thematic analysis of the open-ended questions also demonstrated support towards the leader's high level of competence in the unit, application of culture knowledge. Selected peer statements which helped reinforce leader C's competence in this unit are as follows:

"I have worked work with him in several other integration projects. In this integration I have personally experienced how he really tries to understand their [acquired company] world. He even spent some time at [headquarter location of acquired company] before the integration officially kicked off." "I came from [acquired company name] and I was a bit reluctant at first being part of the integration team. [Leader C] made me feel part of the team right away and was really interested in what I had to say. I was impressed by how he actually, really listened. He did identify, acknowledge and respected us." "Most of his staff are from [acquired company] and he had built these bonds with them. I have

worked with those[referring to acquired company leaders who are now part of leader C's staff] leaders outside of [Leader C's] presence in other capacities and they have a huge amount of respect for him and you know they trust him now, ummm I'd say he absolutely goes out of his way to form relationships."

The peers found the leader's open-mindedness, ability to see the big picture, willingness to accept change and trustworthiness to be important attributes that helped him along the culture integration activities. This unit's aggregate score of 4.68 exceed the study's minimum threshold of 4.0. Furthermore, the analysis of open-ended question responses also corroborated the high quantitative score. As a result, the researcher concluded that case 3 supported the study's theory in the unit, application of culture knowledge.

With an aggregate score of 4.81 the unit, management of differences born out of culture, also demonstrated support towards the researcher's theory. Peer statements which demonstrated support towards the unit are as follows:

"There have been times where [acquirer name] says they are going to incorporate both cultures and the reality is that we [acquired company] have to change. It's like they are talking from both sides of their mouth. [Leader C] takes time to explain why it was decided that way. And it makes sense sometimes." "Sometimes it's possible to keep the [sub] cultures in tact in certain [regional] sites. But at times corporate makes changes and it really disrupts how some sites work. I have seen [Leader C] question corporate by asking them do you see how this is going to affect the site? And do you really want to do this at this time"?

Leader C was asked to identify specific strategies he utilized to mitigate potential merger failure due to culture issues. He responded with the following:

"There are couple of things. One, we take culture very seriously and it's built into our [organizational] DNA. So, even when there's so much to do during the integration we don't lose attention of its [culture's] importance. Second, we have an in-house OD team that also specializes in culture. They do a tremendous job in helping us [integration team]. Culture integration is real hard work. It's not like flipping on a switch, it takes time. I take all the help I can get. Lastly, we also do team debriefs during different stages of the integration. This allows us to see what went well, what went wrong and why" (Leader C, personal communication October 17, 2011).

All three culture specific units of analysis results obtained for leader C indicated scores that were higher than the minimum threshold established in this study. As such, the researcher concluded that case 3 supported the researcher's theory in all three units pertaining to the culture.

Case Study 3 Summary. The seven units of analysis of the theory presented satisfied or exceeded the minimum requirements of the results analysis criteria of this research. Moreover, two of the four case selection criteria that were directly applicable to this researcher's theory were also met. Therefore, the researcher determined that case study 3 supported the theory posited by this study.

Case 4

Description. The PMI leader of this case was identified as leader D. He was the chief financial officer (CFO) at a privately held holding company which consisted of thirteen specialty finance subsidiaries. Prior to his current position, he was the CEO of a regional bank also owned

by the holding company. The thirteen subsidiaries were located throughout the U.S. and their business varied from banking, residential lending, commercial lending, and venture capital to asset management. As the CFO of the holding company, leader D had some financial oversight responsibilities in all the subsidiaries. The holding company was an active participant of mergers and acquisitions. In the third quarter of year 2009, leader D was responsible in integrating a regional bank acquisition.

Leader D was a seasoned financial services industry executive who had extensive operations and management experience. He had merger integration expertise in the financial services sector for over twelve years. The holding company which leader D represented did not have a dedicated merger integration team. Instead, integration teams were formed on an "as needed basis" when acquisitions were made. During his tenure with the acquirer, leader D steered all acquisition integration teams. However, since year 2008 he was only responsible for leading bank acquisition integration teams.

The leader was included in the due diligence phase of the merger. He acknowledged that his position as the CFO (previously CEO of holding company owned bank) invariably granted him a seat in the due diligence team. He also recalled not having HR represented in the due diligence team until the negotiations have moved closer to a mutual agreement. To that he stated the following:

"Our typical due diligence team is about five to six people that represent finance, risk management, credit compliance, and general management. Most of the people in the small team will continue to work closely with the target if we move to buy it. So we take

their expert opinion [from a functional point of view] and their gut feeling about target's management seriously" (Leader D, personal communication December 1, 2011).

Leader D felt that he had the cooperation of the other C-suite management and the owners of the holding company during the integration efforts. He explained that some members of the ad hoc integration team included C-suite leaders while others were high level managers of different functional groups. Furthermore, he stated that he always made sure that the highest ranking leader of the acquired company (i.e. CEO, if retained) also played an integral role within the integration team.

In terms of resource availability for integration tasks, leader D felt that he received sufficient financial, technology and human resources. However, he also stated that there were times that the human capital availability felt scarce. This was primarily due to integration members still having to fulfill their normal work responsibilities in addition to the tasks of the integration team. Although some measures were taken to lessen the amount of regular work load for those who were also members of the integration team, the effort, in his mind only yielded mixed results.

Leader D provided the contact information for four of his peers. All four participated in the ESCI survey. Only one peer participated in the interview based culture questionnaire.

Despite multiple efforts to secure interview time slots, the researcher was unable to collect culture questionnaire data from three peers due to their travel and other time constraints. One of the peers who participated in the ESCI survey joined the holding company as a direct result of the acquisition.

Theoretical Units Summary. A high level results summary of case 4 is presented in the Table 20 below. This is followed by a detailed explanation of the results at each case criteria and unit of analysis level.

Table 20

Overview of Case 4 case criteria and theoretical unit summary

Case Criteria & Unit of Analysis	Data Source	Empirical indicators found	Criteria confirmed or Units supported ?			
a. PMI Leader	Interviews, document review	Formal leader of company with explicit integration responsibilities	Yes			
b. Merger Success	Leader interview, document review	erview, listed in Table 1.				
Emotional Intelligence Specific Units of Analysis:						
1. Self-awareness		Leader score > norm score, result statistically significant	Yes			
2. Self-management	Eddid	Leader score > norm score, result not statistically significant	Yes			
3. Social awareness	ESCI Survey	Leader score > norm score, result statistically significant	Yes			
4. Relationship management		Leader score > norm score, result not statistically significant	Yes			
Culture Specific Unit	s of Analysis:					
5. Cognitive awareness of culture		Leader interview responses indicate high cognitive awareness of culture	Yes			
6. Application of culture knowledge	Interviews, culture questionnaire	Leader & peers agree or strongly agree with Likert scale statements, Interview responses were consistent with Likert scale responses	Yes			
7. Management of differences born out of culture		Leader & peers agree or strongly agree with Likert scale statements, Interview responses were consistent with Likert scale responses	Yes			

PMI leader. Leader D was an executive vice president and chief financial officer (CFO) at a privately held specialty finance company. He was a full time employee whose formal responsibilities included merger integration among his CFO duties. Given leader D met both empirical indicators of a PMI leader as described in this study (i.e. formal integration authority and managerial position or higher), the researcher determined the case criterion PMI leader in case 4 was verified.

Merger success. A leader interview and a document review were used to identify the metrics which delineated the empirical indicators of this criterion. These metrics were then compared to this study's established criteria for measuring success, namely the merger success archetypes, which were described in Table 1. This criterion was considered verified if financial and strategic metrics fell into at least two of the merger success archetypes.

Given the privately held nature of the company no financial documents were publicly available for review. Leader D did provide a copy of the consolidated financial statements which included the financial results of years 2008 through 2010. Only directional financial success indicators were identified from this data. The researcher was able to find merger related press releases which were available to the public. Two of the four success archetypes were identified using the leader interview data, consolidated financial statements provided by leader D and publicly available press releases. They are presented below.

Empirical indicators that fulfilled the *exploitation* archetype include; a) increased revenue, b) accessed target company cash and borrowing capacity to further acquirer's strategic intents, c) leveraged acquirer's excess back-office operations capacity, and d) gained access to proven management team.

Strategic and financial indicators that helped satisfy the *exploration* archetype were; a) quick access to geographic expansion, b) gained new customer base, and c) diversified product offerings by entering into market niche that serviced the oil industry.

Since two success archetypes were identified, this case criterion was considered to be verified.

Leader D's emotional intelligence. The data for this unit of analysis was collected from the leader and four of his peers via the ESCI tool. Data were then evaluated according to the technical manual provided by the survey distributor, the Hay Group. Data analysis steps I though III which analyzed and organized the results into a comparable format was described in detail in Table 43. Table 21 below represents the ESCI results of leader D after data analysis step IV was completed.

Table 21

Leader D's ESCI results

EI specific	A	В	C	D	E	F	G
Units of Analysis	C-4 Unit Score	N-M Unit Score	N-SD Unit Score	Difference sgn(A - B)	z-score	p	Z-test $p \le \alpha$
Self-awareness	4.317	3.722	0.345	1	3.852	0.001	1
Self- management	4.155	4.147	0.355	1	0.052	0.479	0
Social awareness	4.400	4.085	0.339	1	2.083	0.019	1
Relationship management	4.212	3.986	0.389	1	1.297	0.097	0

Note: C-4 = Case study 4, N-M = Norm Mean, N-SD = Norm Standard Deviation, sgn(A-B) = the sign of the difference between column A and column B, p = Probability value associated with the z-score.

The column A of Table 21 above represented leader D's ESCI scores once a) *self* and *peer* results were combined, and b) EI subscales were rolled up to respective unit of analysis

 $^{*\}alpha = 0.05$

levels. Columns B and C represented data that were first extracted from the survey's technical manual and then subjected to a mathematical procedure described further in Table 43. Both case study 4 data and *norm* group data were subjected to the same mathematical procedure in order to maintain consistency between data sets. Column D was utilized to determine how the leader scores fare in relation to the *norm scores*. This was obtained by subtracting the leader's *unit score* from the *norm score*. A positive result denoted with the number +1 indicated that leader's *unit score* was higher in relation to the ESCI *norm score*. Similarly, a negative result which was denoted with the number -1 indicated that the leader's *unit score* was lower than the ESCI *norm score*. As was indicated in column D, the leader scored higher than the *norm* group in all four units of analysis. Therefore, the four EI units of analysis showed support towards the researcher's theory.

The researcher chose to perform a statistical significance test of the case 4 results in order to determine the strength of the support observed. To this end, a z-test was performed to determine whether or not the results observed in column D occurred due to chance. Results of the various stages of the z-test process are presented in columns E though G. Column E represented the z-scores which were calculated utilizing the mathematical function described in Appendix I. The probability value (*p value*) associated with the z-score is presented in column F. Finally, the z-test required the researcher to compare the already obtained *p value* with this study's predetermined *alpha value* of 5%. The study results were considered statistically significant if the *p value* is less than or equal to the alpha. Per the z-test results indicated in column G, two out of the four EI specific units of analysis were found to be statistically significant. In other words, there was less than a 5% chance that the results of these two units of analysis occurred due to chance. The EI units, self-management and relationship management

which were denoted with number 0 in column G, indicated that the theory supporting results observed in column D could have been obtained due to chance.

Leader D's culture specific competence. The three units of analysis of this segment were evaluated using leader and peer interviews. Only one peer participated in the interview. The same data analysis processes which were described in Appendices J and K were utilized to evaluate culture specific units of analysis. Leader D's results of the culture specific units of analysis are presented in Table 22 below.

Table 22

Results of leader D's culture specific units of analysis

Culture specific Units of Analysis	C-4 Aggregate score
Cognitive awareness of culture	42/60pts
Application of culture knowledge	4.480
Management of differences born out of culture	4.433

Note: C-4 = Case study 4, pts. = Points.

Per the open-ended question scoring guide outlined in Appendix K, leader D was awarded 42 points out of 60 points possible. The leader recalled that his formal awareness of the elements of culture originated in his undergraduate studies. He credited much of his understanding of culture to keen observation, practice and "knowing how I want to be treated." Explaining further he stated that:

"Culture can be different things to different people. I feel that universally it [culture] is about treating people with dignity and respect. Words [i.e. organizational culture statements etc.] are nothing; it's the actions that count. As long as you treat people right and have communication flow both directions you can navigate most cultures" (Leader D, personal communication December 1, 2011).

Leader D also strongly agreed that the company leadership had a role in creating organizational culture by continually setting an example of the core values. When asked what the leader thought as disadvantages to undertaking culture integration he responded by stating the following:

"It's hard to compare time, money and effort spent on it [culture integration] with a tangible outcome. So it's hard to convince some people about its [culture integration] merits. You have to realize we are a financial company and we are not known to be touchy feely. So you end up having to first educate and convince our own people" (Leader D, personal communication December 1, 2011).

Leader D was unable to identify authors who write about culture. Given the leader's 42 point unit score for cognitive awareness of culture exceeded the study's minimum of 40 points, the researcher concluded that case 4 supported the theory in this unit; cognitive awareness of culture.

The results of the units, application of culture knowledge and management of differences born out of culture, were 4.48 and 4.3 respectively. Despite only one peer participated in the interview, the *aggregate score* calculation process maintained the 1/5 and 4/5 weights for leader and peer. The researcher made this decision to maintain consistency of the case results throughout this study. In addition the researcher took further steps to augment the findings of these two units of analysis before determining whether or not the case supported this study's theory. The additional step which was described in the section Theoretical Model, involved considering the results of five pre-identified ESCI subscales which were related to culture specific units of analysis. The consideration of the five ESCI subscales was feasible because all

four of leader D's peers participated in the ESCI survey. The results of the pre-identified EI subscales are presented in Table 23.

Table 23
Selected ESCI subscale results of leader D (Means)

	A	В	C	
Culture specific ESCI Subscales	Leader D Aggregate Score	Aggregate Norm	sgn(Column A - B)	
Adaptability	4.367	4.012	1	
Empathy	4.280	3.921	1	
Conflict Management	3.880	3.880	1	
Influence	4.100	3.910	1	
Inspirational Leadership	4.280	3.940	1	

The column A of Table 23 presented above consisted of leader D's aggregate scores for the five EI subscales. This was followed by the aggregate norm results. As was the case throughout this study, all scores presented in columns A and B were calculated means. Column C subtracted leader D's results from the norm. Positive and negative results were denoted with numbers +1 and -1 respectively. Column C indicated that leader D's competency levels in the five EI subscales were at or higher than that of the norm group. This exercise was meaningful to the research because it provided an alternative method of gauging peer perspectives on leader D's units of analysis; application of culture and management of culture born differences. The aggregate scores (column A) considered in Table 23 above were composed of 20% leader and 80% peer input. Given all four peers participated in the ESCI data collection process the researcher concluded that the results of the above exercise provide important insights when triangulating data points pertinent to the culture specific units of analysis. Overall, the results of the interviews, culture questionnaire, and the pre-identified ESCI subscales indicated support

towards leader D's culture specific units of analysis; application of culture knowledge and management of differences born out of culture. As such the researcher concluded case 4 demonstrated support towards the three culture specific units of analysis of this study's theory.

Case Study 4 Summary. All seven units of the theory tested by this research met or exceeded the results analysis criteria adopted. The two case selection criteria that were directly applicable to the theory were also verified to be present. As such, the researcher concluded that case study 4 supported the theory presented in this study.

Cross-Case Analysis

This section examined whether or not the conclusions of the multiple case studies support the researcher's theory. According to Yin, the cross case report "should indicate the extent of the replication logic and why certain cases were predicted to have certain results, whereas other cases, if any, were predicted to have contrasting results" (Yin, 2009, p. 59). Accordingly, the remainder of this section was organized according to three subsections; literal replication, crosscase units of analysis and case criteria summary, and cross-case summary.

An explanation of the overall logic used to organize the findings is warranted here. Two of the four case selection criteria PMI leader and merger success were directly applicable to this study's theory because they helped delineate the characteristics of the domain within which this study's theory were to hold true. Given the two criteria were already utilized during the purposeful case selection process the researcher was unable to consider them as units of the theory. While cursory confirmation of the criteria was met during case selection phase, the importance of these two criteria to the theory prompted the researcher to subject them to the same rigorous empirical testing procedures outlined by Dubin's (1978) theory testing method.

As such, cross-case findings are also presented for both units of analysis and case criteria. For ease of readership case criteria and units of theory were clearly identified.

Literal Replication. The four case studies presented above were chosen according to Yin's (2009) *literal replication logic*. To this end, the researcher purposefully chose cases that predicted similar results by identifying the conditions upon which this study's theory was likely to be supported. As was described in case selection criteria segment, four such conditions were identified. All cases presented in this study demonstrated these conditions which were as follows:

- 1. Formal integration management structure existed;
- 2. Designated formal PMI leader was present;
- Merger was a success as defined earlier in Chapter 1, in the discussion of Definition of Terms;
- 4. The time period of the acquisitions considered was between years 2005 and 2010.

Other similarities across all cases also existed although they were not deliberately planned by the researcher. For example, all PMI leaders had the support of the C-suite management and received sufficient resources to implement integration activities. All four leaders provided contact information for at least one peer (out of four total) who had joined the company as a result of the acquisition being discussed. All leaders also had extensive managerial experience prior to their role as a PMI leader.

Dissimilarities among the four cases included the following. Three out of four leaders had HR specific background while one leader's experience was in finance. While one case

represented a privately held firm, the remaining three cases represented publicly traded companies. The companies highlighted in each case represented four industries which spanned from financial services, medical technology, pharmacy benefit management, and medical appliances and equipment. The dollar values of the deals also varied with two cases representing acquisition values that were worth billions and the remaining two acquisitions valuing in the triple digit millions. None of the differences mentioned above were identified to be issues affecting this study's theoretical model. Given all four cases met the four conditions identified during case selection criteria they were considered to be *literal replications* (Yin, 2009) of each other. In other words, the all four cases consisted of the context and setting similar to each other and demonstrated initial results which could be *analytically generalized* (Yin, 2009) from one case to the next.

Cross-Case Units of Analysis and Case Criteria Summary. This segment focused on examining whether and to what extent the replication of the results was achieved across the cases. Per Yin, each case under the cross-case analysis technique was regarded as a separate experiment. He stated that "replication logic is analogous to that used in multiple experiments. For example, upon uncovering a significant finding from a single experiment, an ensuing and pressing priority would be to replicate this finding by conducting a second, third, and even more experiments" (Yin, 2009, p. 54). An overview of the cross-case results are shown in Table 24 below followed by an explanation of the findings.

Table 24

An overview of the cross-case results

	Case 1		Case 2		Case 3		Case 4	
Case Criteria & Units of Analysis	Outcome	SS(S)	Outcome	SS(S)	Outcome	SS(S)	Outcome	SS(S)
a. PMI Leader	Confirm	NA	Confirm	NA	Confirm	NA	Confirm	NA
b. Merger Success	Confirm	NA	Confirm	NA	Confirm	NA	Confirm	NA
Emotional Intelligence Sp	ecific Units	of An	alysis:					
1. Self-awareness	Support	Yes	Support	Yes	Support	Yes	Support	Yes
2. Self-management	Support	No	Support	No	Support	Yes	Support	No
3. Social awareness	Support	Yes	Support	No	Support	Yes	Support	Yes
4. Relationship management	Support	Yes	Support	No	Support	Yes	Support	No
Culture Specific Units of	<u> Analysis:</u>							
5. Cognitive awareness of culture	Support	NA	Support	NA	Support	NA	Support	NA
Application of culture knowledge	Support	NA	Support	NA	Support	NA	Support	NA
7. Management of differences born out of culture	Support	NA	Support	NA	Support	NA	Support	NA

Note: SS(S) = Statistical Significance of Support.

PMI leader. The criteria for interpreting the findings (Table 9) indicated that this case criterion was confirmed if a formal leader with explicit responsibility to facilitate the merger integration was appointed by the acquiring organization. All four cases included formally appointed PMI leaders who had the authority to facilitate merger integration tasks. Therefore, this case criterion which contributed to the overall theory of this study was confirmed.

Merger success. The overarching definition of merger success, as it was used in this study, was the achievement of financial and strategic outcomes identified at the outset of the merger. In order to assist the evaluation of this case criterion, the researcher employed four success archetypes which were defined in Table 1. According to the results analysis criteria, the

 $^{*\}alpha = 0.05$

theory was considered supported if any combination of at least two archetypes were present in each one of the cases. Three out of the four cases fulfilled three archetypes while one fulfilled the required minimum of two archetypes. As such, all four cases met the guidelines that constituted this case criterion.

Emotional intelligence specific units of analysis. A total of four units of the theory tested were related to EI. Each EI unit was considered supported if the *case study unit scores* met or exceeded the validated multi-rater ESCI *norm scores*. The cross case results of the four EI specific units of analysis are shown in Table 25.

Table 25

Cross-case results comparison against validated multi-rater ESCI norm

EI Units of Analysis	Case 1	Case 2	Case 3	Case 4	Literally Replicated?
Self-awareness	Exceed norm	Exceed norm	Exceed norm	Exceed norm	Yes
Self-management	Exceed norm	Exceed norm	Exceed norm	Exceed norm	Yes
Social awareness	Exceed norm	Exceed norm	Exceed norm	Exceed norm	Yes
Relationship management	Exceed norm	Exceed norm	Exceed norm	Exceed norm	Yes

All four individual case studies demonstrated results that exceeded the ESCI norm.

Furthermore, the results were literally replicated among all cases. Therefore, the sample of four cases demonstrated support towards this study's theory. In order to gauge the strength of the results observed above, the researcher calculated the *statistical significance* of the results portrayed in Table 25. To this end the results were subjected to a statistical significant test (z-test) which helped determine whether the observed results happened due to chance. The cross case results following the completion of the statistical significance testing are shown in Table 26.

Table 26

Cross-case results following the statistical significance test

	<u>Case 1</u>		Case 2		Case 3		Case 4	
EI Units of Analysis	Outcome	SS(S)	Outcome	SS(S)	Outcome	SS(S)	Outcome	SS(S)
Self-awareness	Support	Yes	Support	Yes	Support	Yes	Support	Yes
Self-management	Support	No	Support	No	Support	Yes	Support	No
Social awareness	Support	Yes	Support	No	Support	Yes	Support	Yes
Relationship management	Support	Yes	Support	No	Support	Yes	Support	No

Note: SS(S) = Statistical Significance of Support.

According to Table 26 above the unit, self-awareness, showed statistically significant results in 100% of the cases. This was because all four cases passed the statistical significance test (z-test). As it pertains to the unit; self-management, only case study 3 result passed the statistical significance test. The lack of statistical significance for the cases 1, 2, and 4 meant that the there was more than 5% (i.e. alpha threshold) chance that the results observed in those cases might have occurred due to chance. Since only one case out of four met the requirements of the test, it was determined that the unit, self-management, showed statistically significant results in only 25% of the cases. Given the results of the EI unit, social awareness, met the z-test requirements in cases 1, 3, and 4 it was determined that. 75% of the cases which supported this study's theory also showed statistically significant results. Lastly, the EI unit, relationship management produced two cases whose results met the z-test criteria successfully. As such this unit showed statistically significant results in 50% of the cases.

Each one of the four EI units of analysis of case 3 was found to be statistically significant. The EI units of the other three cases demonstrated mixed statistically significant

 $^{*\}alpha = 0.05$

results where some results were significant while others were not. However, the EI unit, Self-awareness was found to be statistically significant across all cases.

Culture specific units of analysis. This study's tested theory consisted of three culture specific units. The units were considered supported if they demonstrated the presence of the respective competence according to predefined criteria which were established according to Table 9. For example, the unit, cognitive awareness of culture was supported if leaders accumulated at least a minimum of 40 points out 60 points possible for the semi-structured interview questions. The Table 27 summarized the results by this unit of analysis for cases 1 through 4. Given all cases supported the unit cognitive awareness of culture it was concluded that literal replication was achieved and support towards this study's theory was obtained.

Table 27

Cross-case results of the unit cognitive awareness of culture

Culture specific Units of Analysis	Case 1	Case 2	Case 3	Case 4	No. of cases w/t pts. ≥ 40
Cognitive awareness of culture	51 pts.	53 pts.	53 pts.	42 pts.	4

Note: pts. = Points.

The two units a) application of culture knowledge, and b) management of difficulties born out of culture were considered supported if two criteria were met simultaneously. First, the leader *aggregate scores*, which were calculated based the Likert-scale question responses on the culture questionnaire, must be 4 or above. Second, the pattern of Likert-scale responses must also be corroborated by the open-ended question response posed to PMI leaders and their peers. For example, if a leader received aggregate scores 4 or higher, it is expected that the directional response pattern for the corresponding open-ended questions to also be supportive. The crosscase results of these two units of analysis are presented in Table 28 below.

Table 28

Cross-case aggregate scores of remaining two culture specific units of analysis

Culture specific Units of Analysis	Case 1	Case 2	Case 3	Case 4	No. of cases w/t scores ≥ 4
Application of culture knowledge	4.28	4.22	4.73	4.48	4
Management of differences born out of culture	4.00	4.33	4.69	4.43	4

According to the Table 28 above, all cases demonstrated *aggregate scores* of 4 or above. As was demonstrated earlier within individual case reports, the open-ended question responses did corroborate the Likert-scale aggregate scores presented above. As such it was determined that the results were literally replicated among all four cases and support for the researcher's theory was achieved.

Other Findings. Although it was not one of the units of analysis of the theory proposed, the researcher was interested in identifying other related information that shed light into the context of the cases. One such piece of information was whether or not PMI leaders were involved in the merger related negotiations or due diligence activities. Three out of the four PMI leaders interviewed were not part of these activities. Instead, they were assigned soon after the negotiations have closed or soon after the announcement of the merger. To that end, leader A pointed out that the knowledge transfer from due diligence phase to integration phase "could have been better" and that he was "very vocal about it with [his] boss" (Leader A, personal communication February 29, 2012). Leader D on the other hand was an integral part of the negotiation and due diligence teams. All leaders felt that they were given sufficient financial, human and technology resources to facilitate the merger integration process. They also felt that

their respective executive teams expected them to take an overall persuasive and consensus building approach to the integration as opposed to an authoritative and unyielding approach.

Cross-Case Summary. The four cases presented in this study met the *literal replication* requirements identified by Yin (2009). The data collected and analyzed were interpreted according to the criteria described in Table 9. The four literally replicated cases supported all seven units of analysis which formed this study's theory. In other words, the theory supporting results of case 1 was literally replicated in case 2, case 3, and case 4. The supportive results of the four EI specific units of analysis were also tested for statistical significance. This was undertaken only to gauge the strength of the support. The percentage of cases producing statistically significant results varied. This variation did not affect the support of the theory because statistical significance of EI related results were not considered in the interpretation criteria of this study's results. A cross-case summary of the results is shown in Table 29 below.

Table 29

Cross-case support for researcher's theory

Case Criteria & Units of Analysis	Number of cases supporting theory	Percentage of cases demonstrating SS(S)	Overall outcome of the criteria & units
a. PMI Leader	4	NA	Confirmed
b. Merger Success	4	NA	Confirmed
Emotional Intelligence Specific:			
1. Self-awareness	4	100%	Fully support
2. Self-management	4	25%	Fully support
3. Social awareness	4	75%	Fully support
4. Relationship management	4	50%	Fully support
Culture Specific:			
5. Cognitive awareness of culture	4	NA	Fully support
6. Application of culture knowledge	4	NA	Fully support
7. Management of differences born out of culture	4	NA	Fully support

Note: SS(S) = Statistical Significance of Support.

 $^{*\}alpha = 0.05$

Chapter V – Discussion

Using the multiple case study methodology, this research tested the theory which purported that PMI leaders' emotional intelligence and their culture specific competencies positively influenced merger success. All seven of the theory's units of analysis focused on the PMI leader competencies. In this study, four cases presented and they supported the theory at an individual and cross-case basis. In this section, the significance of this research was addressed which was followed by a discussion of findings. A critical evaluation of the theory, research implications of the findings, limitations of the study and suggestions for future research were also included in this chapter.

Significance of the Research

This research contributed to the current literature on post-merger integration leadership by presenting and demonstrating support for a theory which identified PMI leader competencies that positively impact a merger. The practical importance of the findings was twofold. First, it echoed the findings of previous literature which identified the significance of appointing a dedicated formal PMI leader to manage merger integration efforts in order to increase the chances of merger success (Ashkenas et al., 1998; Buono, 2005; Ellis, 2004; Epstein, 2004; Koch, 2002; Pablo, 1994; Sirower & Stark, 2001; Tetenbaum, 1999). Second, the findings presented an empirically proven list of leader competencies which could be helpful in the selection of PMI leaders. To the best of researcher knowledge, the extant literature only consisted of studies that identified requisite competencies (Ashkenas & Francis, 2000; Buono et al., 1989; Covin et al., 1997; Marks & Mirvis, 2000; Shelton, 2003; Thach & Nyman, 2001) and they did not test their validity in real life. While other complementary attributes which might

have assisted the support of the theory were also found during the course of the research, the confluence of competencies identified by the theory remained a key pre-condition in increasing the capacity of PMI leader's influence on merger success.

Discussion of the Findings

The findings were based on four cases, all of which supported this study's theory: all else held constant, PMI leaders with a confluence of EI and culture specific competencies positively influence merger success. As was articulated earlier in the Findings chapter and in Table 9, the researcher adopted a well-defined decision making guidelines in determining whether or not this study's theory was supported. For example, the case criteria PMI leader and merger success were evaluated on the basis of leader interviews and primary and secondary document reviews. The support for EI related units of analysis were based solely on quantitative measures. Specifically, any EI specific unit aggregate score that was higher than the validated multi-rater ESCI aggregate norm score was considered evidence of support towards the theory. Overall, the researcher determined the EI units supported the theory because all case study EI unit aggregate scores were higher than its comparative norm group scores and that literal replication of these results were met within, and across all four cases. Additionally, it should also be noted that the unit aggregate scores were composed of input from the leader as well as four of his peers. In all four sample cases, at least one peer contribution came from the perspective of a member of the acquired organization.

The units contained within the broader construct of culture specific competencies were evaluated using corroborative evidences obtained via quantitative and qualitative measures.

Specifically, the responses to Liker-scale culture questionnaire were used to determine the

quantitative *unit aggregate scores*. As with the EI units, the culture unit *aggregate scores* too included input from leaders and peers. The qualitative measures considered included the pattern of responses documented and observed for the open-ended portion of the leader and peer interviews. The culture specific units of analysis were deemed supported when a) all culture related *aggregate scores* (quantitative measure) were above the required minimum scores, b) the observed pattern of open-ended question responses (qualitative measure) indicated each leader's high culture competency in the areas evaluated, c) both quantitative and qualitative measures corroborated each other, and finally d) literal replication of the aforementioned pattern of results were achieved within and across all four cases.

In essence, each of the seven units of analysis and the two case criteria which represented the entire theory was supported within each individual case and this scenario was literally replicated among all the four cases. As such, no revisions to this study's theory which posited that, PMI leaders' emotional intelligence and their culture specific competencies influence merger success were needed. The supported theory only meant that the four PMI leaders examined in this research demonstrated the competencies identified within the theory. As such, support does not prove causality. A graphical representation of the supported theory is presented in Figure 8.

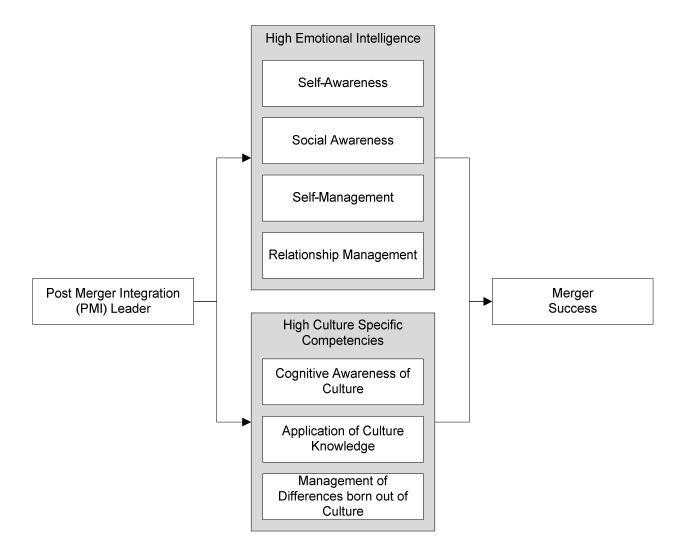


Figure 8. Supported theory.

The theory required the PMI leader role to be a formal leadership position (authority) within the organization with explicit responsibility to facilitate the activities of merger integration. This characterization assured that the leaders had both the authority and responsibility. In this study's cases, all four leaders met this criterion. In addition they also reported having open access to the executive teams (communication, support) and sufficient allocation of resources for (financial, technical support, human capital) integration activities. According to Marks and Mirvis, "when an executive team does not have the bench strength to

free up key people for this [PMI role] assignment, it can be an early warning sign that the transition will not receive the resources necessary to succeed" (2000, p. 38). Therefore, this study's finding also confirmed the existing literature that emphasized the appointment of a dedicated leader to manage integration activities in order to increase the likelihood of merger success (Ashkenas & Francis, 2000; Buono et al., 1989; Covin et al., 1997; Marks & Mirvis, 2000; Shelton, 2003; Thach & Nyman, 2001).

Apart from the leader competencies examined by the theory, the findings of this sample also suggested that being *well resourced* helped the PMI leaders in facilitating integration efforts thereby contributing to their overall success. For example, sufficient availability of funding, ready access to IT and other resources, clout within the organization (i.e., backing of CEO/Board of Directors etc.), power influence and the leader's rank among others helped elevate the PMI leader's perceived importance within the organization. This elevated status might have assisted the leader in navigating the sometimes stifling organizational practices (i.e., destructive organizational politics) that could be especially prevalent during a merger.

The findings related to the EI and culture specific units of analysis also made contributions to the integration leadership literature. The specific competencies and subscales (Table 30) that formed the seven units of analysis of this study provided empirically validated support to the notion that PMI leaders with these specific attributes influenced merger success positively. Although much was written about the various competencies of PMI leaders, to the best of the researcher's knowledge, no study attempted to empirically test the leader competencies against merger success.

Table 30

EI and culture unit competencies and subscales

Units of Analysis/Competencies	Subscale competencies	
1. Self-awareness	Emotional self-awareness	
2. Self-management	Achievement orientation, adaptability, emotional self-control, positive outlook	
3. Social awareness	Empathy, organizational awareness	
4. Relationship management	Conflict management, Coach & mentor, influence, inspirational leadership, teamwork	
5. Cognitive awareness of culture	NA	
6. Application of culture knowledge	NA	
7. Management of differences born out of culture	NA	

Leader statements throughout this research indicated that all four leaders openly and repeatedly discussed the presence of fear, tension, stress, denial, and acts of self-preservation during merger integration activities with the organizational members. This acknowledgement and willingness to discuss the psychodynamics of the change process might have brought on a disarming or neutralizing quality to the *PMI leader - organizational member relationships*. These purposeful acts by the PMI leaders therefore might have helped increase the individual, group and even organizational performance as they might have reduced the likelihood of destructive tension and covert processes that confound change efforts (Marshak, 2006).

In their work Nahavandi and Malekzadeh (1988), highlighted that cultural integration efforts ought to be highly scalable. They suggested that in a scenario where various subgroups and subcultures exist within one organization, these "various subcultures must be understood by the acquirer and that each may need to be managed differently" (p. 86). All four leaders of this study agreed that it was possible for multiple subcultures to exist within one organization thereby complicating culture integration efforts. More specifically, the culture related interview

comments of leaders B and C demonstrated incidents where they communicated to the C-suite leadership the need to pursue different levels of culture integration for different subgroups of the acquired organization. While further investigation was necessary to determine the leader's success in convincing the C-suite leadership in pursuing scalable culture integrations, the comments acknowledged the PMI leader's capacity to recognize, understand and react to complex culture integration nuances.

Much of the previous research primarily focused on the financial outcomes when examining *merger success*. The unit, merger success, as it was defined in under Theoretical Model section in this study, included the achievement of both financial and strategic goals. By including both goals, the researcher attempted to delineate the elements that formed the overarching concept of merger success. Along with the Larsson et al., (2004) study, which included a wider definition of merger success, this research also refined the definition and measurement of merger success as it could be used in future academic research.

More often than not, the early phases of a merger such as due diligence and negotiations were conducted by a small *core group* of individuals. As a result, the potential of an upcoming merger was kept a secret from the rest of the organizational members for as long as practically possible. Out of the four sample cases of this research, only one PMI leader was included in the due diligence and merger negotiation process. The other three leaders were brought into the *core group* near the end of the negotiation process or before announcing the deal to the public. These three leaders were disappointed by the lack of knowledge transfer from the due diligence phase to the integration phase. Collectively, they felt that this knowledge transfer could have helped them in planning the operational aspects of the integration. For instance, the leaders felt that having a seat at the core group from the onset would have given them a chance to be educated

early on about the acquired organization member's attitudes and behaviors, formal and informal aspects of the target organization, and the strategic rationales for the deal as uncovered during due diligence phase. Moreover, the opportunity to participate in meetings, discussions, and site visits would have given these leaders a chance to gain a preliminary understanding of the target organization and its culture early on. In effect, the researcher recommended that the acquiring organizations include integration leaders in the *core merger group*. The advantages of early diagnosis capacity (Marks & Mirvis, 2001; Sirower & Stark, 2001) and predictive power of due diligence activities (Cameron & Mora, 2003) were also discussed in the current literature of merger integration.

Comments of the leader and peer interviews throughout this research identified a theme which spoke of the leader building trust and relationships with the members of the now combined organization within and outside of his formal integration leader role. For example, the integration team members who joined the acquirer as a direct result of an acquisition spoke of specific instances where the PMI leaders went out of his way to form bonds with them as well as other acquired company members. According to McGregor (2006) one of the assumptions of *Theory Y* stated that the knowledge to overcome organizational problems is widely distributed in the population [of the organization]. The PMI leader's ability to build trust and gain the respect of all levels of the acquired company members might have afforded him the capacity to tap into this collective problem solving ability. The ability to form a coalition of support therefore might have enabled the leader to work pass impediments during merger integration efforts.

The proactive efforts taken by the PMI leaders to build trust and form mutual respect for each other were not limited only to members of the acquired organization. Peers who were veteran members of the acquiring organizations also described how the PMI leaders made time to strengthen one-on-one relationships with the integration team members in and outside of the formal role as a leader. Some peer interview statements even suggested that the PMI leaders assumed the role of supporting individuals experiencing change whether or not they were part of the integration team. In one instance peer A2 stated the following:

"[Leader A] pushed us to do our best. Once I was very close to a nervous breakdown [while managing a merger related conflict] and I think he knew it too. He invited me out for a beer after work one day and we talked. I appreciated that he eased off on the pressure a bit after our talk. I was able to regroup and later give it my all. I know it's hard on him too [as] there's so much to do in a short timeline" (Peer A2, personal communication March 9, 2012).

The findings from this sample suggest that the leader's willingness to engage with the integration team in and out of his formal role as the PMI leader as well as the support provided to the individuals undergoing change had contributed to his overall effectiveness in facilitating integration activities. This finding was consistent with the extant literature that also identified similar actions by the PMI leaders as a means to manage complex personnel dynamics during merger integration activities (Ashkenas & Francis, 2000; Buono & Bowditch, 1989; Marks & Mirvis, 2000; Shelton, 2003). PMI leaders therefore played an important role in supporting organizational members during change.

One final observation of the findings in general was that all leaders not only demonstrated higher than average competency levels but also mindfully and strategically incorporated their skills when executing various integration related tasks. Among few of the processes through which the PMI leaders executed their skills included; a) modeling the way, b) incorporating humor into work when appropriate, c) paying attention to and addressing tacit and explicit mental and emotional processes at play, d) being open to meet in the middle (i.e., during conflict) and e) establishing ground rules when tackling difficult situations. Furthermore, each leader appeared to have a clear understanding of his role as it related to the organizational goal(s). The combination of competence, perception and application likely increased the leader effectiveness thereby positively influencing the merger.

Critical Reflection on the Theory

While this study's findings determined the proposed theory to be supported, this section was dedicated to discuss three critical observations of the aforementioned conclusion. In the following, the predictive value of the theory was discussed using the theory development method utilized in this study. In addition, other likely contributors that might have enabled the support for this study's theory were addressed. Lastly, the theory's claim with respect to the higher than average competency level was discussed focusing on its importance given the observed results.

First, as was articulated in the Methodology chapter, the researcher utilized Dubin's theory building method to construct this study's theory. As noted by Dubin (1976), one of the key features of the theory development process was to identify the *boundaries* of the proposed theory. He stated that "theories have a domain over which they are expected to mirror the empirical world. Beyond that domain it may be problematic as to whether the theory holds" (Dubin, 1976,

p. 27). This study identified four *boundaries* to the theory, within which the seven units interacted in the predicted pattern. As such, while this study's theory was found to be supported, it may remain so only within the domain identified which included the following: a) the acquiring organization appointed a dedicated PMI leader with proven managerial skills, b) the leader had both the responsibility and authority to make integration related decisions, c) the leader received sufficient financial, HR and technical resources to implement his duties, and d) the executive team supported the integration efforts. Since all *boundaries* identified were satisfied by all four cases of this study, the researcher could only predict that this study's theory holds true within the specified empirical domain. Therefore, this study's theory may not be considered supported beyond the specifications of the *boundaries* because "it may not be at all clear that the units [of the theory] will continue to interact by the specified law, or that all units will remain in the system, or even that system will remain intact" (Dubin, 1976, p. 28).

Second, the *boundary* features identified above might have assisted the realization of support for this study's theory. For example, all four leaders indicated that they had direct access to the C-suite leadership and they supported and championed his integration efforts. The power-influence of the PMI leader as well as the C-suite leadership might have contributed to the PMI leader's overall ability to influence merger success. Similarly, the consistent cross-case theme of sufficient resource availability (finances, HR, technical) also might have assisted the effectiveness of PMI leader integration efforts. In addition, the pattern of other PMI leader skills identified during data analysis phase such as interpersonal skills, negotiation skills, trustworthiness and ability to see the bigger picture might also have contributed favorably to the support of the theory. Although these additional features do not diminish the important role played by the PMI leader competencies specifically identified in this study's theory, it can be

reasonably argued that they too directly or indirectly contributed to the overall support of the theory.

Third, Dubin's *laws of interaction* built into this study's theory indicated that it was the PMI leaders' higher than average levels of select competencies that helped influence merger success. According to the results analysis criteria adopted for the EI related units, the higher than average competency level was determined to be any case study with an *aggregate score* (i.e., PMI leader specific aggregate score) that was above the validated multi-rater ESCI *aggregate norm*. Although all case study results indicated *aggregate scores* above the *aggregate norm*, the spatial distance of the results compared to the *aggregate norm* varied as shown in Figure 9 below.

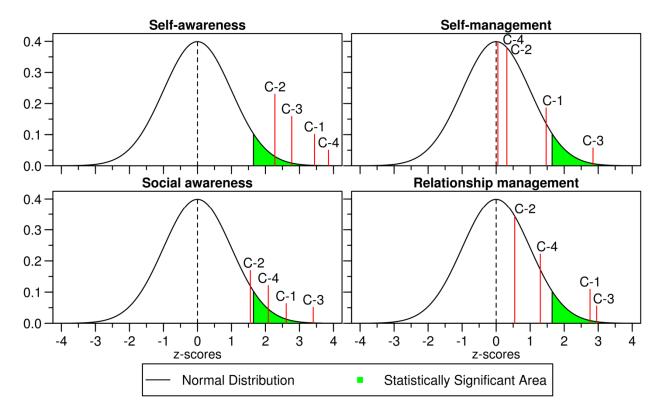


Figure 9. Z-test results of EI specific units of analysis

The above graph plotted the z-scores obtained for EI specific units of analysis. Each quadrant is represented by one of the four EI units of analysis. Within each quadrant, the four cases are identified as follows: Case 1 = C-1, Case 2 = C-2, etc. The x axis was represented by the z-scores while the area of statistical significance (i.e., $\alpha = 0.05$) was identified in the green shaded area under the normal distribution. The aggregate norm was represented by the vertical line intersecting z-score of zero. As demonstrated by the graphical representation in Figure 9 above, some leaders clearly demonstrated competency levels much higher than the *aggregate norm* while others surpassed the said average barely, still numerically higher nevertheless.

The above variability therefore suggest the possibility that perhaps even PMI leaders with average levels of competency might also be able to influence merger success. In addition, one might also argue whether the requisite higher than average competency levels claimed by the

theory indeed was a dominant requirement in influencing merger success. These questions were not addressed by this research. Therefore, one could not truthfully predict that the theory as it stands accurately represent the empirical world. This study's theory however, "does link in some way within the empirical domain. The knowledge of the phenomenon being modeled is contained in the theory, not in the empirical world" (Dubin, 1978, p. 231).

Per Dubin (1976), a theory is a conceptual simplification of a phenomenon observed in the complex real world. During the theory building process the researcher, "tries to make sense out of the observable world by ordering the relationships among elements [units] that constitute the theorist's focus of attention"(1976, p. 26). These elements or units were factors that the researcher assumed to be interrelated in the real world. The theory building requirements of a) the simplification of a complex phenomenon, and b) the inclusion of informed guesses of the elements which constituted the phenomenon, also likely posed limitations to the empirical validity of the theory in the real world. Although the shortcomings outlined above led to question the empirical "validity" of this study's theory beyond its *boundaries*, it did help provide an explanation of the "process" by which the phenomenon manifested in the complex real world.

Research Implications for Organization Development

Organization Development (OD) concerns itself with process conscious planned change (Cummings & Worley, 2005; Marshak, 2005; Vaill, 2005). The intent of OD therefore, was to apply and transfer behavioral science knowledge and skill to the organization so that it (i.e. organization) as a system was more capable of carrying out planned change. One of the tasks of this research was to identify the processes; overt and subtle, a PMI leader might have utilized to influence merger success. More specifically, the study tested how the PMI leaders' Emotional

Intelligence and their culture specific competencies influence merger success. The findings indicated that the confluence of the above stated competencies enabled the leader to notice, identify, relate and respond to the complex demands of merger integration activities. From an OD theory perspective, this study's findings provide insights into the PMI leadership process by isolating specific channels through which the positive influence was transmitted.

This research also made a number of practical contributions to OD. The supported theory indicated that the culture specific competencies of the leaders helped influence merger success. Although further research is necessary to validate this interrelationship, this study's findings could be used to assess the areas of culture related learning and development needs of PMI leaders within organizations. For example, targeted culture related training assistance provided to PMI leaders prior to or during the merger integration would help increase the leader's capacity to address culture issues thereby increasing the chances of merger success.

From a business practice standpoint, OD practitioners were engaged in merger integration planning to a) ensure alignment with corporate plans, b) attract high levels of employee participation, and c) provide transition assistance as needed (Cummings & Worley, 2005). According to the interview comments throughout this research, OD's contribution to merger integration appeared to be transactional in nature where the OD practitioners came in and out of the merger integration life cycle to provide specific assistance. This suggested the possibility that, at least for the cases of this study, OD's full potential was not leveraged to benefit merger integration efforts. OD practitioners could assist PMI leaders in a variety of activities which might help ensure the success of the integration. For example, during the early phases of the integration, the OD practitioners could assist the PMI leader in assessing the managerial, organizational and cultural components of the integration action plan. Moreover, the

practitioner's expertise might also be leveraged to conduct evaluations of the overall integration effort in an attempt to identify and learn areas of effectiveness and improvement. It is hoped that this research encouraged merging organization to consider including OD practitioners to assist the PMI leaders on a full-time basis.

Mergers and their follow-on integrations are often fraught with tension among organizational members of the acquired and acquiring organizations (Appelbaum, Gandell, Shapiro, Belisle, & Hoeven, 2000; Buono, 2003; Marks, 1999; Marks & Mirvis, 2000; Tannenbaum & Hanna, 1985). Both PMI leaders highlighted in this research and those in extant literature demonstrated that these leaders provided emotional support for the organizational members in order for them to cope with the painful experiences that were at times associated with the merger integration activities. While PMI leaders were a source of support for others, the leaders themselves might not have received the support they also needed. For example, constantly giving support and keeping some level of distance from the emotionally painful processes in order to maintain the larger perspective of *leading* the integration, might cause the PMI leaders stress and tension. OD professionals, especially internal OD could assist the PMI leaders as a source of mutual learning and support. For instance the OD professionals could support PMI leaders by being available to "give conceptual and emotional support and serve as a sounding board for ideas and problems" (Cummings & Worley, 2005, p. 170).

The PMI leader competencies identified in the extant literature closely resembled some of the skills and characteristics of OD practitioners. The ability to facilitate concurrent interventions, communicate implications of systems theory, interpersonally relate to others, facilitate complex emotional patterns as well as participative decision-making processes were some of the OD competencies identified by the Organization Development Network (Sullivan,

Rothwell, & Worley, 2001). When observed within the context of mergers and acquisitions, the skills and characteristics of OD practitioners appeared instrumental in facilitating post-merger integration and influencing merger success. As such, this research provided an ancillary benefit to the OD community by highlighting the unique expertise of its practitioners in being capable of playing a key role in leading post-merger integrations.

Lastly, this study was an example of how OD theory and practice could be incorporated into other disciplines (i.e., business) in order to enhance overall organizational performance. This study addressed what was perceived as a business related subject matter, PMI leadership and merger success, from an OD point of view. According to some leading scholars and practitioners of OD, the field of OD as whole was marginalized by the modern business community due to its perceived inability to reinvent itself from the classical roots (Bradford & Burke, 2005). "The principles and premises of classical OD were first developed in the 1950s to 1970s and they took on more humanistic values with little attention given to business values" (Marshak, 2005, p. 37). Some scholars engaged within the debate of reinventing OD suggested possible ways in which to bring OD back to the forefront, in particular within the business field. One such scholar, Marshak (2005), suggested the option of intentionally creating and legitimizing neoclassical OD. Neoclassical OD continued to maintain the objectivist, action research traditions of classical OD while augmenting some of the original humanistic values with business values and processes. For example, Marshak believed that such an updating and rebalancing of classical OD might make it closer to, but not identical with, change management (2005, p. 39). With its focus on both OD and business fields, this study fell within the definition of neoclassical OD, because the study focused on the humanistic values within the domains of EI and culture while also exploring their connection to the business process of re-configuring an

organization for success after a merger. Therefore, at a macro level, this study could be considered as one of the examples of how OD continues to be important within the business community in its *neoclassical* form.

Limitations

This research suffers from the limitation that it only studied one factor (i.e. PMI leader) that contributed to merger success. Merger success was not exclusively a matter of leadership merit as it could be attributable to multiple factors. Other reasons for success might include the payment of appropriate deal price, prudent cash-debt financing, clear relation to core business strategy, adequate due diligence, CEO/Board backing for integration activities, authority and availability of resources for the integration team etc. As Gladwell (2008) wrote, the reality of success takes a biologist's notion of an organism such that;

The tallest oak in the forest was the tallest not just because it grew from the hardiest of acorn; it was the tallest also because no other trees blocked its sunlight, the soil around it was deep and rich, no rabbit chewed through its bark as a sapling, and no lumberjack cut it down before it matured. (p. 19)

While better merger success could be achieved by the appointment of the right kind of integration leader (i.e., hardy acorn), it remains only one of the multitude of factors that might have contributed to merger success. As such, testing for only one contributor of success (i.e., integration leadership) was an important limitation of the study.

Another limitation stemmed from the *merger success* definition utilized by the researcher. As described in the methodology section, this research adopted a broad definition of merger success by including both financial and strategic outcomes as empirical evidence for

success. Some may view this perspective as a limitation favoring the measurement of merger success only using financial metrics. Furthermore, one of the success measurement criteria, strategic (non-financial) outcomes, was analyzed comparing the *stated goals* against its *actual attainment*. This required the researcher to accept the *stated goals* of the merger, as espoused by the organizational members, at its face value and then proceed to observe a pattern for its achievement. It was inherently difficult to positively identify if the organizational *stated goals* were in fact its *actual goals*. Therefore, this lack of clarity of the truthfulness of the success outcomes measured also posed a limitation to this research.

A third limitation occurred during one of the data analysis steps of the culture specific competencies. During the open-ended question analysis phase, the researcher utilized a scoring and interpreting method which was described in Appendix K. A maximum score of 4 points were assigned to each open-ended question. Few open-ended questions were posed and scored in such a way that each relevant response was to receive 1 point each. For example, the question "How much learning about culture have you had in the past?" could generate relevant responses such as the number of years of formal education, foreign travel, foreign friends, reading books, interest in international business, workshops, speak another language etc. There were instances where interview participants identified multiple of these response options available thus accumulated points greater than the maximum allowed 4 points. As such, the response scoring method applied to some of the open-ended questions potentially confined a given participant's ability to score more points. This researcher's choice to apply a consistent scoring method across all questions (i.e., open-ended and Likert) therefore, might have caused a limitation of this study.

In addition, the retrospective bias posed a limitation in this study. For example, some of the leaders and peers were asked to recall past events in order to assess the competencies after the integration took place. To mitigate these issues the study focused on recent integration efforts and triangulated data collection efforts which include in-period document analysis where available. The acquisitions presented within the cases of this study took place between the years of 2008 and 2010.

Some elements of the demographic similarities of the primary study participants might also pose another limitation to the current study. As was described in Table 10 all four cases examined PMI leaders who were male. Furthermore, three out of the four PMI leaders were Caucasian, represented the functional area of HR and were located in a mid-western state. As such it is likely that this study's sample was not representative of the PMI leader population in the real world. While the researcher neither anticipated nor foresaw this pattern at the time of data collection, future research might consider demographic diversity of research participant as part of the case selection criteria.

Finally, from a research design methodology aspect, the findings are only generalizable to the theory tested thus creating a limitation. Per Yin, even a multiple case study designs which followed a *literal replication logic*, do not represent a *sample* as defined in natural sciences.

Thus case study findings are "generalizable to theoretical propositions and not to populations or universes" (Yin, 2009, p. 15).

Suggestions for Future Research

As was mentioned earlier, research findings based on the case study methodology are only generalizable to the sample used (Yin, 2009). In order for this study's theory to be

considered more robust, it should be tested again using a variety of other merger integration efforts. By using similar multiple case study and results analysis criteria future studies could replicate this research in order to test the vigor of the current study's results. Researchers may also want to a) increase the number of peer participants per leader, b) include merger integrations across a variety of industries, and c) study PMI leaders whose functional area of expertise was not HR. It is also hoped that other researchers utilize this study's theory as a mere starting point for developing more sophisticated theoretical models.

Future research may also consider studying the human contribution to merger failure from the perspective of a PMI leader. *Human contribution* may be defined as managerial and leadership decisions and inactions that led to merger failure. For the researcher, it is imperative that the focus be cast wider to include the perceived contributions to failure (i.e., decisions and inactions) by PMI leaders as well as other organizational leaders alike. This wider scope might help defuse the likely unwillingness to discuss failures thus encouraging the participation in the proposed study. Understanding the human contributions to failure from a PMI leader perspective was important because he or she was likely to provide more contextual detail of the human contributions from the acquirer and acquired company frame of reference. This more descriptive detail might help uncover areas of additional planning and attention during merger integration activities. The potential findings of such a study may prove useful to the business community and the OD field.

Another recommendation for future study included the analysis of a successful merger which also had a PMI leader with the specific focus of evaluating the integration process in its entirety. The focus of the study might be learning and identifying a) what of the planned integration went well, b) what went wrong, c) how the unexpected negative events were handled

including the impact of the resolution on the integration, and d) takeaways for the future integration efforts. Such a study could serve multiple purposes. From a researcher standpoint, a study with this focus might ease the entry into an organization to study the integration process. At least according to this researcher's experience, gaining access into organizations to study merger integration efforts were often met with extreme scrutiny. If a study, such as the one proposed was undertaken, the OD researcher might examine not only the PMI leader effectiveness but also what other factors that might lead to the merger success. From an organization's point of view, the proposed study focus of "evaluating the merger integration effort" might also be appealing, because it produces direct benefits for the organization in the form of a review of their integration effort that might include valuable insights for future use, and identify areas that might still need ongoing integration attention.

A study of the career trajectory of PMI leaders after their integration roles might also benefit the career development and talent management areas within OD. Although the strategic importance of the PMI role was established, one might still be curious in knowing what happens to the leaders once the integration was complete and there were no mergers on the horizon. According to most leaders in this study sample, 2 to 3 years after the integration assignment, PMI leaders re-assumed their previous responsibilities as leaders in the respective HR or finance areas. Other leaders continued on in the PMI manager role due to changes in organizational design of that acquirer. The specific research interests might include) how does the PMI role help or hinder the individual career advancement of leaders, b) PMI leader turnover, c) what could OD as a field do to help organizations foster the effectiveness of PMI role assignments?

Conclusion

Finally, the theory tested in this research was empirically supported by a sample of four case studies. The findings indicated that PMI leaders' emotional intelligence and their culture specific competencies positively influenced merger success. During the course of this study, the researcher also uncovered data, other than the seven units of analysis of the theory, which might have contributed to the overall support of the theory. However, higher levels of competencies identified did serve as a pre-condition that increased the leaders' capacity to influence merger success. From a theoretical standpoint, this study contributes to the PMI leader literature by empirically testing the validity of the characteristics of successful PMI leaders. The practical implications of this work included the (re)confirmation of the importance of PMI leader role in effectively managing integrations and offering an empirically tested list of competencies that might assist in appointing PMI leaders. M&A continues to be an important tool of corporate growth strategy. This research offered some actionable insights into how human capital, by way of competent PMI leaders, could be leveraged to realize the expected synergies of a merger.

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Appendices

Appendix A Lead Participant Recruitment E-mail

Email #1

Dear [Participant's name],

My name is Asha Prasangi De Alwis and I am a doctoral candidate in Organization Development at the University of St. Thomas. I first made your acquaintance at the Conference Board's 2010 Post Merger Integration Conference. I am contacting you to ask if you would be interested in participating in my research.

My dissertation topic is post-merger integration leadership. In particular, the study I conduct theorizes that integration leaders with certain select competencies are likely to influence merger success. The two competency categories of interest are a) emotional intelligence; which research indicates to be a distinguishing characteristic of effective leaders, and b) culture specific competencies; which research suggests are highly desired of integration leaders.

In order to continue with the investigation, I am in search of post-merger integration leaders. I invite you to participate in this research. Participants will be asked to do the following:

- 1. Complete a 360 degree emotional intelligence survey (30-40 minutes)
- 2. Participate in an interview (60-90 minutes)
- 3. Nominate at least four peers, colleagues or coworkers who would be invited for an interview (30-60 minutes) and as survey participants.
- 4. Provide a copy of the job description, organizational structure etc. for analysis purposes only (Optional)

Your participation in this study is entirely voluntary; you can choose to withdraw any time before or during the interview. If you choose to participate in the study, you will be provided a copy of your Emotional Intelligence survey results.

Please reply to the email indicating whether or not you will be able to participate. Upon receipt of your favorable response, you will be sent a copy of the letter of consent for your review.

I am looking forward to working with you in this exciting research study.

A brief description of my background is attached to this email, and please do not hesitate to contact me in case you have further questions.

Thank you.

Asha Prasangi De Alwis
Doctoral Candidate
aade@stthomas.edu
651-494-4851
Dept. of Organization Learning & Development

Email #2

Dear [Participant's name],

Thank you for agreeing to participate in my research. I am looking forward to working with you.

As the first step in this process, please review the attached Letter of Consent form. I will get in touch with you to discuss and answer any questions you may have on it. Upon completion of our conversation, please return a paper or electronic copy of the signed form.

At this time I would like to arrange a time for the interview (60-90 minutes) within the next three weeks. Please let me know what time works best for you. If your schedule will not allow you to participate within this time frame, please let me know and I will find a better time to fit your schedule.

As mentioned in my earlier e-mail, I need to have access to at least four of your peers, colleagues or co-workers who are aware of your work. I would appreciate it if you would please provide me the contact information (e-mail and/or phone) of the colleagues of your choosing. I will engage them to complete the multi-rater portion of the survey and participate in a brief interview.

Again, it is an honor to have you as a participant in this study.

Thank you.

Asha Prasangi De Alwis Doctoral Candidate aade@stthomas.edu 651-494-4851 Dept. of Organization Learning & Development

Email #3

Dear [Participant's name],

Thank you for agreeing to participate in my research. I am looking forward to working with you.

Please click on the secured URL below which will take you to the Emotional Intelligence Survey. The survey is estimated to take 30-40minutes. I would appreciate you completing the survey within the next two weeks.

[Place link here]

Again, I really appreciate your time and it is an honor to have you as a participant in this study.

Thank you.

Asha Prasangi De Alwis
Doctoral Candidate
aade@stthomas.edu
651-494-4851
Dept. of Organization Learning & Development

Appendix B Multi-rater Participant Recruitment E-mail

Email #4

Dear [Multi-rater participant's name],

My name is Asha Prasangi De Alwis and I received your contact information from [Lead participant's name]. I am a doctoral candidate in Organization Development at the University of St. Thomas. I am contacting you to ask if you would be interested in participating in my research. Your valuable contribution will be in the capacity of [Lead participant's name] peers.

My dissertation topic is post-merger integration leadership. In particular, the study I conduct theorizes that integration leaders with certain select competencies are likely to influence merger success. The two competency categories of interest are a) emotional intelligence; which research indicates to be a distinguishing characteristic of effective leaders, and b) culture specific competencies; which research suggests are highly desired of integration leaders.

In order to continue with the investigation, I am in search of peers of post-merger integration leaders. I invite you to participate in this research. You will be asked to do the following:

- 1. Complete a multi-rater portion of an emotional intelligence survey (30-40 minutes)
- 2. Participate in an interview (30-60 minutes)

Your participation in this study is entirely voluntary; you can choose to withdraw any time. Also, I will not disclose to [Lead participant's name] whether or not you participated in the study UNLESS, you would like to be identified. The records of this study will be kept confidential. Thus, any report I generate will not include information that will make it possible to identify you in any way.

Please reply to the email indicating whether or not you will be able to participate. Upon receipt of your favorable response, you will be sent a copy of the letter of consent for review.

I am looking forward to working with you in this exciting research study.

A brief description of my background is attached to this email, and please do not hesitate to contact me in case you have further questions.

Thank you.

Asha Prasangi De Alwis

Doctoral Candidate aade@stthomas.edu 651-494-4851

Dept. of Organization Learning & Development

Email #5

Dear [Multi-rater participant's name],

Thank you for agreeing to participate in my research. I am looking forward to working with you.

As the first step in this process, please review the attached Letter of Consent form. I will get in touch with you to discuss and answer any questions you may have on it. Upon completion of our conversation, please return a paper or electronic copy of the signed form.

At this time I would like to arrange a time for the interview (30-60 minutes) within the next three weeks. Please let me know what time works best for you. If your schedule will not allow you to participate within this time frame, please let me know and I will find a better time to fit your schedule.

Again, it is an honor to have you as a participant in this study.

Thank you.

Asha Prasangi De Alwis
Doctoral Candidate
aade@stthomas.edu
651-494-4851
Dept. of Organization Learning & Development

Email #6

Dear [Multi-rater participant's name],

Thank you for agreeing to participate in my research. I am looking forward to working with you.

Please click on the secured URL below which will take you to the multi-rater portion of the Emotional Intelligence Survey. You will be asked to please complete the survey from the perspective of how you perceive [Lead participant's name] in his/her capacity of work. The

survey is estimated to take 30-40 minutes. I would appreciate you completing the survey within the next two weeks.

[Place link here]

Again, I really appreciate your time and it is an honor to have you as a participant in this study.

Thank you.

Asha Prasangi De Alwis Doctoral Candidate aade@stthomas.edu 651-494-4851 Dept. of Organization Learning & Development

Appendix C Lead participant Consent Form

My name is Asha Prasangi De Alwis, doctoral candidate for a degree in Organization

Development at the University of St. Thomas. I am conducting a study about select

competencies of Post-Merger Integration (PMI) leaders and their potential influence on merger

success. I am requesting your participation in this study. You have been chosen as a member of
an exceptional group of leaders who have had experience in merger integration activities. I

invite you to participate in this research.

Background Information: The purpose of this study is to investigate if PMI leaders with select competencies are more capable of guiding the multi-faceted post integration activities, thereby increasing the likelihood of merger success. The two PMI leader competency areas of interest include Emotional Intelligence and select culture specific competencies.

Procedures: Participation in this study will involve completing an Emotional Intelligence survey, estimated to take 30-40 minutes, and participation in an interview. The interview is estimated to take 60-90 minutes. Interviews will be conducted face-to-face where possible, via phone or web conferencing per the preference of the participant. You will be asked to identify several peers, direct reports or superiors who are aware of your work. These individuals will be potential study participants who will complete a survey and an interview. They too will be given an overview of the research and the voluntary nature of participation. In order to maintain confidentiality, the information as to which of the peers, direct reports or superiors accepted the invitation will not be shared with you. Additionally, if possible, I would like to request documents such as the job description, the organizational structure (ex: org chart) and vision/mission of the integration group. This information will only be used for data analysis purposes.

Benefits & Risks of Being in the Study: Although there may be no direct benefit to you, you do have the opportunity to receive personalized results of your Emotional Intelligence survey. There are no anticipated risks of being in this study.

Confidentiality: All surveys and interview notes will remain confidential, only observed by the researcher. Any paper based data such as handwritten notes during the interviews will be kept in a locked file cabinet to which I have the only key. Electronic data such as completed web-surveys will be kept in a password secured personal home computer. Each participant will be given a pseudonym. The list linking you as a participant to a pseudonym will be kept in a separate locked file cabinet to which I have the only key. The results of the research study may be published. Be assured that in any published study findings and analysis, you and your organization will be identified in general and non-attributable terms in order to protect anonymity and privacy. When referencing you as a research participant, I will do so through the use of a pseudonym.

Voluntary Nature of the Study: Your participation in this study is entirely voluntary. Refusal to participate or discontinuing in the study will not affect your current or future relations with any cooperating institutions or the University of St. Thomas. If you decide to participate, you are free to withdraw at any time without penalty. Should you decide to withdraw, any data collected from you will not be used.

Contacts and Questions: If you have further questions, you may reach me by phone (651-494-4851) or e-mail (aade@sttthomas.edu). If you have further concerns, you may reach my advisor, Dr. John P. Conbere, by phone (651-962-4456) or e-mail

(jpconbere@stthomas.edu). You may also contact the University of St. Thomas Institutional Review Board at 651-962-5341 with any questions or concerns.

You will be given a copy of this form to keep for your records.

Tou will be given a copy of	this form to keep for your records.
Statement of Consent: I have	ve read the above information. My questions have been
answered to my satisfaction. I conser	nt to participate in the study.
I grant withhold (please	e select one of the proceeding) permission to audio tape the
interview. Interviews are taped solel	ly for the purpose of analyzing themes.
Signature of Study Participant	Date
Signature of Researcher	Date

Appendix D Multi-rater Participant Consent Form

My name is Asha Prasangi De Alwis, doctoral candidate for a degree in Organization

Development at the University of St. Thomas. I am conducting a study about select

competencies of Post-Merger Integration (PMI) leaders and their potential influence on merger

success. I am requesting your participation in this study. At my request, your colleague [lead

participant's name] has identified you as a potential member to contribute your input my study. I

invite you to participate in this research.

Background Information: The purpose of this study is to investigate if PMI leaders with select competencies are more capable of guiding the multi-faceted post integration activities, thereby increasing the likelihood of merger success. The two PMI leader competency areas of interest include Emotional Intelligence and select culture specific competencies.

Procedures: Participation in this study will involve completing a multi-rater portion of an Emotional Intelligence survey, estimated to take 30-40 minutes, and participation in an interview. You will be asked to please complete the survey from the perspective of how you perceive [Lead participant's name] in his/her capacity of work. The interview is estimated to take 30-60 minutes. Interviews will be conducted face-to-face where possible, via phone or web conferencing per the preference of the participant. The information as to which of the peers, direct reports or superiors accepted the invitation will not be shared with you.

Benefits & Risks of Being in the Study: Although there may be no direct benefit to you, you do have the opportunity to receive personalized results of your Emotional Intelligence survey. There are no anticipated risks of being in this study.

Confidentiality: I will not disclose to [Lead participant's name] whether or not you participated in the study UNLESS you would like to be identified. All surveys and interview notes will remain confidential, only observed by the researcher. Any paper based data such as handwritten notes during the interviews will be kept in a locked file cabinet to which I have the only key. Electronic data such as completed web-surveys will be kept in a password secured personal home computer. Each participant will be given a pseudonym. The list linking you as a participant to a pseudonym will be kept in a separate locked file cabinet to which I have the only key. The results of the research study may be published. Be assured that in any published study findings and analysis, you and your organization will be identified in general and non-attributable terms in order to protect anonymity and privacy. When referencing you as a research participant, I will do so through the use of a pseudonym.

Voluntary Nature of the Study: Your participation in this study is entirely voluntary. Refusal to participate or discontinuing in the study will not affect your current or future relations with any cooperating institutions or the University of St. Thomas. If you decide to participate, you are free to withdraw at any time without penalty. Should you decide to withdraw, any data collected from you will not be used.

Contacts and Questions: If you have further questions, you may reach me by phone (651-494-4851) or e-mail (aade@sttthomas.edu). If you have further concerns, you may reach my advisor, Dr. John P. Conbere, by phone (651-962-4456) or e-mail (jpconbere@stthomas.edu). You may also contact the University of St. Thomas Institutional Review Board at 651-962-5341 with any questions or concerns.

You will be given a copy of this form to keep for your records.

Statement of Consent: I hav	e read the above information. My questions have been
answered to my satisfaction. I conser	nt to participate in the study.
I grant withhold (please	e select one of the proceeding) permission to audio tape the
interview. Interviews are taped solel	y for the purpose of analyzing themes.
C!	D-4-
Signature of Study Participant	Date
Signature of Researcher	Date

Appendix E PMI Leader Interview Guide

The questionnaire below guided the semi-structured face to face interview with the PMI leaders. Aside from the open-ended questions, the researcher also incorporated pertinent Likert scaled questions. The Likert questions also accompanied the possibility to include comments which facilitated further probing as needed.

Cognitive awareness of culture. The questions within this unit of analysis attempted to identify the depth and scope of the PMI leader's intellectual grasp of the concept organizational culture. In other words the questions were designed to discern the leader's conscious ability to process organizational culture related content. Each question was designed to address an aspect of organizational culture. The researcher deemed these aspects important in order to consider the PMI leader to be adept in culture specific competencies in the context of M&A.

No	Questions addressing Cognitive awareness of culture
	How much learning about "culture" have you had in the past?
1	(Probing reference: foreign travel, foreign friends, reading books, interest in international
	business, workshops, speak another language?)
2	How would you define culture?
	(Probing ideas: What comes to mind when you think of culture?)
	What authors who write about culture have you read?
3	(Probing reference: Schein, Hofstede, Trompenaars, Martin etc., What do you think of
	"AUTHOR NAME HEERE" ideas on culture?)
	How do you understand the term "cultural lens"?
4	(Probing reference: Cultural lens = A framework through which individuals/groups
	interpret, interact with, and make sense of reality)
5	What do you think about leadership's role in creating culture?
6	What would be the advantages of cultural integration?
7	What would be the disadvantages of cultural integration?

Application of culture knowledge. The questions related to this unit of analysis attempted to discern whether or not the PMI leader was capable of turning his cognitive awareness of organizational culture into actions within the context of post-merger integration activities. Some questions were designed to assess the level of various skills possessed by the leader. Identifying these skills was deemed important as they help translate culture knowledge into action (i.e., communication and interpersonal skills, adaptability etc.).

No	Likert questions addressing Application of culture knowledge	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Comments
8	I communicate to the upper management the powerful influence of culture on the merger success						
9	I encourage all organizational members to have open discussion of organizational cultural differences and their influences on the merger integration process						
10	I spend time to understand why certain customs and traditions are important to the acquired organization						
11	I take time to explain why certain customs and traditions are important to the acquiring organization						
12	I try to discern the unspoken beliefs and values that people have within the acquiring organization						
13	I make an effort to build trust, show respect, and cultivate relationships with members of the acquiring organization						
14	I adjust my communication style according to the needs of the different organizational cultures (Probing reference: oral/interpersonal, written/formal documentation, and electronic. Also tone, speed and accent)						
15	I am capable of recognizing and accepting different values from different culture backgrounds						
16	I am confident that I can deal well with people and organizations that are different						
17	Cultural due diligence and cultural integration are integral activities included in this organization's postmerger integration process Note: Cultural due diligence = Culture specific research and analysis activities undertaken during the early phase of M&A.						

No	Open-ended questions addressing Application of culture knowledge
18	In the context of integration activities how are goals determined? (i.e., consensus, top down)
19	What are some of the basic skills you find to be useful when approaching cultural integration activities?
20	 a) How do you inform people of change? (Probing reference: meetings, communiqués, informal gatherings etc.) b) Thinking back to the contents of those "methods" used to inform people of change, what would you say is the emphasis mostly on? (Probing reference: only the upcoming change itself, financial and/or all aspects of the operations, acknowledgement of the emotional toll of change)

Managing differences born out of culture. The questions within this unit of analysis attempted to address whether or not the leader actively and consistently managed culture induced differences. Some questions were also designed to check whether the leader was aware of the realities such as the amount of time and patience required to address issues born out of culture while also knowing that the differences may not be fully resolved.

No	Likert questions addressing Management of differences born out of culture	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Comments
21	Culture related differences that arise during integration activities are discussed with due respect and delicacy						
22	Upon confronting obstacles, setbacks or even failure, I am able to reengage in attempting to reconcile differences						
23	Conflicts due to cultural differences sometimes may not be resolved but always may be managed						
24	Culture only changes slowly						
25	An organizational culture that is managed to be <u>adaptive</u> <u>and flexible</u> outperforms one that is managed to be <u>strong</u> <u>and rigid</u> .						
26	To effectively integrate organizational culture is to deal with all aspects of organizational life such as hiring, firing, incentives and compensation, decision making, organizational structure, polices, procedures, technology, workflow, management and leadership styles, processes and measures (Note: the idea behind this is that culture is pervasive and cannot be managed in isolation)						

No	Open-ended questions addressing Management of differences born out of culture
27	How are decisions about cultural integration being made at your organization? (Probing reference: Want to know if managers make quick decisions and try to sell others on their merits OR do they take time upfront to build consensus and then implement them relatively quickly?)
28	Most mergers fail when it comes to realizing expected synergies and often associate cultural differences as the cause. Why is it difficult to achieve cultural integration in M&A?
29	What are some strategies you have used to mitigate the above (Q#28) difficulties?
30	How do you feel about emotionally supporting members of the organization during integration activities? Please explain.

Appendix F Peer Interview Guide

The questionnaire below guided the semi-structured face to face interview with the PMI leader's peers. Both open-ended and Likert scaled questions were included in the interview guide. The comment section of the Likert scale questions were intentionally placed to facilitate further probing as deemed necessary. Only two of the three culture specific units of analysis were measured using peer information. This was because no useful data can be generated by attempting to measure the PMI leader's cognitive awareness of culture (i.e., culture specific unit of analysis #1) through the use of peer information.

Application of culture knowledge. The questions related to this unit of analysis attempted to discern whether the peers felt that the PMI leader was capable of identifying culture related nuances and applying this knowledge into actions within the context of post-merger integration activities. Some questions focused on approximating the perceived skill levels of the leader (i.e., communication and interpersonal skills, adaptability etc.) as they facilitated the application of culture knowledge.

No	Likert questions addressing Application of culture knowledge	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Comments
1	The leader communicate to the upper management the powerful influence of culture on the merger success						
2	Does the leader encourage open discussion of organizational cultural differences and their influences on the merger integration process?						
3	The leader spends time to understand why certain customs and traditions are important to the acquired organization						
4	The leader takes time to explain why certain customs and traditions are important to the acquiring organization						
5	The leader tries to discern the unspoken beliefs and values that people have within the acquiring organization						
6	The leader makes an effort to build trust, show respect, and cultivate relationships with members of the acquiring organization						
7	The leader adjusts his/her communication style according to the needs of the different members of the organization (Probing reference: oral/interpersonal, written/formal documentation, and electronic. Also tone, speed and accent)						
8	The leader recognizes and accepts different values of members from different culture backgrounds						
9	The leader has the capacity to interact well with people and organizations that are different						
10	Cultural due diligence and cultural integration are integral activities included in this organization's postmerger integration process Note: Cultural due diligence = Culture specific research and analysis activities undertaken during the early phase of M&A.						

No	Open-ended questions addressing Application of culture knowledge
11	In the context of integration activities how are goals determined? (i.e., consensus, top down)
12	What skills of the leader do you think are helpful when conducting cultural integration activities?
13	 c) How does the leader inform people of change? (Probing reference: meetings, communiqués, informal gatherings etc.) d) Thinking back to the contents of those "methods" used to inform people of change, what would you say is the emphasis mostly on? (Probing reference: only the upcoming change itself, financial and/or all aspects of the operations, acknowledgement of the emotional toll of change)

Managing differences born out of culture. The questions within this segment attempted to identify whether the peers felt that the leader actively and consistently managed culture induced differences. Peers were also consulted on whether they felt the leader was realistic about the time and patience it required to address culture issues in a merger integration context.

No	Likert questions addressing Management of differences born out of culture	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Comments
14	Culture related differences that arise during integration activities are discussed with due respect and delicacy						
15	Upon confronting obstacles, setbacks or even failure, the leader is able to reengage in attempting to reconcile differences						
16	The leader attempts to manage conflicts due to cultural differences						
17	The leader is realistic about the time it takes to achieve cultural integration						
18	Would you say that the (new) organizational culture of this organization is managed to be <i>adaptive</i> and <i>flexible</i> ?						
19	When dealing with cultural integration the leader considers all aspects of organizational life such as hiring, firing, incentives and compensation, decision making, organizational structure, polices, procedures, technology, workflow, management and leadership styles, processes and measures (Note: the idea behind this is that culture is pervasive and cannot be managed in isolation)						

No	Open-ended questions addressing Management of differences born out of culture
20	How are decisions about cultural integration being made at your organization?
	(Probing reference: Want to know if managers make quick decisions and try to sell others on their merits OR do they take time upfront to build consensus and then implement them relatively quickly?)
	Most mergers fail when it comes to realizing expected synergies and often associate
21	cultural differences as the cause. How would you characterize the cultural integration efforts at your organization?
	(Probing reference: Do you think your organization's approach is somehow different from other organizations?)
22	Would you give me an example of how the leader has handled a situation where there was
	conflicting interests/positions?
23	During integration activities, how would you characterize the leader's ability to be sensitive
23	to the feelings and thoughts of different members of the organization? Please explain.

Appendix G Other Interview Questions

Other questions were included in the PMI interview to collect pertinent information that was used in the composition of individual cases as well as to corroborate merger success related findings. The researcher determined that the specific questions below provided beneficial contextual information. The four questions listed below are organized under two categories; merger success and other.

Merger Success questions. Merger success was defined as achievement of strategic and/or financial expectations set forth at the time of acquisition. For example, included among *strategic expectations* were geographic or product expansion, acquisition as a learning tool for future acquisitions, and acquisition of talent and intellectual property etc. *Financial expectations* included revenue, net income or share price increases, access to capital etc.

- Given the above definition AND thinking back to the espoused expectations of the past merger, do you feel the (past) merger was
 - a) Financial success? How so?
 - b) Strategic success? How so?

Other questions.

2. Thinking back to your communications with the top management (CEO, other executive leaders to whom the PMI leader reported) with regards to your integration role, do you feel that they expect you to take an adversarial or conciliatory approach to integration efforts? (Note: *Adversarial* = authoritative and unyielding, *Conciliatory* = persuasive and consensus building)

- 3. Thinking about the nature and size of the overall PMI team/dept./group which you represent, do you feel you have sufficient resources available to implement your responsibilities? (Note: Resources = Talent, finances, access to leadership, access to industry specialists, technology)
- 4. Were you involved during merger related negotiations or due diligence activities? What did it look like?

Appendix H Calculating Statistical Measures of Scores

ESCI data analysis step II focused on creating aggregate scores. While creating aggregate scores out of researcher generated case study data was straightforward, accomplishing the same for the ESCI norm data, which were extracted from the technical manual, required special mathematical attention. Both the norm means and norm standard deviations must undergo a mathematical treatment in order to obtain aggregated norm scores that are composed of the same weighting scheme as the aggregate scores of the case studies. The following segment explains the transformation process of the ESCI norms into aggregate norm scores as was required by results comparison needs of this study.

As shown in Table 3, the norm group data extracted from the technical manual included two sets each composed of mean(μ) and standard deviation (σ) which represents a set for *self-scores* and *other scores*. A combined *aggregate norm* was not provided in the manual. Given the researcher's intent was to compare aggregate results (i.e., self and other results combined) of case studies and norms and not case *self* vs norm *self* or case study *other* vs norm *other*, it was necessary that the researcher produced the requisite aggregate norm scores.

The following section was utilized introduce the prerequisite assumptions that led to the construction of the mathematical formula which were used to produce the *aggregate norms* sought after by the researcher.

The researcher utilized the letter m to signify the number of sets each composed of a mean (μ) and standard deviation (σ) which was based on a number of observations (n). In order to obtain a combined score, all m sets have to be aggregated. In this study, the notation m referred to 2 score types. The number 2 was used because the researcher merged *self-scores* and

other scores into one unified aggregate norm. Furthermore, the researcher assumed that for each of the m sets, the number of scores n_j , the mean, μ_j , and standard deviation, σ_j , is available (Found in Table 3 and Hay Group's technical manual), where $j = 1 \le j \le m$.

The Abbreviation of Mean and Standard Deviation. A portion of the mathematical formula which converts ESCI norms into *aggregate norm scores* incorporated the formulas for calculating mean and standard deviation. Given the complexity of the mathematical notations to come, the researcher opted to abbreviate the formulas pertaining to the calculation of mean and standard deviation. They are explained as follows:

In this study, a collection of n individual ESCI scores, x_i , $1 \le i \le n$, is often abstracted to two statistical measures namely the mean, μ , and standard deviation, σ . The mean captures the centrality of the data points, x_i , and the standard deviation describes how much the data points spread away from the mean. Since the following formulae often incorporate sums of scores, the researcher represented the sum of all ESCI scores, x_i , with the symbol S, and the sum of all squared scores using the symbol SS. These abbreviations (i.e., S and SS) were introduced to simplify subsequent mathematical notations. Using the abbreviation S, the mean, μ , is calculated as follows:

$$\mu = \frac{1}{n} \sum_{i=1}^{n} x_i = \frac{1}{n} S$$

Using the abbreviation SS, the standard deviation, σ , is determined based on the following formula:

$$\sigma = \sqrt{\frac{1}{n} \sum_{i=1}^{n} (x_i - \mu)^2} = \sqrt{\left(\frac{1}{n} \sum_{i=1}^{n} x_i^2\right) - \mu^2} = \sqrt{\frac{1}{n} SS - \mu^2}$$

The next sections focused on presenting the mathematical formulae which were used to calculate aggregate sample size, aggregate norm mean, and aggregate norm standard deviation. The researcher assigned a weight of 1/5 for *self-scores* and 4/5 for *other scores*. As such, a weight, w_j , was provided for each set of scores that signifies the degree of influence the corresponding value was supposed to have on the combined measures n_c , μ_c , and σ_c .

Aggregate Sample Size (nc). Prior to calculating the aggregate mean and aggregate standard deviation, one must first formulate the combined sample size (n_c) based on the sample sizes of self-scores and other scores, n_i .

The weighted, combined number of score, n_c, was calculated as follows:

$$n_c = \sum_{j=1}^m w_j n_j$$

Aggregate Norm Mean. In the following, the researcher addressed how m means, μ_j , are combined into a single mean, μ_c , (i.e., combined mean). Since a mean, μ_j , can be expressed using the sum of scores, S_j , where $S_j = n_j \mu_j$, the formula is based on sums of scores, S_j .

The combined mean, μ_c , is based on the following formula:

$$\mu_c = \frac{1}{n_c} \sum_{j=1}^m w_j S_j$$

Aggregate Norm Standard Deviation. This section addressed how m standard deviations, σ_j , are combined into a single standard deviation, σ_c (i.e., combined standard deviation). The following formula is based on the sum of squared scores, SS_j , where $SS_j = n_j(\mu_j^2 + \sigma_j^2)$.

The combined standard deviation, σ_c , is determined as follows:

$$\sigma_c = \sqrt{\frac{1}{n_c} \left(\sum_{j=1}^m w_j S S_j \right) - \mu_c^2}$$

Appendix I Z-score, Z-test, and Statistical Significance

The researcher opted to perform a statistical significance test on the results of the EI specific units of analysis at each of the individual case level. The statistical significance test, conducted employing the z-test, help determine the strength of the results observed. The following sections were dedicated to explain the z-score (i.e., one of the steps of z-test), z-test and the process by which statistical significance of the study results were determined.

The purpose of *z-scores* was to describe the exact location of *values* within a given distribution (Gravetter & Wallnau, 2009, p. 141). In this study, a *value*, *x*, was the *case study unit scores* of an EI unit of analysis that is based on n=5 observations (one leader and four peers). These *case study unit scores* (*x values*) were found in column A of Table 6. The formula for transforming an *x value* into a *z-score* is presented below.

$$z = \frac{\sqrt{n}(x - \mu)}{\sigma}$$

The difference, $x - \mu$, signified the distance between the x value and the population mean, μ , which is adjusted by a factor based on the sample size, n. In this study, μ referred to the ESCI *norm unit scores* which were found in column B of Table 6. The numerator was divided by the population standard deviation, σ . This (σ) data was provided in column C of Table 6. The resulting numerical value, the *z-score*, was thus presented in terms of standard deviation units (Gravetter & Wallnau, 2009; Henkel, 1976). In essence, the *z-score* formula helped convert unit scores (i.e., x values) into corresponding *z-scores*. Consequently, this conversion allowed the researcher to identify the exact location of a given x value (now converted to a *z-score*) in terms of where it was positioned on the distribution. For example, a z-

score of +1 signified that the corresponding *x value* was located one standard deviation above the population mean (i.e., ESCI *norm mean*).

Z-scores could be utilized to test the *statistical significance* of corresponding *x values* (Henkel, 1976). Significance testing answered the question whether or not the observed difference between sample results (this research's case studies) and a population (ESCI norms) were likely due to chance? To help answer this question, the researcher must find out the probability values (*p values*) associated with the *z-scores*. The *z-table* (Gravetter & Wallnau, 2009, p. 725) was employed to locate the *p value* associated with a given *z-score*.

The p value identified from the z-table alone was not sufficient to answer the question posed by the test of significance. In order to determine whether a x value was statistically significant, the corresponding p value must be compared against the predetermined probability threshold, α . In this study, the α value was chosen to be 0.05. Hence, the α value helped determine the statistical significance of this study's results. For example, if the p value identified from the z-table was at or below the pre-determined α value, then this study's results were regarded statistically significant. In other words, it can be said that there was equal or less than 5% chance that a result of this study happened due to chance. If on the other hand the p value was greater than the pre-determined alpha value, the corresponding results were considered not statistically significant.

Appendix J Culture Questionnaire Scoring and Interpreting Guide

The culture questionnaire consisted of both Likert and open-ended questions. The responses of all questions were transformed to a numerical representation to facilitate the analysis process. Likert scale question responses were converted into a number score based upon the following scoring system. Strongly disagree = 1, Disagree = 2, Not sure = 3, Agree = 4, and Strongly agree = 5. Similarly, all open-ended questions were given a maximum score of 4 points. Appendix K provided the scoring method and an overview of the general concepts and ideas expected to be included in the responses to the open-ended interview questions.

Data analysis step I. Given this research was conducted employing a multiple case study approach, culture questionnaire results were calculated for each case. Each unit of analysis within the questionnaire had its own number of questions. A sample result of the culture related scores of a single case study is represented in Table 31 below.

Table 31

Culture questionnaire scores of a case study following data analysis step I

C-14	C-1				
Culture specific Units of Analysis	Self	Other			
Cognitive awareness of culture					
Application of culture knowledge					
Management of differences born out of culture					
77					

Note: C-1 = Case study 1.

The above table depicted how the culture questionnaire results were summarized for each case included in this study. The *case study* columns represented the results calculated after the researcher had administered and assessed the questionnaire to PMI leaders and peers. The *self*-scores were the results of the questionnaire given to the principal participant, the PMI leader. The *other scores* were the results of the peer questionnaire. The *self-scores* were generated by

averaging the points assigned to the responses within the respective unit of analysis. Similarly, if there was only one peer participant, the *other-score* would be calculated in the same fashion.

When multiple peer participants contributed data, the *other scores* column reflected the average of peer results. The average was calculated in the following manner. First, an average for each question was determined. For example, the response scores for question 1 will be added across all peers who submitted a completed survey. Then, the tabulated result was divided by the number of completed peer surveys received. Second, an average of responses within each unit of analysis was calculated in order to arrive at the *other score*. The overall method of calculation explained above was chosen to match the calculation sequence used by the ESCI survey, thus maintaining consistency.

Data analysis step II. Here, an aggregated score was calculated by combining the *self-scores* and *other scores*. Since the researcher was only interested in the totality of the culture scores, the two scores were combined. In order to arrive at a single aggregated score, a weighted average was calculated using the two scores. The weight assigned to *self-scores* and *other scores* were based on the number of participants of the interview. For example, in case where one leader and four participants contributed data, a weight of 1/5 was assigned to *self-scores* while a weight of 4/5 was assigned *other scores*. In Table 32 below, a sample result of aggregated scores was shown following the step II of the culture specific data analysis process.

Table 32

Aggregated scores of a case study following culture specific data analysis step II

Culture specific Units of Analysis	C-1 Aggregate score
Cognitive awareness of culture	
Application of culture knowledge	
Management of differences born out of culture	
N. C.1 C 1.1 D.	

Note: C-1 = Case study 1, pts. = Points.

Data analysis step III. This step summarized the case results into one table and displayed the level of culture specific competencies of PMI leaders. Each case's data analysis step II results were populated into one summary table. Culture specific *aggregate scores* that were between 1 and 2.9 were considered insufficient cultural competency. A score between 3.0 and 3.9 were considered indifferent to support or reject the theory proposed. If, however, an *aggregate score* was at or above 4.0, then the researcher concluded that the corresponding unit of analysis supported the researcher's theory. As it pertained to the unit, cognitive awareness of culture, a total aggregate of 40 points out 60 points possible was considered as support towards the theory. An example of a case study result following the completion of step III of the data analysis is shown in Table 33 below.

Table 33
Sample result of culture-specific competency of PMI leaders

	Case 1	Case 2	Case 3	Case 4
Culture specific Units of Analysis	Aggregate scores	Aggregate scores	Aggregate scores	Aggregate scores
Cognitive awareness of culture				
Application of culture knowledge				
Management of differences born out of				
culture				
Madan mada Dalimata				

Note: pts. = Points.

Data analysis step IV. This last stage of culture specific data analysis focused on how the researcher determined if the theory proposed was supported or rejected given the *cross case* results. The theory was considered supported if a) units of analysis portrayed *aggregate scores* at or higher than 4.0, b) 40 points or above for the unit, cognitive awareness of culture, and c) such a pattern of *aggregate score* results were duplicated amongst all case studies. An example of cross case study results following the completion of step IV of the data analysis is shown in Table 34 below.

Table 34

Final results of the culture-specific competency questionnaire

Culture specific Units of Analysis	Case 1	Case 2	Case 3	Case 4	Literally Replicated?
Cognitive awareness of culture					
Application of culture					
knowledge					
Management of differences born					
out of culture					
3.7 B					

Note: pts. = Points.

Appendix K Open-ended Question Response Scoring Guide

The measurement of PMI leader's culture specific competency included a semi-structured interview which contained both Likert and open-ended questions (See Appendix E). The following section explained the specific process by which open-ended questions which target the measurement of the leader's cognitive awareness of culture were evaluated.

A four point maximum score was assigned to all open-ended questions. This approach of assigning points were chosen in order to maintain consistency with points assigned to Likert scale questions that were also included in the interview guide. The conversion of open-ended question responses into numbers facilitated the follow-on analytic interpretation. While the researcher was aware that the open-ended response data by nature had an interpretive quality and thus cannot be thought of as precise even with the assignment of numeric values, the points assignment was used as a means to objectively assess interview responses. The presence or absence of the major themes identified below was used as a catalyst to assign points.

The researcher also established that a score of 40 points or above out of 60 total points possible, were indicative of the leader's cognitive awareness of culture. Given the researcher's theory predicted the culture competency level of PMI leaders to be higher, establishing a minimum score of 30 points were considered too close to average. As such a 40 point minimum requirement was established.

Open- ended Question No.	Expected general content of the response	Points assigned
Q1	Formal education, foreign travel, foreign friends, reading books, interest in international business, workshops, speak another language	1 pts. for each up to
	etc.	4 pts. max

Q2	Themes may include shared assumptions, learned behaviors, socially constructed norms, tacit expectations, the way things are done, joint experiences of organizational members usually built over long periods of time, artifacts such as language, rules, symbols, and anecdotes	1 pts. for each up to 4 pts. max
Q3	Schein, Hofstede, Trompenaars, Martin etc.	2 pts. for each up to 4 pts. max
Q4	Recognizes that "cultural lens" is a framework through which individuals/groups interpret, interact with, and make sense of reality	4 pts. max (all or nothing)
Q5	Recognizes that the leadership has a role in creating culture, recognizes the impact of "founder" in creating organizational culture, recognizes that leaders may be culture carriers and teachers, Recognizes that leader's socialization/charisma/action as transmitters of culture	4 pts. max
Q6	Relevant ideas that promote short-term and/or long-term performance of the organization	1 pts. for each up to 4 pts. max
Q7	Difficulty of organizational member buy-in, difficulties in problem identification, possible inordinate time spent on planning and implementation, possible long duration of time it takes for results to take effect etc.	1 pts. for each up to 4 pts. max
Q18	Members of the acquired company are included in the integration team(s), at least some decisions are made based on consensus, acquired company input is sought and considered in the decision making	4 pts. max
Q19	Recognizes symbolism of actions, role models the change that is expected of others, good listener, respect for others and their values, knowledge of one's own values and biases, mediation skills, deals well with ambiguity etc.	4 pts. max
Q20-a	Meetings, communiqués, informal gatherings, one-on-one meetings etc.	4 pts. max
Q20-b	All aspects of the operations are acknowledged as opposed to financial aspects only, acknowledgement of the emotional toll of change, articulates the leader's culture integration ideology, pays attention to issues that are relevant to cultural integration efforts, promotes the impression that successful integration is possible if organizational members work together	4 pts. max
Q27	Take time upfront to build consensus and then implement them relatively quickly, creates realistic expectations	4 pts. max
Q28	Despite talk, cultural aspects do not receive much leadership attention, cultural integration takes time and most businesses expect immediate results, misidentification of causes of culture clash etc.	4 pts. max

Q29	Long-term commitment to cultural integration, cultural due-diligence	4 pts. max
	begins at the early stages of M&A negotiations, seek executive	
	support for culture integration as a means of creating momentum for	
	change, seek professional help on culture related work, creates	
	realistic expectations	
Q30	Demonstrates ability to empathize, communicates one-on one, focuses	4 pts. max
	on emotions	

Appendix L Case 1 - ESCI Survey Data Analysis

The following sections detail the EI specific data analysis steps I through III pertaining to leader A, who was highlighted in case 1. The tool ESCI consisted of two sub surveys; self and multi rater. The former was intended to be taken by the leader while the latter was supposed to be taken by the leader's peers. The data from the completed surveys were analyzed according to the instructions of the technical manual which was provided by the Hay Group, a global management consulting company that markets the ESCI tool. Per the confidentiality agreement, scoring key and instructions were not disclosed in this dissertation.

The Table 35 below summarized the results of step I of the data analysis process. These survey results were tabulated according to the technical manual instructions. In this table, Case 1 results were compared with the survey's *norm* group results. While the *self-score* column referred to leader A, the *other score* column is represented by the combined results of the four peers. All *norm* group results presented were taken from the technical manual.

Table 35

ESCI scores of case 1 following ESCI data analysis step I

EI specific Units of Analysis	Competency Scale	C- 1 Self	C- 1 Other	N-M Self	N-SD Self	N-M Other	N-SD Other
Self-awareness	Emotional self- awareness	4.000	4.317	3.790	0.520	3.720	0.340
	Achievement orientation	4.833	4.500	4.290	0.490	4.280	0.330
Self-management	Adaptability	4.333	4.625	4.090	0.450	4.010	0.320
-	Emotional self-control	3.833	4.417	3.940	0.540	4.150	0.410
	Positive outlook	3.167	4.317	4.150	0.510	4.150	0.340
	Empathy	4.400	4.400	3.950	0.450	3.920	0.360
Social awareness	Organizational awareness	4.600	4.550	4.190	0.470	4.250	0.310
	Conflict management	4.000	4.100	3.860	0.470	3.880	0.330
Dalationahin	Coach & mentor	5.000	4.708	4.020	0.580	3.970	0.440
Relationship	Influence	4.167	4.375	3.890	0.490	3.910	0.360
management	Inspirational leadership	4.200	4.600	3.940	0.540	3.940	0.430
	Teamwork	4.333	4.708	4.270	0.440	4.230	0.370

Note: C-1 = Case study 1, N-M = Norm Mean, N-SD = Norm Standard Deviation.

Step II of the data analysis process is summarized in Table 36 below. Given the researcher's goal was to compare the *case* results to the *norm* (as opposed to *self* against *other*) step II focused on organizing the results into a format that was conducive to upcoming statistical analyses. This required the calculation of *aggregate scores* where a unified score was determined using both *self* and *other* scores. A weight of 1/5 and 4/5 were assigned to *self* and *other* scores respectively when calculating the *aggregate score*. Both sets of data (*case study* and *norm* data) underwent this procedure. In keeping with mathematical principles, *norm scores* required a carefully crafted approach for converting them into *aggregate norm* scores. Details of this conversion could be found in Appendix H. This conversion of *norm scores* ensured that the *aggregate norm scores* were proportionally identical to that of the case study, which allowed the follow-on results comparisons between *case studies* and the *norm* to be more meaningful.

Table 36

Aggregated scores of a case 1 following ESCI data analysis step II

EI specific Units of		C-1	N-M	N-SD
Analysis	Competency Scale	Aggregate	Aggregate	Aggregate
Anarysis		score	score	score
Self-awareness	Emotional self-	4.253	3.722	0.345
Self-awareness	awareness	4.233	3.122	0.545
	Achievement	4.567	4.280	0.335
	orientation	4.507	4.200	0.555
Self-management	Adaptability	4.567	4.012	0.324
_	Emotional self-control	4.300	4.145	0.415
	Positive outlook	4.087	4.150	0.345
	Empathy	4.400	3.921	0.362
Social awareness	Organizational	4.560	4.249	0.315
	awareness	4.500	4.249	0.313
	Conflict management	4.080	3.880	0.334
	Coach & mentor	4.767	3.971	0.444
Relationship management	Influence	4.333	3.910	0.364
	Inspirational leadership	4.520	3.940	0.433
	Teamwork	4.633	4.231	0.372

Note: C-1 = Case study 1, N-M = Norm Mean, N-SD = Norm Standard Deviation.

Step III of the data analysis focused on rolling up competency scales into the four EI specific units of analysis. In order to generate this result, a simple average was calculated at each EI specific unit of analysis level. This procedure was applied to both *case study* and *norm* data sets. Table 37 below represents the case 1 results after the data analysis step III has been completed.

Table 37

Case 1 results following the ESCI data analysis step III

EI specific Units of Analysis	C-1 Unit Score	N-M Unit Score	N-SD Unit Score
Self-awareness	4.253	3.722	0.345
Self-management	4.380	4.147	0.355
Social awareness	4.480	4.085	0.339
Relationship management	4.467	3.986	0.389

Note: C-1 = Case study 1, N-M = Norm Mean, N-SD = Norm Standard Deviation.

Appendix M Case 2 - ESCI Survey Data Analysis

Case study 2 consisted of data provided by leader B and four of his peers. This segment was utilized to provide a detailed account of the ESCI data analysis steps I through III as it pertained to case 2. The data generated from the multi-rater ESCI tool were analyzed according to the technical manual provided by the Hay Group. The results of the step I of the data analysis process are presented in Table 38 below. In this step the researcher transformed the survey responses into a numerical value utilizing the survey specific scoring guide. A summary of the leader and peer results based on their responses are provided in columns titled C-2 (case study 2). The *norm* columns represent data obtained from the survey's technical manual.

Table 38

ESCI scores of case 2 following ESCI data analysis step I

EI specific Units of Analysis	Competency Scale	C- 2 Self	C- 2 Other	N-M Self	N-SD Self	N-M Other	N-SD Other
Self-awareness	Emotional self- awareness	4.667	3.925	3.790	0.520	3.720	0.340
	Achievement orientation	4.833	4.275	4.290	0.490	4.280	0.330
Self-management	Adaptability	4.500	3.917	4.090	0.450	4.010	0.320
	Emotional self-control	4.500	4.208	3.940	0.540	4.150	0.410
	Positive outlook	4.833	3.917	4.150	0.510	4.150	0.340
	Empathy	4.000	4.100	3.950	0.450	3.920	0.360
Social awareness	Organizational awareness	5.000	4.450	4.190	0.470	4.250	0.310
	Conflict management	3.600	3.750	3.860	0.470	3.880	0.330
Dalationahin	Coach & mentor	4.833	4.167	4.020	0.580	3.970	0.440
Relationship	Influence	3.833	4.083	3.890	0.490	3.910	0.360
management	Inspirational leadership	4.400	4.050	3.940	0.540	3.940	0.430
	Teamwork	4.500	4.167	4.270	0.440	4.230	0.370

Note: C-2 = Case study 2, N-M = Norm Mean, N-SD = Norm Standard Deviation.

Step II of the data analysis process focused on combining the *self* and *other scores* thereby creating an *aggregate score*. In doing so, the researcher assigned a weight of 1/5 and 4/5 to the *self* and *other scores* respectively. In order to maintain consistency between the two data

sets, the *norm scores* too were administered the same mathematical treatment. This helped maintain consistency between data sets and thus enabled meaningful comparison of ESCI results. The special mathematical process of transforming *norms* into *aggregate norms* was explained in Appendix H. The results following the data analysis step II are presented in Table 39 below.

Table 39
Aggregated scores of a case 2 following ESCI data analysis step II

EI specific Units of Analysis	Competency Scale	C-2 Aggregate score	N-M Aggregate score	N-SD Aggregate score
Self-awareness Emotional self-awareness		4.073	3.722	0.345
	Achievement orientation	4.387	4.280	0.335
Self-management	Adaptability	4.033	4.012	0.324
•	Emotional self-control	4.267	4.145	0.415
	Positive outlook	4.100	4.150	0.345
	Empathy	4.080	3.921	0.362
Social awareness	Organizational awareness	4.560	4.249	0.315
	Conflict management	3.720	3.880	0.334
	Coach & mentor	4.300	3.971	0.444
Relationship management	Influence	4.033	3.910	0.364
	Inspirational leadership	4.120	3.940	0.433
	Teamwork	4.233	4.231	0.372

Note: C-2 = Case study 2, N-M = Norm Mean, N-SD = Norm Standard Deviation.

Data analysis step III further transformed the survey results by rolling up the competency scales under each of the four EI specific units of analysis level. This was accomplished by calculating a simple average at each of the EI unit of analysis. In order to maintain consistency, this mathematical procedure was applied to both *case study* and *norm score* sets. The results after this step of data analysis are presented in Table 40 below.

Table 40

Case 2 results following the ESCI data analysis step III

EI specific Units of Analysis	C-2 Unit Score	N-M Unit Score	N-SD Unit Score
Self-awareness	4.073	3.722	0.345
Self-management	4.197	4.147	0.355
Social awareness	4.320	4.085	0.339
Relationship management	4.081	3.986	0.389

Note: C-2 = Case study 2, N-M = Norm Mean, N-SD = Norm Standard Deviation.

Appendix N Case 3 - ESCI Survey Data Analysis

The following is a detailed account of the ESCI data analysis steps I through III as it pertained specifically to case study 3. The multi-rater survey responses of leader C and four of his peers were analyzed according to the ECSI technical manual. Per the confidentiality agreement with the Hay Group, provider of the ESCI tool, the scoring key and other analysis specific instructions were not disclosed in this dissertation. The results after the step I of the data analysis process was presented in Table 41 below. The *case study* columns (i.e., columns titled C-3) of the table consist of leader and peer results. The *other scores* were derived by calculating the average of the four peer responses. The *norm scores* were taken from the technical manual.

Table 41

ESCI scores of case 3 following ESCI data analysis step I

EI specific Units of Analysis	Competency Scale	C- 3 Self	C- 3 Other	N-M Self	N-SD Self	N-M Other	N-SD Other
Self-awareness	Emotional self- awareness	4.000	4.188	3.790	0.520	3.720	0.340
	Achievement orientation	5.000	4.500	4.290	0.490	4.280	0.330
Self-management	Adaptability	4.333	4.542	4.090	0.450	4.010	0.320
J	Emotional self-control	4.500	4.667	3.940	0.540	4.150	0.410
	Positive outlook	4.667	4.658	4.150	0.510	4.150	0.340
	Empathy	4.600	4.400	3.950	0.450	3.920	0.360
Social awareness	Organizational awareness	5.000	4.700	4.190	0.470	4.250	0.310
	Conflict management	4.600	4.550	3.860	0.470	3.880	0.330
Dalationalia	Coach & mentor	4.667	4.417	4.020	0.580	3.970	0.440
Relationship	Influence	3.500	4.367	3.890	0.490	3.910	0.360
management	Inspirational leadership	4.600	4.413	3.940	0.540	3.940	0.430
	Teamwork	5.000	4.792	4.270	0.440	4.230	0.370

Note: C-3 = Case study 3, N-M = Norm Mean, N-SD = Norm Standard Deviation.

As was explained in detail in section Theoretical Model under data analysis step II, the second phase of data analysis focused on creating an *aggregate score* by combining the *self* and *other scores* utilizing a weight of 1/5 and 4/5 respectively. The same weight based procedure

was applied to the *norm scores* in order to generate the *aggregate norm*. In keeping with the mathematical principles, a special formula which was described in Appendix H was used when creating *aggregate norms*. The results following the step II of the data analysis process is listed in Table 42 below.

Table 42

Aggregated scores of a case 3 following ESCI data analysis step II

EI specific Units of Analysis	Competency Scale	C-3 Aggregate score	N-M Aggregate score	N-SD Aggregate score
Self-awareness Emotional self-awareness		4.150	3.722	0.345
	Achievement orientation	4.600	4.280	0.335
Self-management	Adaptability	4.500	4.012	0.324
•	Emotional self-control	4.633	4.145	0.415
	Positive outlook	4.660	4.150	0.345
	Empathy	4.440	3.921	0.362
Social awareness	Organizational awareness	4.760	4.249	0.315
	Conflict management	4.560	3.880	0.334
	Coach & mentor	4.467	3.971	0.444
Relationship management	Influence	4.193	3.910	0.364
	Inspirational leadership	4.450	3.940	0.433
	Teamwork	4.833	4.231	0.372

Note: C-3 = Case study 3, N-M = Norm Mean, N-SD = Norm Standard Deviation.

Data analysis step III concentrated on further transforming the survey results, this time into the four EI specific units of analysis. This was accomplished via rolling up the competency scales by computing a simple average. Both *case study* and *norm scores* underwent this treatment. A summary of the survey results following the data analysis step three is presented in Table 43.

Table 43

Case 3 results following the ESCI data analysis step III

EI specific Units of Analysis	C-3 Unit Score	N-M Unit Score	N-SD Unit Score
Self-awareness	4.150	3.722	0.345
Self-management	4.598	4.147	0.355
Social awareness	4.600	4.085	0.339
Relationship management	4.501	3.986	0.389

Note: C-3 = Case study 3, N-M = Norm Mean, N-SD = Norm Standard Deviation.

Appendix O Case 4 - ESCI Survey Data Analysis

The ESCI data analysis steps I through III pertaining to case study 4 is discussed below. Leader D and four of his peers participated in the multi-rater survey. The technical manual provided by the survey's distributor, Hay Group, was utilized to analyze the data. Table 44 below presents the summary findings after data analysis step I has been completed. Self-score column (i.e., C-4 Self) refers to the results of leader D while other score column (i.e. C-4 Other) depicts the combined results of the four peers. The norm data were obtained directly from the ESCI technical manual.

Table 44

ESCI scores of case 4 following ESCI data analysis step I

TI TI		G 4	G 4	27.24	NI CIP	27.24	NI CID
EI specific Units	Competency Scale	C- 4	C- 4	N-M	N-SD	N-M	N-SD
of Analysis	competency Beare	Self	Other	Self	Self	Other	Other
G 16	Emotional self-	2 222	1.5.60	2.700	0.500	2.720	0.240
Self-awareness	awareness	3.333	4.563	3.790	0.520	3.720	0.340
-	Achievement						
		4.000	4.567	4.290	0.490	4.280	0.330
	orientation						
Self-management	Adaptability	3.500	4.583	4.090	0.450	4.010	0.320
	Emotional self-control	3.833	4.083	3.940	0.540	4.150	0.410
	Positive outlook	3.000	3.958	4.150	0.510	4.150	0.340
	Empathy	4.000	4.350	3.950	0.450	3.920	0.360
Social awareness	Organizational	2.600	4.750	50 4.190	0.470	4.250	0.210
	awareness	3.600					0.310
	Conflict management	3.400	4.000	3.860	0.470	3.880	0.330
D 1 . 1.	Coach & mentor	3.667	4.375	4.020	0.580	3.970	0.440
Relationship	Influence	3.667	4.208	3.890	0.490	3.910	0.360
management	Inspirational leadership	3.800	4.400	3.940	0.540	3.940	0.430
	Teamwork	3.667	4.792	4.270	0.440	4.230	0.370

Note: C-4 = Case study 4, N-M = Norm Mean, N-SD = Norm Standard Deviation.

Data analysis step II focused on generating *aggregate scores*. The *aggregate scores* paved the way for upcoming statistical analysis and comparison of results against the ESCI *norm*. During the calculation process of the *aggregate scores*, a weight of 1/5 and 4/5 were

assigned to *self* and *other* scores respectively. The same weight assignment was made when creating the *aggregate norm*. The observance of proper mathematical principles required the researcher to apply a special formula when creating *aggregate norms*. This was described in Appendix H. The results following the ESCI data analysis step II are presented in Table 45 below.

Table 45

Aggregate scores of a case 4 following ESCI data analysis step II

EI specific Units of Analysis	Competency Scale	C-4 Aggregate score	N-M Aggregate score	N-SD Aggregate score
Self-awareness	Emotional self- awareness	4.317	3.722	0.345
	Achievement orientation	4.453	4.280	0.335
Self-management	Adaptability	4.367	4.012	0.324
<u> </u>	Emotional self-control	4.033	4.145	0.415
	Positive outlook	3.767	4.150	0.345
	Empathy	4.280	3.921	0.362
Social awareness	Organizational awareness	4.520	4.249	0.315
	Conflict management	3.880	3.880	0.334
	Coach & mentor	4.233	3.971	0.444
Relationship management	Influence	4.100	3.910	0.364
	Inspirational leadership	4.280	3.940	0.433
	Teamwork	4.567	4.231	0.372

Note: C-4 = Case study 4, N-M = Norm Mean, N-SD = Norm Standard Deviation.

The focus of data analysis step III was on rolling up of the competency scales under the four EI units of analysis. This required the researcher to calculate a simple average of the competency scales at each EI unit of analysis level. Once again, this treatment was applied to both *case study* and *norm* sets of data in order to maintain consistency. The step III data analysis results are presented in Table 46 below.

Table 46

Case 4 results following the ESCI data analysis step III

EI specific Units of Analysis	C-4 Unit Score	N-M Unit Score	N-SD Unit Score
Self-awareness	4.317	3.722	0.345
Self-management	4.155	4.147	0.355
Social awareness	4.400	4.085	0.339
Relationship management	4.212	3.986	0.389

Note: C-4 = Case study 4, N-M = Norm Mean, N-SD = Norm Standard Deviation.

Appendix P Culture Questionnaire Responses - Leaders

The culture questionnaire which was presented in Appendix E consisted of both Likert-scale and open-ended questions. Leader responses to both sets of questions were summarized in Table 47 and Table 48 respectively. In Table 47 Likert-scale question responses were converted into a number score utilizing the following scoring system. Strongly disagree = 1, Disagree = 2, Not sure = 3, Agree = 4, and Strongly agree = 5. Questions 8 through 17 addressed the unit; application of culture knowledge while questions 21 through 26 covered the unit; management of culture born out of culture.

Table 47

Responses to Likert-scale questions found in PMI leader interview guide

Question No.	Leader A	Leader B	Leader C	Leader D
Q8	4	5	5	4
Q9	5	4	4	5
Q10	5	4	5	4
Q11	5	5	5	4
Q12	4	5	5	4
Q13	4	5	5	4
Q14	5	5	2	4
Q15	4	5	5	4
Q16	5	5	5	4
Q17	3	1	5	3
Q21	4	5	5	4
Q22	5	5	5	5
Q23	5	5	5	4
Q24	4	5	5	4
Q25	4	5	5	3
Q26	5	5	5	5

The open-ended question responses were summarized following the scoring system outlined in Appendix K. All open-ended questions were used to probe further into the units of analysis that were previously examined via Likert-scaled question. Questions 1 through 7

covered the unit, cognitive awareness of culture. The units, application of culture knowledge and management of differences born out of culture were addressed by questions 18 through 20-b and 27 through 30 respectively. The total points earned, as shown in Table 48 were out of a maximum of 60 points possible.

Table 48

Leader scores for cognitive awareness of culture unit

Question No.	Leader A	Leader B	Leader C	Leader D
Q1	4	4	4	2
Q2	4	4	4	2
Q3	0	0	0	0
Q4	4	4	4	4
Q5	4	4	4	4
Q6	2	3	2	2
Q7	3	2	4	2
Q18	4	4	4	4
Q19	4	4	4	4
Q20-a	4	4	4	4
Q20-b	2	4	3	2
Q27	4	4	4	3
Q28	4	4	4	2
Q29	4	4	4	3
Q30	4	4	4	4
Total Points	51	53	53	42

Appendix Q Culture Questionnaire Responses - Peers

The peer interview guide (Appendix F) consisted of a culture questionnaire which had both Likert-scale and open-ended questions. The open-ended questions, which probed further into the units of analysis, were used as a means to corroborate the responses provided in the Likert-scale questions. The Likert-scale responses are depicted in Table 49 below. The responses were converted into a number score using the following guide line. Strongly disagree = 1, Disagree = 2, Not sure = 3, Agree = 4, and Strongly agree = 5. The peer A4 of the peer group A opted to answer the question number 14 with two answers. After considering this peer's reasoning (verbal comments of peer A4), as well as his responses to the open-ended question, the researcher opted to consider the final answer to Liker-scale question 14 to be Agree = 4.

Table 49

Responses to Likert-scale questions found in peer interview guide

Question]	Peer G	roup A	\		Peer G	roup B	}	Pee	er Grou	р С	Peer D
No.	A1	A2	A3	A4	B1	B2	В3	B4	C1	C2	C3	D1
Q1	4	5	4	4	3	4	5	5	5	5	5	4
Q2	4	4	4	4	4	5	4	4	5	5	5	5
Q3	4	4	5	3	4	5	4	5	5	5	5	4
Q4	4	4	5	5	3	4	4	5	5	5	5	5
Q5	4	4	5	4	4	4	5	5	4	5	4	5
Q6	4	5	5	5	4	4	4	5	5	5	5	5
Q7	4	4	5	4	4	2	4	5	5	4	4	4
Q8	4	4	5	4	4	4	5	5	5	5	5	5
Q9	4	5	5	4	4	5	4	5	5	5	5	5
Q10	3	5	2	5	4	1	4	4	5	5	2	4
Q14	4	5	3	2&4	4	5	4	4	5	5	4	5
Q15	4	4	4	4	5	5	5	5	5	5	5	5
Q16	4	4	5	4	5	4	4	5	5	5	5	5
Q17	5	4	4	1	3	5	5	4	5	5	4	3
Q18	1	4	4	3	2	1	3	4	5	5	2	4
Q19	5	4	4	5	5	3	5	5	5	5	3	5

Appendix R Culture Questionnaire Data Analysis

The theory's units which addressed the culture specific competencies were evaluated using the data collected from the semi-structured interviews and culture questionnaire. The following section explained in detail the multi-step data analysis process applied to derive the *aggregate scores* pertaining to culture specific units of analysis. For the purpose of brevity, all tables presented included results related to each of the four cases.

The culture specific competency data accumulated from the leaders and peers were analyzed according to the overall scoring and interpretation guide described in Appendix J. Specifically, the *self-score* for the unit cognitive awareness of culture was determined using the open-ended questions scoring guide presented in Appendix K. The *self-scores* for the remaining two units of analysis were calculated by averaging the points assigned to the questions that covered each unit of analysis Appendix J. The *other scores* were determined by first averaging the scores of each question across each peer. Then, the resulting outcomes (by question) were rolled up into units of analysis by again calculating a simple average (Appendix J). The results following the data analysis step I are presented in Table 50 below.

Table 50

Culture specific results following data analysis step I

	Cas	Case 1		Case 2		Case 3		Case 4	
Culture specific Units of Analysis	Self	Other	Self	Other	Self	Other	Self	Other	
Cognitive awareness of culture	51/60 pts.	NA	53/60 pts.	NA	53/60 pts.	NA	42/60 pts.	NA	
Application of culture knowledge	4.40	4.25	4.40	4.18	4.60	4.77	4.00	4.60	
Management of differences born out of culture	4.50	3.88	5.00	4.17	5.00	4.61	4.17	4.50	

Note: pts. = Points.

The data analysis step II focused on creating *aggregate scores*. As was explained in Appendix J, this was accomplished by calculating a weighted average between the *self-score* and *other scores*. The case results following the data analysis step II are shown in Table 51 below.

Table 51

Culture specific results following data analysis step II

	Case 1	Case 2	Case 3	Case 4
Culture specific Units of Analysis	Aggregate scores	Aggregate scores	Aggregate scores	Aggregate scores
Cognitive awareness of culture	51/60 pts.	53/60 pts.	53/60 pts.	42/60 pts.
Application of culture knowledge	4.280	4.220	4.733	4.480
Management of differences born out of culture	4.000	4.333	4.689	4.433

Note: pts. = Points.

Data analysis step III and IV organized the case results into one table in order to aid the interpretation of results. The units were considered supported in the following manner. For the unit, cognitive awareness of culture, an accumulation of at least 40 points out of 60 points was considered as evidence of supporting this study's theory. The remaining two units supported this

study's theory, if they each accumulated an *aggregate score* of 4.0 or above. The data analysis steps III and IV produced a table which showed whether or not the overall theory was supported by the culture specific units of analysis. The theory was supported if the results a) met or exceeded the minimum requirements of the results analysis criteria, and b) such results were duplicated across all four cases. The findings following the data analysis steps III and IV are shown in Table 52below.

Table 52

Culture specific results following data analysis steps III & IV

Culture specific Units of Analysis	Case 1	Case 2	Case 3	Case 4	Literally Replicated ?
Cognitive awareness of culture	51/60 pts.	53/60 pts.	53/60 pts.	42/60 pts.	Yes
Application of culture knowledge	4.280	4.220	4.733	4.480	Yes
Management of differences born out of culture	4.000	4.333	4.689	4.433	Yes

Note: pts. = Points.