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Reflection in the screen: the perception and value of self-awareness within the IT professional

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REFLECTION IN THE SCREEN: THE PERCEPTION AND VALUE OF SELF-AWARENESS WITHIN THE IT PROFESSIONAL

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Abstract

Today's information technology (IT) professional must go beyond technical ability and obtain new leadership skills. Previous research examined the relationship of self-awareness and its impact on leadership effectiveness, along with exploring correlations with emotional intelligence and IT organizational success. However, gaps remain in the literature to the specific correlations of the value and perception of self-awareness within the IT professional, and what specific role self-awareness plays in IT professionals' success. This research focused on those gaps in the literature. The findings revealed self-awareness being viewed positively and as critical to the success of the IT professional regardless of gender, role, educational level, or years in the industry. Additionally, when more investment in self-awareness training occurs, the importance of that skill increases, and the importance of technical skills decrease, provided an external influence (i.e., sponsor) suggested the individual invest in such skills. Self-awareness had direct positive correlations to improved relationship management.

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Chapter 1

Introduction

Information technology (IT) is a critical function in most businesses and necessary for business growth and sustainability in today's marketplace. According to recent research, roughly $366 trillion was spent worldwide within IT organizations in 2011 (Lovelock, 2013). Research has also projected that spending will continue to rise by about 4% annually through 2016 (Lovelock, 2013).

The use, procurement, and evolution of technology have changed dramatically in recent years. IT organizations were once a backroom function and few people outside of the area knew its inner workings. IT organizations have a language of their own, complex processes to keep it organized, and constant demand to keep its expenses down. However, with the advent of the personal computer, the evolution of technology advancement and usage is like no other industry. With today's smart phones, tablets, and next generation social media tools, the average person with no technology background is able to use and apply technology in almost every aspect of their daily lives. This applies in the business world as well.

This widespread use and continued understanding of technology is transforming the way businesses view and use technology. As such, the way businesses view and use IT departments is also changing. IT organizations were valued mainly for the conceptualization, development, and support of systems and technology needed to project businesses into new competitive advantages with advanced product designs, efficient operations, and intellectual information on their consumers and competitors. Now, many

business units are able to purchase and configure off-the-shelf solutions to fulfill their expense and timeline needs.

Under extreme pressure to significantly reduce costs of legacy systems and to develop quick, cost-effective solutions for today's business needs, IT organizations across industries have transformed their workforce into a global service. Many IT jobs are now being conducted in countries such as India, China, Indonesia, and Mexico, offering a significantly lower price point and allowing better economies of scale. Trends indicate that onsite, fully owned IT operations will be the exception and global workforces will be the norm (Marriott, Cohen, Huntley, & Ridder, 2014). As such, IT jobs, roles, and competencies are dramatically changing in the United States to accommodate this new workforce and work model. The roles of IT professionals at all levels are transforming.

Many IT professionals enter the industry based on their high analytical and technical skill sets. These same skill sets are the jobs currently being filled outside of the United States. The IT professional must now develop and foster new relationships with their business partners. A recent survey of chief information officers revealed the two top areas of focus for IT professionals are to develop stronger relationship management skills and run IT delivery like a customer-driven service business (Gerrard, 2006). Relationship management skills are especially important, as an effective relationship between IT professionals and their associated business partners is a primary determinant of success in gaining business advantage through IT (Bassellier & Benbasat, 2004).

Traditional leadership competencies are now being looked at with more interest and need to improve in IT organizations. These include but are not limited to

communication, strategic thinking, critical thinking, relationship management, and business knowledge (Hoffman, 2010). Smith and McKeen (2005) recommended moving a level deeper to address some specific needs such as organizational understanding, effective use of resources, flexibility in approach, and ability to gain business attention. Church (1997) showed that there is a direct correlation between high-performing individuals and increased self-awareness. This might imply that self-awareness development should be integrated for leadership development in IT professionals.

Over $50 billion is spent in the United States on training annually with approximately $14 billion of that on leadership development (Dolezalek, 2005). Leadership development programs need to be carefully designed to address skill sets that are needed most and help leaders to determine how success will be measured (Turner, 2007). Typically, these programs have been reserved for managerial levels and higher. With the many new challenges and opportunities IT organizations face, researchers argue that all IT staff should now be expected to act as leaders, regardless of their official job title (Smith & McKeen, 2005).

It will be critical for IT organizations to identify the specific knowledge, skills, and behaviors they require to meet the new demands of business relationships, manage work around the globe, and enable their organizations to achieve greater business success through their technology. This report specifically explores if self-awareness is considered a skill set worth acknowledging and investing in for IT professional growth as part of the leadership changes needed in this profession.

Purpose and Approach of Research

The purpose of this research was to understand and quantify how IT professionals perceive the meaning of the word self-awareness, and the connection between self-awareness and increased effectiveness of IT professionals. Three overarching questions were used as the basis of this research:

1. What is the perception of self-awareness within the IT community?
2. How do IT professionals view the connection between self-awareness and job performance?
3. If given a choice, would they invest in self-awareness development or improvement over technical training?

A comprehensive survey was developed using pre-specified research questions and pre-structured data collection methods and conducted with IT and business professionals of different levels, different sizes of organizations, and different industries to formalize quantitative answers to these questions. Follow-up interviews were also conducted to gain further clarification of survey results.

Significance of Research

With the dramatic change in IT employee roles, increased demand to keep expenses down, and the need to develop and recruit individuals with the right skill set, it is critical to help further define the specific skill sets needed. Exploration of the perceptions of self-awareness and its possible enabling or inhibiting effects on individual development are considered and need to be explored in more detail. This research will also help contribute a specific business case value and commentary, facilitating a common language and ability to clearly articulate value and development relevance for

the skills sets identified (i.e., what does success look like?). This research also has the implication of better defining recruiting and hiring competencies for IT employees.

Organization of the Report

This chapter outlined the background and purpose of the research, the methodology used, and identified the significance of the research. Chapter 2 reviews literature relevant to several critical skill sets needed by today's IT professionals, showing a progression of skill set needs and where self-awareness may fit into the their development. Chapter 2 also discusses research that explores the perceptions and stigmas associated with self-awareness. Chapter 3 outlines the research methods categories of participants, data collection, and analytic decomposition approach. Chapter 4 reports the results obtained, and finally, Chapter 5 provides a discussion of the findings, conclusions, and implications associated with both.

Chapter 2

Literature Review

The world, and its use of technology, is changing rapidly on a daily basis. As such businesses rely heavily upon technology and the people who support it. Gone are the days of the IT professional solely being the master of all things technical. Instead enters the need for new leadership skills sets and measures of success associated with those skill sets. Today's IT professional must go beyond technical ability to obtain these key leadership skills. Leadership development is needed in the technology profession in methods and speed of implementation like never before.

If IT professionals are expected to have business acumen as part of their core skill set, they must also explore what additional leadership skill sets are needed to complement this business acumen and increase the effectiveness of the individual and business success. IT professionals are faced with integrating numerous additional skill sets to their already complex technical background, while trying to determine the priority and improve speed of development. It is the viewpoint of this author that development and integration of self-awareness as a core capability in the IT professional will assist with the integration of these newly demanded leadership skill sets—skill sets that are deemed mandatory for individual and business leadership success. This chapter provides a literary examination of the new skill sets needed in the IT professional, and how self-awareness is specifically connected in terms of perception, inclusion in leadership development programs, success criteria, and investment willingness.

Historical Competency Development for IT Professionals

An executive coach once said, "What has made you successful in the past is not necessarily what will make you successful in the future" (S. Essen, personal communication, May 12, 2010). For those entering the IT profession over 20 years ago, the primary focus for job placement and success was the ability to comprehend, apply, and develop technology products within the systems development and operations arena. The technology languages and platforms have changed dramatically over the years, but have the core beliefs that all IT professionals need to be technical as their primary skill and measure of credibility changed? Is what was needed to be effective as an IT organization leader then the same as it is today? Several studies have shown the answer to be no—the required skill sets have changed and more focus is needed on leadership development (Gomolski & Morello, 2000; Lopez, McGee, & Hunter, 2012).

In the past, IT leaders needed to maintain technical skill sets for proper technology management, while also gaining credibility with employees, vendors, and business partners (Smith & McKeen, 2005). However, as business evolved with its use of technology and as business partners became savvier with technology usage for competitive advantage, technical skill sets were no longer enough for IT professionals to remain effective. IT leaders at all levels are struggling with skills sets once deemed as the only vital source of knowledge and experience, as these skills alone are no longer effective at meeting today's business needs (Cho, Park, & Michel, 2011; Gomolski & Morello, 2000; Roberts & Mok, 2011). Leadership development training in the IT profession was previously focused solely on being a good internal service provider (Walker & Roswell-Jones, 2010). This included items such as system availability,

reliability, and scalability. Skill set development was targeted to provide IT leaders with the ability to apply their technical skill sets to meet those service provider goals—not adding new leadership skills per se. The next section explores what additional leadership skills sets are needed in the IT professional and how this leads to self-awareness contributing to business success.

New Leadership Skill Sets Needed for IT Professionals

Over the years, as technology has evolved so too have the skills sets of the IT professional, albeit not at the same rate (Laplante & Costello, 2006). The keys to business success for IT in the 21st century lie in an organization's ability to be adaptive, responsive, and aligned to business needs (Ross, Beath, & Goodhue, 1996). Technology has transitioned over the last 50 years from large, monolithic mainframe databases and systems, to non-integrated systems and architectures, to today's mobile and web app technology with multiple databases full of inconsistent data, and this has created a significant broadening of the range of technologies now prevalent. Combined with a significant increase in the pervasiveness (scope) of technology application across different processes, functions, and along the value chain, it is clear that it is harder than ever to keep abreast of all the technological intricacies and be an "expert" of all IT. This increased technical complexity has over emphasized the need for technology skill sets, making organizations and their leaders technocrats—managing by expertise (Tan & Libby, 1997).

Technocratic organizations have a distinct polarization of expert and non-expert roles, and individuals within IT organizations view technical skills as the primary source of legitimate authority (Burris, 1989). While technical understanding, application, and

life cycle management are critical components in leading an IT organization, they do not address the increased demands for people leadership, business relationship management, and business strategic advantage. Adding additional skills sets such as these to compliment the technological foundation of IT leaders is not only desired but also mandatory (Gomolski & Morello, 2000; Lee, Trauth, & Farwell, 1995; Lopez et al., 2012).

Smith and McKeen (2005) argued that it is not just senior leaders in the IT organization who need these new skills—people at all levels require leadership skills. Smith and McKeen maintained the following very practical reasons to include these skills:

1. Top Line Focus – New technologies and applications are at the core of most business strategies in today's global marketplace. This is driving the need for usage and deeper understanding across the organization, not just within the IT organization. This means that shared goals linking the business strategies to the IT organization execution is critical.
2. Credibility – No IT organization will have credibility with their business if they fail to deliver results consistently. These results are in fact delivering business value beyond the mere implementation of a new technology.
3. Impact – Even small decisions within IT organizations can have large impact to the organization. Given that most IT organizations are highly structured and specialized, more decisions are being driven further down into the organizational hierarchy. Therefore, the need for risk assessment skills and strong organizational perspectives are needed.

4. Flexibility – Due to rapidly changing business needs and equally changing technology advances, IT professionals and organizations must be flexible. They must be able to determine when to do the right thing for the business, which is inconsistent to the long history of large, complex, and rigid IT organizational structures and processes.
5. Complexity – IT organizations rarely have single-role positions, as being a high-performing organization is no longer enough. They must also be innovative, deliver lower-cost solutions, and keep up with the changing technology and marketplace.

The evolution of these additional skill sets for IT professionals has taken a distinctive and prescribed approach for development. Basic leadership skills were introduced to training curriculum, which included team building, problem solving, collaboration, and basics on communications (Gomolski & Morello, 2000; Roberts & Mok, 2011). While these skills provided a foundational level improvement of what is needed in addition to technology skill sets, they still fall short of what is required for a business to excel (Ferdig, 2007). Improving basic leadership skills did allow for more effective IT operations in terms of delivering results; however, IT organizations and their people still struggled to make the proper connections necessary for their business.

Boosting IT professionals' business acumen and increasing their understanding of their own company's industry or business is now considered a core skill set. Gomolski and Morello (2000) asserted that unsuccessful technology implementations are not a result of bad technology, but rather the lack of a proper business case or business leadership; such failures occur when the business impact is not fully understood. While

some increase of business acumen can be obtained from business school programs and/or refresher courses, other methods can provide more direct and applicable learning. These include joining industry associations, finding business mentors, and improving organizational awareness by temporarily working in a business unit.

The 3M company, based in St. Paul, Minnesota, and operating in over 60 countries, took this level of insight even further and developed an internal program to not only address better business knowledge, but to also increase the level of business value from their IT organization (Roepke, Agarwal, & Ferratt, 2000). In understanding their business model, the current role of technology, and the role technology would take in the future, they found it imperative to transform the IT organization from a back office support role to a strategic business partner. For 3M, this represented a need for the IT organization to proactively identify ways to leverage technology to advance the business, rather than waiting to receive requirements from the individual business units for technology change (Roepke et al., 2000). Restructuring the IT organization was not enough. Fundamental transformation of the IT staff was needed, which required new roles and leadership skill sets for all levels of the organization. The traditional IT organization environment, where individual initiation and discretion in job performance were not rewarded, was viewed as direct opposition to the development of innovation in the IT department. Table 1 provides examples that reflect 3M's views of the current "old" behaviors of the IT organization and the desired "new" behaviors (Roepke et al., 2000).

As deeply rooted behavior changes were needed, Goleman, Boyatsis, and McKee (2004) developed the personal leadership model, which focuses on skill sets associated

with increased business knowledge as well as emotional self-management—one of the key components of emotional intelligence along side self-awareness.

Table 1
Views of Current IT Behaviors versus Desired IT Behaviors at 3M

Transformation Target	Old 3M IT	New 3M IT
Role of IT within 3M	Essential support	Strategic partner
Client perceptions of IT	"Technical, back-office, buried-in-the-woodwork," "reactive," "late, or over budget, and not communicating requirements"	"A key business partner helping us enhance our customer interface, achieve our business goals, and enhance our productivity"
IT management style	Command and control, hierarchical	Participative, collaborative
Attitudinal and behavioral change	Nominal leaders make all decisions	Everyone has responsibility for leadership; IT professionals are empowered to act on the vision of IT

Note. IT = Information Technology. Adapted from "Aligning the IT Human Resource with Business Vision: The Leadership Initiative at 3M," by R. Roepke, R. Agarwal, and T. Ferratt, 2000, *MIS Quarterly, 24*(2), p. 331. Copyright 2000 by Roepke et al. Adapted with permission.

Increasing business knowledge was critical in the case of 3M, and other research has shown that improving the relationships and interactions between the IT organizations and their business counterparts is becoming a core capability (Feeny & Willcocks, 1998). IT organizations and their resources need to become more "business friendly" in how they collaborate with the business so that they can effectively assist the business in clarifying what it wants and prevent business leaders from circumventing business problems by using technology (Gerrard, 2006).

Coughlan, Lycett, and Macredie (2005) conducted a study identifying a number of themes directly contributing to a qualitative account of communication within Business to IT relationships. The following list presents some of those themes:

- Business and IT camps – A distinct "us vs. them" attitude that contributes to a distancing from each other.
- Clarity and Understanding – Roles between both the business units and the IT organization seemed to be unclear.
- Information Exchange – Communication between the organizations were lacking in dialogue and focused more on process. Specialized roles within the IT organization were developed to help translate "tech" language to business speak. A lack of open communication channels does not allow for efficient exchange of information.
- Customer Contact – IT organizations tend to operate from a hardware or software perspective and not from a more integrated perspective of system, people, and context.

This would imply that the tasks of communicating and fostering effective relationships could not be made the sole responsibility of one individual; these tasks must be developed and transparent throughout the IT organization in order for the organization to maintain its value. Therefore, raising the level of the communication skill set needs to be broader in scope than a select few individuals within the IT organization. Developing one's understanding of the impact of communication to the people and environment around the individual is a key linkage of self-awareness (Goleman et al., 2004). A further implied connection is that communication as a component of self-awareness is correlated

to business success.

Merely stating that communication is needed is insufficient. A proper communication framework is needed to ensure effective communication (Olding & Fitzgerald, 2013). Communications cannot be in the form of "telling," but rather need to encompass the component of listening. Ensuring the communication is a two-way and an ongoing process, not a one-time event, is critical.

Self-Awareness Connection to Leadership Development

Simultaneously obtaining business acumen, developing successful IT-business relationships, communicating effectively, and still being technical makes being an IT professional more challenging than ever. Knowing when and how to appropriately apply these skill sets requires an ability to be aware of one's own abilities, accurately assessing the environment (i.e., people and culture), and knowing the impact of one's actions on both. This could be interpreted as one viewpoint upon which the definition of self-awareness is based.

Within the literature self-awareness has been defined in several manners. Wickland (1979) defined self-awareness as one's own ability to self-observe. Atwar and Yammarino (1992) described self-awareness as precisely evaluating one's behavior with respect to a set of norms. Church (1997) stated self-awareness is the practice of reflecting on and accurately assessing one's own behavior and skills, and Higgs (2002) defined self-awareness as the awareness of our own feelings and ability to recognize and manage them. Further, self-awareness is also considered one of four components of emotional intelligence; therefore, an individual cannot have high emotional intelligence without self-awareness (Goleman et al., 2004). This is important, as it has been shown that team

flexibility and team performance have increased as a result of higher emotional intelligence within IT professionals (Günsel & Acikgöz, 2013). This emotional intelligence framework also has self-awareness broken down into the three subcomponents of emotional self-awareness, accurate self-assessment, and self-confidence (see Table 2), thereby demonstrating that self-awareness is a multifaceted competence. What all of these definitions have in common is the ability for individuals to be able to step back in the moment and accurately contemplate their effect on others, the environment, and themselves.

Table 2
Components of Emotional Intelligence

Category	SELF Personal Competence	OTHER Social Competence
Recognition	1) Self-Awareness • Emotional self-awareness • Accurate self-assessment • Self-confidence	2) Social Awareness • Empathy • Service Orientation • Organizational Awareness
Regulation	3) Self-Management • Self-Control • Trustworthiness • Conscientiousness • Adaptability • Achievement Drive • Initiative	4) Relationship Management • Developing Others • Influence • Communication • Conflict Management • Leadership • Change Catalyst • Building Bonds • Teamwork & Collaboration

Note. Adapted from *Primal Leadership: Learning to Lead with Emotional Intelligence* (p. #), by D. Goleman, R. Boyatsis, and A. McKee, 2004, Boston, MA: Harvard Business School Press. Copyright Goleman et al. Adapted with permission.

Several studies have directly correlated IT leadership success to increased self-awareness (Ashley & Reiter-Palmon, 2012; Suri & Prasad, 2011). Self-awareness involves leaders being aware of their own strengths and weaknesses and possessing the

ability to be frank and honest about them. This includes being able to integrate the standards and goals of relevant stakeholders into their own self-regulatory processes (Suri & Prasad, 2011; Tsui & Ashford, 1994).

Obstacles. When individuals are focused on a certain self-aspect, this inward reflection is normally compared to a standard or norm (Carver & Scheier, 1981). Self-awareness engages a cognitive process, which can trigger emotional outcomes such as anxiety and empathy (Ashley & Reiter-Palmon, 2012). This seems consistent, given that much of the literature compared self-awareness to societal norms or personal differences. When these emotions are tied to societal norms, they cause a relation within the individual about their social identity, thus leading to certain stigmas (Pinel & Bosson, 2013).

The need for self-awareness may not be recognized and accepted by the IT community due to the negative stigma associated with this inward reflection. Emotions such as anxiety and empathy may cause an individual to resist or deny further exploration within themselves. Without this self-exploration, it is difficult to arrive at a definitive conclusion or to synthesize observations to reactions so insight or the "a-ha" moment can be achieved (Pinel & Bosson, 2013). This may result in the individual's devaluation of the skill. Furthermore, individuals may not identify with or may avoid certain emotions if they are uncomfortable exploring them within themselves (Egan & Feyerherm, 2007).

"Maverick research" (Gartner Inc., 2014, Featured Research section, para. 2) is a category that IT research and advisory company Gartner uses to deliberately expose "unconventional thinking" (Smart Machines section, para. 2); research in this category "may not agree with Gartner's official positions" (Smart Machines section, para. 2). This

category is designed to help senior managers uncover opportunities and enable innovation. Garter's thinking is that this will help leaders and companies get ahead of the mainstream. Garter selects material for consideration in the maverick research category by utilizing some of the following criteria:

- Inside and outside organization conventional thinking
- Potential disruptive impact
- Impact within 3 to 5 years

Self-awareness, along with socially centered leadership, crowdsourcing, and green IT, is listed as a maverick category (Logan & Rozwell, 2012). This indicates that self-awareness is not yet a mainstream skill set within the IT profession, it could have potential disruptive impact, and it is expected to have impact in the near future. The term maverick might also be misleading and be associated with the alternative definition of a rebel or confrontational non-conformist limiting acceptance and action, thereby reinforcing the previously mentioned stigma.

Age, years of professional experience, and gender have been thought of as predictive factors of an individual's interest in pursuit and utilization of self-awareness. Jensen (2011) has shown that there is no correlation with these variables. However, these predictive factors may represent societal and industry norms and limit increased awareness and pursuit. Self-awareness development has typically been reserved for the most senior levels within the organization. In IT organizations, this is sometimes reserved strictly for the chief information officer and his or her direct reports (Smith & McKeen, 2005). This is inconsistent with data showing that individuals starting leadership development courses with higher levels of self-awareness generate better outcomes

(Ashley & Reiter-Palmon, 2012), which supports the benefit of starting this skill building with the most junior IT staff.

Benefits. While obstacles exist in the development and acceptance of self-awareness, it should be noted that several benefits have been directly tied to business success when self-awareness is leveraged as a key skill set. Jensen (2011) conducted a study that showed evidence of application of self-awareness to practice and correlated thematic evidence. Jensen revealed three prevalent themes and summarized their benefits summarized as follows:

1. Capacity for perspective taking – increased feelings of empathy lead to greater desire and willingness to listen well to others. This is linked to IT-business relationships and team development and management; as no one individual will have all the necessary skills, leaders need to rely on their team.
2. Clarity regarding leadership style – this clarity allowed individuals to be more effective with their own leadership style regardless of their personality, strengths, and experience. Participants also reported deeper understanding of their own humanity, allowing for greater relational emphasis.
3. Awareness of discrepancies between espoused values and actual behavior – many individuals explored new ways to consistently communicate their values. Decision-making processes and outcomes were positively affected by this awareness.

Jensen (2011) also concluded that leaders could be developed: “They can reflect on increased awareness and utilize that awareness in service of behavioral habits of

effective leaders" (p. 35). Of course this takes effort and intent, but explains variance in leaders' outcomes.

Egan and Feyerherm (2007) suggested that emotional dynamism, which takes into account self-awareness, allows fluid and appropriate movement between emotions. This in turn provides a powerful understanding and utilization of emotions in the workplace. Egan and Feyerherm discussed the following four dimensions and resultant implications on leadership:

1. Emotional Range – An emotional dynamic leader can access a wider range of emotions leading to increased compassion and empathy.
2. Emotional Intensity – Leaders unable to control their "volume" maybe unpredictable. Without emotional stability it is difficult to gain trust.
3. Emotional Fluidity – This allows the leader to move past a current emotion to maintain or generate momentum in the team or group. This is particularly useful in frustrating or stressful situations.
4. Emotional Integration – Without full understanding and integration of emotions, leaders at not operating a full capacity. Tying emotions to physical and psychological states allows for more insight and predictive analysis.

The ability to master the skill of self-awareness is an important first step. Once the insights are obtained, moving to a higher level of emotional intelligence and further into emotional dynamism shows significant value application to both personal and business development. This evolution of self-awareness would then be instrumental to the application, pace, relevancy, and integration of leadership development skills in the IT professional.

Summary

The research has shown that due to the complexity associated with successfully managing and integrating an IT organization to provide maximum benefit to the business, all levels of IT resources need many new leadership skills. In order to effectively develop the necessary leadership skills to manage the environment and properly foster the most productive relationships, self-awareness is a foundational level skill set that must be incorporated into the professional's development plan. While numerous benefits have been shown linking self-awareness to business success, obstacles may limit or prohibit the development of self-awareness, especially in IT professionals. Those may include negative stigmas associated with the term or lack of prioritization when compared to other skills needed (i.e., technical).

Despite these obstacles, the literature suggested that self-awareness is a critical component in all professional skill set development and should be developed and reinforced at all levels. Integrating this information with the literature review on the complexity of working and managing in IT organizations implies that it would be equally if not more beneficial for IT professionals to expand their leadership development to include the enhancement, evolution, and integration of self-awareness.

The focus of this paper was to inquire as to the perception of self-awareness within the IT professional and if they viewed self-awareness as being necessary or beneficial to their success. If so, would they invest the necessary time and effort to develop this skill set as a priority? The next chapter describes the methods used in this study to help answer these questions.

Chapter 3

Research Methods

This chapter describes the methodology used for the research project. It begins with a restatement of the research purpose, followed by the research design, description of the participants, and the data collection and analysis methods used.

Research Purpose

The purpose of this research was to explore how IT professionals perceive and value self-awareness as a critical skill set in their profession. Three overarching questions were used as the basis of this research:

1. What is the perception of self-awareness within the IT community?
2. How do IT professionals view the connection between self-awareness and job performance?
3. If given a choice, would they invest in self-awareness development or improvement over technical training? (This researcher is particularly interested in the level of commitment to this training; hence the question is worded as a choice versus in addition too.)

Research Design

Data were collected using a mixed-methods research approach (Punch, 2005). Obtaining quantitative data through an online survey, which was developed using pre-specified research questions and pre-structured data, launched the design. As part of the online survey, a follow-up question asked participants if they would be willing to take part in post-survey interviews. Participants who answered yes to that question were prompted to enter contact information so that an interview could be conducted.

The purpose of post-survey interview was to gain a deeper understanding, to correlate and triangulate the respondents' selections in the survey, and to allow a stronger representation of the respondents' perception. The interview questions attempted to further clarify the perception of self-awareness within the IT professional and how self-awareness connects to career success (Ashley & Reiter-Palmon, 2012; Suri & Prasad, 2011) by giving additional qualitative evidence and the opportunity to correlate the interview data with the survey data for increased relevancy.

Participants

The population used for this research included all members of the ThinkIT association. ThinkIT, a not-for-profit organization based in the twin cities of Minneapolis and Saint Paul, Minnesota, is an IT professional networking association comprised of approximately 1,000 members. Members represent leaders and non-leaders and span all functional areas within the IT industry (i.e., project management, application development, infrastructure, etc.). Membership is voluntary and free of charge. All members received the survey, and no members of the ThinkIT association were excluded from the invitation to participate in the survey, as a diverse IT population response set was desired. A target goal of 271 completed surveys was established in order to obtain a statistically representative sample size with a 90% confidence level and a margin of error of +/- 5%.

In order to conduct a post-survey interview session, a question was included at the end of the survey asking if participants would volunteer for the session, and if so, to provide their contact information. A stratified random sample of the survey volunteers was conducted so that the sample would equally represent their roles in the IT industry

and to obtain a confirmed sample size of 10 interviewees. The randomly selected individuals were invited to choose one of several meeting times for either a face-to-face or telephone interview lasting no longer than 1-hour in length. The first 10 volunteers of the random sampling who were willing to participate and follow through with the process were interviewed.

Protection of Human Subjects

Institutional approval to conduct the research study was obtained by the ThinkIT Association on September 15, 2013 (see Appendix A). In addition, the researcher completed the Human Participants Protection Education for Research Teams course sponsored by the National Institute of Health on November 21, 2012 (see Appendix B).

For the survey portion of the study, an invitation email was sent to each ThinkIT member (see Appendix C) using the distribution lists provided by ThinkIT. The invitation explained the research study and voluntary nature of participation. When participants accessed the survey via the attached link within the invitation letter, they were presented with a Consent to Participant form on the first page (see Appendix D). Participants acknowledged that they read and understood the nature of the study and consented to participate by checking the box at the bottom of the form and completing the survey online.

For the interview portion of the study, the participants were emailed an invitation letter, which explained the nature of the interviews and that participation was voluntary (see Appendix E). Included as an attachment to that invitation was an Informed Consent for Participation in Research Activities form (see Appendix F), which required the participants to sign the form and bring it with them to the interview if they chose to

attend (an electronic scan of the signed document was also accepted). If they did not send the form, verbal confirmation of the reading and understanding of the form was obtained at the beginning of the interview.

All participant responses were kept confidential. Only aggregate data were included in this research report; aggregate data will also be used in any subsequent analysis for possible future publication of results. All tape recordings and research data were stored securely in the researcher's locked file cabinet during the study and will be kept in this location for 3 years following the study, after which time all data will be destroyed. Upon request, an abstract of the study results will be made available to participants within 1 year of the completion of the study.

Instrumentation

Two instruments were used to collect data: An online survey utilizing Qualtrics (2014) software and post-survey interviews. The survey (see Appendix G) was designed to be completed in less than 10 minutes and was organized into the following three sections:

1. Demographic questions gathered information regarding participants' position or role, gender, and educational levels to assist in creating profiles of the respondents.
2. Questions regarding IT professionals' skill sets requested data on which skill sets or training had primary focus. The first question gathered information on what kinds of training, if any, the respondent has undergone within the last 5 years. The other two questions used a 4-point Likert scale from Least Important/Never Performed to Very Important/Very Well. The non-technical

skill sets used in these questions have significant importance within IT organizations; however, when compared to technical skills, it is this researcher's hypothesis that they would be rated less important (Gomolski & Morello, 2000; Pinel & Bosson, 2013; Roberts & Mok, 2011; Smith & McKeen, 2005; Tan & Libby, 1997).

3. Two open-ended wrap-up questions addressed additional comments and sought volunteers for follow-up interviews.

To validate if the questions were written in a way to collect information that could be analyzed as expected, 10 IT professionals with whom this researcher had an association with but were not associated with ThinkIT (i.e., pilot respondents) were interviewed and asked the following for each survey question:

1. What do you hear me asking in this question?
2. Does this make sense if I am trying to make sense of "X" linked to the correlation table (see Appendix H)?
3. Do you see a gap? Is there a question I'm not asking?

The pilot respondents' input was collected, considered, and incorporated as per the scope of the research to the survey questions. All pilot respondents' confirmed the survey was well constructed, would resonate well and be clear with IT professionals, and provide the needed data for this research once all feedback had been incorporated.

Interviewees who elected to participate in a follow-up interview were asked general guiding questions with no predetermined data structure to gather qualitative data. The questions had a loosely structure design based on the respondents' survey responses (see Appendix I). The interviews took place during the month of February 2014, were

conducted one on one, in person or via telephone, and were recorded for the purposes of data collection and transcription.

Data Analysis Procedures

This section discusses the data analysis procedures, beginning with the quantitative survey. The process for conducting the qualitative interviews is then reviewed.

Survey – quantitative. SPSS was used for all quantitative analysis. The overall approach for the statistical analysis was done using the following thought process: (a) overall descriptions of the data for the whole group; (b) within group summary and descriptions of the data (i.e., women); (c) bimodal affect data summarization (i.e., women in certain roles); and (d) between group data summarization (i.e., men versus women). Techniques such as means, standard deviations, frequency distributions, and cross-tabulation were used to summarize and describe the survey data.

Once the descriptive statistics were obtained in the manner above, analysis of data variance within and between groups was conducted in a variety of manners. For correlation analysis, the Spearman rho correlation was used given the nominal and ordinal nature of the data as well as the lesser restriction on assumptions (e.g., distribution, variance). For analysis of variance, Mann Whitney or Kruskal-Wallis tests were used, depending on whether there were two groups or more than two groups being analyzed, given the data were generally non-parametric (i.e., did not assume normal distribution). For regression analysis, all non-binary data were recoded to binary for the purpose of running Chi Square analyses, and Chi Square was used given the categorical nature of the variables. Where the expected value was less than 5, the Fisher's

exact significance value was used as the final statistical significance result. Primary and secondary predictive indicators were predefined as demonstrated in Table 3. Table 4 presents the predefined outcome variables.

Table 3
Primary and Secondary Predictive Indicators

Primary Predictive Indicators	Secondary Predictive Indicators
Role in IT	Years in industry
Education level	Gender

Note. IT = Information Technology.

Table 4
Primary Outcome Variables

Skill importance to participant success in IT	Key philosophies
Self-awareness	More self-awareness leads to greater success
Emotional intelligence	Trust requires emotional stability
	If participant could only take one course, it would be in self-awareness

Note. IT = Information Technology.

As the responses available to the participant relative to one of the primary predictor variables, "Role in IT," were solely categorical (e.g., program manager, infrastructure), the data were recoded to reflect "Below Manager (0)" and "Manager or Above (1)" for the purpose of analysis.

The summaries, descriptions, and initial correlations of the survey data were analyzed to come up with initial findings and answers to the research questions. Any gaps, large variances, or complex multivariable discrepancies of the data were

incorporated into the refinement of the interview questions so that further clarity, correlation, or significance could be obtained to meet the specific research intent.

Interview – qualitative. Once the interview candidates were randomly selected, an email was sent to invite them again to participate in the interview (see Appendix E). Upon confirmation of their interest, meeting times and locations were established with each candidate.

During the interview, the semi-structured questions (see Appendix I) were asked and the answers were recorded via digital recorder and handwritten notes. Other observations from the researcher where also noted (i.e., tone, facial expressions). Points of interest to the researcher as it related to this research were further explored when needed in an emergent fashion. The entire interview took a maximum of 1 hour.

Once all the interviews were conducted, the digital recordings were transcribed by an independent contractor and combined with the researcher's handwritten notes and observations. Punch's (2005) grounded theory analysis was conducted to develop theories through the analysis. This analysis occurred as a three-step process:

1. Conceptual categories were identified from the data (coding).
2. Relationships were identified between the categories.
3. Relationships were conceptualized and correlated.

Coding is a concrete way to label the data and began the analytic portion of the qualitative data (Punch, 2005). Initial codes were defined prior to the analysis, as the data (a priori) with a strong correlation to the interview questions. The codes were first defined at a meta level to capture the high-level theme of the data and were then broken down into subcategories (codes) for further refinement.

As the interview transcriptions were analyzed, each interviewee's comments were collected as unitized data. These comments were then sorted and grouped by demographic data to determine correlations for gender, level of position, and level of education. After this initial analysis, full qualitative analysis began by sorting and grouping the interview data into the meta and sublevel codes that were defined a priori. As a result of the analysis, inductive codes were defined as more information contributed to further insights of the data, especially when identifications between the categories were uncovered. This was done at both the meta and subcoding level.

After the initial coding was conducted (to include associated grouping of interview data), an inter-rater reliability test was performed. This test consisted of another researcher, not affiliated with this research project as either the researcher or participant, reviewing the codes to determine the level of agreement and consistency of the data classification.

Once the first two steps of the grounded theory analysis were initially completed with the interview (qualitative) data, the relationships identified were then correlated back to the online survey relationships to solidify relevancy or note that there were not strong enough correlations obtained. Summations of the narrative data of the interviews at the subcode levels were used as they key relationships for this correlation analysis.

As a final step, the correlations and lack of correlations between the qualitative and quantitative data were analyzed. Researcher conceptualization and accounting for the relationships were provided as part of the discussion and conclusion section of this paper, as well as supporting literary references.

Summary

This chapter provided an overview of the methodology and procedures used by this researcher to determine the perception and value of self-awareness within the IT professional. Chapter 4 describes the results and analysis of the study findings.

Chapter 4

Findings

The purpose of this research was to explore how IT professionals perceive and value self-awareness as a critical skill set in their profession, and, if given a choice, would they invest in self-awareness training over technical training. This chapter presents the findings of the study and describes the data collection results and analysis.

This chapter begins with a presentation of the descriptive statistics gathered using the online survey sent to members of the ThinkIT Association to provide an overall descriptions of the whole group as well as within group summaries and descriptions. Initial themes and categories of the data are identified, which leads to the conclusion of this section with the bimodal affect and between group data summarization of all the quantitative data.

The second section reports the findings from the analysis of the data from the post-survey interview and identifies conceptual categories (coding) and relationships between the categories. This section includes all correlations with supporting narrative of the qualitative data from the interviews. This chapter concludes with a summary.

Online Survey Findings

General demographic data. A total of 183 members initially logged into the survey, of which 178 signed the consent waiver and participated in the survey. Of those 178 consenting participants, 164 individuals completed the survey in its entirety. Only fully completed surveys were included in this analysis. Table 5 represents a summary of the descriptive data of the respondents. Key descriptive statistics to note are that 132 or 75% of survey respondents were male and over 87% of the respondents had 11 or more

years in the IT industry with over 40% having more than 20 years. In addition, the data were highly biased with regard to level of education (92.7% had an undergraduate degree or higher) and years of industry experience (87.8% had greater than 10 years in the industry).

Table 5
General Demographics

Variable category	*n*	% of Sample	*M*	*SD*
Gender[a]			.26	.439
Male (0)	121	74.2		
Female (1)	42	25.8		
Years in Industry			3.88	1.24
< 2 Years (0)	4	2.4		
2–5 Years (1)	5	3.0		
6–10 Years (2)	11	6.7		
11–15 Years (3)	33	20.1		
16–20 Years (4)	44	26.8		
20+ Years (5)	67	40.9		
Role in IT			.69	.464
Below Manager (0)	51	31.1		
Manager or Above (1)	113	68.9		
Level of Education			2.36	.758
High School (0)	6	3.7		
Trade School (1)	6	3.7		
Undergraduate (2)	79	48.2		
Masters (3)	69	42.1		
Doctorate (4)	4	2.4		

Note. $N = 164$. [a] One missing data point for gender; $n = 163$. Due to rounding of values, percentages do not always total to 100%.

As the responses available to the participant relative to one of the primary predictor variables, "Role in IT," were solely categorical (e.g., program manager, infrastructure), the data were recoded to reflect "Below Manager (0)" and "Manager or

Above (1)" for the purpose of analysis. More than half (68%) of the respondents reported being in formal leadership roles such as manager, senior leader, director, or executive roles (Manager or Above classification). As such, the data obtained from this survey are skewed to reflect more of a "Manager or Above" view. A total of six other roles were represented in the "Below Manager" category: Project manager (8%), business analyst (2%), infrastructure (2%), developer (2%), architect (6%), and other (15%). The "other" category had a variety of roles that were mapped to the two binary categories as shown in Table 6.

Table 6
Mapping of "Other" Role Category

"Other" Response	Mapped to Category
CIO	Manager or Above
Database Administrator	Below Manager
IT Application Software	Below Manager
Quality Assurance Lead	Below Manager
Infrastructure Engineer	Below Manager
IT Advisor	Manager or Above
IT Consultant	Manager or Above
IT Recruiter	Below Manager
IT Sourcing	Below Manager
ITIL process analyst	Below Manager
Management Consultant	Manager or Above
Program Manager	Below Manager
Scrum Master	Below Manager
Security	Below Manager
Strategic Consultant	Manager or Above
Student	Below Manager
Tech support	Below Manager
Technical Analyst	Below Manager
Technical Project Specialist	Below Manager
VP of IT	Manager or Above
Scrum Master	Below Manager

Note. CIO = Chief Information Officer; IT = Information Technology; ITIL = Information Technology Infrastructure Library; VP = Vice President.

Other frequency data. The respondents were asked in one question what areas have they invested training time and effort within the last 5 years in order to determine if non-technical training, specifically anything related to self-awareness, was taken. When selecting from a list of training programs (multiple selections were allowed), leadership development programs and style profiling, such as Myers-Briggs Type Indicator® (The Myers-Briggs Foundation, n.d.) and DiSC® (DiscProfile™, 2010), had the highest frequency within the last 5 years among all respondents with a mean of .72 and .64 respectively (see Table 7). Training for 360-feedback had a mean of .46 with a standard deviation of .500, ranking it third highest in frequency compared to the other categories. It is important to also note that only seven respondents (M = .04) conducted no training within the last 5 years.

Table 7
Training Frequency Within Last 5 Years

Training Programs	*M*	Mode	*SD*
Communication	.41	0	.494
Relationship management	.38	0	.488
Technical	.32	0	.469
Business	.26	0	.438
Degree program	.15	0	.361
Leadership development	.72	1	.451
360-degree feedback	.46	0	.500
Style profiling	.64	1	.481
None	.04	0	.203

Note. N = 164; Min = 0; Max = 1.

Findings of Perception of Self-Awareness in IT Community

The first overarching question this report addressed was: What is the perception of self-awareness within the IT community? The data from the survey did not show a statistically significant correlation between the importance of self-awareness to success with level of education (-.061, $p = .441$) nor with the role in IT (.112, $p = .152$) or gender (.049, $p = .552$; see Table 8). However, other correlations did exist.

Table 8
Frequency Statistics for Skill Set Importance to Success

Skill Set	*M*	Mode	*SD*	Min	Max
Communication	2.85	3	.355	2	3
Technical	2.12	2	.631	0	3
Leadership	2.73	3	.471	1	3
Self-awareness	2.56	3	.545	0	3
Emotional intelligence	2.48	3	.669	0	3
Organizational skills	2.36	2	.564	1	3
Business knowledge	2.48	3	.548	1	3
Innovation	2.30	2	.577	1	3
Analytic capabilities	2.32	2	.614	1	3
Problem solving	2.70	3	.459	2	3

Note. $N = 164$.

One such significant statistical correlation was found between the importance of self-awareness as a skill set critical to participants' success and a willingness to invest more time to develop more skills to understand their leadership style (.273, $p = .000$; see Appendix J). Additionally, the Kruskal-Wallis ($H = 13.963$, $p = .003$) pairwise comparison adjusted *p*-value showed significant difference between Important and Very Important ($p = .009$). Meaning that if respondents selected important or very important for self-awareness as a skill set critical to their success, then there is also a significant

correlation that they chose the same responses for a willingness to invest in understanding their leadership style.

When the respondents were asked to evaluate a list of 10 skill sets in terms of how important they feel these skills are to their success within IT (0=Least Important, 1=Not Important, 2=Important, 3=Very Important), self-awareness had a mean of 2.56, which reflects a high percentage of ratings in the Important and Very Important categories (see Table 8). A total of 98.8% of the respondents selected one of these two choices. It is important to note that 95.9% of respondents chose either Important or Very Important across all of the skill sets; the mean overall score was 2.49 for level of importance of that particular skill to one's success in IT (see Table 9). In other words, participants predominantly reported each of the 10 skill sets to be an important if not very important element in their success in IT.

Table 9
Frequency Statistics for Selecting Important/Very Important for Skill Sets

Rating	Frequency of Selections	Percentage (%)	Rank	Weighted Frequency
Least Important	6	0.4	0	0
Not Important	62	3.7	1	62
Important	695	42.4	2	1,390
Very Important	877	53.5	3	2,631
Total	1,640	100.0		4,083

There was a statistically significant correlation found with the importance of self-awareness to respondents' success in IT and to the importance of emotional intelligence to their success (.581, $p = .000$; see Appendix K). There was also a correlation (although less significant and of small effect; see Table 10) to the agreement that the respondents

want to think more about how their emotions affect their behaviors (.202, $p = .009$) and agreement that without emotional stability it is difficult to gain trust (.240, $p = .002$). The Kruskal-Wallis ($H = 11.723$, $p = .008$) pairwise comparison adjusted p-value showed significant difference between Important and Very Important ($p = .042$); this shows an agreement that "without emotional stability it is difficult to gain trust" was significantly affected by the level of importance of self-awareness to their success in IT. If respondents rated the importance of self-awareness as high, then the rating for the emotional stability question was also high.

Table 10
Intercorrelations of Key Predictor Variables and Primary Outcome Variables

Variable	1	2	3	4	5	6	7	8
1 Years in Industry								
2 Role in IT	.228**							
3 Gender[a]	-.074	-.004	--					
4 Education Level	.028	.095	.065	--				
5 Self-Awareness Important to Success	.031	.112	.049	-.061	--			
6 EI Important to Success	.061	.231**	.047	-.084	.581**	--		
7 More self-awareness of effect on others increases success	.017	.079	-.022	-.026	.028	.164*	--	
8 Trust requires emotional stability	-.028	-.145	-.010	-.246**	.240**	.238**	.187*	--
9 If only one course, course in Self-Awareness	.073	.010	.076	-.026	.170*	.220**	.443**	.219**

Note. $N = 164$. [a] One missing data point for gender; $n = 163$; $^{*}p < .05$; $^{**}p < .01$.
IT = Information Technology; EI = Emotional Intelligence.

There was also a statistically significant positive correlation between the role in IT and the importance of emotional intelligence (EI) as a skill to success (.231, $p = .003$). The Independent Samples Mann-Whitney U Test results support the distribution of EI skill importance is not the same across categories of role in IT (i.e., Below Manager or Manager or Above; U = 3,611.5, $p = .003$). Chi square analysis also resulted in a statistically significant influence of role in IT on the importance of EI as a skill to their success in IT, χ^2 (1) = 7.645, $p = .009$. In other words, if the respondent was a Manager or Above, they reported EI has having a higher level of importance level and as being critical to their success.

Other correlations to note with a statistical significance would be agreement that if survey respondents (across all levels) could take only one course in the next year, it would be in self-awareness (.170, $p = .030$) and agreement that if they could only invest in one area, it would be technical skills over 'softer' skills (-.169, $p = .030$). Note this latter correlation is a negative effect, showing that they would not invest in technical skills over softer skills.

Findings of Connection Between Self-Awareness and Job Performance

The second overarching question of this report was: How do IT professionals view the connection between self-awareness and job performance? When comparing the importance of self-awareness to respondents' success in IT and self-rated performance levels in self-awareness there was a statistical significance with a moderate effect (.378, $p = .000$; see Appendix L). This is supported further by Kruskal-Wallis (H = 24.657, $p = .000$) pairwise comparisons, which with adjusted p-values showed that there were significant differences between the categories of Important and Very Important

(p = .000). Consider then that it is likely that those who rated self-awareness as "Important" rated themselves as "Good but need improvement," and those who rated self-awareness "Very Important" rated themselves as performing "Very Well."

Correlations were also found between the importance of self-awareness to a participant's success in IT and the following self-rated areas of performance (see Appendix L): Communication (.200, p = .010); Leadership (.189, p = .015); EI (.200, p = .010); and Business Knowledge (.235, p = .002). (Note: The Independent Samples Kruskal-Wallis analysis did not produce any statistically significant difference between groups.)

There was a statistically significant negative correlation between respondents' level of education and the agreement that trusts requires emotional stability (-.246, p = .001; see Appendix K). Results of an independent samples Kruskal-Wallis test supported the hypothesis that the agreement that trust requires emotional stability is not distributed equally across levels of education (H = 10.704, p = .030), although when looking at the pairwise comparisons the adjusted significance levels ranged from .317 to 1.0, reflecting no significant difference between categories (e.g., Undergraduate, Master). Despite the significant overall effect, the data seem to mainly reflect the fact that as level of education increases, agreement that trust requires emotional stability goes down, yet the granular detail suggests no significance of variance between groups.

The data also did not show a statistically significant correlation between level of education and the importance of self-awareness to success (-.061, p = .441; see Appendix K). Further examination using an independent samples Kruskal-Wallis analysis reflected a statistically significant relationship (H = 10.737, p = .030), although the pairwise

comparisons resulted in adjusted significance levels of .153 to 1.0. Despite the significant overall effect of the Kruskal-Wallis analysis, the granular detail suggests no significance of variance between groups.

In the last examination of the importance of self-awareness to success, the data did not show a statistically significant correlation between role in IT and the importance of self-awareness to success (.112, $p = .152$; see Appendix K), even though there was a statistically significant positive correlation between Role in IT and the importance of EI as a skill critical to success. Further examination using an independent samples Mann-Whitney analysis supported the lack of a statistically significant relationship (U = 3,228, $p = .152$).

Findings of Investment in Self-Awareness over Technical Training

The third overarching question in this report was: If given a choice, would they invest in self-awareness development or improvement over technical training? The survey data showed no statistically significant correlations between the predictor variables (primary or secondary) in all by years of experience in the industry and the primary outcome variable that if they could only take one course this year it would be regarding self-awareness. The correlation coefficients ranged from -.023 to .130; the *p*-values ranged from .097 to .861 (see Appendix K). In other words, the data did not show a predictive correlation between gender, role in IT, or educational level and taking self-awareness as their only course in a given year. However, chi-square analysis resulted in a statistically significant influence of years of experience in the industry (5 years or less, or 6+ years) on the agreement that if they could only take one course this year, it would be in self-awareness, $\chi 2\ (1) = 6.010$, $p = .029$.

Statistically significant correlations were found between some of the other primary outcome variables and the primary outcome variable that if survey respondents could only take one course this year, it would involve self-awareness (see Appendix K): (a) more self-awareness of effect on others increases success (.443, p = .000); (b) importance of EI skills (.220, p = .005); and (c) trust requires emotional stability (.219, p = .005). This means that survey participants who responded Agree or Strongly Agree to taking self-awareness as their only course this year, responded the same to the categories listed above.

One other area of interest was found within the survey results when correlations were discovered between the type of training undergone within the last 5 years and how survey participants responded to skill set importance (see Appendix M). Interestingly, the data showed that if the respondents took communication, business, 360-degree, or personality-style training within the last 5 years, the importance of EI to their success increased, .165, p = .035; .164, p = .036; .192, p = .014; and .238, p = .002, respectively. Conversely, degree program participation and no training of any kind within the last 5 years showed a negative affect on the importance of EI to their success, -.174, p = .026 and -.169, p = .031.

Similarly, correlations were found with training and key philosophies (see Appendix N). Here the data specifically reflect a negative correlation to technical skills and training when other softer skills have investment in training. Therefore, if respondents have taken communication, leadership, 360-degree, or personality style training within the last 5 years, there is a correlation that their investment in technical training decreases, -.193, p = .013; -.270, p = .000; -.211, p = .007; and -.212, p = .010,

respectively. Conversely, if the respondent took technical training within the last 5 years, there is a correlation that investment in technical skills over soft skills increases, .159, $p = .042$. No other statistically significant relationships were found using chi-square analysis between any combination of Predictor Variable (Primary or Secondary) and Primary Outcome Variable.

Post-Survey Interview Findings

The post-survey interview findings include the following 10 subtopics: general demographic data, self-awareness as an overarching concept, self-awareness and the relationship to others, categorization of self-awareness and perceptions, evolution of the viewpoint of self-awareness, relationship of different skills, context of training in relation to self-awareness, prioritization of technical skills and self-awareness, expanding self-awareness, and self-awareness as a unique orientation. Each of these topics is discussed below.

General demographic data. Of the 183 survey responses received, 83 participants volunteered to take part in the interview session and provided their contact information. A total of nine participants successfully completed the interview after several attempts to connect with numerous random samples of participants. The nine participants varied in demographics as illustrated in Table 11; however, no significant correlations were found with any of the variable categories that are worth noting as part of these interview findings.

Once the interviews were conducted and transcribed, the interview data were sorted into the predefined meta categories correlating to the interview questions (see Table 12). As the data were analyzed and further correlations were noted, additional meta

codes were added and sublevel categories were defined to provide a micro grouping of interview data. A full list of the meta and sublevel codes with their associated definitions can be found in Appendix O.

Table 11
Interview Participant Demographics

Variable Category	*n*	% of Sample
Gender[a]		
Male (0)	6	66.6
Female (1)	3	33.3
Role in IT		
Below Manager (0)	3	33.3
Manager or Above (1)	6	66.6
Level of Education		
High School (0)	1	11.1
Trade School (1)	1	11.1
Undergraduate (2)	4	44.4
Masters (3)	3	33.3
Doctorate (4)	0	0.0

Note. [a] $N = 9$.

Table 12
Meta-Level Codes – Interview Questions or Inductive Correlation

Correlated Interview Question(s)	Meta Category	Description
3. What is your definition of the term self-awareness? 4. When you hear the term self-awareness, what are the first thoughts or emotions you have in relationship to the term?	Concept	Self-awareness as an overarching concept
Inductive Meta Category	Relationship	Self-awareness and the relationship to others
11. Why don't you think all IT resources view self-awareness as a skill set critical to their success? Does role, education level, or years of experience in the industry matter?	Category	How self-awareness and self-awareness perceptions can be broken down and categorized

5. Do you view self-awareness as a skill set critical to your success? Why specifically? How do you think you came to this viewpoint? 6. Do you think you have developed a strong level of self-awareness? If so, how did you come to do this?	Influence	Influence on how people's viewpoint of self-awareness evolved
8. Do you also view emotional intelligence to be of equal importance to your success? 9. Do you think you are better in communications, emotional intelligence, leadership, and business knowledge because you view self-awareness as a skill set critical to your success? How so? Why not?	Skills	Relationship of different skills and self-awareness
7. What is your willingness to invest in understanding your leadership style? 10. Do you find that your investment in technical training is the same, less than, or more than what it was 5 years ago? Why is that? 12. Most survey respondents took a style profiling and leadership development program within the last 5 years. Why do you think these two types of programs were the highest selected?	Training	Reasons for why people have had or not had certain types of training; context of training
10. Do you find that your investment in technical training is the same, less than, or more than what it was 5 years ago? Why is that?	Priority	The prioritization of technical skills vs. self-awareness
5. Do you view self-awareness as a skill set critical to your success? Why specifically? How do you think you came to this viewpoint? 6. Do you think you have developed a strong level of self-awareness? If so, how did you come to do this?	Expansion	Whether and how to expand one's self-awareness
Inductive Meta Category	Orientation	Self-awareness as a unique orientation

Self-awareness as an overarching concept. The meta category of self-awareness as an overarching concept yielded eight subcategories. These subcategories were refined as follows: definition of self-awareness, first impressions of the term self-awareness, importance and value, current level of skill, characteristics of those who are self-aware, overuse of the term, critical to success, and the implications of not having self-awareness.

Definition of self-awareness. In terms of a general definition of self-awareness, interviewees generally agreed that self-awareness is looking into and understanding yourself, including understanding your strengths, weaknesses, capabilities, and limitations. Participants also noted that self-awareness is an understanding of oneself in the context of others. This was consistent across all interviewees regardless of gender or positional or educational level. The following interview quote best represents the summation of this category:

> There are a couple of different ways of looking at [the definition of self-awareness]. If you take one level, it's being aware of your instincts or being self-conscious of where your capabilities and limitations are. But I think at another level . . . is being aware of how the responses are within you and that you create from others is a reflection of yourself, so the concept of looking in the mirror and your reactions of others, and knowing that you control that, is another level of self-awareness.

First impressions of the term self-awareness. The first impressions that come to mind for most people when hearing the term self-awareness is of a very internal nature-introspection, insight, reflection, absorbing, internal monitor, internal work, and subjectivity. Overall, the term was viewed positively. One interviewee quote noted a different perspective reflecting a split perception:

> [When I hear the term self-awareness, the particular emotion or feeling I have associated with those words is] a brief and minor flash of "Uh-oh, here comes the HR [human resources] touchy-feely stuff." However at the same time I do feel

> that being self-aware is critical—and I use that word intentionally—to a good leader.

The importance and value of self-awareness. Consistently, all interview participants saw the value and importance of self-awareness. Self-awareness was linked on a broad spectrum from knowing one's self—especially one's weaknesses and being able to compensate for them, to knowing how to interact with others' styles and understanding one's impact on others (this theme is expanded upon later on in this paper), to linking to results and changing organizational culture. The following two interviewee quotes best represent these assertions:

> If you want to change the culture, you do it through your managers and supervisors. If they're not very self-aware, you're not really going to have much success there. I think I might have just said that self-awareness in your supervisors and managers of a company is a mandatory foundation for changing the culture in an organization.

> If you're self-aware and have emotional intelligence, your relationships will be stronger. Your leadership skills will be stronger. You'll have a better rapport with your team and others that you're dealing with.

Current level of self-awareness. Some interviewees shared their own level of self-awareness, which ranged from "some" to "a little higher than average." At the same time, the majority of interviewees (> 50%) indicated their self-awareness had room for improvement. One participant admitted not having given self-awareness much thought. A couple of interviewees conveyed a belief that generally people are not very self-aware.

Characteristics of those who are self-aware. There was some consensus (4 out of 9) that a characteristic of self-aware people is their understanding of how they impact and are perceived by others. Participants also noted an intentionality (i.e., "deliberately go through," "pause and self-reflect," "communicate," "deal with it differently," and "monitoring themselves") with people who are self-aware. Other descriptors included

"intuitive" and "vulnerable." Participants shared the perception that those who are good leaders may be self-aware; one participant explained that the people with whom the interviewee had positive experiences with have been good leaders, and expressed that this was probably a sign that these leaders have self-awareness as a skill set, as they are "able to utilize their people's strengths more effectively."

Overuse of the term. Only two interviewees commented relative to overuse of the term self-awareness. However, both people referred to self-awareness as a more external aesthetic (i.e., "takes on a marketing standpoint" and "keyword on a resume") as opposed to a genuine trait.

Self-awareness is critical to success. There was a high degree of consensus (88%) among interviewees that self-awareness is a skill set critical to their success, ranging from "a certain degree" to multiple responses of "absolutely." This mirrored the frequency results in the quantitative data. Only one interviewee (in a below-manager position) indicated that technical skills were more critical to his or her success than self-awareness.

Implications of not having self-awareness. Interviewees shared characteristics of people who lack self-awareness, most notably describing people who repeatedly acted inappropriately, did not understand the impact they have on others, or who blamed others when the issues were actually internal to them. Interviewee data revealed the overarching trait of individuals who had little to no self-awareness was a lack of personal accountability. One interviewee shared a particular story that illustrates this theme:

> I don't know how it was, but I come around the corner and there's this young veteran standing there. He has that form and he's holding onto this, and this guy is mean . . . and tattooed. . . . He says, "You're not going to make me fill out a form, are you?" And I'm like, "No, no way. I'm not." He clearly needed help, not a

> form. Yes, we need the form and all that other stuff, but we'll worry about that later. I have a saying, "Fix the customer, then fix the problem." . . . He said, "Look, I've been the bloodiest place in Afghanistan, the place where most of our American troops have died. I was shot at every day, sometimes several times a day, and I've been awarded two Bronze Stars." What he's saying to me is, "I can go through that and I can't get a freakin' job. What the hell's wrong with this place?" And I'm like, "Look, it's not them. It's you. Your head needs to be screwed around differently," and I explained all that to him. He got straight and he got confident, and he got to be his old self again. He wasn't frustrated anymore. He actually was taking notes, and he's not a guy that takes notes. And he thanked me for not making him fill out a form.

Self-Awareness and the relationship to others. The meta category of self-awareness and the relationship to others yielded five subcategories. These subcategories were refined as follows: self-awareness as a vehicle to building relationships, self-awareness and interactions with people, importance of self-awareness for teams, self-awareness and one's impact on others, and self-awareness and being aware of others.

Self-awareness as a vehicle to building relationships. Overall, interviewees viewed that self-awareness is a necessary foundation to relating with others. The first impression is that self-awareness is some internal thing—touchy-feely and self-absorbed, yet in fact the irony is that it is the basis of relating to others. Interviewee findings also demonstrated agreement between self-awareness as a critical skill set to success and relationships being essential in the quantitative data. These findings may also help make sense of the quantitative data that showed a correlation between the Primary Outcome Variable that if survey respondents could only take one course this year it would be regarding self-awareness and another Outcome Variable of more self-awareness of effect on others increases success.

Self-awareness and interactions with people. Participants viewed self-awareness as the core of being able to interact in a healthy way with people irrespective of level,

role, or function. This finding is illustrated by the following interviewee quotation:

> I think for myself, we deal with so many different types of personalities, and it's all like I have to work up to the CEO [chief executive officer]. I have to work horizontally to other levels, other SVPs [senior vice presidents], down to directors and managers and individual contributors . . . such a wide variety of contact where people are. You have to know where you are and who you are in order to interact at all those different levels. Interactions with the CEO are very different than when I'm interacting with an individual contributor. The awareness is very different. The perception is very different.

Importance of self-awareness for teams. The need for people to work well together as a team came through as very important to the interviewees. Self-awareness provides the basis for being able to work in and lead successful teams; as one interviewee stated, "The better I understand my staff and the better they understand each other, the better we all work together." The following interviewee quotation supports a correlation between the importance of self-awareness for a team with it being a vehicle to building relationships:

> Leading a team, as well as building relationships, if you're self-aware and have emotional intelligence, your relationships will be stronger. Your leadership skills will be stronger. You'll have a better rapport with your team and others that you're dealing with.

Self-awareness and one's impact on others. The respondents noted that self-awareness is critical toward the understanding of how a person impacts others. This understanding allows people to work better with others and be more successful. However, one needs to know it to improve it. Without self-awareness, this perspective is absent. The following particularly strong interviewee statement shows that self-awareness is not only critical to understanding the impact of others, but also in how to convey such importance and connection:

> If you want a mental exercise of HR [human resources] throwing out a self-awareness program to a company, that just doesn't feel right. It doesn't feel like it

> would succeed. It feels like there would be a spare amount of, "What the heck is this?" If you took pretty much the same content and said, "Okay, those of you who have people reporting to you, let's talk about understanding the impact you have and you being aware of the specific situation and the things you do, that sort of thing. Let's talk about that." That's really something that HR should be doing. That should be almost a standard part of increasing the quality of your supervisors and managers, which I believe is a key part of HR responsibilities given the high percentage of people who leave because of their supervisor.

Self-awareness and understanding others. There was a strong consensus among all respondents that self-awareness leads to a better understanding and awareness of others. This allows for greater empathy, insight, and accommodation when working with others:

> I have had employees in the past that didn't really understand the impact they were having on others, and I've had to kind of coach them through that. [Although] I didn't use the word self-aware . . . I addressed it by trying to get them to see the other person's motivations, to see the other person's concerns, and then once they have a better picture of this other person or group of people, I said, "Okay, let's look at the words you use, the things you say, the actions you take, how is that going to have an impact on them?" So I tried to get there by making them more aware of how the other person is receiving the interaction or communication, and then bringing it to something that they can control, which is how they present it or how they perform it. . . . In most cases [people have improved]. (Interviewee)

Categorization of self-awareness and perceptions. This meta category reflects how self-awareness and people's perceptions of self-awareness can be broken down and categorized. It is considered important to make the distinction between the presence of self-awareness and the individual's importance of or need for self-awareness by category, which goes directly to answering the core thesis question of value and perception. This meta category yielded four subcategories that were refined as follows: self-awareness is individualized, self-awareness categorized by role or level, self-awareness categorized by discipline (IT or other), and self-awareness categorized by the company or organization.

Self-awareness is individualized. Six interviewee comments noted that self-

awareness is more individualized than it is based on role, level, education, or some other category. Participants stated that, ideally, everyone would be self-aware.

Self-awareness categorized by role or level. There was, however, a great deal of consensus across all respondents in the perspective that the importance of self-awareness varies by role. Which is not to say that the presence of self-awareness varies by role, but rather stresses the importance or need for varying degrees of self-awareness dependent upon roles. The more social the role, the greater the need for self-awareness. Interestingly, participants primarily defined the term social as working with people outside the IT function. Interactions within IT organizations were implied, yet not explicitly stated, as being less social. Also interestingly, the quantitative data did not show a statistically significant correlation between role in IT and the importance of self-awareness to one's success. The survey data did show, however, a moderate correlation between role in IT and the importance of leadership skills. The following excerpts from the interviews are examples of these findings:

> [For] a manager in IT . . . I think they ought to be able to recognize much better [the viewpoint on self-awareness and investing in it] because they're working with people more than the technical hands-on.

> I had mentioned that for individual contributors [the value and perception of self-awareness] isn't quite as critical as it is for management style, and I think there is a perception in a lot of technology areas that moving forward in a career means moving into a management role, and I'm not sure that's always the case, that finding where you want your career to be in 5 years, in 10 years, and working toward that goal can be a very important exercise. While I think these interpersonal and self-awareness areas are helpful in any role, no question about it, they are more pivotal to success in some roles than others. Understanding what sort of role someone wants to go for long term could bring a whole lot of light on how important these areas are to them.

> Well, there are probably two different types [of personality that would be attracted to IT], like a developer, somebody who's really technical, DBAs [database administrators], network folks. I think they're very smart. I think

> they're very intuitive, but they're usually not the greatest communicators. I mean the joke is you usually don't want to take them out of the back room. You usually don't put them in front of a customer. . . . And then there's another aspect of IT that I think can be very social, project managers, business analysts, finding people there, they're usually very dynamic and are very self-aware because they're adjusting to a million different situations and people and trying to keep all those going as smoothly as possible. So there are kind of two sides to it. There's a soft side and a technical side.

Self-awareness categorized by field (IT or other). The data also indicated that the importance and level of self-awareness may differ based on whether someone is in the IT field or not. As one interviewee shared,

> I think particularly in IT, we have emphasized strong technical skills, so technical skills in the standard sense, and sometimes those have been the people that get promoted where they're not necessarily self-aware or good leaders. They're better off as an individual contributor, and that is their skill.

Self-awareness categorized by the company or organization. One final category worth noting is that some interviewees expressed that the importance of self-awareness may differ by organization. This correlates with participants' comments associated with culture and the impacts of self-awareness upon it.

Evolution of the viewpoint of self-awareness. This meta category was defined before the interviews were conducted to determine one's viewpoint. However, many responses were less about the "viewpoint on self-awareness" and more about their own level of self-awareness. Participants described mentors, family, other people, and experience as having the greatest influence on their self-awareness. Very little was said about training as an influence on self-awareness. These findings may help make sense of the quantitative data, in which no relationship was shown between Predictor Variables and the Primary Outcome Variable that if survey respondents could one take one course this year, it would be regarding self-awareness. This meta category yielded eight

subcategories that were refined as follows: self-awareness is influenced by personality ("DNA"), family members, mentorship, working with others, feedback, the culture, experience, and training.

These categories of influencers where nearly evenly distributed between the respondents in terms of these contributing to one's self-awareness or viewpoint of self-awareness. However, the category of mentorship received more input as a key influencer over the others, as is represented in the following story:

> [I came to the viewpoint that self-awareness is important to my success because] someone hit me on the head. A strong mentor is what brought me to this area. I started off in 2001 with a little company . . . and 18 months later I was the only manager left. They fired the president, and the others left soon after. I had a mentor put their arm around me and let me know they thought I could be successful in that large arena, and here are the things I needed to do to make it happen. Then when the new president came on board, they took over as my mentor. Without that mentorship and my understanding about the importance of the relationship I had with others, I wouldn't have been successful. I'll be honest. I needed to be shoved around. I'd love to say I came to this in a flash of brilliance. But there were people who cared enough about me to say, "Hey . . . if you don't improve this particular skill set, you're not going to go as far as you could. This needs to be your focus." And it was potentially a fatal flaw. The fact that they believed in me enough to point this out and coach me through it, I was very touched by that. (Interviewee)

Relationship of different skills. This meta category was defined after the online survey was conducted, as there were strong correlations that came out of the quantitative data. The interview responses closely mirrored the results from the quantitative data analysis in terms of relationship of self-awareness as a critical link to success and other skills. This meta category yielded the four subcategories of business knowledge, communications, leadership or leadership style, and EI.

Business knowledge. Interview participants demonstrated more consensus around the link between self-awareness and acquiring business knowledge than support for no

link between the two. Although the possibility exists to have one without the other, as interviewees spoke of the relationship of self-awareness as a critical link to success and other skills, they could see the eventual connection between self-awareness and business knowledge.

Communications. The respondents noted that communication skills are linked to having a stronger sense of self-awareness, or to believing that self-awareness is critical to one's success. The prevailing thought process is that the more people know themselves, the more they will be aware of others, and the more effective the communication will be.

Leadership or leadership style. Participants also noted that the more one recognizes that self-awareness as a critical skill set to success (and subsequently has a higher level of self-awareness), the more effective the individual will be at leading. Participants viewed self-awareness as key ("critical" and "pivotal") to good leadership.

Emotional intelligence. EI is generally on par with self-awareness in terms of its importance to one's success. Interviewees indicated that EI is part of the larger concept of self-awareness, which supports a statistically significant positive correlation between the role in IT and the importance of EI as a skill to success.

Context of training in relation to self-awareness. The quantitative data from the survey showed several correlations between the type of training undergone within the last 5 years and how participants responded to skill set importance; most showed a higher importance of the skill set with training. Due to these correlations, questions were asked in the interviews as to the types and reasons for certain training. This meta category had eight subcategories including encouragement to take technical training as well as encouragement to take self-awareness training (including role or level differences,

practicality, and training choices); the value of self-awareness training; popularity of style or leadership profiling; and if there was more or less training within the last 5 years.

Encouragement related to training. Overall, participants offered varying viewpoints on the context of training. A few participants were encouraged to take both technical training and self-awareness training (directly or indirectly through course curriculum). Interviewees offered varied views of training they had not taken and were often invited to training based on their level in the organization. Some participants offered up what they would choose to take if they could take anything; however, the answers varied. As such, no significant correlations were found within these categories.

The value of self-awareness training. Several participants saw the value in self-awareness training (most notably in the form of style profiling). It seems many people needed to have the experience themselves in order to recognize the value (i.e., a chicken-and-the-egg situation).

> I didn't realize when I went to the [management] training [that included 360-degree feedback] how important it was. To be honest, that week I remember thinking, "This is a bit of a waste of a week." I mean, I liked what I was learning, but it didn't hit me until about 6 months later. I had started putting some of these things into play and realized how much more effective myself and my team were becoming as a result.

This finding may help make sense of the moderate correlation in the quantitative data that people who saw self-awareness as critical to their success also found themselves to be very self-aware.

Branding of self-awareness. Branding (e.g., not labeling "self-awareness training" or "personal development") may be an important element of convincing people to take the training. These findings may also help make sense of the quantitative data, in which no relationship was found between Predictor Variables and the Primary Outcome

Variable that if survey respondents could only take one course this year it would be regarding self-awareness. An example of this is reflected here, indicating the importance of linking style profiling with self-awareness as a component of that training:

> It was kind of an eye opener [to take a style profile]. I think more people in the workplace should maybe have exposure to that. Even if it's not from a personal development perspective, just the self-awareness side where you might be able to look at it and go, "Oh, that's why they do this in meetings," and "Oh, that's why I might have conflict with so-and-so over this area."

Popularity of style or leadership profiling. Since style profiling was taken by the majority of the survey respondents (76%), it was worth exploring further to determine why so many took this training and to determine if there was a correlation between this training and self-awareness development. From the qualitative data, the popularity of style profiling may be due to accessibility and ease. Recognition of style profiling seems to have increased, given the need for stronger leaders, greater results, and improved teamwork. This supports a connection to previously stated common viewpoints linking self-awareness as critical to communications, leadership development, and business knowledge results.

> I think [the reason for survey participants taking leadership development programs so frequently] is that there's more recognition. What's your style and how you interact with others, and there is a lot more around leadership. I mean, if you think about the companies that you've been in and the people that you know, everybody has goals and a portion of their goals in many organizations are focused on how you do your work, how you lead, how you interact, how you communicate. So I think there is a greater focus in organizations on those skills because even though we talk about them as being intangible, they're so important to the success of the work, and I think there is recognition of that.

More or less training within the last 5 years. Overall, people seem to have taken less technical training in the last 5 years, which, according to interview participants, may

be due to role-driven decisions (e.g., "[As a manager] I rely on my team more for technical stuff so my investment is less"). This closely mirrors the quantitative findings.

Prioritization of technical skills and self-awareness. The meta category of the prioritization of technical skills and self-awareness yielded the two subcategories: review priority between technical skills and self-awareness. There is still a prevalent view that technical skill is prioritized over softer skills such as self-awareness. Participants offered reasons of practicality, industry, choice, and reward. A few participants viewed non-technical (softer) skills as being more important than technical skills. One interviewee referenced the reason of reward, while two others spoke to level in the organization. The latter may support the quantitative finding of a negative correlation between Role in IT and the importance of technical skills.

Expanding self-awareness. The qualitative data from the interviews had many comments on whether and how to expand one's self-awareness, such that this meta category was created. Findings suggested a necessity for individual, proactive initiative, which is interesting to juxtapose with the thought on "mandatory" training. The five subcategories that resulted from the analysis included willingness to invest in learning, as well as expansion through training, feedback, working with others, and personal work (e.g., yoga, reflection).

Willingness to invest in leadership style. Overall, respondents commented on a willingness and interest to invest in their leadership style. This mirrors the results of the quantitative data. Only one participant was not interested in investing in their leadership style, and that was due to the person not being interested in perusing a leadership role.

Expansion through training. Some participants noted that training is a way of

expanding one's self-awareness. It may be that self-awareness is required to recognize the value of self-awareness training (a chicken-and-the-egg situation similar to what came up for the subcategory of "seeing the value of certain types of training").

Expansion through feedback and personal work. Participants viewed seeking and receiving meaningful feedback as a way to expand their self-awareness and to improve their ability to work with others—whether it is through mentorship, leading by example, providing feedback, or participating in open discussions. Finally, participants found expanding self-awareness to be very personal and expressed that it takes personal work:

> There are a few things I do [to keep building the skill set of self-awareness]. I think I read and try to keep it at the forefront that way. I think there are some personal things I do. For instance, I take yoga and for me that's a time for self-reflection when I'm in those classes.

Self-awareness as a unique orientation. The final meta category in this qualitative analysis views self-awareness as a unique orientation. Similar to what emerged in the definition of self-awareness, this meta category revealed self-awareness to be a unique way of viewing and connecting with the world by first looking inside. Participants also noted individualization makes self-awareness unique for each person:

> [Self-awareness] is being aware of how the responses are within you and that you create from others is a reflection of yourself, so the concept of looking in the mirror and your reactions of others, and knowing that you control that, is another level of self-awareness.

Summary

This chapter presented the findings of this research to address the three overarching questions central to this thesis:

1. What is the perception of self-awareness within the IT community?

2. How do IT professionals view the connection between self-awareness and job performance?
3. If given a choice, would they invest in self-awareness development or improvement over technical training?

The first section of this chapter presented the quantitative data findings associated with the online survey. The second section presented the qualitative data findings associated with the post-survey interviews. Data from the qualitative analysis not only supported many of the correlations found within the quantitative data, but also provided quantifiable value for the IT professional as it relates to this skill.

The demographic data showed a high bias to male gender, manager and above level, level of education being undergraduate level or above, and having more than 16 years of experience in the industry. Despite these biases, there were no significant statistical correlations between these demographics and the importance of self-awareness as critical to IT professionals' success.

In terms of general perception of self-awareness, participants demonstrated a strong consensus that self-awareness is looking into and understanding oneself, and understanding of oneself in the context of others. Overall, participants viewed self-awareness as positive and critical to the success of the IT professional. Other themes that emerged in terms of perception included an intentional focus for self-awareness, self-awareness is highly individualized, self-awareness is key to good leadership, IT professionals experience a negatively affect if they lack self-awareness, and perception of self-awareness impacts the organization and culture.

When looking at the connection between self-awareness and job performance, overall participants viewed that self-awareness is a necessary foundation to relating with others, and that this provides the basis for individuals to interact in a healthy way with people irrespective of level, role, or function. This, combined with understanding one's impact on others, makes an individual more successful by allowing for greater empathy, insight, and accommodation. Other themes identified from the data include the more social the role, the greater the need for self-awareness; self-awareness provides the basis for being able to work in and lead successful teams; and a strong correlation exists between self-awareness and improved communication skills, leadership skills, greater EI, and more in-depth business knowledge.

There was a high frequency among participants showing investment in self-awareness development and improvement over technical training. People and experience had the greatest influence on participants' self-awareness. Very little was said about training as an influence on self-awareness. However, formal self-awareness training was most prevalent in the forms of style profiling and leadership development courses and programs. Other themes included correlation between training taken and raising perception of importance of that skill set, seeking and receiving meaningful feedback is viewed as a way to expand one's self-awareness, and how the training is branded may be an important element of encouraging people to take the training. One final interesting correlation to note is that participants who responded "Agree" or "Strongly Agree" to taking self-awareness as their only course this year, responded the same to the following categories: more self-awareness of effect on others increases success, importance of EI skills, and trust requires emotional stability.

Chapter 5 discusses the conclusions based on these three research questions and reviews the interpretations and implications of the data with the IT professional. Chapter 5 also discusses the implications of the study's findings and provides recommendations for further research.

Chapter 5

Conclusions

The purpose of this research was to understand and quantify how IT professionals perceive the meaning of the word self-awareness, and the connection of self-awareness leading to increased effectiveness of IT professionals. This chapter begins with a discussion organized around the three overarching questions that were used as the basis of this research and leads into an integrated conclusion and interpretation. Implications, limitations, and directions for future research are then discussed, and a summary of the key insights of this study are presented in the conclusion of this chapter.

Discussion and Conclusions of the Findings

The discussion begins with addressing the three overarching questions used as the basis of this research:

1. What is the perception of self-awareness within the IT community?
2. How do IT professionals view the connection between self-awareness and job performance?
3. If given a choice, would they invest in self-awareness development or improvement over technical training?

Perception of self-awareness within the IT community. Overall, both the quantitative and qualitative data showed that self-awareness is viewed positively and is critical to the success of the IT professional. This conclusion is independent of gender, role, educational level, or years of experience in the industry, and is supported by the literature (Jensen, 2011). With the exception of two remarks in the qualitative data, the data also suggested no negative stigma is associated with the term self-awareness nor of

the skill itself, even though some literature in IT publications considered the skill and area of self-awareness as having disruptive impact and exposing unconventional thinking (Logan & Rozwell, 2012).

The data obtained as to the genesis or evolution on the IT community's positive perception of self-awareness showed indications of a strong correlation with outside influencers ("sponsors") such as other leaders, mentors, and family members. These influencers helped initially establish self-awareness as not only a skill set worth investing in, but also as critical to being effective in the professional's role within IT organizations. Once the respondents received the feedback on the importance of self-awareness and were encouraged to make an investment in this area, then the positive perception was established internally (i.e., they found it positive for them, not just for other people). Participants reflected that sponsors provided a start, but they did not fully realize the impacts of the needed investment in this area until the investment was underway and they could see how this impacted their performance in a positive way. In other words, if these participants had not received the feedback from others or had personal experiences demonstrating a need for this skill, their perceptions and willingness to invest may have differed. They had to have their awareness raised, to raise their awareness, and this effort needed to be intentional.

Connection between self-awareness and job performance. Overall, this study found that IT professionals found self-awareness, along with other softer skills, as having a connection to job performance and critical to success. This supports the literature showing diverse skill sets, beyond technical skills, are needed for IT job performance (Gomolski & Morello, 2000; Lopez et al., 2012).

An interesting concept that emerged from the data implied a difference in the type of individuals who received feedback on the importance of self-awareness, and given their role and reward system, how they then acted upon it. If resources are deemed to have a strong technical role versus a role needing more social skills, the feedback, importance, and investment of self-awareness was decreased for their specific role. Individuals who are relied upon primarily for their technical skills may not receive this feedback, and as such may not view self-awareness as important to their success; however, they do view self-awareness as important for others. This might imply that for certain roles within IT, it is currently acceptable for an individual not to perceive, invest, or change reward systems to increase self-awareness if they are relied upon primarily for their technical ability. Smith and McKeen (2005) had shown that employees of all levels need these soft skills. While the data from this study did not dispute this claim, it did differentiate between a "social" and a "non-social" IT role. Even more specifically, the data suggested that IT roles that have a primary relationship with stakeholders outside the IT organization (OIO) are perceived to need and value self-awareness versus roles where the primary relationships are within the IT organization (WIO).

IT roles are normally defined based on the function or specialization they perform (Potter, Mok, & Berry, 2011). The follow-up interviews conducted as part of this study showed a difference in the need and benefits of self-awareness to performance with a division between OIO and WIO relationship roles. While overall participants' perceptions of self-awareness were viewed as positive and critical to the success of IT, there was a difference in who specifically needs to invest in this training and the level of direct connectedness to success. Individuals whose role had primary relationships

involving WIO stakeholders viewed self-awareness as important for those performing more of a social role. Similarly, individuals who had more of a social role held the same viewpoint. Participants went on to say that individuals in less social roles were valued and rewarded more for their technical ability. What was not clear from the study is the exact division between these roles. Figure 1 shows a summary of the perception and value of self-awareness between OIO and WIO relationship roles obtained from this study.

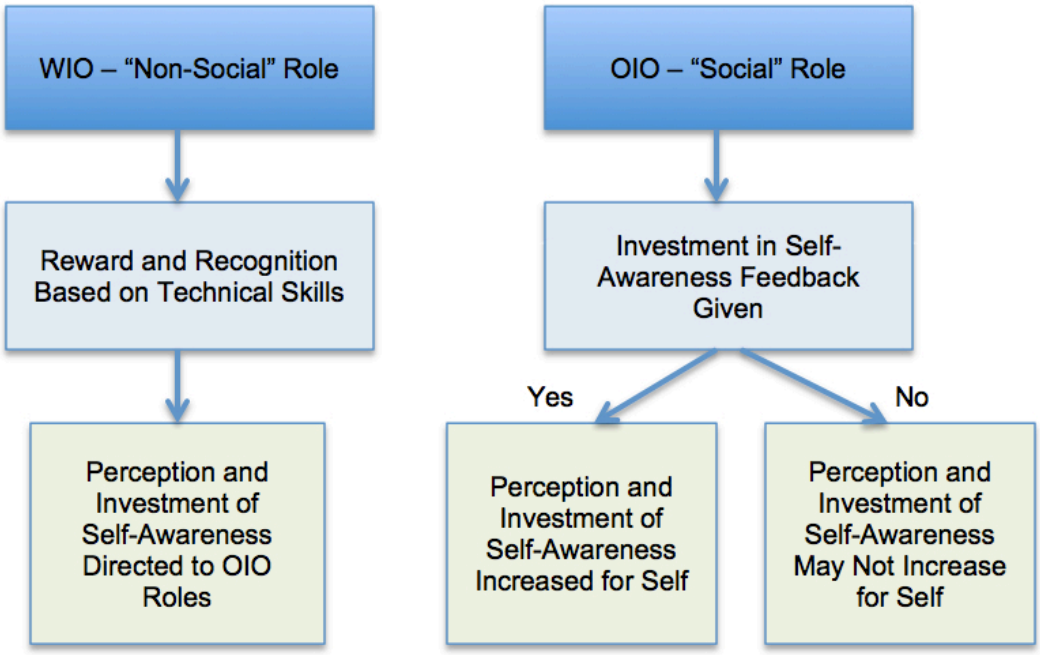

Figure 1. Perception and investment of self-awareness between "non-social" and "social" information technology roles.

Note. OIO = Outside Information Technology Organization, WIO = Within Information Technology Organization.

The majority of the respondents represented "Manager or Above" and that self-awareness was statistically shown to be a skill set critical to their success and one they reported performing "Very Well." This may imply that job performance was enhanced due to self-awareness, and as a result these individuals advanced to formal leadership

levels. The data also showed that by acknowledging self-awareness as important in their success that this then increased their ratings in their performance with communication, leadership, EI, and business knowledge.

Communication, leadership, EI, and business knowledge were initially identified from the literature as critical skills for the IT professional (Coughlan et al., 2005; Goleman et al., 2004; Gomolski & Morello, 2000) and that self-awareness provides a lens to increase said skills. These four areas were reinforced from the qualitative data as primary components that led to IT professionals' ability to relate better to others. This increased ability towards relationship management was the overarching theme from this study, which was supported by the literature (Bassellier & Benbasat, 2004). This overarching theme also showed a direct connection in the qualitative data, which tied self-awareness to increase job performance for the IT professional through improved relationships. This study revealed an emerging pattern outlined in Figure 2, which summarizes the implied progression of self-awareness and its importance to improved relationships for IT professionals' success.

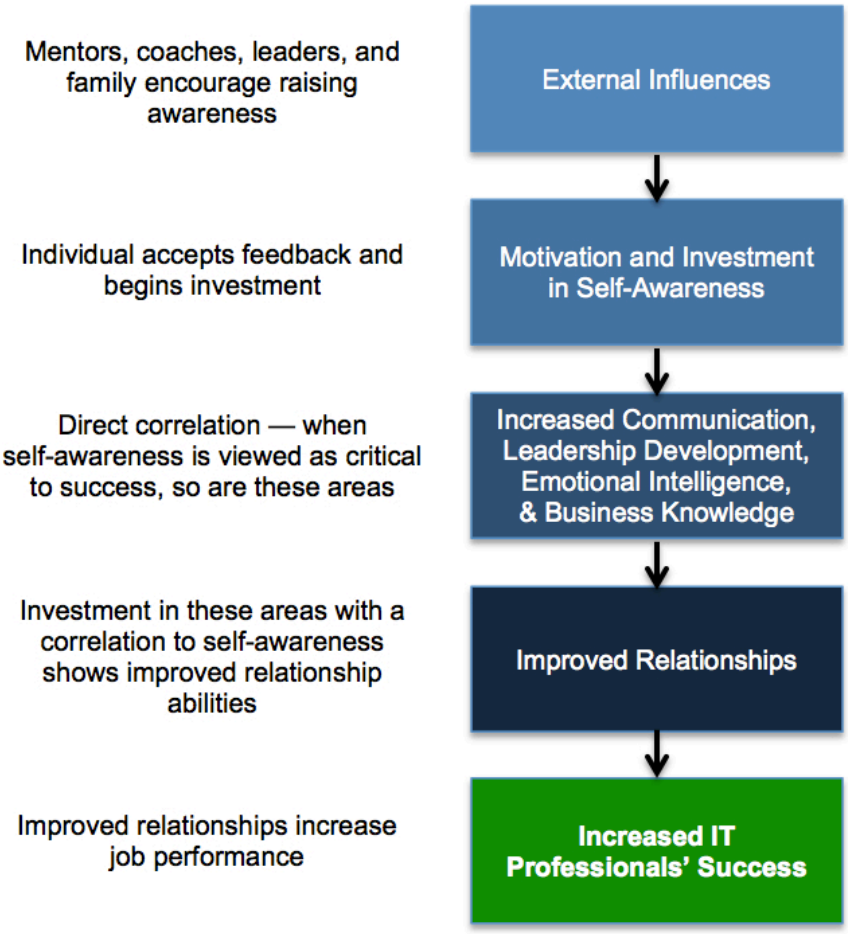

Figure 2. External influences encouraging self-awareness lead to increased information technology job performance.

Note. IT = Information Technology.

Investment in self-awareness over technical training. The quantitative data showed strong evidence that self-awareness training would take precedence over technical training. However, this result may be a reflection that the majority of the respondents were in "social" or formal leadership roles—roles that were deemed to require the ability to relate as a critical skill. Being able to relate with others is seen as critical to the success of the IT professional in "social" roles, and self-awareness is viewed as the foundational level skill set to develop relationships. This is consistent with the data presented in Table 2, which shows self-awareness as the first component leading

to potential increases in relationship management; all of which lead to higher EI (Goleman et al., 2004). However, the data from this study showed increased EI as a way to raise one's ability in relationship management.

It is interesting to note that the qualitative data showed correlations that self-awareness training is not labeled as such. The quantitative data showed training coming in the form of style profiling, leadership development programs, and 360-feedback, which was supported by literature showing a perceived value and connection to self-awareness (Higgs & Rowland, 2010; McCarthy & Garavan, 1999). With leadership development training and style profiling having a high percentage of 72% and 64% respectively, this could also support that the survey respondents have a positive perception of self-awareness if they are willing to invest in this training.

Overall, the data from this study suggested a trend of higher importance of a specific skill if training within that specific skill was taken within the last 5 years. What emerged from the data is an implication that if more investment in self-awareness training were to occur, the importance of that skill would increase, and the importance of technical skills would decrease. The data showed that if technical training is taken, then the importance of technical skills increases. It would be interesting to determine if non-technical training for individuals in roles in which the primary relationships involved OIO stakeholders would elevate the importance and value of self-awareness if they were not previously given feedback to invest in the area of self-awareness, as noted earlier in the report. Based on the responses from the participants, they needed to have the feedback first in order to make the investment and realize the importance of self-awareness. This would imply that participants taking non-technical training need

"sponsorship" for it to be effective in raising self-awareness, thereby increasing the effectiveness of the training and leading to better relationships with others.

Conclusion. Figure 3 shows a consolidated view of the collective patterns this study revealed for the perception, value, and investment of self-awareness against relationship roles in IT organizations. In this figure, the perception, value, and investment of self-awareness are compared against role differentiation—roles requiring OIO relationships versus roles dealing primarily with WIO resources. When comparing, it appears that IT professionals who have a low perception, value, or investment of self-awareness have more of an internal correlation to success that differs between OIO and WIO roles. For the OIO roles, this might be due to never receiving the necessary feedback to invest in this area. As such, these individuals would be more specialty activity focused (i.e., project management and process focused) versus relationship focused. The WIO roles with this low rating are technically focused and are rewarded based on their technical ability, thereby reinforcing the view that there is no need to value or invest in self-awareness for themselves.

IT professionals who hold a high perception, value, and investment towards self-awareness appear to have more of an external correlation to success. This again varies between OIO and WIO roles. Individuals in OIO roles have most likely received feedback from an external source to make this investment, and as such understand and value how self-awareness is critical to their success, namely by relating better with others. Individuals in a WIO role who provided a high rating also value self-awareness, but their view is outwardly focused; they believe this skill is important for people in OIO roles that require the individual to relate with others.

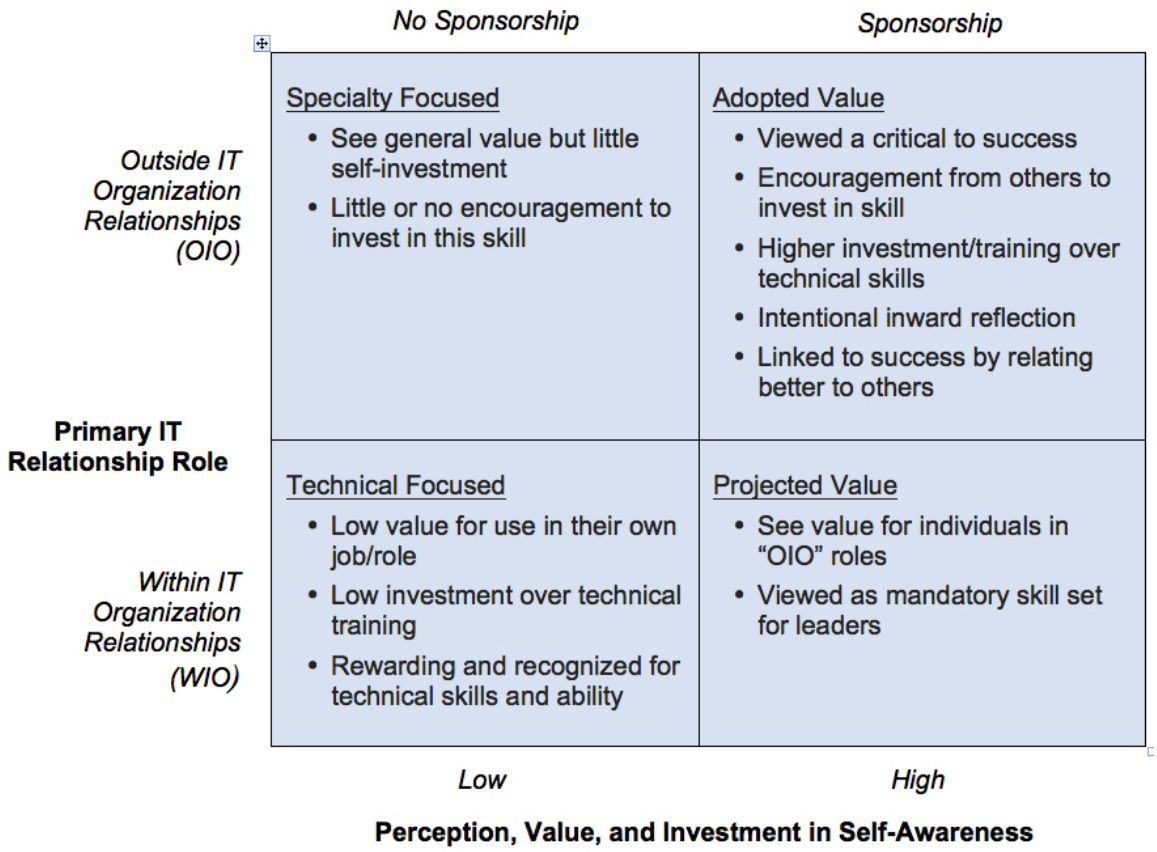

Figure 3. Correlation summary of perception, value, and investment of self-awareness against information technology relationship roles and sponsorship influence.

Note. IT = Information Technology.

Limitations

Given the focus and scope of this study, the quantitative findings do not represent a statistically significant sample size to represent all professionals in the IT industry. In order to obtain a statistically representative sample size with a 90% confidence level and a margin of error of +/-5%, 271 surveys needed to be completed. Since there were only 164 completed surveys, the findings represent only the opinions of those sampled in the survey. It would be interesting to determine if the title of this study created a selection bias primarily with people who already view self-awareness as important to participate in

the survey. It is also important to note that all participants in the study were in a narrow geographic region (the Twin Cities in Minnesota) and may not represent the population across the United States. During one of the interviews a participant pointed out that cultural diversity could account for differences in perception and value. This leads directly to another limitation of not accounting for cultural differences.

The demographic data were highly biased with regard to level of education (92.7% had an undergraduate degree or higher), years of experience in the industry (87.8% had greater than 10 years experience in the industry), and gender (75% being male). However, the gender bias in the study may be insignificant, as the percentage of male participants is representative of the gender bias in the IT industry (Harris, Morello, & Raskino, 2007). It is also important to note that Jensen (2011) asserted there is no correlation between age, gender, and years of experience with the value of self-awareness. This study also found no statistical correlations between gender, years of experience, and self-awareness. However, considering the limited sample size of this study, these biases should still be noted.

Specific to the limitations of using the respondents of the survey for the follow-up interview, the sample size of the participants following through with the interview was considerably small and may not reflect the perceptions of the entire sample pool to adequately substantiate the quantitative analysis. However, the demographics of the interview participants closely mirror those of the survey participants despite the small sample size.

One final limitation of this study that should be mentioned is researcher bias, considering this researcher is from this industry and a board member of the participating

association. However, reducing this bias was accounted for in the design of this study in two ways: (a) this study used an online survey with multiple choice versus open-ended questions, and (b) the coding, data entry, and data analysis of the follow-up interviews was completed by the researcher and confirmed by an independent auditor.

Implications

With IT professionals being faced with integrating numerous additional skills to their already complex technical background, it is important to consider when and how these skills should be incorporated. This study showed a viewpoint and perception that while self-awareness is a necessary skill and is critical to success, its lens is skewed to primarily benefit individuals in roles with OIO relationships. IT professionals view, recognize, and reward self-awareness in roles that have more interactions with people and in which relationship management is a core job responsibility, especially those involving OIO stakeholders.

The following four items are potential implications for the field of organizational development as a result of this study:

1. Practitioners working with IT organizations may need to inquire further into the difference in roles based on the need in relating to others. Even though all individuals have the potential to increase self-awareness and have this lead to higher functioning teams, if there are limited resources available towards the development of softer skills with self-awareness as a foundational level skill, it may prove more beneficial to initially direct efforts to individuals whose roles involve primary OIO relationships.

2. Sponsorship is needed for self-realization of criticality and investment in self-awareness with IT professionals. If it is deemed that IT professionals should make investment in self-awareness, having a personal, direct connection or impact on their daily job performance was viewed as critical. IT professionals need an external resource to sponsor them for self-actualization. This may include not only the initial feedback of needing to develop in the area of self-awareness, but also providing encouragement, validation, and connection to success throughout the IT professional's training.
3. Evaluation of IT reward and recognition systems is needed. If IT organizations desire to improve relationships (especially with key OIO stakeholders), then the reward and recognition systems should be evaluated to ensure OIO roles have job performance and success tied more closely to the ability to relate well with others. This evaluation should expand beyond the actual reward and recognition system or process, and should include how the culture itself views this skill and whether or not it rewards more for relating to others versus technical ability.
4. Examination of IT job descriptions or roles is needed. Reviewing IT job descriptions and revising with a heavier focus on relationship skills over technical skills might prove beneficial in the recruitment and success of candidates in roles in which OIO relationships are critical. Self-awareness (or related) training might be considered a requirement for entry into such roles.

Future Research

Conducting this study with a larger sample size might prove advantageous, as it would allow for more generalization of the data. Expanding the sample size not only in

terms of volume but also in the areas of geographic location and cultural differences could help determine if the conclusions drawn from this study are consistent with these other variables.

As the responses available to the participant relative to one of the primary predictor variables, "Role in IT," were solely categorical (e.g., program manager, infrastructure), the data were recoded to reflect "Below Manager (0)" and "Manager or Above (1)" for the purpose of analysis. It might prove beneficial to conduct another study to determine if the age or length of tenure in a "Manager or Above" position would impact the results.

Understanding the division between OIO and WIO relationship roles in IT organizations should be explored because of the direct correlation to self-awareness perception, value, and investment. Since WIO roles are usually segregated by function, it would be interesting and relevant to the conclusion of this study to examine how the exact division of such roles is determined. This extended research could modify the recommendations to the organizational development community in the implications section to allow for more specificity in the recommendations.

Finally, because there appears to be a correlation to the type of role performed in IT organizations and needing some sort of external influence to raise IT professionals' willingness and perception of self-awareness, a study to determine if these same resources gain value from an investment in self-awareness without said sponsorship is recommended. The data from this study suggested that outside feedback experience is a key factor in defining value of self-awareness. If IT professionals only receive feedback and encouragement to invest in self-awareness before they are actually in a role that

recognizes and rewards that ability, will they see the value and give the same level of intentional investment to improving that skill? Additionally, would the results be different between OIO and WIO roles if there were sponsorship to provide specific connections to the value of self-awareness for relationships within IT?

Summary

This chapter provided a summary of the results of this study and specified correlations to the literature, limitations, implications, and potential future research areas. The purpose of this research was to understand and quantify how IT professionals perceive the meaning of the word self-awareness, and the connection of self-awareness leading to increased effectiveness of IT professionals. The following selections relate back to the three overarching questions used as the basis of this research.

What is the perception of self-awareness within the IT community? Overall, the participants who took part in this study viewed self-awareness positively and as critical to the success of the IT professional. This is independent of gender, role, educational level or years of experience in the industry. Outside influencers (or sponsors) played a significant role in initially establishing self-awareness for the IT professional, not only as a skill set worth investing in, but also as critical for individuals to be effective in their roles within IT.

How do IT professionals view the connection between self-awareness and job performance? This study found that IT professionals viewed self-awareness as having a connection to job performance and critical to success. The feedback, importance, and investment of self-awareness decreased for individuals deemed to have strong technical roles versus those in roles requiring more “social” skills. However, IT professionals with

a strong technical focus did view self-awareness as critical to job performance for those in "social" roles. More specifically, the data suggested that IT roles that have primary relationships with OIO stakeholders are perceived to need and value self-awareness more versus roles with primary WIO relationships.

The data also showed that those who acknowledged self-awareness as important to their success had increased ratings in their performance with communication, leadership, EI, and business knowledge. These four areas were the primary components that led to their ability to relate better to others. This increased ability towards relationship management was the overarching theme from this study tying self-awareness to increase job performance for the IT professional.

If given a choice, would IT professionals invest in self-awareness development or improvement over technical training? The study showed strong evidence that self-awareness training takes precedence over technical training. However, this result may be a reflection that the majority of the respondents were in social or formal leadership roles. Training came in the form of style profiling, leadership development programs, and 360-degree feedback. Overall, the data implied that if more investment in self-awareness training were to occur, the importance of that skill would increase, and the importance of technical skills would decrease in roles that had primary relationships with OIO stakeholders, provided the IT professionals had an external influence (or sponsor) who offered feedback to invest in such skills.

While the results of this study did not provide definitive answers, several insights on self-awareness and the IT professional were provided. These insights included how

self-awareness is viewed, where self-awareness might specifically be of value to the IT professional, and investment opportunities for development of this skill.

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Appendix A

Research Study Approval

September 15, 2013

Graduate and Professional School IRB
Graduate School of Education & Psychology
Pepperdine University
6100 Center Drive 5th Floor
Los Angeles, CA 90045

Dear Sir or Madame:

As Chairman of the ThinkIT Association, I am directly responsible for the facilitation, coordination, and reputation of the ThinkIT Association and its related events.

I have read and understand the project, ***Reflection in the Screen: The Perception and Value of Self-Awareness within the IT Professional***, Laura Woodward has proposed and grant her permission to conduct the study. I understand she will be requesting participation from members of ThinkIT, in which membership is voluntary, for the purposes of distributing surveys and conducting relevant follow-up interviews. I also understand that participation in the survey is voluntary and that members must request to be included in interviews as part of the survey. They may withdraw their request at any time.

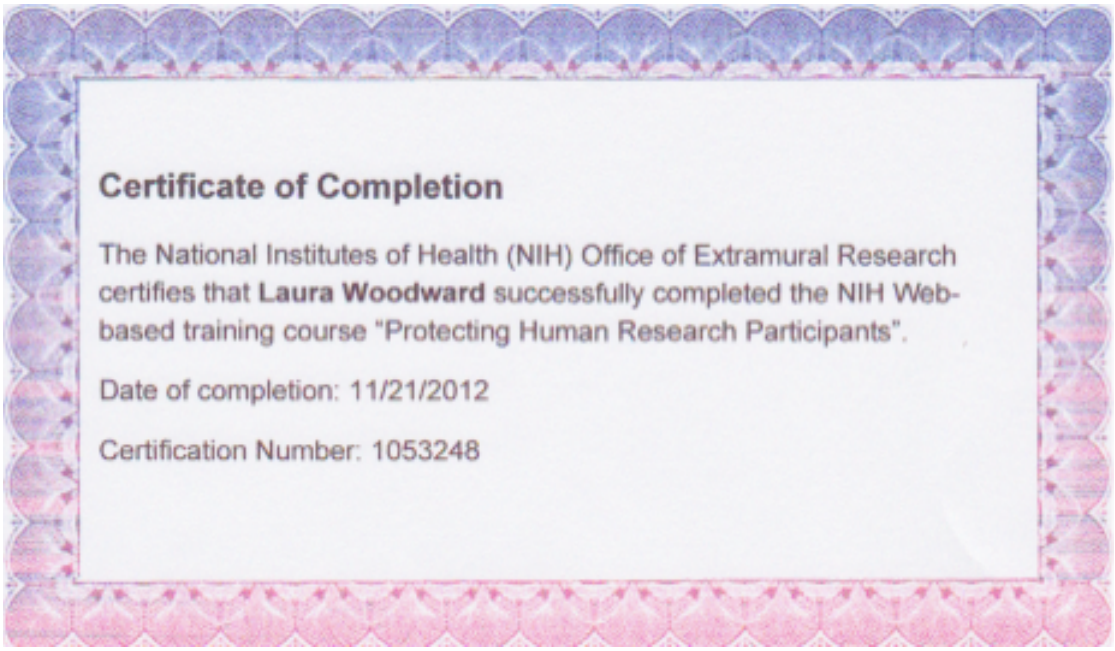
It is my understanding that this study will not directly identify any individuals from ThinkIT through its findings and will not possess any risk or liability to ThinkIT or its members. I further understand that Pepperdine University is not liable for what is documented in the study.

Sincerely,

Richard Walker
Chairman, ThinkIT Association

Appendix B

National Institutes of Health Web-Based Training Certificate



Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Laura Woodward** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 11/21/2012

Certification Number: 1053248

Appendix C

Survey Invitation Email to ThinkIT Members

Dear ThinkIT Member,

I am currently a student at Pepperdine University and am in the process of conducting research for my thesis project in partnership with ThinkIT. As a student in the Master of Science in Organization Development program, I am currently recruiting individuals for my study entitled, *Reflection in the Screen: The Perception and Value of Self-Awareness within the IT Professional*.

The purpose of this research is to understand and quantify how IT professionals perceive the meaning of the word self-awareness and the connection of self-awareness leading to increased effectiveness of IT professionals. Knowledge gained from this study will be helpful to validate if IT professionals have the view of self-awareness being necessary for leadership effectiveness, if they would invest the necessary time to develop this skill, and if they can establish connections to business success. As such I am inviting you to participate in this study.

I am conducting an anonymous survey and I am inviting all ThinkIT members to participate. Your participation is strictly voluntary and your responses will be kept anonymous and confidential. Completion of the survey will take approximately 10 to 15 minutes.

Click here to take the survey:
[survey link]

The deadline to participate in this survey is Friday, December 6, 2013. Please let me know if you have any questions and I hope you decide to take the survey.

Thank you,

Laura Woodward

Laura Woodward
[telephone number]
[email address]

Appendix D

Consent Form Used with a Waiver or Alteration of Informed Consent

As a student in the Master of Science in Organization Development program at Pepperdine University, Graziadio School of Business and Management, I am currently recruiting individuals for my study entitled, *Reflection in the Screen: The Perception and Value of Self-Awareness within the IT Professional*. The professor supervising my work is Dr. Gary Mangiofico.

The purpose of this research is to understand and quantify how IT professionals perceive the meaning of the word self-awareness and the connection of self-awareness leading to increased effectiveness of IT professionals. Knowledge gained from this study will be helpful to validate if IT professionals have the view of self-awareness being necessary for leadership effectiveness, if they would invest the necessary time to develop this skill, and if they can establish connections to business success. As such I am inviting you to participate in this study.

Please understand your participation in the study is strictly voluntary. The following is a description of what your participation entails, the terms for participating, and a discussion of your rights as a study participant. Please read this information carefully before deciding whether or not you wish to participate.

If you should decide to participate in the study, you will be asked to complete the following online survey regarding your experience as a professional and the skill sets you have relied upon and developed as an IT professional. Completion of this survey will take approximately 5-10 minutes. Please complete the survey alone in a single setting.

Your responses will be kept anonymous and confidential.

There are no direct benefits to you for participating in the study. This is an opportunity for you to give input about which skills IT professionals need and value.

There are no major risks associated with this study.

If you should decide to participate and find you are not interested in completing the survey in its entirety, you have the right to discontinue at any point without being questioned about your decision. You also do not have to answer any of the questions on the survey that you prefer not to answer—simply leave such items blank. Terminating your participation at any time will not put your professional position in jeopardy in any way.

One week after the initial email invitation is sent and again one day before the final survey deadline, a reminder email will be sent to you to complete and return the survey. Since this email will go out to everyone, I apologize ahead of time for sending you these reminders if you have already completed the survey prior to the deadline.

If the findings of the study are presented to professional audiences or published, no information that identifies you personally will be released. The data will be kept in a secure manner for three (3) years, at which time the data will be destroyed.

If you have any questions regarding the information that I have provided above, please do not hesitate to contact me at the address and phone number provided below. If you have further questions or do not feel I have adequately addressed your concerns, please contact my research supervisor, Dr. Gary Mangiofico at [email address] or [telephone number]. If you have questions about your rights as a research participant, contact Thema Bryant-Davis, Pepperdine University, Chairperson of the GPS IRB, [email address], [telephone number].

You are welcome to a brief summary of the study findings in about one (1) year. If you are interested in receiving the summary, please send me an email under separate cover to [email address].

Thank you for taking the time to read this information, and I hope you decide to complete the survey.

Sincerely,

Laura Woodward
Student, Master of Science in Organization Development
[telephone number]
[email address]

By checking the box below and by completing the survey online, you are acknowledging that you have read and understand what your study participation entails, and are consenting to participate in the study.

- ❑ I have read the informed consent (above) and agree to participate in this study.

Appendix E

Email: Interview Invite

Dear [Name],

Thank you for completing the survey associated with my thesis work at Pepperdine University in the Master of Science in Organization Development program. Your responses will be consolidated and reviewed as part of my study entitled, *Reflection in the Screen: The Perception and Value of Self-Awareness within the IT Professional*.

You indicated as part of the survey that you would be willing to participate in a follow-up interview. This interview will allow me to further understand and quantify how IT professionals perceive the meaning of the word self-awareness and the connection of self-awareness leading to increased effectiveness of IT professionals.

Your participation is strictly voluntary. The interview will be one-on-one with me and will take approximately 45 to 60 minutes. Your responses will be kept anonymous and confidential.

If you are interested, send me an email to suggest times and dates that would be most convenient for you over the next two weeks. If you would rather decline, please email me and let me know.

Should you decide to participate in the interview, attached is the consent form. Please read it closely and contact me with any questions you may have. You may deliver the signed consent form to me at the time of the interview.

I appreciate your consideration and hope you decide to sign up for an interview.

Thank you,

Laura Woodward

_____

Laura Woodward
[telephone number]
[email address]

Appendix F

Informed Consent for Participation in Research Activities

Participant: _____

Principal Investigator: Laura Woodward

Title of Project: Reflection in the Screen: The Perception and Value of Self-Awareness within the IT Professional

1. I _____, agree to participate in the research study being conducted by Laura Woodward, a student in the Master of Science in Organization Development program at Pepperdine University, Graziadio School of Business and Management, under the direction of Dr. Gary Mangiofico.

2. The purpose of this research is to understand and quantify how IT professionals perceive the meaning of the word self-awareness and the connection of self-awareness leading to increased effectiveness of IT professionals. Knowledge gained from this study will be helpful to validate if IT professionals have the view of self-awareness being necessary for leadership effectiveness, if they would invest the necessary time to develop this skill, and if they can establish connections to business success. As such I am inviting you to participate in this study.

3. My participation will involve a 45 to 60 minute interview, which will be conducted face-to-face at an agreed upon location or on the phone. I understand my responses will be kept anonymous and confidential. If the findings of the study are presented to professional audiences or published, no information that identifies me personally will be released. The data will be kept in a secure manner for three (3) years, at which time the data will be destroyed.

4. I understand there are no direct benefits to me for participating in the study.

5. I understand there are no major risks associated with this study.

6. I understand that I may choose not to participate in this research.

7. I understand that my participation is voluntary and that I may refuse to participate and/or withdraw my consent and discontinue participation in the interview at any time without penalty or loss of benefits to which I am otherwise entitled.

8. I understand that I may request a brief summary of the study findings to be delivered in about one (1) year. If I am interested in receiving the summary, I will send an email request to [email address].

9. I understand that the researcher, Laura Woodward, will take all reasonable measures to protect the confidentiality of my records and my identity will not be revealed in any publication that may result from this project. The confidentiality

of my records will be maintained in accordance with applicable state and federal laws.

10. I understand that the investigator is willing to answer any inquiries I may have concerning the research herein described and that I may contact the researcher, Laura Woodward at [email address] or [telephone number]. I understand that I may contact Dr. Gary Mangiofico at [email address] if I have other questions or concerns about this research. If I have questions about my rights as a research participant, I understand that I can contact Thema Bryant-Davis, Pepperdine University, Chairperson of the GPS IRB, [email address], [telephone number].

11. I understand to my satisfaction the information regarding participation in the research project. All my questions have been answered to my satisfaction. I have received a copy of this informed consent form, which I have read and understand. I hereby consent to participate in the research described above.

_____ _____

Participant Signature Date

_____

Participant Name

I have explained and defined in detail the research procedure in which the subject has consented to participate. Having explained this and answered any questions, I am cosigning this form and accepting this person's consent.

_____ _____

Principle Investigator: Laura Woodward Date

Appendix G

Participant Survey Questions

DEMOGRAPHICS

The following questions will help provide a better understanding of your background.

1. How many years have you worked within the IT or IT-related industry?
    - Less than 2 years
    - 2-5 years
    - 6-10 years
    - 11-15 years
    - 16-20 years
    - 21+ years

2. What is your current role within IT?
    - Project Manager
    - Business Analyst
    - Quality
    - Infrastructure (IS)
    - Developer
    - Architect (Business or Technical)
    - Manager/Team Lead/Director
    - Senior leader / Executive
    - Other

3. What is your gender?
    - Male
    - Female

4. What is the highest level of education completed?
    - High School
    - Trade School
    - Undergraduate Degree
    - Masters
    - Doctorate

SKILL SETS WITHIN IT

The next set of questions focus on skill set development and usage within the information technology industry. The intent of these questions is to understand what skills you feel are critical within IT.

5. Which types of training have you undergone within the last 5 years? Please select all that apply:
    - Communication
    - Relationship Management
    - Technical course (i.e., Java, CISCO, Oracle, PMP)

- Business industry course
- Degree program (i.e., BS, MBA)
- Leadership development
- 360 feedback
- Style profiling (i.e., Myers-Briggs, DiSC, Strength Finder)
- None

6. Please rate the following skill sets in terms of **how important you feel they are to your success within IT** *(1=Least Important, 2=Not Important, 3=Important, 4=Very Important)*
    a) Oral and Written Communication – Ability to clearly articulate a message so that the receiver understands the intended message.
    b) Technical Ability – Possessing the necessary systems/technical knowledge and application for the specified job.
    c) Leadership – Ability to guide individuals (with or without direct authority) to a common goal.
    d) Self-Awareness – Awareness of our abilities and their effect on others, the environments, and ourselves.
    e) Emotional Intelligence – Ability to recognize and manage your own emotions appropriately based on the situation and environment.
    f) Organizational Skills – Systematic approach to managing time and tasks.
    g) Business Knowledge – Understanding of company's business as it relates to your position.
    h) Innovation – Demonstrates the ability to create new ideas or methods.
    i) Analytic Capabilities – Developing new insights and understanding based on data and trends.
    j) Problem Solving – Finding solutions to overcome obstacles.

7. Please rate the same items again in terms of **how well you think you perform these skill sets regardless of relevant importance to your job** *(1=Never perform, 2=Do not perform well, 3=Good but need improvement, 4=Very well)*
    a) Oral and Written Communication – Ability to clearly articulate a message so that the receiver understands the intended message.
    b) Technical Ability – Possessing the necessary systems/technical knowledge and application for the specified job.
    c) Leadership – Ability to guide individuals (with or without direct authority) to a common goal.
    d) Self-Awareness – Awareness of our abilities and their effect on others, the environments, and ourselves.
    e) Emotional Intelligence – Ability to recognize and manage your own emotions appropriately based on the situation and environment.
    f) Organizational Skills – Systematic approach to managing time and tasks.

g) Business Knowledge – Understanding of company's business as it relates to your position.
h) Innovation – Demonstrates the ability to create new ideas or methods.
i) Analytic Capabilities – Developing new insights and understanding based on data and trends.
j) Problem Solving – Finding solutions to overcome obstacles.

8. Please rate each of the following from strongly disagree to strongly agree based on your viewpoint. *(1=Strongly Disagree, 2=Disagree, 3=Agree, 4=Strongly Agree)*
    a) I believe that all IT professionals need to have strong technical skills
    b) I would be open to learn how to consciously think about the ways my actions and emotions affect my behavior
    c) Maintaining and establishing good Business – IT relationships is essential in my role
    d) I am recognized and rewarded for my performance based on my technical ability
    e) I would allocate the necessary time to develop more skills in the area of understanding my leadership style
    f) If I could only invest in one area, I would invest in technical skill sets over "softer" skills (i.e., communication).
    g) As long as leaders in IT organizations have a strong technical background, they can be less skilled at "softer" skills (i.e. relationship management, communications)
    h) If I had more self-awareness in terms of my effects on others, I would be more successful
    i) Without emotional stability it is difficult to gain trust
    j) If I could only take one course this year, I would be willing to attend a course titled "Increasing Your Self-Awareness"

FOLLOW UP

9. Would you be willing to participate in a focus group to help gain further clarity on survey responses which would consist of a 45-60 minute interview?
    - No
    - Yes
      (If "Yes," ask for them to enter their name and email address)

10. Please feel free to add any additional comments or suggestions as it relates to the questions in this survey

Appendix H

Survey Correlation Table

Question	Correlation
DEMOGRAPHICS The following questions will help provide a better understanding of your background. Answering these questions is optional.	General mapping/correlation to determine if there are demographic trends
1. How many years have you worked within the IT industry? • Less than 2 years • 2–5 years • 6–10 years • 11–15 years • 16–20 years • 21+ years	Should time in job or time in industry be a factor to consider?
2. What is your current role within IT? • Project Manager • Business Analyst • Quality • Infrastructure (IS) • Developer • Architect (Bus or Tech) • Manager/Team Lead/Director • Senior leader / Executive • Other	Does the perception or value of self-awareness depend on the role being performed within IT?
3. What is your gender? • Male • Female	Do males or females value self-awareness more?
4. What is the highest level of education completed? • High School • Trade School • Undergraduate Degree • Masters • Doctorate	Is there a correlation with education level?

Question	Correlation
SKILL SETS WITHIN IT The next set of questions focus on skill set development and usage within the information technology industry. The intent of these questions is to understand what skills you feel are critical within IT.	
5. Which types of training have you undergone within the last 5 years? Please select all that apply: • Communication • Relationship Management • Technical course (i.e., Java, CISCO, Oracle, PMP) • Business industry course • Degree program (i.e., BS, MBA) • Leadership development • 360 feedback • Style profiling (i.e., Myers-Briggs, DiSC, Strength Finder)	Where have they spent their development effort? Will they select 360 feedback or style profiling which could be an indicator of wanting to develop self-awareness? What if they select leadership development? It could be an indicator that they are willing to work on self-awareness. If they do select those items, a deeper dive is needed in interviews.
6. Please rate the following skill sets in terms of importance to your success within IT *(1=Least Important, 2=Not Important, 3=Important, 4=Very Important)* • Oral and Written Communication – Ability to clearly articulate a message so that the receiver understands the intended message.	Where do the points lie – which skill sets? Hypothesis: 6d and 6e will be among the lowest scores. How do these scores vary by demographic? Use interview to drill down on demographic variances if there are any.
• Technical Ability – Possessing the necessary systems/technical knowledge and application for the specified job.	
• Leadership – Ability to guide individuals (with or without direct authority) to a common goal	
• Self-Awareness – Awareness of our abilities and their effect on others, the environments, and ourselves.	Looking to see where this category is ranked compared with the others

Question	Correlation
• Emotional Intelligence – Ability to recognize and manage your own emotions appropriately based on the situation and environment.	Looking to see where this category is ranked compared with the others
• Organizational Skills – Systematic approach to managing time and tasks.	
• Business Knowledge – Understanding of company's business as it relates to your position	
• Innovation – Demonstrates the ability to create new ideas or methods	
• Analytic Capabilities – Developing new insights and understanding based on data and trends.	
• Problem Solving – Finding solutions to overcome obstacles.	
7. Please rate the same items again in terms of how well you think you perform these skill sets *(1=Never perform, 2=Do not perform well, 3=Good but need improvement, 4=Very well)* a) Oral and Written Communication – Ability to clearly articulate a message so that the receiver understands the intended message.	Where do the points lie – which skill sets? How do these scores vary from 6a-j? If higher does that mean they value the skill set but don't need it or that they have it but don't value it in their work? What is their self-awareness in these skill sets? Use interviews to get further insight in the comparison of scores from 6 and 7.
b) Technical Ability – Possessing the necessary systems/technical knowledge and application for the specified job.	
c) Leadership – Ability to guide individuals (with or without direct authority) to a common goal	
d) Self-Awareness – Awareness of our abilities and their effect on others, the environments, and ourselves.	Looking to see where this category is ranked compared with the others

Question	Correlation
e) Emotional Intelligence – Ability to recognize and manage your own emotions appropriately based on the situation and environment.	Looking to see where this category is ranked compared with the others
f) Organizational Skills – Systematic approach to managing time and tasks.	
g) Business Knowledge – Understanding of company's business as it relates to your position	
h) Innovation – Demonstrates the ability to create new ideas or methods	
i) Analytic Capabilities – Developing new insights and understanding based on data and trends.	
j) Problem Solving – Finding solutions to overcome obstacles.	
8. Please rate each of the following from strongly disagree to strongly agree based on your viewpoint. *(1=Strongly Disagree, 2=Disagree, 3=Agree, 4=Strongly Agree)*	Where do the points lie – which viewpoints? Hypothesis: 7b, 7e, 7h, and 7i would score 3 or 4. 7f and 7j would score lower and probably be the lowest scores overall. If so this would indicate that IT professionals recognize self-awareness as a good skill set but might not spend the necessary time developing it if competing with other items. This would indicate lower value. Validate through interviews. Do any of these vary by demographic?
a) I believe that all IT professionals need to have strong technical skills	
b) I would be open to learn how to consciously think about the ways my actions and emotions affect my behavior	Looking to see where this category is ranked compared with the others

Question	Correlation
c) Maintaining and establishing good Business – IT relationships is essential in my role	
d) I am recognized and rewarded for my performance based on my technical ability	
e) I would allocate the necessary time to develop more skills in the area of understanding my leadership style	Self-Awareness category - Looking to see where this category is ranked compared with the others
f) If I could only invest in one area, I would invest in technical skill sets over "softer" skills (i.e. communication).	Self-Awareness category - Looking to see where this category is ranked compared with the others
g) As long as leaders in IT organizations have a strong technical background, they can be less skilled at "softer" skills (i.e. relationship management, communications)	
h) If I had more self-awareness in terms of my effects on others, I would be more successful	Self-Awareness category - Looking to see where this category is ranked compared with the others
i) Without emotional stability it is difficult to gain trust	Self-Awareness category - Looking to see where this category is ranked compared with the others
j) If I could only take one course this year, I would be willing to attend a course titled "Increasing Your Self-Awareness"	Self-Awareness category - Looking to see where this category is ranked compared with the others
FOLLOW UP 9. Would you be willing to participate in a focus group to help gain further clarity on survey responses? • No • Yes *(If "Yes," ask for them to enter their name and email address)*	

Question	Correlation
10. Please feel free to add any additional comments or suggestions as it relates to the questions in this survey	Might give further insight to help with interview sessions.

Appendix I

Interview Questions

DEMOGRAPHICS

1. Are you a manager or above or below a manager?
2. What is the highest level of education you completed?

CLARIFYING QUESTIONS ON SELF-AWARENESS

3. What is your definition of the term self-awareness?
4. When you hear the term self-awareness, what are the first thoughts/emotions you have in relationship to the term?
5. Do you view self-awareness as a skill set critical to your success? Why specifically? How do you think you came to this viewpoint?
6. Do you think you have developed a strong level of self-awareness? If so, How did you come to do this?

If they responded positively to self-awareness being a skill set critical to their success ask:

7. What is your willingness to invest in understanding your leadership style? NOTE: Find material on how understanding leadership style = success in IT.
8. Do you also view emotional intelligence to be of equal importance to your success?
9. Do you think you are better in communications, emotional intelligence, leadership, and business knowledge because you view self-awareness as a skill set critical to your success? How so? Why not?
10. Do you find that your investment in technical training is the same, less than, or more than what it was 5 years ago? Why is that?
11. Why don't you think all IT resources view self-awareness as a skill set critical to their success? Does role, education level, or years in the industry matter?
12. Most survey respondents took a style profiling and leadership development program within the last 5 years. Why do you think these two types of programs were the highest selected?

WRAP UP

13. Open format question based on interview responses and other patterns identified from online survey results.
14. Are there any other questions or comments you have or would like to share?

Appendix J

Correlation Table – Viewpoints with Importance of Self-Awareness Skill Set

Spearman's rho		Skill important to success: S-A
Skill important to success: Self-awareness	Correlation Coefficient	1.000
	Sig. (2-tailed)	
	N	164
IT Needs to have Technical Skills	Correlation Coefficient	-.072
	Sig. (2-tailed)	.357
	N	164
Learning about Emotions or Behavior	Correlation Coefficient	.202**
	Sig. (2-tailed)	.009
	N	164
Relationships Essential	Correlation Coefficient	.242**
	Sig. (2-tailed)	.002
	N	164
Recognized/Rewarded	Correlation Coefficient	.002
	Sig. (2-tailed)	.985
	N	164
More time on Leadership Style	Correlation Coefficient	.273**
	Sig. (2-tailed)	.000
	N	164
Invest in Technical over Soft Skills	Correlation Coefficient	-.169*
	Sig. (2-tailed)	.030
	N	164
Technical background primary	Correlation Coefficient	-.137
	Sig. (2-tailed)	.080
	N	164
More Self-awareness more successful	Correlation Coefficient	.028
	Sig. (2-tailed)	.724
	N	164
Trust requires emotional stability	Correlation Coefficient	.240**
	Sig. (2-tailed)	.002
	N	164
One course: Self-awareness	Correlation Coefficient	.170*
	Sig. (2-tailed)	.030
	N	164

Appendix K

Correlation Table – Demographics with Primary Outcomes

Spearman's rho		Years in Industry	Role in IT	Gender	Education Level	Skill important to success: S-A	Skill important to success: EI	More S-A more successful	Trust requires emo stability	One course: S-A
Years in Industry	Corr. Coef.	1.000	.228**	-.074	.028	.031	.061	.017	-.028	.073
	Sig. (2-tailed)		.003	.351	.726	.690	.434	.825	.718	.356
	N	164	164	163	164	164	164	164	164	164
Role in IT	Corr. Coef.	.228**	1.000	-.004	.096	.112	.231**	.079	-.146	.010
	Sig. (2-tailed)	.003		.964	.220	.152	.003	.315	.062	.901
	N	164	164	163	164	164	164	164	164	164
Gender	Corr. Coef.	-.074	-.004	1.000	.065	.049	.047	-.022	-.010	.076
	Sig. (2-tailed)	.351	.964		.409	.537	.552	.776	.896	.332
	N	163	163	163	163	163	163	163	163	163
Education Level	Corr. Coef.	.028	.096	.065	1.000	-.061	-.084	-.026	-.246**	-.026
	Sig. (2-tailed)	.726	.220	.409		.441	.284	.746	.001	.740
	N	164	164	163	164	164	164	164	164	164
Skill important to success: S-A	Corr. Coef.	.031	.112	.049	-.061	1.000	.581**	.028	.240**	.170*
	Sig. (2-tailed)	.690	.152	.537	.441		.000	.724	.002	.030
	N	164	164	163	164	164	164	164	164	164
Skill important to success: EI	Corr. Coef.	.061	.231**	.047	-.084	.581**	1.000	.164*	.238**	.220**
	Sig. (2-tailed)	.434	.003	.552	.284	.000		.036	.002	.005
	N	164	164	163	164	164	164	164	164	164
More S-A more success-ful	Corr. Coef.	.017	.079	-.022	-.026	.028	.164*	1.000	.187*	.443**
	Sig. (2-tailed)	.825	.315	.776	.746	.724	.036		.017	.000
	N	164	164	163	164	164	164	164	164	164
Trust requires emo stability	Corr. Coef.	-.028	-.146	-.010	-.246**	.240**	.238**	.187*	1.000	.219**
	Sig. (2-tailed)	.718	.062	.896	.001	.002	.002	.017		.005
	N	164	164	163	164	164	164	164	164	164
One course: S-A	Corr. Coef.	.073	.010	.076	-.026	.170*	.220**	.443**	.219**	1.000
	Sig. (2-tailed)	.356	.901	.332	.740	.030	.005	.000	.005	
	N	164	164	163	164	164	164	164	164	164

Note. Corr. Coef. = Correlation coefficient; EI = Emotional Intelligence; emo = Emotional; IT = Information Technology; S-A = Self-Awareness.

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Appendix L

Correlation Table – Self-Rated Performance of Skills with Importance of Self-Awareness

Spearman's rho		Skill important to success: S-A
Skill important to success: Self-Awareness	Correlation Coefficient	1.000
	Sig. (2-tailed)	
	N	164
Performance: Communication	Correlation Coefficient	.200*
	Sig. (2-tailed)	.010
	N	164
Performance: Technical	Correlation Coefficient	-.027
	Sig. (2-tailed)	.735
	N	164
Performance: Leadership	Correlation Coefficient	.189*
	Sig. (2-tailed)	.015
	N	164
Performance: Self-Awareness	Correlation Coefficient	.378**
	Sig. (2-tailed)	.000
	N	164
Performance: Emotional Intelligence	Correlation Coefficient	.200*
	Sig. (2-tailed)	.010
	N	164
Performance: Organizational Skills	Correlation Coefficient	.126
	Sig. (2-tailed)	.109
	N	164
Performance: Business Knowledge	Correlation Coefficient	.235**
	Sig. (2-tailed)	.002
	N	164
Performance: Innovation	Correlation Coefficient	.143
	Sig. (2-tailed)	.068
	N	164
Performance: Analytical Abilities	Correlation Coefficient	.066
	Sig. (2-tailed)	.404
	N	164
Performance: Problem Solving	Correlation Coefficient	.138
	Sig. (2-tailed)	.077
	N	164

Appendix M

Correlation Table – Training with Skill Set Importance to Success

Spearman's rho		Skill important to success:									
Training within 5 years		Comm	Tech	Ldr	S-A	EI	Org	Bus	Inn	Anly	PS
Comm	Corr. Coef.	.173*	-.045	.129	.038	.165*	-.010	.058	-.070	.022	-.073
	Sig. (2-tailed)	.026	.566	.099	.629	.035	.899	.464	.371	.780	.356
	N	164	164	164	164	164	164	164	164	164	164
Rel Mgmt	Corr. Coef.	.043	-.008	.094	-.025	.021	-.061	.118	-.057	-.037	-.142
	Sig. (2-tailed)	.582	.914	.229	.746	.789	.441	.132	.465	.642	.070
	N	164	164	164	164	164	164	164	164	164	164
Tech	Corr. Coef.	-.046	.314**	-.141	-.137	-.069	.160*	-.067	.092	.080	.138
	Sig. (2-tailed)	.560	.000	.072	.080	.381	.041	.392	.242	.307	.079
	N	164	164	164	164	164	164	164	164	164	164
Bus	Corr. Coef.	.085	.086	.083	.041	.164*	.115	.223**	.155*	.189*	.017
	Sig. (2-tailed)	.280	.276	.291	.606	.036	.142	.004	.047	.015	.831
	N	164	164	164	164	164	164	164	164	164	164
Degree	Corr. Coef.	-.064	-.059	-.058	-.026	-.174*	-.001	-.077	-.052	-.048	-.168*
	Sig. (2-tailed)	.413	.452	.459	.740	.026	.994	.329	.510	.543	.032
	N	164	164	164	164	164	164	164	164	164	164
LD	Corr. Coef.	.010	-.147	.202**	.038	.051	-.089	-.020	.101	-.045	-.170*
	Sig. (2-tailed)	.896	.061	.009	.628	.518	.256	.795	.197	.568	.029
	N	164	164	164	164	164	164	164	164	164	164
360	Corr. Coef.	.246**	-.186*	.268**	.121	.192*	-.010	.153	.017	-.024	-.008
	Sig. (2-tailed)	.001	.017	.001	.124	.014	.898	.051	.833	.758	.921
	N	164	164	164	164	164	164	164	164	164	164
Style	Corr. Coef.	.265**	-.119	.236**	.109	.238**	-.095	.077	.036	-.024	.038
	Sig. (2-tailed)	.001	.129	.002	.166	.002	.225	.327	.651	.759	.628
	N	164	164	164	164	164	164	164	164	164	164
None	Corr. Coef.	-.169*	.071	-.081	-.061	-.169*	-.015	.002	-.069	.050	.006
	Sig. (2-tailed)	.031	.367	.304	.436	.031	.853	.978	.379	.521	.939
	N	164	164	164	164	164	164	164	164	164	164

Note. 360 = 360-Degree Feedback; Anly = Analytic Capabilities; Bus = Business Knowledge; Corr. Coef. = Correlation coefficient; Comm = Communication; EI = Emotional Intelligence; Inn = Innovation; LD = Leadership Development; Ldr = Leadership; Org = Organizational Skills; PS = Problem Solving; Rel Mgmt = Relationship Management; S-A = Self-Awareness; Tech = Technology.

Appendix N

Correlation Table – Training with Viewpoints

Spearman's rho / Training within 5 years		IT Needs to have Tech Skills	Learning about Emo/Beh	Relation-ships Essential	Recog-nized/ Rewarded	More time on Ldr Style	Invest in Tech over Soft Skills	Tech back-ground primary	More S-A more success-ful	Trust requires emo stability	One course: S-A
Comm	Corr. Coef.	-.009	.257**	.092	-.041	.087	-.193*	-.059	.239**	.021	.100
	Sig. (2-tailed)	.913	.001	.242	.606	.270	.013	.456	.002	.794	.201
	N	164	164	164	164	164	164	164	164	164	164
Rel Mgmt	Corr. Coef.	.032	.134	-.086	-.051	.110	.037	.020	.102	-.126	-.026
	Sig. (2-tailed)	.684	.086	.274	.520	.161	.637	.795	.193	.107	.737
	N	164	164	164	164	164	164	164	164	164	164
Tech	Corr. Coef.	.053	-.007	-.109	.142	-.028	.159*	.017	.014	.025	-.060
	Sig. (2-tailed)	.504	.927	.163	.069	.724	.042	.829	.856	.751	.449
	N	164	164	164	164	164	164	164	164	164	164
Bus	Corr. Coef.	.010	.063	.062	-.002	.037	.095	-.036	.032	-.012	-.032
	Sig. (2-tailed)	.902	.424	.430	.977	.634	.227	.651	.687	.874	.683
	N	164	164	164	164	164	164	164	164	164	164
Degree	Corr. Coef.	-.031	-.032	-.076	.082	-.120	.018	.063	-.064	-.111	.005
	Sig. (2-tailed)	.696	.685	.334	.294	.127	.821	.425	.412	.157	.947
	N	164	164	164	164	164	164	164	164	164	164
LD	Corr. Coef.	-.070	.074	.104	.022	.159*	-.270**	-.083	.153	.054	.148
	Sig. (2-tailed)	.376	.349	.184	.783	.041	.000	.292	.050	.495	.058
	N	164	164	164	164	164	164	164	164	164	164
360	Corr. Coef.	-.113	.050	.145	-.160*	.010	-.211**	-.183*	.086	-.056	.064
	Sig. (2-tailed)	.151	.521	.063	.041	.895	.007	.019	.273	.474	.419
	N	164	164	164	164	164	164	164	164	164	164
Style	Corr. Coef.	-.227**	.126	.181*	-.053	.073	-.202**	-.104	.157*	.001	.132
	Sig. (2-tailed)	.003	.108	.020	.503	.350	.010	.184	.044	.991	.092
	N	164	164	164	164	164	164	164	164	164	164
None	Corr. Coef.	.009	-.127	-.229**	.019	-.053	.048	-.030	-.040	.064	-.046
	Sig. (2-tailed)	.906	.106	.003	.808	.498	.539	.702	.614	.414	.561
	N	164	164	164	164	164	164	164	164	164	164

Note. 360 = 360-Degree Feedback; Bus = Business Knowledge; Corr. Coef. = Correlation coefficient; Comm = Communication; Emo = Emotions; Emo/Beh = Emotions/Behaviors; IT = Information Technology; LD = Leadership Development; Ldr = Leadership; Rel Mgmt = Relationship Management; S-A = Self-Awareness; Tech = Technology.

Appendix O

Full Coding Index of Interview Data

Correlated Interview Question(s)	Meta	Sub	Description
15. What is your definition of the term self-awareness? 16. When you hear the term self-awareness, what are the first thoughts/ emotions you have in relationship to the term?	**Concept**	**Self-awareness as an overarching concept**	
		DEFSA	Definition of self-awareness
		FSTIMP	First impressions of the term 'self-awareness'
		VALIMP	The importance and value of self-awareness, including results
		LEVEL	Current level of self-awareness
		CHARAC	Characteristics of someone who is self-aware
		OVRUSE	Overuse of the term 'self-awareness'
		CRISUC	Self-awareness is seen as critical to one's success
		LACKOF	Implications of not having self-awareness
Inductive Meta Category	**Relationship**	**Self-awareness and the relationship to others**	
		BLDREL	Self-awareness as a vehicle to building relationships
		INTER	Interaction with people
		IMPTEM	The importance of self-awareness for a team
		IMPOTH	The impact self-awareness has on others
		AWAOTH	Self-awareness as it relates to being aware of others
12. Why don't you think all IT resources view self-awareness as a skill set critical to their success? Does role, education level, or years in the industry matter?	**Category**	**How self-awareness and self-awareness perceptions can be broken down and categorized**	
		SAIND	Self-awareness as being individualized
		ROLE	Self-awareness broken down by role/job/level
		ORG	Self-awareness categorized by the company or organization
		IT	Self-awareness categorized by whether in IT or not

Correlated Interview Question(s)	Meta	Sub	Description
7. Do you view self-awareness as a skill set critical to your success? Why specifically? How do you think you came to this viewpoint? 8. Do you think you have developed a strong level of self-awareness? If so, How did you come to do this?	**Influence**	**Influence on how people's viewpoint of self-awareness evolved**	
		SADNA	By personality, "DNA," how someone is 'wired'
		FAM	Through family members/one's family history
		MENT	Through mentorship
		OP	Through working with other people
		FB	Through feedback
		CULT	Through the culture (organizational or national)
		EXPER	Through experience
		TRNG	Through training
9. Do you also view emotional intelligence to be of equal importance to your success? 10. Do you think you are better in communications, emotional intelligence, leadership, and business knowledge because you view self-awareness as a skill set critical to your success? How so? Why not?	**Skills**	**Relationship of different skills and self-awareness**	
		BK	Business knowledge
		COMM	Communications
		LDRSHP	Leadership or leadership style
		EI	Emotional intelligence

Correlated Interview Question(s)	Meta	Sub	Description
8. What is your willingness to invest in understanding your leadership style? 11. Do you find that your investment in technical training is the same, less than, or more than what it was 5 years ago? Why is that? 13. Most survey respondents took a style profiling and leadership development program within the last 5 years. Why do you think these two types of programs were the highest selected?	**Training**	**Reasons for why people have had or not had certain types of training; context of training**	
		ENCTT	Encouraged to take technical training
		ENCSAT	Encouraged to take self-awareness training
		BYLEV	Difference of training based on role or level
		PRAC	Practicality
		CHOICE	If they had a choice, what training they would choose
		SEEVAL	Seeing the value of certain types of training
		POPPRO	Popularity of style/leadership profiling
		MORLES	More or less training in last five years
11. Do you find that your investment in technical training is the same, less than, or more than what it was 5 years ago? Why is that?	**Priority**	**The prioritization of technical skills vs. self-awareness**	
		TECTOP	Technical skills are prioritized
		SATOP	Self-awareness is prioritized

Correlated Interview Question(s)	Meta	Sub	Description
7. Do you view self-awareness as a skill set critical to your success? Why specifically? How do you think you came to this viewpoint? 8. Do you think you have developed a strong level of self-awareness? If so, How did you come to do this?	**Expansion**	**Whether and how to expand one's self-awareness**	
		INVEST	Willingness to invest in learning more/becoming more self-aware
		ETRAIN	Through training
		FBEXPA	Through feedback
		WRKOTH	Through working with others
		PERS	Through personal work (e.g., yoga, reflection)
Inductive Category	**Orientation**	**Self-awareness as a unique orientation**	
		LOOKIN	Looking in to look out