

How the self-leadership factors enhance individual goal achievement: the case of company

Thesis submitted in accordance with the requirements of the
University of Liverpool, UK, for the degree of

Doctor of Business Administration

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December 5, 2019

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Author's declaration

This thesis is the result of the sole author's original research, which was completed under the thesis supervision of Dr. Lorenzo Lucianetti from the University of Liverpool (UoL), UK. It has been composed by the author and has not been previously submitted for examination which has led to the award of a degree.

Abstract

Topic: How the self-leadership factors enhance individual goal achievement: the case of company

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Introduction: In a rapidly changing business world, individuals in all layers of leadership have limitations to deal with the realities to meet diverse demands of stakeholders. Self-leadership (S-L) becomes an important skill set and S-L to deal with the challenges in business processes has generated a great deal of discussion.

Objective: The study aims to generate actionable knowledge by developing S-L instruments such as S-L management checklist, S-L pyramid and S-L self-assessment as a part of promoting of individual's S-L capabilities and generating S-L culture development strategy. The key objectives of the research were to identify the five key S-L factors for individual goal achievement, investigate the significant correlations between S-L factors and individual goal achievement and reflect on generating actionable S-L instruments to develop S-L culture and S-L implication to the ABC (pseudonym of the research context) under given limitations.

Method: The research was conducted by adopting the mixed methods of quantitative and quantitative methods in sequence after enriched literature reviews. The quantitative method utilized online survey methodology for data collection and analyses from a large sample in Canada while qualitative method employed cross-participants' interviews and discussions in the ABC.

Findings: The findings of the study out of 370 participants drew on the fact that the five S-L factors were positively correlated with individual goal achievement. The value creation factor, goal setting factor, skills factor, teamwork factor, and characteristics factor are significant in descending order. Most importantly the value creation factor is the most influential factor, while teamwork and characteristics factor are less significant factors for individual goal achievement. The results of empirical tests reached with evidence that the S-L pyramid and S-L self-assessment instruments enhanced individual's S-L capabilities, impacted on the effect of S-L culture development as well as on expanding markets, business process and financial reports. The findings

of S-L culture development strategy benefits the ABC countering realities on a macro scale in development of harmonized S-L culture.

Limitations: The study posits S-L propositions applied to the ABC, impacts findings limited to Canada. The generalization of research results of the quantitative on-line survey which was dependent upon the participants' honesty and the results of the qualitative study was relied on cross-participants who made contribution to the qualitative findings with a small group of participants, thus relatively limited in implication.

Implications: Practical implication of the study shows that individuals must acknowledge their own S-L, engage in reflection on findings and adopt S-L factors focused on value creation factor in encountering realities to meet the demands from the stakeholders. Moreover, the results of the research produced innovative frameworks of S-L self-assessment and S-L culture development strategy in practice.

Recommendations: Recommendations for future research addressed future research under different business cultures, business philosophies and business strategies in research settings.

Conclusion: The study may make contributions to originality in theoretical contributions to the research community by filling the gaps and by finding facts that provide academic S-L concepts and insights of correlations between S-L factors and individual goal achievement. It also contributes to originality in making practical contributions by generating actionable S-L instruments to self-assess S-L scale and to develop S-L culture.

Dedication

This thesis is dedicated to my late parents Kim, Chong-Jin and Cheon, In-Soon who raised and taught me through all their efforts even in their poor and difficulty situations. I achieved the doctorate degree at the age of 73rd when completed in memory of my late parents.

Acknowledgments

The thesis was possible with cooperation from the research context ABC in Canada. The CEO, Mr. Greg Lewis, global controller, Mr. Armand Roch, colleagues across Canada and friends of the University of Liverpool supported the thesis project with all their assistance and participation.

I wish to express profound gratitude to Dr. Pascale Hardy, DBA director of University of Liverpool, UK, my thesis supervisor (Nov. 2014-July 2016) and Dr. Lorenzo Lucianetti (Sept. 2017-Nov. 2019) who gave me the positive feedback, guidance and direction to pursue this thesis and provided me a key of the thesis with persistent supports to accomplish it. Their leadership, deep academic knowledge and understanding my situation as a retiree, were tremendous in enhancing my academic knowledge as well as to strengthen the thesis project to achieve my academic goal. I would like to express my deepest appreciation to Dr. Paul Ellwood who gave me constructive feedback and pointed me in the right research direction, to Dr. Caroline Ramsey and Dr. Andrew Robson, examiners who gave me an opportunity to upgrade the thesis.

The voluntary mentor and tutor of Mr. KEN SAKAMOTO for over several years greatly enabled me to complete the thesis by his critical reviews and correction of English syntax. The share of Dr. Ken Mensah's experiences also helped me to build confidence in completing the thesis. The colleagues and reviewers including Dr. Manoj Ravindran, Dr. JOSE HELANO MATOS NOGUEIRA, Dr. Ravi Tahilramani, Dr. Rebecca Sunmi Kim, Dr. Hui Gek Ang, Dr. Cicero Ferreira, Dr. Mahmoud Tadjallimehr, Dr. Steve Jeffs who helped me on SPSS statistical data analyses, and voluntary proofreader, Mrs. Aarathi Shenoy, they deserve great thanks for their supports and contributions to my doctoral thesis.

I would like to thank my family members in South Korea, Australia and Canada. I specially thank my wife, Seo, Myong-Yon Lucy for her support, caring for my health and sacrifice throughout the doctoral program. My great sons, Peter and Rev. Paul, thanks for their prayers and supports.

Above all, I stress that all have made through the message of the energy, encouragement, fulfillment, grace and faith through the holy divine ones.

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CHAPTER 1 INTRODUCTION

1.1 Introduction

The significance of self-leadership (S-L) has grown in business processes as businesses are rapidly changing. ABC needs to respond to the changing business context as S-L is self-oriented in achieving individual goals in a cost-effective way with a sense of who the individual is, what to achieve and how to achieve for all levels of individuals in ABC. According to Pihl-Thingvad's (2014) study, S-L is the key success factor when facing continuous challenges in business in an organization as it ensures its continued success. Facing the dynamic rapid-changing challenges of the business world, individuals in ABC must have a sense of responsibility to deal with the diverse realities utilizing their own S-L capabilities. The quest for S-L of individuals in ABC is becoming more significant in the dynamic world to meet the high demands from the stakeholders. S-L is also critical in the pursuit of individual goals and to pursue multiple roles due to the merging of functions and departments.

As Pearce & Manz (2011) suggested S-L is best "leveraged for greater effectiveness" (p. 130) by allowing the pursuit of individual goals: S-L and the individual's commitment are positively related as in the S-L theories of Ross (2014). In Nelson (2000)'s reviews, Manz & Neck (2004) defined S-L as "the process of influencing" (p. 139); starting that individuals were first influenced by individual goals and then they could influence the business contexts. That is, individuals deploy S-L to achieve their own goal in the process aligned to organizational goals. ABC thus faces great challenges to meet the demands from the stakeholders by utilization of the individual's S-L. Moreover, individuals have multiple roles due to changing technology and the merging of departments and functions to form a single entity. What convinced the researcher was the need for undertaking this research as it would benefit both individuals and ABC in facing the challenges of increasing demands of business which are required a new approach. The questions concerned were how S-L factors enhance individual goal achievement (IGA) and what individuals can do to facilitate their S-L to pursue their goals. The research would suggest to individuals to keep enhancing, growing and being independent individuals in pursuing their goals by identifying, exploring and applying all the elements of S-L factors as true leadership begins within (Jackson, 2005).

Given the rising significance of S-L (Furtner, Sachse & Exenberger, 2012) in ABC, it is necessary to address correlations between core S-L factors and IGA focusing on the impacts on IGA. Personal characteristics (Lee, Sheldon & Turban, 2003); skills competency (Curren & Marques-Quinteiro, 2009) and teamwork (Hauschildt & Konradt, 2012; Stewart & Barrick, 2000); value creation (Wan-Gould, 2011) all of which need consistent alignment to targeted goals. The S-L factors focusing on IGA leave gaps with relatively less attention to ABC. This research aims to increase the contribution to the body of knowledge to enhance process related S-L (Margherita, 2014) by bringing out S-L in everyone (Raelin, 2003) by exploring new angles of IGA. This research suggests that in practice, individuals devote

themselves to S-L as a “self-leader type” (Ross, 2014, p. 312) to improve IGA by moving toward positive goal attainment. The results of the research recommend that the individual’s S-L for IGA will benefit ABC’s goals achievement (Pihl-Thingvad, 2014).

1.2 Research context settings and research background

ABC which the researcher studies, is a utility manufacturing company in Canada. It is the leading organization in the field as a supplier of choice and customers are worldwide. The leaders are often on business trips to meet existing and potential customers and vendors. The Management constantly demands efficient management techniques for profitable business and customers demand high quality service. In terms of national setting, the study focuses on Canada, in which the ABC is located, and which has its own unique characteristics. Canada is highly dependent on the USA and on other offshore countries for trade. Canada has multiple cultural ethnic groups with open opportunities for individual growth under democratic management and with a highly individualistic culture (Xiao & Ma, 2015) to set and achieve their goals. On the other hand, the study avoids any analysis and comparison of gender differences, age groups and levels of education to meet the code of conduct of ABC and to respect individual’s dignity and to not discriminate due to the individual’s appearance, age and education.

This S-L study found that correlations between S-L factors and IGA were essential for ABC to provide actionable knowledge. The explanation of issues of S-L by individuals in ABC was necessary to address the problem because it not only empowers individuals and enables them to grow in performing successfully, but also promotes dealing with the realities. The history behind the S-L problem is approached from the following perspectives:

From a practical perspective, individuals have multiple compounded roles due to merging of functions and centralizing of functions with more responsibilities and reduced manpower to meet the Management’s high demands and due to the necessity of keeping a lead in global competitive markets and to meet customers’ needs. The S-L framework for IGA therefore is becoming significant for all layers in ABC. For instance, individuals need to set individual goals throughout the processes utilizing their positive traits, constructive and productive S-L behaviour, while enhancing their skills, aligning the individual goal to team collaboration and to ABC goals to create values in turn for achieving individual goals.

From the structural organization perspective, the premise is that the ABC structure is merging one department into another and centralizing functions with place for fewer individuals. For instance, the design and engineering departments are merged; Information Technology (IT) function and human resource (HR) department have been centralized in the Management. Business divisions across the world are globalized; individuals are often away from the office for business, visiting sub-divisions offshore, customers here and customers across the world. In addition, this ABC looks for investment on mergers or acquisitions to expand to an international dimension. Moreover, individuals now have multiple roles and

responsibilities including additional functional duties due to merging of departments and globalization of ABC. All those structural changes in ABC necessitate more individual responsibilities with fewer people. S-L is becoming important to individuals' goal fulfillments.

From the S-L development perspective, S-L includes identification of S-L assessment, growth opportunity and access to factors and variables of S-L. ABC has not studied S-L practical instruments and S-L culture development which can help to enhance individual's S-L, as S-L is relatively new in ABC. There are few chances to develop S-L instruments such as the S-L self-assessment to promote S-L capabilities and to develop S-L culture for long term individual's S-L enhancement. No one has been interested in what the significant S-L factors are for IGA.

Figure 1.1 illustrates the background of the study, the challenges faced by ABC and S-L factors including individual characteristics, skills, teamwork, value creation and goal setting factors in the business processes. How do the findings of the study make implications for ABC?

Figure 1.1 Background of the study



From the impetus perspective, the researcher pursues the doctorate DBA program with the S-L research topic. Below is the justification of why this study is important to the researcher, the organization and academic.

- To contribute to the research context which gave the researcher opportunities to serve the company for 30 years by generating innovative, creative and original actionable S-L knowledge to create positive changes in ABC

- To fill the gap in the S-L academic field
- In memory of researcher's parents who had supported researcher's education in spite of their difficulties.

1.3 Problem statement

ABC becomes more dynamic through growth and restructuring. As joint ventures and sub-divisions are located across multiple continents, business leaders are frequently on business trips to meet stakeholders' demands. While leaders were away, subordinates were easily distracted from work, generating unproductive activities. Individual's S-L is becoming more significant as it may help to make individuals more productive while pursuing the individual's goals. Identifying sets of diverse S-L factors and their significance are becoming more important in ABC as Kerr et al. (2006) found; they also found that competency of S-L impacted its effectiveness. Enhancement of S-L capabilities becomes a critical problem in achieving individual goals. Professional leadership training places more emphasis on leaders with a leadership style of a more hierarchical leader-centred structure and less an individual's S-L driven S-L culture in ABC. In the study, the key problems include:

First, the lack of daily S-L practice in the business process of IGA that generates conflicts in business values. The problem can be affected by the individuals' characteristics such as integrity, virtue and self-motivation or self-learning. It can be an issue of professional interaction ability, a sense of honesty in a trust relationship, business ethics (Badaracco, 2006) or S-L culture. Moreover, this problem can be related to the development of professionalism in value creation, with S-L in collaboration with teamwork (Hauschildt & Konradt, 2012). As Churchman (1967) brought out, this problem comes from the difficulties to recognize a generic problem faced by all businesses in the competitive world.

Second, ABC does not have any S-L instrument to identify individual's S-L, to measure the strength of S-L and to promote individual's S-L capability development.

Third, neither has ABC an S-L culture to encounter organizational challenges. Furthermore, neither a specific S-L study nor investigation has been adopted or applied in business processes in ABC. On conducting the study, the researcher develops a primary form of logical questions of goals and objectives in the following section which enable the researcher to develop further research to make propositions of actionable knowledge of S-L instruments to develop S-L culture in ABC.

1.4 Research goals and objectives

In a fast changing globalized business environment, Furtner, Sachse & Exenberger (2012) address the fact that S-L is increasingly demanded a company as it influences a person's IGA. Thus, S-L factors and its variables have become an essential engine for

individuals in achievement of goals, for developing of S-L instruments and S-L oriented culture and S-L strategy in business. S-L is becoming more important not only at the micro level but also for the leader of ABC. This research establishes goals to make a significant contribution to ABC such as the following.

1.4.1 Goals of the study

The study delivers propositions of actionable knowledge on how S-L factors enhance IGA in ABC.

1.4.2 Objectives and scope of the study

The objective of the study is to explore S-L factors in business and discover how S-L factors enhance IGA. For achieving the research goal, this study targets and fulfills the following strategic research objectives:

Objective 1: To identify the five key S-L factors and their variables which are involved in IGA in business processes through literature reviews.

Objective 2: To investigate the correlations between S-L factors and IGA, an S-L factor and its variables by adopting quantitative data collection and exploratory analysis design.

Objective 3: To determine the most significant S-L factor and the least significant S-L factor impacting on IGA in order to reflect on evaluations of the quantitative findings.

Objective 4: To generate actionable knowledge of S-L instruments in practice based on the result of the study.

1.5 Research questions

The nature of the business is that individuals have a limitation in the pursuit of their goal achievement while facing multiple challenges. The research questions (RQ1 through RQ4) focus on finding the correlations between S-L factors, variables and IGA. The path of this research is toward guiding and supporting specific research questions related to the thesis topic. It aims at approaching different perspectives from various stakeholders with the intention to discover significant S-L factors which will provide information for development of actionable knowledge in ABC. The following research questions laid down by Onwuegbuzie & Leech (2005) are at the center of this quantitative study which aims to provide levels of significant S-L factors and their correlations in achieving individual goals. The findings of the quantitative study are utilized in generating actionable S-L knowledge and are linked to an evaluation (Shah & Corley, 2006) how S-L factors enhance IGA.

RQ1: What is the correlation between S-L factors and IGA?

RQ2: What is the most significant S-L factor impacting on IGA?

RQ3: What is the correlation between S-L culture and IGA?

RQ4: What is the correlation between S-L culture and S-L factors?

These above research questions illustrate how this research can provide S-L factors and how variables of each factor benefit from exploring the significant effect those S-L factors and variables have on IGA in ABC (Stewart, Courtright & Manz, 2011). It includes linear regression of the scattered data to calculate IGA for each S-L factor and the Pearson correlation coefficient statistics which support the correlations between S-L factors and IGA all of which bring out the significant benefits of the study.

1.6 Work experience of the researcher for the five S-L factors and awareness of growing

Since there were free trade agreements between Canada and the USA, Canada and other foreign countries, foreign investors have been interested in acquisition of Canadian businesses as Canada is near to the USA. The research context is one of a company owned by USA Management. For over 30 years the researcher's experience with ABC, the owners of ABC have been changed several times. The researcher acknowledged that some individuals who have been contributing to ABC regardless who was an owner. Kummerow & Kirby (2014) share S-L work experiences in growing S-L and describing major S-L factors in the ABC context from the perspectives of enhancing IGA. It describes key S-L factors with enhancing IGA in ABC. S-L factors may be divided into five general factors based on the researcher's work experiences:

Personal characteristic factor (cq-factor): ABC has grown due to business globalization strategies; however, the roles of individuals have become dynamic and most of the individuals including leaders have multiple roles. Certain individuals who had S-L, had self-motivation and were influenced in achieving an individual goals in a self-directed way while achieving individual goal by seeking available resources and motivating a sense of self-independence.

Skills factor (sq-factor): To achieve ABC's mission and to be the choice of customers, business practices and products require advanced skills and specialists. To meet those demands, individuals' skills need ongoing enhancement for efficient IGA. Individuals need strong motivation for improvement of skills and adaptation of new skills in achieving their goals.

Teamwork factor (tq-factor): Business required an intensive involvement of the various experts working in groups along the whole process of production, because most of the orders are custom jobs. However, individuals were so busy managing their own multiple roles after structural and functional merging. There was no deep understanding of teamwork's S-L capability. This research focuses on the correlation between a pertinent S-

L in teamwork which empowers individuals to achieve their own goals and endeavors to study that teamwork can positively enhance IGA.

Value creation factor (vq-factor): A challenge in ABC is maximizing value creation. However, individuals did not critically deal with value creation; rather they had considered that value creation was mostly a matter between leaders and shareholders although value creation is accumulated from the value created by all levels of individuals. There is no mechanism to encourage individuals to create value from micro to macro level in ABC. Determining a set of individual's value creation capabilities becomes important to build the value creation work environment and consequently to promote fulfilment of individual goals.

Goal setting factor (gq-factor): Customers across the world demand high quality products and on time delivery at a competitive price. In addition, increasing order capture rate, expanding market, reducing reworks, processing of efficient operations, producing a better financial report became significant to meet stakeholders' expectations. Functional or structural merging demand even more of the individual's goal attainment as individuals need to build confidence and strengthen ownership-centered attitudes for achieving their goals. Goal setting is an essential and growing element to complete an individual's goal achievement in an effective way by seeking appropriate information; communicating with relevant people.

The researcher's work experience thus points to the demanding and growing awareness of the S-L factors unique to ABC and suggests aiming at discovering how the S-L factors enhance IGA. Further, literature review work in chapter 2 will demonstrate achievement of the second task: showing that those S-L factors are defensible given what other researches have been done in current knowledge of the S-L factors in enhancing IGA.

1.7 Significance and benefits of the study

This research suggests redefining a new dimension of individual's S-L by creating originality of actionable knowledge S-L which will help to promote individual's S-L and provide long-term benefits of development of S-L culture. By implementing the proposed S-L actionable knowledge from this research, individuals may evaluate their own capabilities of S-L in pursuing their individual goals and building strong entrepreneurship (Houghton & Neck, 2002) to accomplish individual goals.

In the study of Furtner, Rauthmann & Baldegger (2013), the instruments of S-L additionally help individuals in leading others by realizing their own S-L capabilities. S-L benefits ABC by its awareness of individual's S-L and in developing S-L in individuals which motivates them to identify their strengths and to reach a great accomplishment.

The findings fill the gaps in organizational knowledge from rigorous research as well as theoretical literature from scholarship research. It discovered facts of generalizable knowledge of correlations between S-L factors and IGA by exploring the five S-L factors and by providing empirical evidence (Lewis et al., 2015) in building original and theoretical

contributions. The research enabled expansion to diverse research contexts including education, hospital, government etc. by integrating them from different research perspectives (Colquitt & Zapata-Phelan, 2007). The study, however, was undertaken with the following assumptions:

1.8 Assumptions of the study

From the leadership structural perspective, the expected assumptions are the possible suitability of S-L to ABC which has been operating under a structured hierarchy leadership. The aim is to help ABC recognize the individual's S-L capabilities and use the S-L for constructive business activities by reflecting the individual's own S-L.

As a further assumption from the perspective of the processes of the achievement of individual's goals, this study emphasizes identifying the role of the individual's personal characteristics, measuring skill levels, teamwork ability, creating business value and goal setting in achieving goals. The assumptions were expected to define the factors of S-L ability and the variables of each factor. As this research uses a sample population in Canada adopting the online survey, the sampling assumption represents the research population in the study as the population of the subject ABC. The samples of population are composed of fulltime office individuals. The nature of the workplace (= the previous workplace since the researcher is a retiree from the ABC after serving 30 years) in this research was chosen seeking an actionable knowledge for promoting S-L capabilities and enhancing IGA in ABC.

1.9 Constraints of the study

Although the study posits S-L implications by supporting S-L factors and correlations between S-L factors and IGA, the following are its' limitations and constraints.

Limitation of context: The limitation is that the impacts of S-L are limited to Canada for quantitative study and one unique workplace in Canada for evaluation of findings. The results from this study may not be generalizable across ABC including sub-divisions in the USA and the joint-venture in Asia, as this research provides findings based on given background and the research context in Canada.

Limitation of quantitative data collection: This study has limitations in defining the scope in investigating the correlation between S-L factors and IGA, as it relates to workforces in an organization in Canada for quantitative data collection. For the quantitative data collection from the targeted population, the Google-form survey application was distributed electronically. However, the researcher did not have full control over the participants in online surveys and the survey being limited only to the Canadian workers who are fulltime contractors; the researcher had to depend on participant's virtue.

Limitation of evaluations: Although the subject ABC has grown over the decades and expanded to become a globalized organization, the support for the viability of S-L

research is limited in the research design including data collection and validation of the results as there are limitations to understanding the needs and perceptions of S-L and ABC which has not paid enough attention to the needs for S-L factors for IGA. Since the researcher has been retired close to a decade, ABC has changed in terms of management including leaders and business management. For these reasons, the evaluations of research result are more the Focus Group interview as permitted rather than person-to-person interviews within ABC. The structure and format of the thesis are described in the following section.

1.10 Structure of thesis

This research investigates the five significant S-L factors and explores relationships between S-L factors in the processes of IGA in business contexts in Canada to discover how S-L factors enhance IGA in ABC.

Chapter One, Introduction, which includes the statement of the problem, work experience of the researcher as well as: What is the background of this research? What are the goals, objectives? What are the significant benefits? What are the assumptions, scope and significance of the study?

Chapter Two comprises the existing literature resources to investigate the existing knowledge, insights, theories and concepts from academics and professionals which are relevant to this research and pointing to the S-L factors. It includes conceptual models which are utilized to form the conceptual framework and propositions tests to achieve research goals and objectives.

Chapters Three covers the research methods which address the nature and purpose of the research, participants of the research as well as roles of the researcher and a conceptual model. The quantitative method utilizes the online survey for a sample population (N=370) with data collection procedures and phases including justification of reliability and validity. The results of the quantitative study are presented to the stakeholders for interpreting the quantitative findings which affect the generation of actionable knowledge.

Chapter Four discusses the findings of quantitative study and focuses on the results of propositions tests and research questions.

Chapter Five addresses the findings of qualitative study. The quantitative findings are reviewed from the perspectives of practice in ABC for qualitative findings which include major variables linked to the S-L culture to generate practical actionable knowledge.

Chapter Six shares and evaluates the findings that impact the implications of the research with the members of ABC.

Chapter Seven is the conclusion and highlights the fulfillment of research goals and objectives with limited implications. The study posits implications for both a business practitioner and a scholar-practitioner.

Finally, Chapter Eight deals with the feasible invention strategies, limitations and recommendations and describes the five fundamental limitations such as research resources, method, participants, finding validations and changes in ABC towards practical implications. The study recommends that ABC promote individual's S-L capabilities and establish an S-L culture.

1.11 Reflections and conclusions

In ABC globalized, merged work contexts with high demands from the Management and higher service levels demanded by the customer across the world, S-L is critical to respond to the demands of stakeholders. This research aims to develop new S-L actionable knowledge to enhance IGA for ABC by addressing the research background, problem statement, the goals and objectives, research questions and constraints of the study. It has underscored the significance of the researchable problem, the consequences and significance of S-L in the business process in ABC. This research emphasizes the S-L challenges confronted by ABC in the globalized business context which lacks understanding of S-L capacities; the research thus focuses on proving of S-L capabilities to deal with challenges better. As “this thesis project is entirely suitable for a DBA”, according to the thesis supervisor, this study foresees enhancing the individual's S-L utilizing S-L correlations which integrate the five major S-L factors and increasing adaptive S-L through business activities. The problem statement, research goals and objectives and research questions in this research reflects on driving the study by exploring the existing literature on the S-L theories, ABC S-L contexts and finding of research gaps to fill described in the subsequent chapter.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

The S-L five key factors were identified based on the two sources including researcher's work experience as a primary source as described in section 1.6 and the literature reviews as a secondary one which shows what other research has been done in S-L factors for IGA. The literature review investigated the insights, theories and concepts from academics and professionals published by key authors and frequently cited in related recent studies and publications which were no more than 5 years old as major references if available except historical or classical sources. The insights were critically reviewed to frame the S-L factors and their variables for IGA and in turn, to discover how S-L factors enhance IGA.

This study is based on Carmeli, Weisberg & Meitar's (2006) theories of self-empowerment, Manz (1992) the key author's self-motivation, self-learning, self-control, self-management (Lenzen et al., 2017), self-direction and self-motivation theories (Manz & Neck, 2004), self-efficacy (Bandura, 2012) and self-cognitive strategies theories (Manz, 1986), the model of Reichard & Johnson's (2011) self-development, Neck & Houghton's (2006) individual's personality dimensions, self-assessment, self-reward and self-learning. Those theories reinforce the nature of S-L required for IGA as they address the significant variables in S-L factors which are relevant to accomplish IGA.

The lessons obtained from the existing literature suggested to the researcher to discover literature gaps and build a framework for a conceptual model of the study as well as the propositions. Most of the existing S-L theories imply a concept of intrinsic perspectives that there is a literature gap which has not explored in the various S-L factors focusing on the IGA on which this study focuses. The literature reviews are organized in a group by each argument and by ideas to achieve research goals and objectives. These arguments include:

- i) *An individual is a self-leader who has S-L versus the traditional appointed leadership role;*
- ii) *The significant S-L factors enhance achieving individual goals.*
- iii) *S-L culture is important in IGA;*
- iv) *S-L benefits in the ABC context.*
- v) *Filling theoretical and practical S-L gaps*

2.2 Relevant theories of S-L factors and individual goal achievement (IGA)

This section examines available literatures focused on for understanding and gaining of the theory of S-L and broad knowledge of IGA. Then, the researcher extracted relevant theories and concepts to this study. Carmeli, Weisberg & Meitar, (2006) note that individual's S-L is a foundation for empowering themselves concerning their task process and increasing their goal accomplishment. S-L influences the individual's self-motivation and self-learning (Manz, 1992) which includes establishing self-goal settings, self-assessment and self-reward. The articles suggest that S-L facilitates a perception of goal orientation theory (Marques-Quinteiro & Curral, 2012) that individuals have their own beliefs about pro-active activities in pursuit of their goals in an effective way with a sense of who you are, what your goals are and how to achieve them. Thus, the effect of S-L

significantly affects achievement in the IGA. The following section explores major theories underpinning S-L factors that affect IGA.

2.2.1 Relevant theories in S-L factors

The term ‘S-L factors’ refers to an individual capability that has potential for IGA and that may be developed for an IGA. The difference between traditional leadership and S-L explains the reason why this research used S-L. The deeper understanding of leadership leads to further insights on leadership’s elements, nature and challenges which the researcher applies for S-L.

Leadership is what leaders really do in guiding and inspiring at all levels (Summerfield, 2014). Leadership is the process (Deenitchin, Dmitriev & Hebenstreit, 2015; Northouse, 2007) of influencing people toward achieving goals (Grieves, 2018), taking people to new places (Kane, 2007), mobilizing others toward a shared goal, rallying people for better a future (Godfrey & Buckingham, n.d.) producing useful change (Kotter, 2007), creative and positive changes (Balmer et al., 2018) and driving changes for the common good (Goodpaster, 2017). Those leadership definitions contain five essential factors:

- i) Leader’s characteristics – taking initiatives as a champion that the leader has a vision and leads the people.*
- ii) Leader’s skills – conveying ideas that the leader adopts skills for efficient and effective resource management to improve status.*
- iii) Leader’s teamwork – influencing people that the leader interconnects with team members to achieve common goals.*
- iv) Value creation – conveying that the leader creates values in a cost effective way using available resources.*
- v) Achievement – a notion that the leader aims to achieve goals.*

Those leadership factors are compatible with S-L as it includes the leader’s perspective, leadership skills in processing as well as a collegial teamwork and value creation toward attainment of goals. S-L defines that what a self-leader does in practice in an organization is to influence practice and achieve goals through IGA activity (Bryant & Kazan, 2012). A self-leader can be a subordinate individual or in leader’s level in a hierarchal organization. S-L is a source of organizational leadership in the Fryer (2011), DiLiello & Houghton’s (2006) model which suggests that leaders would encourage the practice of S-L among individuals to build creative and innovative work environments. According to Friedrich, Griffith & Mumford (2016), the leadership paradigm has been shifting from the hierarchical model toward a more horizontal process for the past years. This shift helps to enhance individual’s S-L and ties with the ability to influence oneself and motivate others to do likewise to reach the targets. Bryant & Kazan (2012) stress that S-L is a significant piece of the puzzle in developing and achieving goals in ABC.

The model of leadership has changed from a command and control leadership through empowered and coached leadership to a servant leadership (Gandolfi, Stone & Deno,

2017; Sinha, Kakkar & Gupta, 2012). S-L for IGA may be different from one business culture to another. However, it is important for the individuals to understand how S-L factors help individuals achieve their own goals for the following reasons:

First, it would help individuals to understand concepts of S-L as against traditional hierarchical leadership.

Second, it can be argued that S-L defined from the research would provide a recommendation to ABC for identification of significant S-L factors which affect IGA.

Third, the study of S-L would lead to the development of actionable knowledge and relevance, which facilitates IGA. Thus, S-L would enhance IGA.

Finally, it is necessary to present the benefits of S-L and make recommendations for its implementation.

Neck & Houghton (2006) endeavored to study leadership based on the individual's personality dimensions and focused on effectiveness and outcome, addressed concerns of modern leadership and summarized the S-L contemporary leadership trend. It is an important finding highlighting S-L as pertinent to leadership as business is becoming more and more globalized and increasingly complex in the contemporary business world. Marino (2007, p. 10) suggested a new paradigm in which the business team creates a "shared vision and mission" to share and guide an improved process and to achieve desired goals (Anderson & Jamison, 2015) by innovating individual's S-L capabilities. It states that management alone can have limitations to meet the demands from various stakeholders as well as to fulfill the challenges faced. Those theoretical studies give proof that the study is an important research area in which S-L key factors can make a favorable contribution to the efforts to increase IGA.

2.2.2 Relevant theories of IGA

IGA is defined as "the commitments of demands from stakeholders and challenges faced." IGA includes any layer's individual and a full or partial demand from a stakeholder or any challenges encountered. A partial demand means individual deals with the jobs to carry out their roles and responsibilities. This is explained as demands from an internal and external stakeholder. IGA can refer to individuals dealing with extra jobs because of merging the organizational structures in the research context.

Pearce & Manz (2011) introduced S-L as an alternative to the traditional top-down leadership model in the business process because S-L is crucial for individuals to take controls and achieve individual goals successfully. Carmeli, Weisberg & Meitar (2006) found that an individual's S-L was a foundation empowering the process of IGA. They also examined the effects of S-L and self-efficacy on performance and directed that S-L significantly affects self-efficacy (Bandura, 2012), which in turn directly affects their IGA.

By practical choice, effective S-L of individuals continues to be a significant variable in dealing with the processes of IGA in management, technologies and global business (Topper, 2009). Based on Day's (2001) study, S-L would provide greater benefits from the individuals to IGA.

Under current business trends, the tendency is to shift leadership style from a one-size-fits-all model to a more effective business process model (Abfalder, 2013) in which one must first learn to be an effective leader (Zaharia, 2016). In other words, leadership should be a performing art (Murphy & Ensher, 2008) where trends emerge from continuous innovation from individual's S-L. It indicates that S-L contributes to the practical business process by challenging individuals' goals under a specific working context which demands continuous S-L competency instead of traditional top-down leadership. This is because it integrates an individual's S-L into a constructive and creative business process for value creations. In the Arista & Parahyanti's (2018) study, individual innovative S-L provides a base of higher IGA and promotes ABC's competitiveness for long-term success in the business world. S-L is the background to the promotion of successful business process in the theory of Pratoom & Savatsomboon's (2012). It tells that S-L helps in building a solid foundation of not only improvement of IGA (Carmeli, Weisberg & Meitar, 2006) but also organizational goal accomplishment that contributes to business competence (Schilling, 2008).

For both on micro or macro level, Joiner & Josephs (2007) acknowledge that individual's S-L is important because they have to deal with a business process. Moreover, S-L can be extended to enhance an organizational leadership domain (Lee, Sheldon & Turban, 2003) which includes management and general administrators. S-L framework tends to both increase and lessens the hierarchical organizational structure because outcomes are related to layers of individual's S-L. Neck, Stewart & Manz's (1996) research revealed that organizations tend to utilize all levels of the individual's S-L and expertise for improving organizational efficacy and reducing costs (Sanchez, 2013). However, Locke & Latham (2004) stress the limitations of S-L in self-goal setting in its directions and managing complexity which requires engagement, interaction, and collaboration of participants in ABC. The deeper understanding of S-L factors and its variables helps bring out how S-L factors increase IGA from all ranks of the organizational structure by transformation of S-L into business (Carmeli, Weisberg & Meitar, 2006).

IGA emerged as an important aspect of the S-L through the stimulation of goal motivation and promotion (Godwin, Neck & Houghton, 1999, p. 163). Individuals need to identify, understand their personal strengths: their own S-L and establish individual goal settings for achievement. S-L helps individuals fulfill their roles and responsibilities by identifying significant key S-L factors as they focus on positive S-L perspectives from processes of IGA. Along these lines, S-L enables individuals to align their resources to individual goal settings which strengthen connections to IGA. Those articles suggest that an

individual's S-L capabilities promote the progress to reach the targeted individual goals by directly aligning the S-L key factors to the targeted goals.

S-L concerns the individual capacities of positive traits, effective and perceived self-efficacy and targeted self-goal settings resulting in continuously orienting their jobs toward contributing to the business process. Consequently, individuals enhance the business process by creating value and producing quality outcomes. Moreover, over time individuals identify themselves as a valued member of an organization (Campbell, 2013) and believe that their S-L capabilities are capable of impacting organizational growth and global competitive advantage (Hames & Joiner, 2012). IGA adds long-term benefits (Godwin, Neck & Houghton, 1999) for an individual's future goal setting by enhancing an individual's self-efficacy and self-plan, by building a set of self-beliefs (Bandura, 2012) and by generalizing the individual's own S-L. Neck & Houghton (2006) suggest that S-L becomes an arising standard from self-influence on achieving individual goals and helps manage the complexity of changes and advantage which are emerging from the aspect of effective S-L utilization.

The researcher argues that S-L positively affects the degree of IGA. Carmeli, Weisberg & Meitar (2006) support the theory that S-L influences individual capabilities and perceptions of attainment within specific goal domains. S-L influences individuals to achieve self-motivation and self-direction which are needed to obtain subsequent outcomes by having constructive thoughts, attitudes and behaviours (Ajzen, Czasch & Flood, 2009) focusing on self-assessment, self-reward and self-learning (Manz, 1992). S-L facilitates insight of S-L capabilities to pursue the individual's goals in an effective way by enhancing the thoughts, attitudes, and behaviours. In contrast, the study of Stewart, Courtright & Manz (2011) depicts that there are no consistent relationships among S-L out of each layer of authority in an organization and outcomes in encountering various challenges in the business process. Those theoretical literatures inspire to build new propositions to be tested on how S-L factors impact IGA as the existing theories are contradictory in theoretical concepts as well as to answer to the research questions. As above sections prove that IGA is impacted by S-L, the following section will justify five major S-L factors impacting IGA by reflecting from existing relevant theoretical studies.

2.3 Reflection from relevant theories in justification of the five S-L factors for IGA

Since S-L factors for IGA is a new area, this study adopted researcher's work experience as a primary source identifying five key S-L factors as described in chapter 1. The literature reviews will be a secondary measure of how five S-L factors fit within current literatures to enhance IGA. In the next section, the researcher explores major theories underpinning S-L factors which will show how existing literature points to the five factors and helps to understand various variables that affect IGA. The results of the S-L study done by Alves et al. (2006) indicates that S-L factors influence IGA because of a strong belief, desire and effort to achieve goals (Signe, 2014). In the self-action theory developed by Jensen, Neck & Beaulieu (2015), S-L is rooted in and aimed at expanding the individual's

freedom of goal fulfillment. The study of Wan-Gould (2011) notes that a successful individual maintains good traits, skills competency and teamwork, and value creation. S-L reflects on leading oneself (Clawson, 2008) and leading others (Furtner, Rauthmann & Baldegger, 2013). S-L factors strengthen individual's S-L capabilities to achieve their goals as S-L is "truly the heart of empowerment" (Manz, 1992, p. 80) and a driver of goal achievement. The understanding of S-L factors for IGA from conceptual perspectives helps to examine S-L in all levels of individuals (Manz).

S-L's factors are developed with a sense of 'who you are', 'what you can do', 'how you deal with' on the way to IGA (Bryant, Kazan 2012). From empirical studies in McCullough (2007), the individual's personal attributes significantly affect IGA which is related to managing resources and engaging in teamwork and skills intelligence in processes which are necessary for reaching goals as a conductor. What it gives is the idea that constructive teamwork and appropriate skills facilitate creativity and innovation in creating value and obtaining desired goals. Manz's (1992,) article aims at finding S-L factors involving the process of IGA. S-L factors are grouped into three core categories consisting of input-process-output factors (Ensley, Pearson & Sardeshmukh, 2007) designed to achieve favorable individual goals. Input factors focus on cognitive capability while process factors are actual functional capabilities such as skills and teamwork which positively influence IGA. Output factor is the achievement of the individual's goals in creating value. Input factor is a resource which requires proceeding to construct the S-L factors: heightening an individual's personal characteristics to facilitate input and executing processes to reach the targeted goals. From empirical studies, the individual's personal variables significantly affect an individual's goal achievement. Process factors are related to managing the resources in input and engaging in teamwork and skills intelligence in processes which are necessary for reaching goals as a conductor (McCullough, 2007) of resources, process and accomplishment of the goals. What it gives is the idea that constructive teamwork and appropriate skills facilitate creativity and innovation in creating value and obtaining desired goals. The following literature reviews explore S-L factors and discover how S-L factors enhance IGA to accomplish the research objective and to answer the research questions that are essential to the research processes.

There are researcher's arguments that are finding how S-L factors that enhance IGA could be beneficial to an individual as well as to the research context that delivers outcomes to the stakeholders. The results of the S-L study done by Alves et al. (2006) indicates that S-L factors influence IGA because of a strong belief, desire and effort to achieve goals (Signe, 2014). S-L reflects on leading oneself (Clawson, 2008) and leading others around (Furtner, Rauthmann & Baldegger, 2013). In the self-action leadership theory developed by Jensen, Neck & Beaulier (2015), S-L is rooted in and aimed at expanding the individual's freedom of goal fulfillment. Effective individuals are positive in their approach to a goal and sensitive to their efficient work process and goal achievement to meet the needs. In the study

of Wan-Gould (2011), a successful individual maintains good traits, skills competency and teamwork, and value creation.

The above articles show that S-L factors strengthen individual's S-L capabilities to achieve their goals as S-L is "truly the heart of empowerment" (Manz, 1992, p. 80) and a driver of goal achievement. The understanding of S-L factors for IGA helps to examine S-L in all levels of individuals (Manz) as an efficient, and effective individual 'from the inside out' (Bryant & Kazan, 2012). From empirical studies in McCullough (2007), the individual's S-L attributes significantly affect IGA and these are related to managing the resources and engaging in teamwork and skills intelligence in processes which are necessary for reaching goals as a conductor. What it gives is the idea that constructive S-L factors facilitate creativity and innovation in creating value and obtaining desired IGA. The following literature reviews explore S-L factors to discover their variables within current literature to demonstrate how the five S-L factors fit IGA.

2.3.1 Personal characteristic factor

Lovelace, Manz & Alves (2007) discussed S-L strategies such as self-regulation, self-control, self-management, self-rewards, self-constructive patterns in maintaining a high level of achievement. The result of the study done by Carmeli, Weisberg & Meitar (2006) has shown that individual characteristics become significant in IGA. Neubert & Wu (2006) have examined S-L as "intra-individual practice(s)" (p. 363) to enhance IGA. The results obtained by Grinnell (2001) indicate that individual characteristics play a major part in IGA and offer great opportunities to achieve IGA. It proposes that personal characteristics are grounded bases influencing self-efficacy to achieve favorable individual outcomes. Lee, Sheldon & Turban's (2003, p. 257), goal orientation theory, extends the relationship between personality characteristics and the accomplishment of goals. Stewart (2007) examines individual traits which are core factors in determining effective ways of IGA and Budría & Ferrer-I-Carbonell (2018) conclude that personal traits determine IGA. As Benson & Campbell (2007) suggested, personality inventory from the perspective of S-L needs to continue to reach individual goal potential and to promote continued future accomplishments.

Jooste & Cairns' (2014) research suggests that self-direction governance helps to develop individuals' confidence and strengthen ownership of their goal achievement. Self-planning is a self-directed input in the individual's goal fulfillment; it enables effectively managing time within ABC's priorities. In the Sorensen & Severinsson (2008) study, self-direction is essential for seeking information; communicating with others, making decisions and solving real problems. The real problem being that more is demanded of S-L and therefore, of the workforce in dealing with the new realities of business. Ensley, Pearson & Sardeshmukh (2007) covered S-L areas including self-directed governance for individual goals done successfully. In the S-L development model developed by Ross (2014), the important element posited is a positive characteristic which leads to positive behaviours in

self-learning, self-motivation, and self-efficacy which in turn impact positively on achieving individual goals. Positive thoughts are positively linked to group effectiveness and these characteristics lead to positive individual goals which involve self-regulation and self-integrity (Kelly, 2000).

Ross (2014) requires individuals to have leader minded characteristics with self-control over the realities and he argues that an organization needs to enable individuals to become self-leaders (p. 299) as S-L represents an individual's capability to self-efficacy and self-control of goal achievement by providing intrinsic rewards (Grinnell, 2001). Individuals need to study to reach goals and have continued future accomplishments because leader-minded personality is the determinant characteristic of S-L (Benson & Campbell, 2007). It is important to know and identify the individual's own leader-minded personality as a determinant of S-L to achieve their own goals as DiLiello & Houghton (2006) argue. It influences their success, specifically through self-direction, self-determination, self-learning and self-motivation (Lee, Sheldon & Turban, 2003) through establishing a self-goal pattern and goal level. Neubert & Wu (2006) established a conceptual S-L based upon the theory of intra-individual strategies utilizing of positive and constructive thoughts, promoting self-effective process and further examining internal rewards. The subsequence of intrinsic-reward practices positively impacts on IGA and is the driving force to promote and to lead to greater self-motivation and self-efficacy (Ross, 2014).

Self-determination builds empowerment and generates motivation and positive influences on outcomes that benefit an individual (Dierendonck & Dijkstra, 2012). DiLiello & Houghton (2006) argue that self-determination is a center in IGA, looking for alternatives to resolve issues and real problems. Achieving goals lies at the intersection of the individual and self-resource management as self-resource must be utilized to cope with demands while pursuing IGA. Neck et al. (2013) argued that self-resource provides the necessary means which include time and material requirements during the pursuit of IGA. S-L is a means (Ross, 2014) for achieving individual goals requiring an intrinsic self-motivation.

The literature suggests that the individual characteristic factor and its variables play an important role Ugurluoglu et al. (2013) state the basic needs for self-motivation and self-determination, self-efficacy utilizing available self-resources in leader-minded self-directed-governance and delivering outcomes with intrinsic self-rewards. These articles strengthen the role of individual characteristics as the determinant in work behaviours, enabling individuals to promote their S-L and thus acquiring benefits from goals achieved successfully. And further, that personal achievement emerged from the individual's characteristics which motivated individuals to work toward a desired goal. The individual's characteristics factor's independent variables can be formulated:

f (Individual's characteristics factor) = (Variables: self-leaders characteristics, self-efficacy, self-intrinsic award, self-control, self-improvement characteristics, self-imagination of future goal

achievement, self-creative characteristics, self-directed, self-determination, self-motivation) = Individual goal achievement

Individuals' S-L characteristics increase affordable professional characteristics which Ugurluoglu et al. (2013) suggested to meet needs for IGA. The above literature point to the personal characteristic factor is significant to IGA. The individual characteristics' factor will be referred to as 'cq-factor' (characteristics' intelligence factor) in this study. The reasons why the researcher used the word 'intelligence' is because S-L is gifted by birth to some people, or some are born to be self-leaders, while others need to be trained to enhance S-L. Those literatures confirm that the cq-factor and its variables play an important role as basic needs for IGA utilizing available self-resources in leader-minded individuals and delivering outcomes (Ugurluoglu et al., 2013).

2.3.2 Skills S-L factor

Individuals need a certain level of skill to achieve the individual goals as well as to deal with the diverse demands in a changing work environment. In particular technologies, management, self-learning, and self-competence are necessary for adopting innovative knowledge and skills which advance effectiveness and creativity (Manz & Neck, 2004).

In the theories of self-learning (Campos-Sánchez et al., 2013) and self-competence skills (Kaldi & Xafakos, 2017), Smith et al. (2007) offer that S-L skills factor is the heart of individual effectiveness. Pursuing technical skills by individuals is becoming more dominant in IGA. The results of the Wan-Gould's (2011) study show that self-learning promotes skill competency in the individual and results in favorable outcomes. The study by Wan-Gould examined and affirmed that interrelationship skills are correlated to S-L in achieving an individual's goals of improvement and efficacy. The rising significance of S-L as well as individual technical skills is needed at the individual level in achieving goals (Furtner, Sachse & Exenberger, 2012). Summerfield (2014) notes that the role of S-L is to "make things better" (p. 252) in the process of business. Making things better by utilizing S-L skills for more efficient and effective processes of business is a key determinant (Kerr et al., 2006) of S-L for achieving individual goals.

Skills have a direct relationship with S-L in innovative behaviour to achieve goals, because skills promote competence in development and implementation of technological enhancement and solution (Curren & Marques-Quinteiro, 2009). It suggests that skills enhance the individuals' competencies for enhancing their innovative motivation and confidence. The study by Neck & Manz (1992) also shows that those individuals who have technical skills have a more constructive higher level of self-efficacy. It conveys the idea that IGA is strongly dependent on skills which empower individuals themselves for self-independence, self-efficacy, and self-competence. Skill in adapting to new technology determines the level of potential success (Wan-Gould, 2011) in IGA as it encourages individuals to be more self-competent to meet their desired outcomes.

Self-empowering skills are rooted in self-regulation, self-motivation, self-efficacy, self-management theory (Wan-Gould, 2011). The desired outcomes of S-L, according to Neck & Houghton (2006), come from the adaptation of innovation (Corcoran, 2017), self-efficacy and self-empowerment in addition to constructive thoughts through self-empowerment which formulate resolutions of individual goals. In addition to those soft-skills, Wan-Gould discusses the hard-skills which emphasize on the broad base of technical knowledge and skills for success in achieving goals. Individuals face a challenge in the reality that they are required to have self-efficacy skills as a result of rapid changes in both domestic and global markets (Bright, Amos & Francois, 2013). The results of the research by Bright, Amos & Francois (2013) suggest that there is a linear relationship between individual self-efficacy skills and commitment.

Those literatures ensure the skills are resources for taking proactive action to pursue IGA as Bright, Amos & Francois (2013) discussed to reduce the risks and uncertainty. Tim Cook, chief executive officer of Apple Inc., possesses a set of computer skills (p. 252) and combines both personal traits and skills to contribute to success. It conveys an idea that IGA is strongly dependent on skills which empower individuals themselves for self-efficacy and self-competence (Wegge et al., 2010). The functional formula for skills factor includes the independent variables as below.

$$f(\text{Individual's skills factor}) = (\text{Variables: technical skills (hard skills), self-proactive action skill, self-promoting skills, self-discipline and self-competence skills, new technology adaptation skills, self-constructive skills, self-empowering skills, self-efficacy skills ...}) = \text{Individual goal achievement}$$

The literatures above show that skills factor is important to IGA for an efficient management of S-L in dealing with challenges and to meet expectations from stakeholders (Carmeli, Meitar & Weisberg, 2006). The skills factor will be referred to 'sq-factor' (skills' intelligence factor) in this study.

2.3.3 Teamwork S-L factor

Teamwork S-L is becoming more significant in ABC's strategic changes for future growth (Auster, Wylie & Valente, 2005). Hauschildt & Konradt (2012) stress the importance of building trust relationship in teamwork to increase chances to reach a great accomplishment and as a means of raising effectiveness to achieve the individual's goal. According to Malmir & Azizzadeh (2013), the team is a group of self-leaders. In the evidence provided by Hauschildt & Konradt (2012), teamwork S-L factor is related to self-efficacy in dealing with individual goal tasks in teamwork with the aim of dealing with complexity. It indicates that the teamwork S-L factor strengthens positively IGA. Barnes (2012) shares insight for an inspiration focusing on grounded goal fulfillment with different approaches. Iles & Feng (2011) point out that the significance of alignment to the targeted goals in teamwork helps to avoid fragmenting of information. It proposes that the S-L in

teamwork needs to share insights, knowledge, and information; to explore them further and integrate them for individual and team goal achievement.

The result of the Godé's (2016) study indicates that team coordination positively influences the efficiency of IGA through understanding and sharing each other's functions and Song (2009) suggests spending more time for coordination for a successful achievement. S-L with teamwork empowers individuals to achieve their own goals by coordinating their goals by continuously reflecting "proactivity, adaptability and efficacy" (Cural & Marques-Quinteiro, 2009, p. 498).

Crossan, Vera & Nanjad (2004) proposed an alignment of interrelated individual goals to team goals as a strategic plan which addresses individual shared goals among all participating individuals (Magnuson et al., 2016). Goal alignment includes proactive organization and preparation for teamwork by interrelated individuals and review of the outcomes. Stewart & Barrick (2000) highlight the positive relationship between goal alignment and IGA, as teamwork S-L helps in dealing with challenges using the participant's S-L capacities in finding alternative solutions. Stewart & Barrick (2000, p. 135), however, suggest a deeper understanding of the characteristics of teamwork due to the task differences and members' capabilities. Teamwork S-L relates to team members' "work role behaviour" (p. 503) to increase chances of achieving individual goals. The teamwork S-L factor encourages positive team-oriented behaviours of team members for proficiency and adaptability in achieving individual goals and team goals (Wan-Gould, 2011). Furthermore, teamwork S-L factor empowers individuals to deal with uncertainties and cope with challenges by helping one another, requesting others in a team in a positive way, managing disagreement in a team and motivating others in a team (Cordery et al., 2010) to enhance individual and team achievements. These theories provide support for the teamwork S-L factor which can support individuals and the team in achieving goals and in coping and adapting individual's S-L (Stewart, 2007). Based on the literature review, teamwork factors include the following variables to answer the research questions and to construct a causal relation between them. The formula can be as below:

$$f(\text{teamwork factor}) = (\text{Variables: alignment to targeted goal, sharing insights and information, exploring and integrating information to individual goal, aiming at clear individual's target, dealing with challenges, finding an alternative solution, coordinating the individual goals to the teamwork}) = \text{Individual goal achievement}$$

The above literatures point to the teamwork S-L factor as an essential factor which is linked to IGA by integrating team and collaborating teamwork for team's proficiency (Hauschildt & Konradt, 2012). The teamwork factor will be referred to as 'tq-factor' (teamwork intelligence factor) in the study.

2.3.4 Value creation S-L factor

Value creation can be one of the critical items in relating S-L factors for IGA, because the mission of ABC in the research context is focused on value creation. As Bligh, Pearce & Kohles (2006) emphasize, S-L may encourage an individuals' value creation using independent work attitudes that in turn, create work beliefs that become more favourable to value creation.

The study of Abdullah & Siti-Nabiha (2012) states that an organization values an individual's value creation attitudes with their strengthened sense of ownership in the company (here ABC) and this may impact IGA. This sense of ownership does not necessarily produce monetary benefits, but it empowers individuals and ensures fulfillment of value creation (Vítková, Chovancová & Veselý, 2017). Organizational value added desired by the ownership is expressed. In terms of value creation, Prussia Anderson & Manz (1998) assert that self-recognition increases enthusiasm which influences self-efficacy and extends commitment to value creation utilizing a self-managed way.

To promote individual value creation, engaging in positive and strong beliefs is essential to align self-beliefs with desired individual goals (Ho & Nesbit, 2013) because as Busby (2005) stated IGA is a process by which an individual develops beliefs toward value creation. Rudd (2013) approaches self-value focused perspective as it enhances self-effectiveness and self-regulation. Self-reward and self-punishment recharges self-motivation for value creation and for further enhancing efficacy for IGA (Ho & Nesbit, 2013). Bligh, Pearce & Kohles (2006), however, argue that an individual's self-values in relation to his actions promote value creation through goals accomplished, while DiLiello & Houghton (2006) have identified an environment in which organizational motivation tends toward value creation in IGA.

Neubert & Wu (2006) measured a goal setting variable in self-reporting of S-L to enhance natural value creation. It includes self-establishing specific goals for value creation, self-goal minded efforts to be achieved in creating future value. As ABC has adopted merged organizational structure, Jones (2010) establishes self-management practices which include individual goal setting for value creation as a significant element, in addition to monitoring and goal attainment. This contributes to the conceptual knowledge of self-goal setting in value creation. Recent changes in ABC suggest that individual's S-L copes with reality by self-managing and self-influencing, to overcome the limitations of organizational constraints (Manz, 1992). Hoch & Kozlowski (2014) studied the effects of S-L on value creation by finding alternative resources for cost effective and efficient processes to manage resources. With regard to alternative resources, it is critical when the individual faces technical limitations and when there is low level of organizational support. The finding in the research done by Abu Hassan Asaari, Dwivedi & Lawton (2012) revealed that work associated self-attitude was considered a core element which has a positive impact on individual commitment in value creation. It indicates that a distinctive self-attitude can assist

individuals in dealing with the challenges and demands by the stakeholders. The literature above supports the structure for developing the relationship between the value creation factor and its effects on IGA. These literatures support the framework of value creation by developing the relationship between value creation and effects on individual goal accomplishments to build a formula with associated independent variables that may be used as below:

$$f(\text{value creation factor}) = (\text{Variables: establish specific settings of goal's level, passionate about the individual goal and stay energized, consciously have goals in mind for successful achievement, work toward specific goals set and monitor the progress ...}) = \text{Individual goal achievement}$$

The above current literatures show how the value creation factor is significant for IGA. Wan-Gould's (2011) study indicated that personal value consistently aligned goals-created value through exercising S-L value creation to balance values settings between employee and shareholders, transformed as individual's value to organizational value focusing on profitable value creation. The value creation factor will be referred to as 'vq-factor' in the study.

2.3.5 Individual goal setting S-L factor

As Markham & Markham (1995) note, the S-L constructs an essential process for achieving goals and acts as an engine from the beginning through to achieving the ultimate goal. The accomplishment of individual goals is through S-L's practice at individual level in ABC. The findings of the Lee, Sheldon & Turban (2003) study demonstrated that an individual's achievement was derived from S-L because personal characteristics influence fulfillment of goals. An important part is the setting of a goal level which an individual wishes to achieve so that he can monitor his progress toward the targeted goals. According to Furtner & Rauthmann (2011), S-L associated with hope for self-reward is positively related to IGA, while self-punishment is co-related to fear of failure in goal attainment.

Individual goal setting factor is the ability of maximizing goal directed behaviours (Helmut, 2016); Godwin, Neck & Houghton, 1999). How an individual attains a successful goal, according to Neck, Nouri & Godwin (2003), is that goal setting intelligence is required to determine how S-L should be applied to individual goals. Accomplishment of individual goals involves individual goal setting. S-L is an engine influencing self-direction, self-motivation and self-goal setting. Those determine the appropriate factors and variables of S-L in heightening levels of individual attainment (Neck & Manz, 1992). Neck, Nouri & Godwin (2003) confirm that the significant element of successful accomplishment of goals is passionate attitude of self, others and the workplace. This statement illustrates passionate goal setting attitude enabling individuals to motivate action, move toward and succeed in challenging individual goals aligned to organizational goals (Marques, 2009) and positively affecting individual engagement and performance (Shoaib & Kohli, 2017).

The result of Wan-Gould's (2011) study showed the self-constructive mind in goal setting has a strong correlation with IGA as self-influence ability increases, self-competency level, heightens self-motivation and self-talk enable positive change of individual cognitive mindsets and actions for effectiveness of utilization of skills (Manz & Neck, 2004). S-L reflects IGA executing productive mindsets, constructing goal setting and executing goal sets and self-rewarding work that is a powerful way of fostering positive feeling, recharging to establish another challenging goal (Wan-Gould, 2011). Also, S-L enriches opportunities for goal accomplishment; Wan-Guild (2011) suggests that the execution of goal setting sets is critical to increasing performance reflecting an individual effectiveness in S-L toward positive results. Individual goal setting enables individuals to focus on their goals and to take control of the directions of IGA. The above literatures provide appropriate theoretical sources that S-L factors have explored in relation to the research area in a particular topic of the study to accomplish expected research goals and objectives. Those articles are supporting material to find the appropriate factors and variables of the S-L in achieving individual goals heightening levels of achievement (Neck & Manz, 1992) to drive at the conclusion that the formula of individual goal achievement factor may include the independent variables as below to construct a causal model between them:

$$f(\text{individual setting goal achievement factor}) = (\text{Variables: self-goal pattern, setting self-goal level, goal driven personal characteristics, self-rewarding, self-direction, self-motivation, goal achievement-focused S-L, facilitating resource and execute processes...}) = \text{Individual goal achievement}$$

The existing literatures point to how the individual goal setting factor helps to build an ability of maximizing goal directed behaviours (Godwin, Neck & Houghton, 1999) in pursuing their intellectual roles for IGA; the goal achievement factor will be referred to 'gq-factor' in this study.

In brief, the five S-L factors will be used to find how S-L factors enhance IGA; sets of variables within each factor will be used for developing the online quantitative survey. As the researcher wishes to test various S-L factors and IGA relationships and a causal model, the propositions for the quantitative study part of the research are generated as below to test how the five individual's S-L factors impact on IGA.

According to Cooper & Schindler (2014), a research proposition is a statement about concepts that may be judged as true or false. The researcher utilized research propositions rather than hypotheses for the following reasons:

- The research developed a new causal model involving S-L factors and IGA.
- The analysis part of the quantitative study is of an exploratory factor analysis nature.
- The research is not based on a previously developed model.
- The study used a pragmatic perspectives approach by creating generalizable knowledge.

The following propositions were formulated to determine as true or false the correlations between S-L factors and IGA.

Proposition 1 (P1): There is a significant correlation among the five perceived S-L factors and IGA.

P1a: Personal characteristics factor is positively related to IGA.

P1b: Skills factor is certainly associated with IGA.

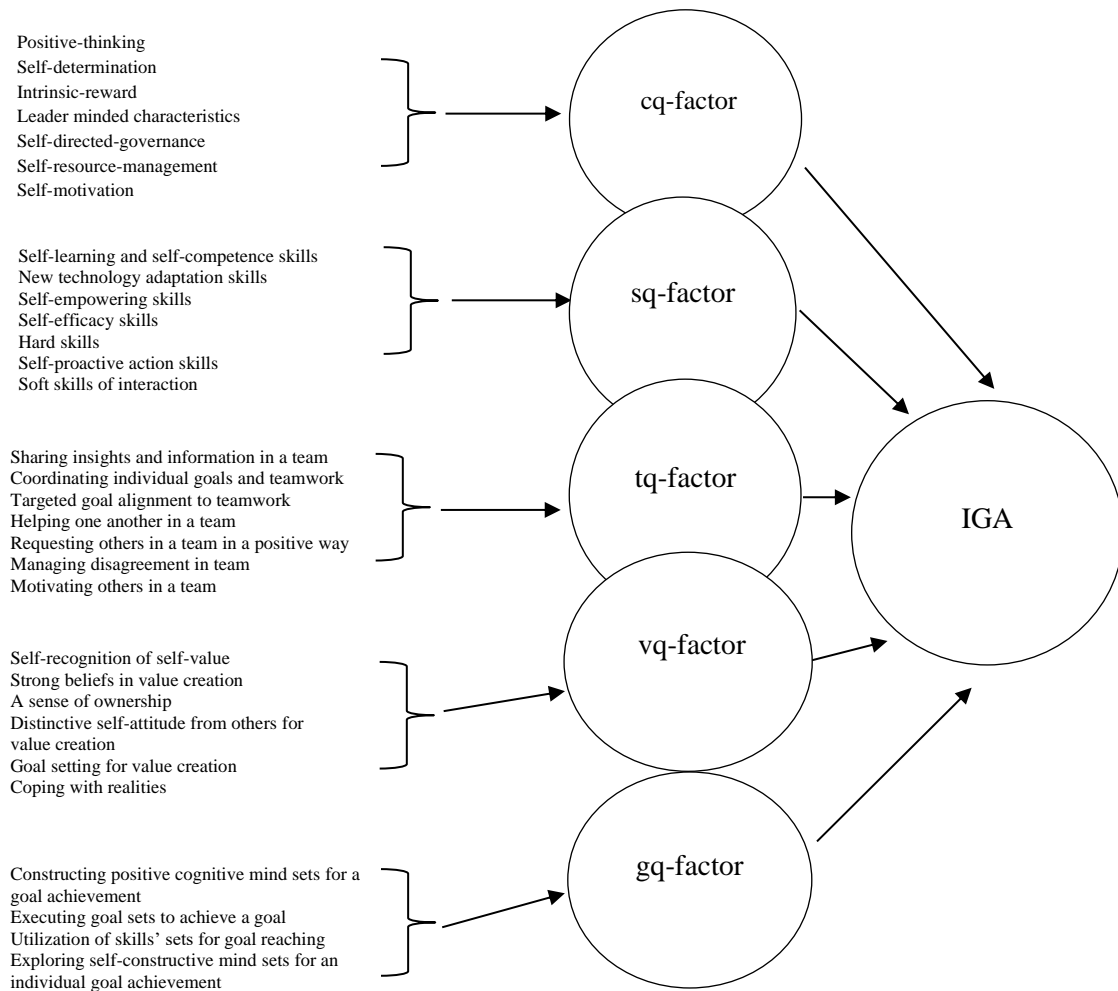
P1c: Teamwork factor is positively linked to IGA.

P1d: Value creation factor is surely related to IGA.

P1e: Individual goal setting factor is positively connected to IGA.

Nurs (1994) defines a causal model as “a diagram of the relationships between independent, control, and dependent variables”, which is also known as a structural equation model (SEM). S-L factors are hard to measure on how to enhance IGA directly. Alternatively, the empirical model finds facts derived from observation and experience; the fundamental model develops a framework with a software-intensive concept to forecast the results, while a metaphysical model broadly approaches reality to present the logical, flowing process (Ruth, 2017). None of them purports strongly to find how S-L factors may improve IGA. Therefore, the researcher adopts the causal model or SEM. Mensah developed a matrix using a set of independent and their dependent variables based on supporting conceptual domains, while Kim (2015) utilized a causal model in the development of the turnover model. The causal model in general guides the future direction (Krafft et al., 2015) of the study results in ABC for promoting S-L for enhancing IGA. The S-L factors and their variables are utilized as the basis of the online questionnaires which are instruments in the quantitative data collection and subsequent measurement scale based on the existing articles. See Appendix I for the independent variables for a causal model which indicates theoretical domains of independent variables. A comprehensive IGA model has inspected the impact of IGA determinants and the researcher then concluded five major S-L factors and their variables as IGA antecedents. Those independent variables are empirically tested in the revised S-L questionnaire (Houghton & Neck, 2002, pp. 690-691), event planner soft skills assessment in Wan-Gould (2011, pp. 281-290); Allen’s (2012) ‘a correlational analysis of the spiritual leadership survey versus authentic leadership’ questionnaire in non-denominational mega-church organizations (Marques-Quinteiro, Curral & Passos (2012). Figure 2.1 illustrates the causal model of S-L factors for IGA to present dependent variables and independent variables in the study as below in a hierarchical factor structure. It demonstrates the five S-L factors fit for finding how S-L factors improve IGA in a way that test various relationships and an overall model with existing S-L theories (Houghton & Neck, 2002).

Figure 2.1 A causal model between S-L factors and IGA



(Source Adapted from Kim (2017, p. 26))

Note: Arrow sign: left side is an independent variable, and right side is a dependent variable

The following section discusses impact of ABC’s organizational S-L culture that includes the vision, mission, and values that are relevant to S-L factors to achieve IGA in dealing with ABC realities.

2.4 Impact ABC organizational S-L culture

While S-L culture in ABC remains, in general, under the direction of the vision and mission of ABC. S-L culture development requires a long-term plan, it needs the daily practice of S-L that is applicable to business realities for both managerial and administrative individuals. In the study conducted by Witt (2017) in an organization which has developed S-L culture, individuals accomplish their roles more likely as a self-leader with a positive mindset in place of seeking a skillset of self-efficiency, self-learning and self-challenges to pursue their goals regardless of their position in an organization. Witt suggests building a

better individual's goals with S-L culture in an organization. ABC seeks for better individual goal achievements through carrying out their roles and responsibilities. With improving the S-L culture, individual's S-L capacities in an organization, individuals can produce better outcomes. It raises an S-L culture in an organization which enables individuals to take action to achieve their goals and build better consequences utilizing their S-L. It appears relevant to an issue that the impact of S-L culture in an organization can help individuals in accomplishing better goal achievements to meet the demands of stakeholders and by leading themselves.

Houghton, Carnes & Ellison (2014) suggest that S-L depends on cultural dependency in various countries and cannot be considered universal; that S-L can reflect the dominant national work culture. For example, Asian work culture has more power distance than North America. Workforces in the Asian context, for instance, have less spread in power distribution than in the North American context. In this regard, it is significant to understand how S-L factors enhance IGA in the Canadian cultural context of the targeted group, ABC that is a more democratic and individual favoring work environment. It indicates that cultural S-L provides facts in support of S-L factors and IGA by having own visions that help to take effective behaviours by recognizing their own S-L. Houghton, Carnes & Ellison point out that S-L culture focus on behaviour, self-rewards and constructive thoughts and is the way to achieve individual goals by having beliefs, interacting with others, making decisions in practice. It would be advantageous to examine how S-L culture supports enhancing IGA in the Canadian context where ABC is located.

P2: An organizational S-L culture moderates the relationship between certain perceived S-L factors and IGA.

Research context is perceived to be important to understand how S-L factors impact on IGA and how they benefit individuals in dealing with the stakeholders' demands in ABC.

2.5 Relevant to the ABC research context

It is important to understand the significant S-L in ABC's organization and how S-L helps to enhance IGA. S-L is dependent upon a research context in terms of reliability and limitation in generalizability (Ho & Nesbit, 2011). ABC increasingly acknowledges the significance of an individual's S-L which in turn, enables the individual to initiate self-motivation, to take reasonable responsibilities and to make S-L settings (Neck, Nouri & Godwin, 2003) to achieve effective goal accomplishment. Considering the dynamics and complexity of changes in ABC and the global environment, there is a limit within which leaders can manage their own roles and all their subordinates efficiently. Supporting the emergence of individual's goal fulfillment, questions then arise as to the significant S-L factors that enhance IGA. S-L is linked with the individual's goal achievement through S-L factors (Houghton & Neck, 2002) in ABC. In Kazan's (2000) research, S-L is emerging out of developing self-knowledge and self-skills, enhancing self-management and self-

assessment. It conveys that S-L is an idea of dealing with the challenges of functional and structural merging and high expectations from the stakeholder and shareholders of ABC. The following section investigates ABC's organizational contexts to contribute to understanding how significantly S-L benefits in achieving individual goals within the research context.

Organizational and structural changes and functional merging: ABC has its own structure due to a specific work environment and its own special business specifications which require the interaction between individuals and work structure (Roberts & Foti, 1998). S-L in the process of achieving individual goals includes S-L factors permitted in ABC's structure and functions for IGA. The individuals in ABC have an inhabitant culture depending upon ABC direction and guidance to pursue functional goals by accepting traditional top-down leadership (Neubert & Wu, 2006). This represents S-L which has been only marginally endorsed by the individuals and not recognized by ABC. ABC's organizational functions have been merged for an efficient business by integration of knowledge and communication channels (Lin, 2014) due to a new ownership and / or centralized management strategy. Moreover, a globalized division strategy enabled ABC to have subdivisions in multiple locations across the world. In response to structural merging and expansion strategies, an individual taking on multiple responsibilities reflects the strengths of S-L (Sonu et al., 2012). A leader had to take up a leader's role alongside his/her functional ones and the traditional leadership pattern had to adapt to fit the new structures (Furtner, Sachse & Rauthmann, 2015). It appears that the findings from this research may enhance IGA utilizing S-L factors in ABC.

Stakeholder's expectations: van Marrewijk (2004) defines stakeholders as individuals including workforces in ABC, internal and external customers, and suppliers. S-L needs to emphasize the recognition of those stakeholders while pursuing their goal attainment. The effect of S-L no longer applies only to internal individuals but extends to entities with interrelated dimensions of stakeholders (Hauschildt & Konradt, 2012). S-L should also lead to value creation focusing on stakeholder oriented goal accomplishment. Marino (2007) asserted that individuals and stakeholders understand that their efforts can contribute to IGA. It is critical that S-L and IGA should meet the stakeholder's expectation by self-awareness which McGregor & Dawson (2009) assert; this increases S-L capabilities and impacts their positive thoughts, emotions, and behaviours. Thus, an IGA should consider the importance of these expectations in setting a priority and moving toward another IGA. It indicates that enhancing S-L factors including identification of individual characteristics, developing skill and teamwork intelligence and creating value, achieving individual goals and reflecting on executing the process of IGA for responding to time-sensitive expectations (Marques-Quinteiro & Curren, 2012).

Shareholder's expectations: Shareholders focus on ABC achieving its goals of financial profitability, accountability, and sustainability. Ren & Tienan's (2014) study

suggest that organizations should create value by the integration of complementary technology and S-L capability. It should also be emphasised that a long-term business plan developed from effective IGA with its higher self-efficacy will gear ABC for more success (Carmeli, Weisberg & Meitar, 2006). According to the study of Tianjiao (2014), a globalized organization positively has better control over product diversity and market value. The gap between the complexity of shareholder's expectations and the IGA increases the need for a paradigm shift from a traditional hierarchical approach to an individual's S-L which Hoch & Kozlowski (2014) empirically evaluated as a negative impact on hierarchical leadership. As Marino (2007) demonstrated, successful organizations include individuals who are in the process of continuous improvement to meet the shareholders' expectation. It is apparent to this researcher is that the efforts of individual's S-L promise results through alignment to shareholders' expectations with a clear and precise direction. As underlined by Dickson, Waters & López-Gydosh (2012), the significance of this alignment reflected the importance of shareholder's expectations. According to Marino (2007), effective S-L may contribute to creating core values and achieving goals to satisfy the shareholders through improvement and focus enabling IGA. The individual should ensure that he/she is responsible and clearly understand not only their own goal achievement but also the accomplishment of shareholder's "expected future earnings and its persistence" (Dargenidou, McLeay & Raonic, 2007). In addition, Ross (2014) suggests that individuals initiate their S-L with well-articulated individual goals and determine what the most critical streamline in the process is to reach the expected IGA and shareholder targets.

Globalization in business: A globalized business environment stimulates continuous enhancement in business practices and in building quality products because business heavily relies on global competitive markets. Redick et al. (2014) have analyzed leadership competencies including individual's S-L which brings capabilities from personal experience and competencies to add value to the business, to place ABC in a competitive position and so sustain its competitive position over time. Under this globalized context, S-L is becoming significant for meeting the demands and the dynamic and complex specifications from stakeholders and for leading in the turbulent and competitive global market. Friz et al. (2004) have developed a conceptual framework that focuses on the S-L factor which is fundamental in IGA and expanding the possibilities of meeting the demands of globalization. The findings of how S-L factors increase IGA may restructure the views on enhancing capability while adapting to the globalized environment. The individual's S-L may have to be engaged in constant in the changing global world and paradigm set of awareness of global changes in the process of achieving individual goals in practice will have to be created. It enables individuals to identify their S-L capabilities and develop skills to expand their S-L capacities to achieve their goals successfully in the globalizing world. S-L needs to focus on implementing a competitive strategy to meet the challenge of globalization. To make progress towards successful IGA by facing ongoing changes in the globalization of business

(Toor & Ofori, 2008), S-L factors should also investigate how to enhance IGA in the needs of the globalizing business and its long-term growth.

Centralization in administration: Centralization has contributed to efficient administration because “a higher degree of centralization may lead to a higher level of effectiveness in large organizations” (Huber, Miller & Glick, 1990, p. 14). It has become a key strategy in ABC since Internet technology can support the needs of communication and interaction. Information technology (IT) support can be done remotely from a centralized IT support team which is capable of reducing downtime. There are limitations in the practical application of S-L in the context of centralization in business because power and authority are issues as Hauschildt & Konradt (2012) found while examining situational uncertainty. ABC has more difficulties in dealing with the dynamic and complex problems of a centralized administration. The research of Pearce & Manz (2011) introduced the idea of S-L as an alternative to centralized leadership and has supported the positive influence and capability of S-L in practice on various individual attainments as also noted by Neck, Stewart & Manz (1996). This perspective suggests that S-L can offer advantage to centralized administration by promoting the business process using self-efficacy through self-goal-setting, self-initiative and self-execution which increase the value of goal reaching (Neck & Houghton, 2006). Houghton et al. (2012) though, suggest that individuals should be interdependent as well as fully integrated for optimized capabilities of S-L. Furtner & Rauthmann (2011) address that S-L plays different roles in different contexts. Successful S-L requires that individuals need to align their goal settings to centralizing administrations and utilizing technologies as the foundation of IGA. The main thrust of technology centers on IT technical support and standardization of IT devices and applications. Management has centralized IT professional service and standardized most IT tools and techniques to help the end-users remotely with IT issues or problems using IT resources across the world as put forward by Akkermans & van der Horst (2002) and this in order to increase IT efficiency and utilization. As a result of centralized IT support, a professional thus has to take the dual roles and responsibility which in turn may require S-L to manage multiple roles (Holian & Coghlan, 2013). A concern with centralized IT support promotes the significance of S-L, as individuals want to resolve their IT problem as soon as possible to improve their individual goals. Instead of Management’s IT support, the individuals who have enhanced IT skills, intelligence and knowledge may initiate and be directly involved in the IGA with interactions with other individuals who are more attentive to coordination. It is favorable to the researcher’s theme, because individuals can interact with their peers’ team to achieve their IGA. Therefore, it remains to study S-L that it is suitable to achieve individual goals by identifying those S-L capabilities (Taştan, 2013; Zyl, 2012; Wan-Gould, 2011; Houghton et al., 2012) and finding how S-L factors help to increase IGA over time.

Long-term advantage of ABC: S-L may help expanding market, efficient business processes and better financial reports. In addition, for the long run, the consequences of the study may gradually contribute to the development of S-L culture in ABC and a paradigm

shift from top-down management type to S-L work environment. However, the aim of the study is not to identify who has stronger S-L capabilities or not, rather the researcher argues that the benefits of the study would be higher individual's S-L capabilities, competitiveness of the ABC and meeting the demands of stakeholders. Furthermore, S-L capabilities have significant implications for individual job effectiveness and IGA. For these reasons, enhancing S-L capabilities for IGA is not only relevant from an individual's point of view but also from the organization ABC's perspective.

The literature reviews above prove how IGA is critical to meet the high demands from the shareholders and stakeholders' expectations. It encourages the researcher to discover how S-L factors promote IGA and fill the research gap relevant to theoretical and practical research in the S-L field.

2.6 Research gap to fill

The existing literature has not addressed S-L factors in IGA in the Canadian context to answer research questions and research problem statements. The study conducted research which helps fill the research gaps in the body of knowledge in the S-L research literature. The following theoretical and practical gaps are left for future literature (Crockett, 2015).

Theoretical research gaps: The scope of the research extended to ABC in Canada to generate generalizable knowledge of the correlations between S-L factors and IGA. The research explored the five S-L factors and drew on the fact that the five S-L factors are positively correlated through the quantitative and qualitative studies done in a sequential order for empirical evidence (Lewis et al., 2015) in constructing theoretical contributions. The research enabled expansion to different research contexts that link diverse S-L cultures, S-L strategies and to integrate them from different research perspectives (Colquitt & Zapata-Phelan, 2007).

Practical research gaps: The research provided ABC with S-L instruments for a better understanding of the S-L factors that promote individual's S-L capabilities and affect IGA. The study posited developing S-L strategy at the individual levels (McCullough, 2007) and incorporating S-L factors to achieve individual goals. As Crockett (2015) suggested, taking advantage of generating actionable knowledge for practice by filling a gap in the existing knowledge; the study identified the five S-L factors, correlations between the S-L factors and IGA, created S-L instruments which can be utilized for organizational changes by adapting findings to development of S-L culture to drive enhancing S-L capabilities in dealing with the challenges which have to be faced in the business processes.

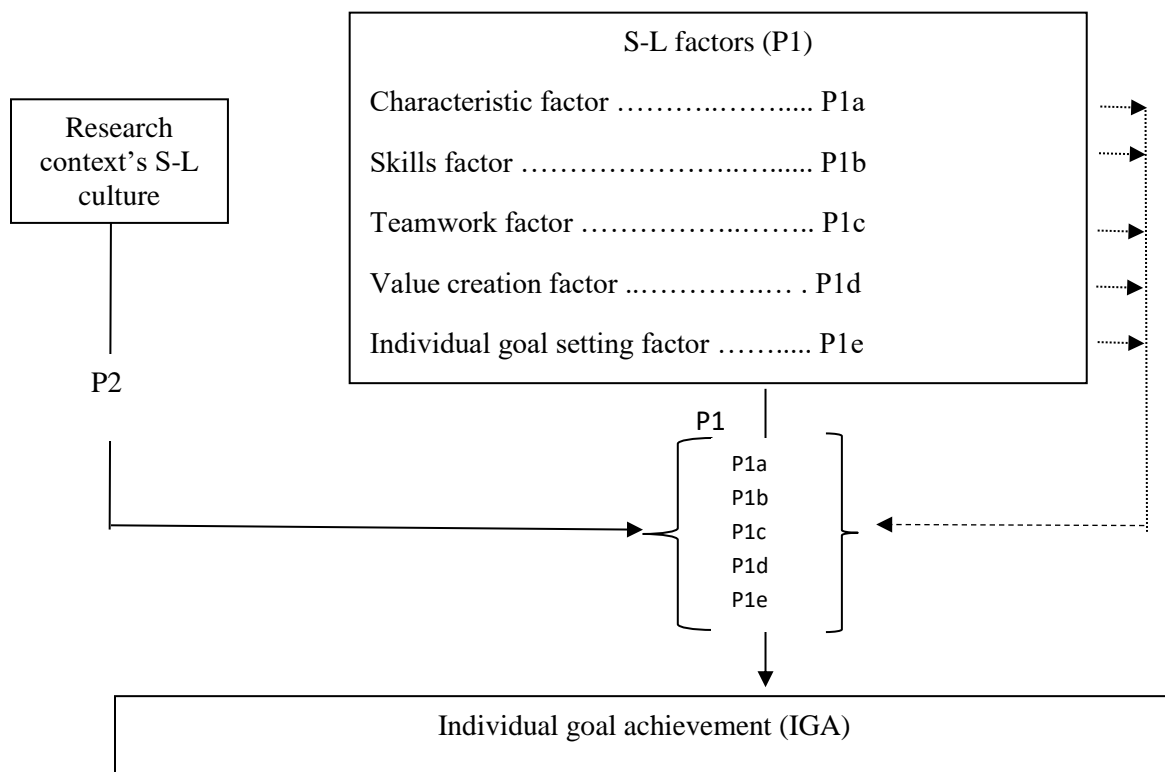
The researcher offers the originality of view that S-L factors are influencing IGA in dealing with the contextual challenges that have never been studied in ABC nor in academic literature. Five S-L factors are ABC's realities that have significant impact on IGA in practice. The researcher extends the view that the five S-L factors are best practice for any

layers' individuals for IGA by embedding the research context's S-L culture into the traditional top-down leadership culture.

2.7 Reflections and conclusions

After literature reviews, the researcher explored, identified and defined the five S-L factors and the variables of each factor which enabled the construction of a conceptual model to develop the study design. The existing literature helps to determine the independent and dependent variables to find how S-L factors enhance IGA. Marques-Quinteiro & Cural (2012) adopted a model which is a structured model in answering propositions tests (P1 and P2). Figure 2.2 displays the conceptual model which includes the framework for a theoretical model. The focus of the literature review was to form a framework in which the conceptual model and propositions are developed for the quantitative component of the study. S-L factors and their variables are discovered to develop the causal model of IGA. The research will convince individuals that they tackle challenges better by utilizing S-L factors for IGA.

Figure 2.2 Conceptual research model



(Impact of S-L factors and S-L culture on IGA) P1: Proposition 1, S-L factors; P2: Proposition 2, S-L culture

The literature review helps to strengthen the researcher's arguments such as the major five S-L factors that enhance IGA. Ultimately, the role of individual characteristics

(Grinnell, 2001) is studied as the determinant which enables motivating individuals to work toward desired goal achievement (Lovelace, Manz & Alves (2007). Skills factor promotes self-competence (Currell & Marques-Quinteiro, 2009) and innovative self-motivation to obtain a higher level of self-efficacy (Wan-Gould, 2011). Self-empowering skills are grounded in providing individuals with deeper and broader skills and knowledge to formulate resolutions of individual goals (Neck & Houghton, 2006). Bright, Amos & Francois (2013) suggest that skills are resources to take proactive action. In producing outcomes. In the light of ABC's strategy, the teamwork S-L factor is significant for future growth as the team is a group of self-leaders (Malmir & Azizzadeh, 2013) and related to self-efficacy (Hauschildt & Konradt, 2012) by alignment to the targeted goals in the team (Iles & Feng, 2011; Crossan, Vera & Nanjad, 2004; Stewart & Barrick, 2000) in dealing with various challenges. Those theoretical literature reviews ascertain what theories already exist, to identify where research gaps are, to confirm how the research fits in the S-L field and to establish new propositions to be tested in relation to the research problem.

The ABC context contributed to understanding the research problem and outlined the study from the dimension of functional emergence, structural merging and centralized business administration followed by stakeholder's expectations, which raised the significance of S-L and relevance to the research problem in achieving IGA. The results of the literature review certainly informed that S-L factors and their variables reflected on IGA toward how to build a conceptual model including research propositions for a quantitative study.

Coghlan & Brannick (2010) suggest two AR types such as core and thesis AR. The core AR is for solving a real problem in the research context while thesis AR focuses on academic writing for knowledge creation. The study initially investigated the mixed methods of quantitative, qualitative and action research (MMAR) of Ivankova (2015). However, applying AR which aims at inviting internal experts to the research processes and having them actively engage in discussions and finding solutions in practice through Rowell et al.'s (2015) learning cycles and reflections with repetitions in the processes (Hitchcock, 2014), repeated interpretations of the results (Niglas, 2009) was limited. Although, there were no multiple times of repetitions of AR cycles, stakeholders participated in research processes.

When it comes to generating actionable knowledge, the study makes the quantitative study as a primary method for finding of generalizable facts using a large volume of participants. After that, the group discussions and interviews take places by engaging key stakeholders in of the research context for evaluation of findings. The findings from both the quantitative study and group interviews and discussion are used to create actionable knowledge. The research methods and design are discussed in the sequent chapter.

CHAPTER 3 METHODS

3.1 Introduction

The research method chapter explains and justifies the methodological choice and how to answer the research questions raised in the study. It details the research processes and describes the rationale for utilizing the research methodology and how data will be used to measure a causal relationship between the five key S-L factors and IGA. The methodology is intrinsically chosen based on the assumptions and limitations of the samples and participants available to the researcher to deliver outcomes. This chapter starts discussions of the researcher's philosophical approach, justification for choosing methodology and researcher's position as a scholarly practitioner to ensure the methodological rigor of the study to demonstrate a scholarly sensitivity as well as relevant to ABC to develop conclusions based on evidences. Subsequently, the methodology discusses data collection procedures, research instrument validity and reliability ensured by ethical considerations as well as by the tools of a statistical data analysis (Aggarwal, 2011). To address the research goal and objectives from the perspective of the theoretical and practical significance, the study utilizes mixed quantitative and qualitative methods to examine, explore and explain (Blasimme, Maugeri & Germain, 2013) the degree of correlation between S-L factors and IGA utilizing a causal model. The researcher goes through the research processes and procedures to reach findings using statistical quantitative analysis and the qualitative group interview follows.

3.2 Research philosophical position

This section explains and justifies the methodological choices that include mixed quantitative and qualitative methods. It describes why the research questions will be answered and how they will provide the data that will investigate the relationships between the five S-L factors and IGA that the researcher is theorising.

The philosophical approach of the researcher guides the direction of the study. Both ontology and epistemology create new knowledge. Ontology is searching for the nature of reality and epistemology is searching the world for the nature of knowledge and justification of belief (Easterby-Smith, Thorpe & Jackson, 2012). Ontology is approaching objective realities while epistemology is a continuum of subjective interactions with participants. On the other hand, realism is related to scientific reality that rejects subjectivist ontologies (Johnson & Duberley, 2000) and interpretivism subjectively emphasizes on difference among people in acquisition of knowledge. Further, pragmatism concerns inclusion of existing knowledge (Saunders, Lewis & Thornhill (2008). Therefore, the researcher's epistemological approaches are both positivism on a continuum of objective realities in quantitative research and post-positivism or social-constructivism (Easterby-Smith, Thorpe & Jackson, 2012) from the perspective of the subjectivist in qualitative study utilizing mixed quantitative and qualitative methods by exploring approaches. The researcher was aware that the recruited participants of ABC were too small to obtain generalizable findings in an objectivism stance (Kim, 2017). Therefore, the researcher chose an online quantitative method as a primary method to utilize sufficient participants with a constructivist approach

based on epistemic human endeavours (Johnson & Duberley, 2000). The researcher discovers findings utilizing existing quantitative questionnaires for higher validity in epistemological perspectives (Creswell, 2017). Cross-participants' interviews and discussions run in sequence for rich interpretation to justify and to build reliable and practice-oriented outcomes in the research context (Barbour, 2008) by gaining insights and perspectives of the participants of ABC who have experiences (Creswell, 2017) from a continuum of subjectivist interactions.

3.3 Chosen research methodology

Ivankova (2015) suggests 4 different types of mixed methods: i) Concurrent quantitative and qualitative method; ii) Sequential quantitative and qualitative method; iii) Sequential qualitative and quantitative method; iv) Mixed methods with action research. The 4 types show that which method is first and which method next sequentially or concurrently using both methods, and how those methods are connected.

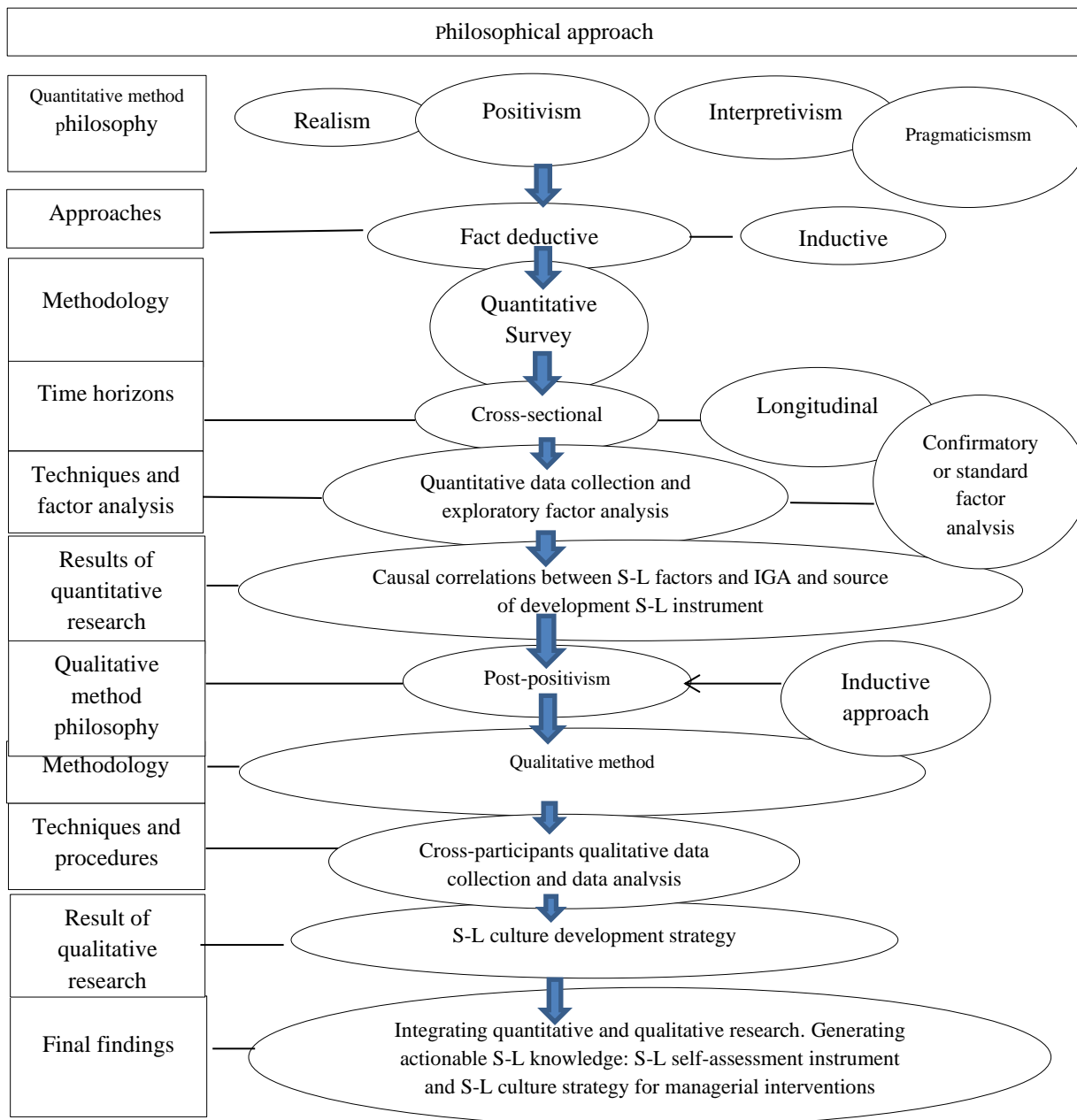
In the research, the researcher adapted a sequential design with which the quantitative study first and the qualitative study next utilizing an explanatory designing which the quantitative results are followed up by qualitative results in sequence in mixed methods. Neither exploratory nor concurrent design fit to the study as the research does not compare the two results as the concurrent design. The study does not pursue a qualitative study first and quantitative study next as exploratory design. In the study, the quantitative method is for generating findings using larger data for statistical findings and creating S-L instrument, while qualitative method is for explaining the quantitative results, interpreting and developing actionable knowledge, S-L culture development strategy in practice based on quantitative and qualitative results.

Quantitative surveys strategy through one-time based online survey as a means of collecting quantitative data as samples as it is fit to examine a causal model between independent and dependent variables (Fetters, Curry & Creswell, 2013) to find on how S-L factors enhance IGA. The researcher justifies the research findings with reliability and validity of the instruments through analyzing the statistical information, confirming the quantitative results and ensuring the ethical requirements. Furthermore, the researcher investigates what knowledge already exists through literature reviews and refers to how to afford them to this research by findings relevance to this research. An online survey methodology is used for the quantitative method using the self-administrated online survey questionnaire to achieve the research goals and objectives aiming at generating an actionable knowledge which can be shared under certain conditions in ABC. The researcher will monitor and verify collected data to minimize any sample error and biases. In addition, the researcher does not depend on a size of a sample for accuracy, thus, for data accuracy; the sample selection will be controlled at the beginning of the sample process.

Qualitative study is to obtain individual’s insights, feelings and experiences in semi-structured interviews (Fetters, Curry, & Creswell, 2013). Qualitative data is also used to understand quantitative findings and interpret how S-L factors can enhance IGA. Thus, a mixed methods research design is chosen provides strengths by maximizing the strong points of both quantitative and qualitative research (Ivankova, 2015).

The conceptual model of a research philosophy and paradigm in sequential quantitative and qualitative mixed methods research design in a single study is as illustrated in Figure 3.1.

Figure 3.1 Reserch philosophy and research paradigm in mixed method



(Source: Adapted Saunders, Lewis & Thornhill (2008, p. 108); Ivankova (2015, p. 135))

3.4 Justifications for choosing explanatory sequential mixed methods design

Reflecting the research goals and a research method's application, the researcher adopted mixed sequential quantitative and qualitative methods in explanatory design. The researcher emphasized a quantitative method for statistical finding first and a qualitative method for managerial findings. The quantitative method allowed the researcher to obtain the generalizability with a perspective of objectiveness. It helps to achieve the research goals by involving sufficient data collection, statistical data analyses which will be continued to reach a conclusion in a deductive research approach for quantitative finding (Overmars, Groot & Huigen, 2007). The researcher follows the deductive quantitative research approach to formulate propositions and build a framework of the research findings by exploring S-L factors' variables from existing theories and concepts through the literature review prior to the data collection (Colquitt & Zapata-Phelan, 2007).

This quantitative research method helps to provide a mathematical relationship between the five S-L factors and IGA using major variables in addition to the online quantitative data collection approach which is comparatively fast in data collection in a short time period (Amaratunga et al., 2002). Thus, this study explores a relationship between the S-L factors and IGA as a causal correlation in research. Fetters, Curry & Creswell (2013) highlight that a quantitative method is a suitable in the way of examining a causal model among independent and dependent variables which help to answer propositions tests and create generalized outcomes. The advantage of the causal model is appropriate for development of actionable knowledge of how S-L factors effect IGA with numeric evidences (Mirghafoori, Sharifabadi, & Takalo, 2018) that have significant cause from S-L factors. Further, the regression analysis is available to measure the causal correlations that indicates significant effect on IGA.

The qualitative method is beneficial to collect participants' numerous perspectives of insights, knowledge, information and experiences (Fetters, Curry, & Creswell, 2013) that contribute to the findings of the study. The inductive research approach will assist the researcher for better understanding and development of managerial intervention strategies to enhance IGA. The data collected from both quantitative and qualitative methodological choices for conducting the study that involves analyzing, integrating and combining results which help to achieve research goals with more evidence. Consequently, the researcher adopted mixed methods of quantitative and qualitative contributions to secure rigour and practice, which can make the results of the study robust and ensure the credibility of the research results, and increase possibility of transferability by combining the benefits of each method (Ivankova, 2015). In these regards, mixed methods design provides the researcher with a research method's platform to find how S-L factors enhance IGA for both rigor and practice.

The reason why the researcher does not adopt the exploratory sequential mixed methods nor sequential embedded design is that it starts with a qualitative study first and followed by a quantitative phase. This design explores qualitative data and analysis first and then uses the qualitative findings in a second quantitative study (Creswell, 2017). Since ABC has more or less N=15, it does not provide generalizable outcomes in finding the correlations between S-L factors and IGA.

The researcher did not adopt an AR because the AR focuses on an immediate solution to a research context's problem or reflection on progressive problem solving with stakeholders via repeated AR cycle (Niglas, 2009) which are limited to accessibility and availability to resolve an issue or problem (Creswell, 2017; Hitchcock, 2014). However, once managements of ABC make a decision, the actionable knowledge are ready for implementation in practice as stakeholders of ABC participated in research processes as cross-participants.

3.5 Research phases design

The main purpose of research phases design is focusing on procedures, processes and products of each phase for findings and validations of the study. The researcher adapted Kim' (2017) phases in the study that includes pre-step phase, Phase I: Constructing phase, Phase II: Acting quantitative and qualitative study, Phase III: Taking action and Phase IV: Evaluating action.

In a pre-step phase, the researcher attained an ethical approval from the research ethical committee of the university, which is mandatory before research work and also built research context settings, research goals and objectives. The researcher identified five key S-L factors for IGA based on the sources of researcher's work experiences as a primary source and existing literatures as a secondary source.

Phase I Construction of a research model: the researcher discusses with managers of ABC who know the stakeholders' demands and the areas needed to improve in IGA. The following extensive literature reviews is to identify five major S-L factors and sub-variables of each S-L factor to have supportive academic sources. The propositions and the causal conceptual model are constructed based on research variables found.

Phase II Action of quantitative and qualitative study: the data are collected utilizing a structured on-line survey questionnaire for the quantitative data and employing interviews for qualitative data in sequence. The collected data are analyzed to find correlations between S-L factors and IGA. Moreover, more significant S-L factors and less significant S-L factors for IGA are identified. The propositions are tested and the research's results are used to generate actionable knowledge in ABC. After completing of the quantitative study, qualitative data is collected utilizing semi-structured questionnaires to find individual's experience, insights and perceptions on S-L factors for IGA.

Phase III Evaluations, implications and conclusions: The research findings are evaluated with managers to validate and found improved and potential changes in ABC. Managerial intervention strategies are developed to increase S-L capabilities and S-L culture strategy for enhance IGA.

Phase IV Interventions, recommendations and limitations: The intervention strategies are addressed followed by recommendations and limitations. The intervention strategies include contextual intervention on transferring S-L instruments and strategies for S-L culture. Figure 3.2 illustrates the phases of the processes of the study.

Figure 3.2 Research phases design

Pres-step: Ethical approval, research contextual settings	
Procedure	Products
<ul style="list-style-type: none"> • Meeting ethical compliances and standards • Discussions and literature reviews • Finding of S-L factors based on work-experiences 	<ul style="list-style-type: none"> • Ethical approval • Research contextual settings • Research goals and objectives
Phase I: Constructions of research problem, intervening variables and conceptual framework	
Procedure	Products
<ul style="list-style-type: none"> • Discussion with ABC managers • Extensive literature reviews 	<ul style="list-style-type: none"> • Identification of problem • Research variables: S-L factors, S-L culture and IGA • Propositions and a conceptual framework
Phase II Action of Quan & Qual study: Data collection, analysis & results	
Procedure	Products
<ul style="list-style-type: none"> • On-line survey • Interviewing with ABC's stakeholders • Data analysis through SPSS and thematic analysis 	<ul style="list-style-type: none"> • Survey questionnaires • Propositions test and data analysis • Outcomes of study • Actionable knowledge
Phase III: Evaluations, discussions, conclusions and implications	
Procedure	Product
<ul style="list-style-type: none"> • Evaluating findings • Discussing with ABC's managers 	<ul style="list-style-type: none"> • Managerial intervention strategies • Conclusions • Implications
Phase IV Interventions, recommendations and limitations	

Procedure	Product
<ul style="list-style-type: none"> • Summary of overall findings • Reflections 	<ul style="list-style-type: none"> • Intervention strategies • Recommendations and limitations • Reflections

3.6 Quantitative study strategy

The quantitative research describes the overall stages of the research including sample participants, informed consent, data collection and ethical considerations. The primary purpose of the quantitative study is to answer the propositions tests by finding the causal correlations between the five S-L factors and IGA. The results will be used with focus on generating actionable knowledge that can be used to improve IGA and to strengthen the individual’s S-L capabilities by understanding the participant’s points of view (Brandimarte, 2011).

3.6.1 Inclusion criteria and sample

The research population and recruited participants were reviewed by the thesis supervisor to meet, conform and fulfill ethical policy, compliance and requirements approved by the University research ethics subcommittees before pursuing this study.

Sample population is individuals from whom the study generalizes results. The sample size is important to obtain significant research results because a statistical analysis needs to have sufficient data. The researcher reviewed Cochran’s formula for a simple random technique, however, it does not fit to this study as a number of fulltime office workforces including retirees and offshore work-force were statistically unknown. Therefore, the researcher adopted Field’s (2009) suggestion in which a sample size of between 268 and 1,000 is proposed to analyze and calculate statistics for producing reliable results in the research. The sample data are a mix of gender, education and age working in different functional groups in various areas. It includes individuals in administrative or management roles in Canadian business and fulltime office individuals including retirees, but excludes the hourly workforces because they are mainly unionized.

3.6.2 Research participants and informed consent

This research delivers quantitative findings based on participants with informed consent to find generalizable outcomes from a larger group of participants and thereby provides more confidence in the statistical correlations between S-L factors and IGA.

Participants were chosen who are or were full time Canadian workers in all levels and also Canadian individuals who work offshore. Exclusion criteria included those who are hourly or part-time employees and who are not Canadian as they are not in the research scope. The participants were encouraged to enlist their colleagues who were not part of the original individuals requested in the study. Canada is bilingual using two official languages of English and French. Since all the questionnaires are in English, individuals qualified for participation were limited to English speaking people.

Informed Consent is mandatory. Before participating in the survey, the participants should be able to access the information sheet and the consent form by requesting over email. The control statement should appear in the front page to avoid data error and bias (Podsakoff et al., 2003). They are informed that this is voluntary and data collected is used only for this research with confidentiality and privacy protection (Beskow, Check & Ammarell, 2014). Without accepting the consent, the survey should not be continued; the informed consent will be signed for a direct consent or implied consent will be taken by just participating in the survey without signing for the online survey. Only people who agree to the informed consent participate in this research and complete the questionnaire.

3.6.3 Survey instrument

After discussions with the thesis supervisor, the researcher adopts four existing and well-evidenced survey instruments that are fit for answering the research questions and the propositions tests. The existing survey instruments are investigated to find the appropriate online survey instruments suitable to measure the causal model. It is significant to choose proper survey instruments that have been tested and proved in experimental experiences in terms of validity and credibility of data collected (Kim, 2017). Houghton & Neck (2002) suggest about 35 questions that can be filled in more or less 10 minutes. The instrumentation of the survey questions are relatively recent and similar to those used in business for evaluation of personnel so that a participant feels at ease answering the questions; similar questions are spread out in different places to minimize biases. The website address are released to the social media or an email is sent to the recruited participants when the data collection stage is ready for execution and lasts in given the data-gathering time frame. The S-L factors' significant questions are asked at the beginning of the survey and demographic questions last with more focus on the S-L factors' questions than personal information. The instruction to the participant is to choose the most appropriate rating on the Likert 5-point rating scale. Checking and reviewing data will be conducted soon after starting data collection to reduce data exception, to monitor and to increase a response rate. After completing the questionnaires, a participant is encouraged to invite another participant to join in the study.

Research instrument is a tool to survey using questionnaires. The online quantitative questionnaire is developed as an instrument to collect data. It has been developed by adopting the four past relevant studies and available S-L instruments such as:

1. The revised S-L questionnaire (Houghton & Neck, 2002, pp. 690-691)
2. Event planner soft skills assessment in Wan-Gould (2011, pp. 281-290)
3. Allen (2012) A correlational analysis of the spiritual leadership survey versus authentic leadership questionnaire in non-denominational mega-church organizations.
4. Marques-Quinteiro, Curral & Passos (2012) Adapting the revised S-L questionnaire to the Portuguese context. social indicators research.

The study of Marques-Quinteiro, Cural & Passos (2012) revised the S-L Questionnaire for the Portuguese version utilized 720 participants and adopted an exploratory and confirmative factor analysis. The revised questionnaires include team-work S-L factors and IGA in measurement of S-L scales that are appropriate to the study. Houghton & Neck (2002) focused on S-L measurement scale from characteristics' factor rooted in psychological perspectives and S-L cultural views for a development of an advanced S-L measurement. Those efforts helped the researcher to structure S-L questionnaires from the S-L characteristics factor and how S-L culture contributes to IGA in organizing the S-L questionnaires. On the other hand, Wan-Gould (2011) approached S-L capabilities on technical hard skills as well as management soft skills' sets that need to deal with the diverse demands from stakeholders. Those skills competencies were becoming more significant evidences in achieving individual goals based on the results examined by 3,204 participants. It indicated that S-L skills factor impacts on IGA and suggested to the researcher to include it in the quantitative questionnaires to measure the individual's S-L capabilities in heightening IGA. Allen (2012) emphasized on teamwork to empower individuals as a teamwork member to promote a higher level of IGA. Those questionnaires support the researcher in organizing the quantitative questionnaires to collect the data regarding S-L factors and S-L culture for IGA.

The online quantitative questionnaires are created using the online tool of Google Forms. The front page of the online survey provides respondents with information regarding the purpose of the study, requests for voluntary participation and offers an implied consent. The questionnaire of "How the five self-leadership factors enhance individual goal-achievement Survey" consisted of 35 questions and comprised four parts. In the first three parts of the questionnaire respondents are requested to tick one from 'Strongly insignificant' to 'Strongly significant' in which '1' indicated 'Strongly insignificant', '5' denoted 'Strongly significant' and in between '2', '3' and '4' denoted intermediate significance. The first part is about the five S-L factors, the second part is about IGA, and the third part is about the S-L culture that is the moderate variable. The last part requested personal demographic information about the respondent which includes position, working department, etc. See Appendix A for the survey questionnaires. See Table 3.1 that details and the development of the 35 items of the questionnaires and sources comprising the 35 and linking them to the testable propositions. The causal model is constructed with a matrix of independent and dependent variables, numbers of items, survey instruments and sources to measure the causal model. See Appendix J for the details of S-L measurement metrics that maps for the sub-scales of S-L factors and details of testable propositions.

Table 3.1 Causal model of independent, dependent variables and source

Variables & link to propositions		No of items	Instruments	Source
Independent variables	The five S-L factors - Link to proposition P1: There is a significant correlation among the five perceived S-L factors and IGA.	31	-The revised S-L questionnaire -Event planner soft skills assessment -A correlational analysis of the spiritual leadership survey versus authentic leadership questionnaire in non-denominational mega-church organizations -Adapting the revised S-L questionnaire to the Portuguese context. social indicators research	-Houghton & Neck (2002, pp. 690-691) -Wan-Gould (2011, pp. 281-290) Allen (2012); -Marques-Quinteiro, Curreal & Passos, (2012)
Dependent variables	IGA	3	-Adapting the revised S-L questionnaire to the Portuguese context. social indicators research -The revised S-L questionnaire	-Marques-Quinteiro, Curreal & Passos, (2012) -Houghton & Neck (2002, p. 682).
Moderating variable	S-L organizational culture - Link to proposition P2: An organizational S-L culture moderates the relationship between certain perceived S-L factors and IGA	1	-The revised S-L questionnaire	Houghton & Neck(2002)
	Total	35		

Instrument for the five S-L factors: Part I survey questionnaires are to collect data about the five S-L factors which impact on IGA. The five S-L factors refer to the characteristics, skills, teamwork, value creation capabilities and individual goal setting capabilities which are identified in the study based on the researcher's work experiences as well as extant literature reviews. Thirty-five statements are drawn from four existing instruments including Houghton & Neck (2002), Wan-Gould (2011), Allen (2012) & Marques-Quinteiro, Curreal & Passos (2012) to measure how each S-L factor enhance IGA. Among the total 35 survey questions, the relevant 31 questions were taken to assess the five relevant S-L factors: cq-factor, sq-factor, tq-factor with each seven statements, vq-factor with six statements, and gq-factor with four statements.

IGA: Part II the IGA questionnaires are comprised of three statements to measure three different IGA such as expanding markets, efficient business process and better financial reports which are demanded from stakeholders.

S-L organizational culture: For Part III S-L organizational culture, the researcher extracted

one statement that is concerned with moderating IGA and the five S-L factors.

3.6.4 Pilot testing of survey instrument

The pilot testing aims at finding out if the survey instruments in the study will really work in real data collection by trying out on a few people before releasing the data collection website address to recruited members and beginning the full data collection.

First, the researcher visually tested all the questions again if there are any negative questions that require to reverse the scores answered and confirmed all statements are positive ones. Second, the survey questionnaires were pilot tested on a few individuals to obtain confidence by the researcher oneself and to attain familiarity with the online data collection processes. In addition, the other intention was to ascertain if anyone of recruited members could participate in the survey, how long it would take to complete the questionnaires and how it would be saved in a database. The researcher discovered one problem which a participant could not access to the survey website address, if a participant did not have Google account since the researcher adopted the Google form in the data collection design. The researcher correspondingly changed the setting in Google form to allow any participant even if a participant did not have a Google account.

3.7 Quantitative data collection and analysis strategy

This research is a non-experimental survey design to examine the S-L factors for IGA. This quantitative survey is conducted as a single event using self-reporting. This quantitative data collection is used for statistical and mathematical research applications and techniques. The result of the quantitative study is presented to the key stakeholders of ABC. *Justification of data collection approach:* This research employed an online survey questionnaire methodology for quantitative data collection to have over 300 participants as Field (2009) suggests for the reason of obtaining generalizable results since ABC has more or less 15 recruited members. The estimated time period for the data collection was between 1 and 3 months or until sufficient valid data was collected.

Procedures: The online survey's website link address is posted on social media in addition to emails to approach the unknown participants, clearly highlighting the purpose of the survey, freedom of choice to participate or not and the anonymity of the survey. Before participating in the survey, they will be informed that the data collected is used only for this research with confidentiality and privacy protection. Participants complete the survey at their convenience as computer and Internet connectivity are available. If the participant faces any problem, then the participant may contact the researcher and the thesis supervisor. If a problem remains unresolved through the researcher or thesis supervisor, the participant may contact the research governance officer of the university providing details including participant's name, the researcher's name, description of the research and the details of complaint, as it is necessary to identify an incident and to respond to the concern.

Phases: The researcher adapted Yuan et al.'s (2012) quantitative data collection model which comprises three phases.

Phase 1 recruited samples and participants with limitations: They include staff at the research context, supporters, individuals of the researcher's voluntary workplace and the voluntary participants responding over social media. Estimated numbers are 500.

Phase 2 sending reminder: One month later after Phase 1, a reminder is sent out to the recruited participants as applicable. The researcher validates the data collected to date, identifies and determines the usable and unusable samples.

Phase 3 validating data: A few months after Phase 1, validation of the data collected and identification of usable and unusable samples continues. If usable data is less than minimum required responses, then the data collection period will be extended to another month, while if usable samples are over 500 then the thesis supervisor guides and advises the researcher if the data collection site address can be discontinued.

Data analysis strategy: The collected data was stored in Google Drive for analysis of quantitative data using SPSS statistical tool to produce the research results of facts. SPSS which stands for Statistical Package for the Social Sciences allowed the researcher interactively to do statistical analyses of functionalities through menus and easier to make a documentation, while SAS which stands for Statistical Analysis System requires Structured Query Language, SQL programming coding skills, furthermore it does not have a user interface (Granville, 2008). For these reasons, the descriptive analysis, reliability of measurement of scale, exploratory factor analysis, Pearson correlation results, simple regression results and multicollinearity were calculated utilizing SPSS version 25. The proposition are tested and probability value, $p < .05$ is used for the statistical significance.

3.7.1 Post-hoc assessment of originality of the study

The correlations between S-L factors for IGA is a post-hoc analysis that has never been studied in a specified research context, Canada. The primary goal of the post-hoc analysis is to investigate how S-L factors enhance IGA. In a work environment, it was uncertain which S-L factors are significant in IGA and also which S-L factor should be focused on improving IGA. The study explores and identifies the five major S-L factors to investigate the correlations between S-L factors and IGA that individuals face in dealing with realities related to business management such as expanding markets, efficient business processes and better financial reports. Furthermore, the researcher evaluates whether the S-L culture influences IGA. The secondary goal of the post-hoc analysis is to create actionable knowledge including S-L self-measurement instruments at individual level and S-L culture development strategy at the organizational level. This typically requires creating data collection instruments from existing questionnaires and a distinctive statistical testing to discover the generalizable findings utilizing sufficient participants. The study extended to current thinking by identifying that IGA is a core engine to business performance. The study encouraged individuals to enhance S-L capabilities and the development of S-L culture for enhancing IGA. As regards the local organization's current thinking, the study posited developing S-L strategy for S-L culture incorporating S-L factors to achieve individual goals (McCullough, 2007) which are never considered in business management. As Crockett

(2015) suggested, taking advantage of generating actionable knowledge for practice by filling a gap in the existing knowledge; the findings contributed to improvements and potential changes by adapting findings to develop S-L culture to enhance S-L capabilities in dealing with the challenges which have to be faced in reality. The researcher has clarified why S-L instruments and S-L culture could be a new direction on the effects of IGA to meet the demands from stakeholders in a lean-based managerial environment. The research approached the short- and long-term S-L strategy while others did not think about the macro period of S-L.

Post-hoc analysis of the fact that five S-L factors are influencing IGA. The researcher created a causal model of how the five S-L factors identified impacted on IGA in practice. The researcher extends the view that the five S-L factors can be implemented for any layers' individuals for IGA by practicing with the more significant S-L factors. It is an originality of post-hoc analysis that the five S-L factors are influencing IGA in dealing with the contextual challenges that have never been studied in ABC nor in the academic research community. It fills the deficits in the existing literatures by finding facts (Crockett, 2015) that provide academic S-L conceptions and design of a causal model of S-L factors and IGA relations. It has been tested in propositions' tests and empirical evidences that make theoretical contributions in constructing a causal model in S-L fields (Colquitt & Zapata-Phelan, 2007). Indeed, identifying major S-L factors including cq-factor, sq-factor, tq-factor, vq-factor and gq-factor in addressing IGA and approaching to findings significant correlations between S-L factors and IGA are the new findings and such results were never discussed and completely absent in the existing literature. S-L culture strategy conceptual model on a macro scale is a post-hoc analysis that approached a conceptual S-L culture model design on a long-term macro scale. It is not in the scope of the study but has been discussed to view the long-term benefits of increasing S-L capability and building S-L culture with valued participants to impact on changes (Barbour, 2008). It presents how the S-L capability and S-L culture development strategy benefit an organization in maximizing value creation. The time period is not defined, but the benefits are expected over a long-term in development of S-L culture. It is under an assumption that S-L capabilities and S-L culture are facing upward while traditional top-down leadership culture is downward and leadership paradigm is gradually shifting to S-L mode to maximize value creations. The harmonized S-L culture should eventually merge with traditional top-down leadership culture and they should work together.

3.7.2 Why not confirmatory factor analysis (CFA) in the study

The researcher did not adopt CFA in factor analysis. The assumptions of a CFA include normality in data distribution with a sufficient sample size, $n > 200$ according to Statistics Solution, <https://www.statisticssolutions.com/confirmatory-factor-analysis/>, a priori model specification, and data from a random sample that incorporates variables and latent

constructs. The causal model of S-L factors as independent variables and IGA as dependent variable developed in the study is a newly structured equational modeling that has not been previously studied. The five S-L factors are structured based on literature reviews and researcher's long term business experiences rather than a previous research that suggests a priori relationship pattern. The five S-L factors are structured based on the causal model designed in the study and items are loaded on each S-L factor. The study does not examine the hypotheses tests that a relationship between the independent S-L factors and the dependent variable of IGA which CFA allows the researcher. Rather, propositions tests are adopted as the study is an originality and the original latent constructs do not exist. When the researcher attempted CFA, the resulted show all-in-one and one-in-all relations such as all items are correlated to one another and all S-L factors are linked to each other instead of grouped within one S-L factor. In these regards, the researcher adopted exploratory factor analysis (EFA) in the study.

3.7.3 Exploratory factor analysis (EFA) execution strategy in the study

The purpose of EFA aims at extracting factors and estimating factor loadings. The researcher followed the steps of Tantos' (2019) dimensionality reduction model that includes data factorability, methods of extraction and rotation, and Cronbach alpha.

Data factorability: Tantos suggests that the Bartlett sphericity test and the Kaiser-Meyer-Olkin (KMO) test that enable checking the data factorability. i) The Bartlett sphericity test suggests whether or not there is significant difference between the correlational matrix and the identity matrix of the same dimensionality and provides an evidence of essential factors. ii) Factor extraction methods include minimum residual and maximum likelihood estimation principal axes factor extraction with minimum sample size weighted chi square minimum rank alpha factoring.

Methods of extraction and rotation: Commonality is first extract the factor that accounts for the most variance, and then successively. To determine how many factors to retain, there are options such as Kaiser-Guttman criterion the Scree test Parallel analysis very simple structure with criterion function, Wayne Velicer's Minimum Average Partial (MAP) criterion function. The researcher choose the Scree plot which suggests how many factors are available and from which factor forwards starts getting weaker. The researcher can notice where the eigenvalues are close to each other that suggests how many factors are stronger to adopt as S-L factors. that can be visualized in a graph.

Whether the Factor Analysis is with Factoring Analysis (FA) or Principal Component Analysis (PCA): Both FA factoring and PCA aim to reduce the dimensionality of a set of data. , but there are differences in the approaches taken. FA is designed to objectively

identify factors from the variables, whereas PCA provides an approximation to the required factors. For example, in exploratory analysis, the eigenvalues of PCA are estimated components. In FA, factors are essential latent traits behind variables which make them correlate and reduce data by utilizing only essences. PCA explains variables including non-segmented ones while FA explains only common variance. Thus, PCA's components are linear functions of variables, and variables are linear functions of components. FA is a method for a fixed number of factors so it can be used in CFA and the rotations of factors are done routinely, while PCA is not because of a latent-trait. In terms of data reduction, PCA is a better method than FA because FA cannot correlate beyond a factor due to clusters of coherent variables. PCA is independent of the number of components in loading while FA depends on the number of factors extracted. PCA scores exact components with no assumptions while FA scores approximating components with an assumption. It indicates that FA is weak in finding correlations for analysis. In addition, PCA's algorithm is successful while FA may have a problem of uniqueness. In these regards, the researcher chose PCA that also fit to a choice in EFA.

Whether the rotation was Varimax or direct Oblimin with reasons: The researcher chose Varimax in the rotation rather than Oblimin and the reasons are below.

First, in factor rotation methods, Varimax returns factors are orthogonal while Oblimin allows the factors to not be orthogonal. It indicates that the Varimax rotation constructs an orthogonal set from an independent variable. Preferably, the researcher wants all S-L factors loaded on the independent variables as the Questions 1 – 7 of the survey are related to cq-factor; questions 8 – 14 all associated with sq-factor, questions 15 – 21 all connected to tq-factor, questions 22 – 27 linked to vq-factor and questions 28 – 31 all associated with gq-factor.

Second, the researcher wants the S-L factors' coefficients to be as much as higher in results as Varimax intends for it through rotations.

Third, the Varimax provides the researcher factors that are correlated between S-L factors, and what accounts for the correlations between the S-L factors.

As the explanations above, the researcher preferred Varimax in the rotations that are better suited to the EFA.

3.7.4 Post-hoc analysis of Cronbach alpha coefficient

Cronbach's alpha is the tool for testing reliability that indicates the internal consistency of items in quantitative questionnaires as a survey instrument. Before ensuring the reliability through Cronbach alpha, the researcher checked all the quantitative questionnaires if there are any negative worded questionnaires which required reversing the scores, for instance if scored 1, then change 1 to 5 and if scored 5 then change it to 1 in 5-point Likert scales. There was no need to reverse the score as all items were positive on

questionnaires. Cronbach alpha inner consistency coefficient is calculated to determine the level of reliability of the measurement of scale in the quantitative questionnaires. The Cronbach alpha test is important as it indicates how closely related a set of quantitative questionnaires items are. The range of Cronbach's alphas' values is between 0 and 1 that shows the level of reliability. If Cronbach's alpha value is greater than .7 is interpreted as reliable (Pallant, 2011) and if over .89 is considered as very good (Abu Hassan Asaari, Dwivedi & Lawton, 2012) in reliability of inner consistency. With advice from the thesis supervisor, the researcher adopted the quantitative questionnaires from the existing articles such as 19 items of Houghton & Neck (2002), 8 of Marques-Quinteiro, Curren & Passos (2012), 7 of Wan-Gould (2011) & 1 of Allen (2012) in total, 35 items. It helped the researcher avoid repeated pilot tests and reconstruction of the quantitative questionnaires to meet the acceptable Cronbach's coefficient internal consistency reliability.

A post-hoc assessment for each of the S-L factors identified: The researcher misinterpreted the 'if an item deleted Cronbach's value' as Cronbach's α value per each item and the following are the corrected ones. Cronbach's alpha coefficient is measured for independent, dependent, moderating variables and all 35 items. The result of Cronbach α test out of 35 items is .911 which indicates a high level of internal consistency reliability in the measurement scales (Abu Hassan Asaari, Dwivedi, & Lawton, 2012) in overall items. Cronbach's α coefficient was measured per each S-L factor. S-L cq-factor for IGA was measured using 7 items (Cronbach's α =.6), sq-factor was measured using 7 items (Cronbach's α =.7). Tq-factor for IGA was measured using 7 items (Cronbach's α =.819). Vq-factor was measured using 6 items (Cronbach's α =.721). Gq-factor was measured using 4 items (Cronbach's α =.638). Dependent variable, IGA was measured using 3 factors, and S-L culture and IGA factors was only 1 item and Cronbach's α was not available.

The Cronbach's α values for the four survey instruments that the researcher adopted are near to or over .7. It had reported Cronbach's α reliability coefficients per S-L factor, IGA and S-L culture ranged from .6 to .819. Cq-factor and gq-factor are slightly lower than cut off point of .7. The 7 items of transactional leadership scale studied by Kim (2007) explain that the Cronbach α reliability scores range from .67 to .85, which is within the acceptable range for internal consistency. Reliability of measurement of statistics of the Cronbach α reliability coefficients is shown on Table 3.2 and the employed survey instruments were discussed in detail in section 3.6.3 Survey instruments.

Table 3.2 Cronbach's α statistics of reliability of measurement in the causal model

Variables	S-L factors, number of items and Cronbach's alpha value		
		Items	Cronbach's alpha value
Independent variables	Self-leadership factors		
	S-L cq-factor	7	.600
	S-L sq-factor	7	.700
	S-L tq-factor	7	.819

	S-L vq-factor	6	.721
	S-L gq-factor	4	.638
Dependent variables	IGA Factors		
	IGAM: marketing	1	N/A
	IGAP: processes	1	N/A
	IGAF: finances	1	N/A
Moderating variable	S-L culture	1	N/A
Totals	All items	35	.911

Note: Cronbach's α value is acceptable at $\geq .7$ (Pallant, 2011)

3.8 Two methods chosen in EFA

There are two methods for driving factors such as Principle component factor (PCA) and common factor analysis (FA). It aims to reduce data to make a smaller dataset of variables and explores to identify the structure of the relationship between variables. PCA analysis method is used when a researcher needs to drive the minimum number of driving S-L factors and justify the maximum number of variances in components. FA, on the other hand, is used when a researcher does not know the nature of the factor to be extracted and its variances. In the study, the researcher adopts the PCA method in selection of factors to be extracted. The first criteria to determine the five S-L factors to be extracted was based on the two sources: i) researcher's long term work experiences relevant to practices and ii) literature reviews supporting theories for the five S-L factors for IGA to make rigorous evidence. The researcher reviewed the Eigenvalue criterion for the number of factors to be extracted and investigated the Eigenvalue plot on a graph to examine the number of S-L factors suggested and utilized Varimax orthogonal rotation rather than Quatimax or Equimaxas. The reason is that Varimax's extraction calculates multiple S-L factors among the variables from the correlation matrix, while Quartimax loads only a single factor and Equimax method simplifies row and column at a single time. (Statisticssolutions, 2019). In these regards, the researcher chose and justified both the five S-L factors identified and the five fixed S-L factors given from SPSS for data analysis, and for the data reduction option on factors. The results of the two chosen methods were compared to find the favorable outcomes in correlations between S-L factors and IGA.

3.9 Qualitative study strategy

The purpose of the qualitative interview is to better understand and to confirm the results of the quantitative study and to collect data as grounded information to evaluate the quantitative findings in ABC. The qualitative research starts after the quantitative study with the description and interpretation of the results of the quantitative method (Mensah, 2014) to obtain general ideas and insights. In addition, Lincoln & Canella (2004) posit a qualitative method to generate trustworthy findings appropriate to ABC using a qualitative research method which enables collection of the individual's interests and perceptions of S-L factors

which impacts IGA. The qualitative research paradigm (Denzin, Lincoln & Giardina, 2006) is committed to the creation of practical outcomes in ABC. St. Pierre (2004) advanced the notion for reliability and validity to improve the research findings by thinking outside the box (Atkinson, 2004) in dealing with the research in practice. Creswell (2017) offered multiple ways of qualitative methods such as ethnography, narrative approach, phenomenological method, grounded theory and case study. The researcher adopted the phenomenon approach because the qualitative study neither aims at creating theory like grounded theory, nor focuses on individual's story utilizing narrative approach, nor an ethnography which requires often years of observations nor a case study. The researcher chose a phenomenon approach for the study to create themes, subthemes/code and sub code through analytical processes of the participants' insights, experiences, perspectives and other data sources. The findings contribute to the study to draw conclusions based on the findings from both the quantitative and qualitative study that can be more reliable and practical as suggested by examiners.

3.9.1 Research cross-participants

The recruited participants of the cross-participants consist of individuals who voluntarily joined in the quantitative survey as well as the qualitative interviews. The group interviews in ABC includes a volunteer assistant who takes notes and records dialogues. The participant includes both leaders as the decision makers of ABC and administrators from whom were collected individual perceptions and experiences which as Creswell (2017) has stated may inform of the different S-L effects in various groups in the office.

The cross-participants were 12 key stakeholders in total, 67% out of 18 recruits from multiple departments including sales and marketing through engineering and designing to manufacturing and administration. So far as lifetime career experiences are concerned, 2 participants have less than 10 years (17 %), 7 have 11-20 years (58 %) and 3 over 20 years (25 %). Over 80% participants have more than 11 years work experience.

3.9.2 Interview questionnaire construct

The qualitative questionnaires formed the basis of the group interview which obtained feedback from the quantitative findings after watching the Power-Point file presented by the researcher. What the participant learned, how to apply what was learned for making changes reflecting the research results in improving IGA in practice. Appendix C shows interview questions that contain three parts: Part I: S-L factors, Part II: S-L culture and Part III: Individual goal achievements with seventeen questions in total. The first seven questions in Part I is to collect participant's perceptions on S-L factors which individuals utilize to increase their IGA. The next seven questions is about S-L culture which may impact on IGA as well as participant's recommendations. The final three questions in Part III are about IGA from the perspectives of expanding market, efficient business processes and better financial reports which stakeholders demand.

3.9.3 Qualitative data collection

The discussions and interviews with cross-participants take place following a presentation of the quantitative result and after obtaining informed consent from the participants. The researcher respects all individual's human rights in ABC with confidentiality and privacy protection. As the interview time is limited to an hour over the lunch and learn session, email or telephone interviews are used to follow up the interviews where necessary. The group interviews were utilized for data collection as suggested by Schaik et al. (2014). According to Hatcher (2005) group interview enhances the integrity of qualitative data by utilizing more participants at the same time and at a designated space.

Shento (2004) requires that the researcher understand the characteristics of the participants for the qualitative study so that the researcher can engage in interviews for increasing the trustworthiness of data collection procedures. This section presents the distribution of interviewees to attempt to understand participants' characteristics as a group and as individuals in ABC. The researcher respects individual rights in ABC within a multi-cultural country (Canada) by avoiding any participant's background characteristics such as gender, age, marital status, educational level, religion and ethnicity; for equality, freedom from discrimination and personal security.

Creswell (2017) exposes the individual's insights and experiences, so the qualitative findings may inform of the development of potential interventions in which S-L factors may impact positively on business process through IGA. This study employed a semi-structured interview for both a group and individuals from ABC in Canada utilizing participants who were active fulltime office workers including all levels in ABC, but excluding sales representatives offshore and a dispatcher in joint venture in the Far East. It allowed exploring their S-L experiences, to better understand the quantitative findings. It also posits to apply the research findings for actionable knowledge to promote S-L in practice. The timeframe of qualitative data collection was November and December, 2015 with key stakeholders' interview and discussion first and individual interviews next in sequence. The reason for the group interview first is that as Schaik et al. (2014) suggest the group qualitative data collected forms the individual interview guide and enhance the integrity of the qualitative data analysis in exploring categories and themes. During the group discussion and interviews, a volunteer assistant took notes.

After presentation of the quantitative findings by the researcher, group qualitative questions were discussed. The researcher gathered their insights and levels of understanding and confirmed the findings from the quantitative study and found how the research results may apply to strengthening individual's' S-L. Recommendations were also discussed and collected for enhancement of S-L for development of actionable knowledge. As Barbour (2008) notes the advantage of the key stakeholder's group interview and discussion for this study included increasing the number of participants who share their experiences and insights at a designated location with facilities for presentation, capturing data quickly with

same controls on data collection in a cost effective way without interfering with their production time since it took place over the lunch hour.

3.9.4 Qualitative data analysis strategy

There are available computer aided qualitative data analysis software such as Computer Assisted Qualitative Data Analysis (CAQDAS), ATLAS.ti and NVivo, however the interviews were limited to N=12 which was a manageable size. The researcher carried on with the data coding and analysis (Crockett, 2015).

As Creswell (2017) suggested the researcher initially visually screened collected data, interpreted interviews and coded in an inductive process which Overmars, Groot & Huigen (2007) have used to search for correlations within datasets. Cunningham (2013) simultaneously analyzes qualitative data while collecting data in qualitative research as Liamputtong (2009) states. The researcher adopted the interpretive thematic analysis which Liamputtong (p. 135) used for identifying, analyzing, naming and recording patterns of themes and subthemes (Crockett, 2015) after a deeper understanding of the interviews.

3.10 Role of the researcher

The researcher's experience for 30 years as an IT leader in the research context was advantageous as the researcher had many chances to contact individuals for their IT support. It also assisted the researcher for better understanding the background of the research, identifying needs for S-L and how S-L actionable application can benefit at the levels of both the individual and the organization (Barnaghi, Sheth & Henson, 2013, p. 10). As a self-funded and voluntary outsider researcher, the researcher made efforts for minimizing interruption of individual's production time and avoiding any possible legal issue. The researcher was given a specific key contact to access to other key stakeholders, to collect data, present and evaluate the findings while carrying out the research. The researcher initiated and lead the research process by monitoring the successful progress of the research executions while gaining from Caverlee et al. (2007) insightful ideas through mixed quantitative and qualitative methods to depict the factual data as well as to deepen insights (Barnham, 2015). Furthermore, the project involved theoretical findings and discovering practical S-L outcomes through phases of the project. Included were exploring, identifying significant S-L factors and discovering how S-L factors enhance IGA utilizing voluntary participants. Then, the researcher's role was escalated to design the theoretical framework and pursue it to discover and deliver actionable knowledge in practice with generalizability. The researcher ensured that the findings answered the research questions to create originality in both academics and practice to fill the research gaps. The other role of the researcher was to ensure the validity, reliability and ethics of the research processes from data collection through analyses and presentation of the findings to avoid any research bias. The researcher communicated with thesis supervisors and a key contact of ABC to make sure the research processes were on the right track to meet the ABC compliances.

Reflexibility and positionality: The qualitative study requires an eagerness and willingness of cross-participants that affected the researcher's collection of data and its analysis. The reflexivity and positionality helped the researcher to prepare for interviews by building trust relations with cross-participants in ABC and meet ethical requirements. While pursuing the study, the researcher visited ABC several times to have closer relationship with potential cross-participants so that they could have willingness to support the researcher and join in the research. In the role of the outsider researcher, on account of being a retiree of ABC, the researcher realized that the presence of the CEO, the previous direct line leader, managers, and directors were great sources in proceeding the thesis project. Since Canada is a multi-cultural country in which there are many immigrants from over 250 countries with a cultural pluralism and with various ethnic groups, the researcher respected their identity, culture and politics to avoid any legal issues.

The researcher's company role: The researcher's role as a retiree IT leader in the mixed method of explanatory sequential methods was a dual role as an outside researcher and as a change agent in the study. The challenges as a self-funded voluntary outside researcher included pre-understanding, source accessibility and availability and organizational politics (Coghlan & Brannick, 2010) that impacted on the researcher in implementing the findings of the research. Moreover, the challenges to the researcher were approach the study in terms of inviting sufficient participants from the outside of ABC to create generalizable knowledge, although the limitations were to collaborate with ABC to implement findings for the benefit of all layers of individuals and ABC. As a change agent, the researcher influences individuals on how S-L capabilities are significant in dealing with challenges and how S-L culture development is essential for the long-term benefits to ensure the maximization of value creation with harmonized S-L and traditional leadership.

Potential relationships with the interviewees: Involving key stakeholders as interviewees is important to collect their experiences, insights and perspectives and better understand the S-L factors and S-L culture that influence their IGA. Since early 1980s at ABC, the researcher has had roles and responsibilities to support IT as a leader's role in relation to the interviewees. The long-term IT service in relation to the interviewees of the target company has been a precious resource in pursuing the research project in pre-understanding, gaining insights, perspectives and evaluating research findings. It has helped the researcher understand and capture the interviewees' S-L factors' perceptions and S-L culture development insights more deeply and accurately which other researchers may not have had. It is because the researcher understands the requirements of S-L capabilities and S-L culture development of ABC as an individual as well as from organizational perspectives from an insider's approach for embracing and dealing with the research context's realities and an outsider's objective perspectives for findings of generalizable facts (Dorfman, 2004). However, the pre-understanding of the requirements of S-L instruments to increase S-L capabilities and to develop S-L culture strategies hindered the researcher as the subject company has been run under top-down traditional hierarchical leadership. Nevertheless,

with the outsider researcher position at the research context, the researcher had support from the senior managers who are decision makers and policy creators, who are the key individuals who supported pursuing of the research project. Those relationships provide the researcher with valued insights and information in data collection and accessing other individuals of ABC. On the other hand, the researcher had to follow the organizational visitor's compliance to meet the requirements as an outside researcher at the time of interviewing and evaluating findings of the study. Before data collection, the researcher greeted individuals to have them feel free at participations and to avoid any hinderance in interviewees' responses due to the possible disadvantages, their critical perspectives and insights in the group interviews were required. In this regard, ethical considerations relating to the research are stated in the subsequent section.

3.11 Research ethical considerations

The research involves several stages in the research process including identification of participants, data collection, data analysis and discussion of validity and reliability. Each stage maintains ethical concerns of the participant and protection of collected data. Research ethics lead the research in the right direction (McClaren, 2015) and keep the research at the front of ethical discipline and ethical behaviour (McClaren, 2013). The researcher follows all the research ethical requirements and guidance such as confidentiality, security, research ethical concerns and participants' anonymity which are necessary to meet the requirements for research ethics approvals from international online research ethics committees of the university "as per the University's policy on research ethics involving Human Participation" (Research ethics application form, 2013). The researcher pursued this study fulfilling applicable ethical policy, ethical compliance (AbuShmais, 2013) and ethical requirements under supervision to improve validity (McClaren, 2013) and reliability of the research. The researcher has been provided with a sponsor letter (see Appendix B) from the workplace's direct line leader to ensure approval for ethical considerations relevant to local ethical requirements. The researcher complies with the university's ethical regulations and code of ethics throughout the study. The thesis ethical proposal was reviewed by the thesis supervisor, revised accordingly as advised and reviewed again by the ethical committee to meet all ethical requirements and finalized consequently as directed.

3.12 Reflections and conclusions

For the research methodology design, mixed of quantitative and qualitative methods are adopted to achieve both rigorous and relevant solutions to the research problem. The inclusion of quantitative method research design increases the opportunity for generalizable research findings from an objectivism stance (Kim, 2017) to construct pragmatic S-L instruments. An online survey is utilized for the quantitative study and its population and sample size are defined for generating valued outcomes with large participants. The quantitative questionnaire instrument for a response from participants is a mix of elements found in existing quantitative questionnaires for higher validity from the epistemological perspective (Creswell, 2017). It is refined to produce information for the analytical processes

for practical and actionable S-L findings as a constructivist instrument for pragmatic resolutions.

For the qualitative method, the group interview emphasizes better understanding and confirms the results of the quantitative study and to contribute to the appropriate quantitative findings relevant to ABC's context. It also focused on evaluating the quantitative findings and applying the research results to improving individual's S-L capabilities and providing the fact on how S-L factors help enhance IGA in practice. Throughout the research process, research ethics leads the research direction (McClaren, 2015) and the researcher complies with the applicable ethical regulations and code of ethics to improve the validity and reliability of the research (McClaren, 2013). The quantitative study and its findings will be discussed in the following chapter to search for the facts and to forward to achieve research goals and objectives of the study.

CHAPTER 4 FINDINGS OF QUANTITATIVE STUDY

4.1 Introduction

This chapter presents the quantitative research findings through data collection and the data analyses. The main purposes of the quantitative study are to discover the facts, present and explain what the researcher has learned and to justify why the findings are important in terms of enhancing IGA and managerial interventions in ABC. Furthermore, it aims at answering the researcher's arguments described in the research questions and propositions tests in a logical way.

The data were collected from Canadian full-time office workers including retirees and were analysed to test the research propositions and answer the research questions. The first section of this chapter summarizes the demographic characteristics of the participants, sample size adequacy; validity and missing values. The second section describes the preliminary analysis for descriptive statistics, S-L factors for IGA and test of normality of the frequency distribution. The third section will analyse the statistical correlation between S-L factors and IGA, factor analysis, exploratory factor analysis, regression analysis and propositions testing. Furthermore, the causal relationship between S-L factors and IGA will be analysed using regression analysis.

The quantitative study is the first followed by qualitative study in sequence, which are methodological hierarchy (Denzin, Lincoln & Giardina, 2006) and which enrich the results of the research (Yauch & Steudel, 2003). The quantitative data are analysed first, then the researcher presents the findings of the quantitative results to a workplace and then qualitative findings which play an auxiliary role in pursuit of the research with an interpretive framework (Howe, 2004) are presented. The research analyses and findings aim at collecting diverse quantitative hard data (Hesse-Biber, 2010) for statistical analyses, while qualitative data add values in depth of understanding, interpreting, evaluating and confirming the results of the quantitative study.

4.2 Findings of preliminary data evaluation

This is an initial evaluation process before starting of data analyses for the valuable research findings. The researcher investigated the sample size adequacy, characteristics of demography participants, case studies for missing data and tests of normality of data distributions, which may have an influence the findings of the research.

4.2.1 Sample size adequacy

The sample size is a critical feature in a quantitative study to achieve the research goal according to Creswell (2017) because the sample size determines the reliability of the relationship among S-L factors in statistical analyses. Thus, the reliability of this research is dependent on the sample size which requires having sufficient sample data. Through online data collection during the data collection period, the total participants were 370 which was

more than the 300 which Field (2009) recommended. Thus, the sample figure is considered sufficient enough to move forward to data analyses as the thesis supervisor has approved.

4.2.2 Demography of participant's characteristics

Respondent characteristics are important as they provide the background of the participants. Table 4.1 presents demographic statistics regarding age, education, lifetime working experience, position as the participant indicated. 85% of respondents in total had obtained degrees (degree 30%, postgraduate degree 55%). Respondents were asked their life-time work experiences; the survey shows that experience between 6 and 10 years, 18%, 11 and 15 years, 19%, 16 and 20 years, 19% and over 21 years, 38%.

The majority of the participants were leaders 279 (75%) out of 370. The over 11 years' life-time work experiences of the participant were 280 (76%). The findings of the quantitative study through quality participants may provide an opportunity for contributing to ABC by finding out how S-L factors enhance IGA in individual's daily activities. How the results of survey contribute to creating S-L instrument to enhance IGA and how ABC can build S-L culture to achieve IGA in a macro period.

Table 4.1 S-L participant's characteristics by demographic category

Category	Item	Count Total	Ratio %
Age	20 – 39	141	38%
	40 – 49	124	34%
	50 and plus years old	105	28%
	Total	370	100%
Education	College or under than college	51	14%
	Degree	114	31%
	Postgraduate	205	55%
	Total	370	100%
Life-time work experience	0 – 5 years	24	6%
	6 – 10 years	66	18%
	11 – 15 years	71	19%
	16 – 20 years	70	19%
	21 and plus years	139	38%
	Total	370	100%
Position in organization	Administrator	91	25%
	Managerial individual	279	75%
	Total	370	100%

4.2.3 Data accuracy and missing value

Before statistical analysis, the researcher ran case process to check the validity for data accuracy and missing data collected through the online quantitative questionnaires. 100% of collected data was valid and there was no missing data. None of the cases needed to be deleted from the data file. The researcher hence utilized a total dataset of N=370 for the data analyses, however, will make sure that every data analysis procedure has sufficient data before analysing the data.

4.3 Findings of descriptive statistics

Preliminary statistical analysis is important to understand the main features of a quantitative data provided by individual participants. It examined descriptive statistics describing general scores between minimum, 1 and maximum, 5 in measurement of scales and data's normality in the frequency of scores for test of normality to find if there any significance in the variables from the sample and the measures.

4.3.1 Descriptive frequency statistics

The descriptive statistics show the basic features of quantitative data distribution in the study including min/max, mean, standard deviation identifying spreading of answers chosen and if all questionnaires were answered by all participants (N=370) which included the data from ABC, N=12. The researcher argues that the size of ABC, N=12 is insufficient to generate statistically valuable results (Field, 2009), hence the researcher justified utilizing N=370 which can represent the sample population in the study. 35 questions were used to compute minimum and maximum which were 1 and 5 respectively on a 5-point Likert scale; mean values were between 3.402 and 4.379 with standard deviation (S.D.) between .700 and 1.422. The means and standard deviations appeared to be reasonable. Table 4.2 summarized descriptive statistics by variables.

Table 4.2 Descriptive frequency statistics

Independent: S-L factors Dependent variables: IGA	N	Min	Max	Mean	S.D.
Characteristics factor	370	1	5	3.543	1.153
	ABC	1	5	3.683	1.237
Skills' factor	370	1	5	3.968	.898
	ABC	1	5	4.239	.902
Team-work factor	370	1	5	4.144	.831

	ABC	3	5	4.379	.700
Value creation factor	370	1	5	3.881	.994
	ABC	1	5	3.905	1.138
Goal setting factor	370	1	5	3.600	1.086
	ABC	1	5	3.554	1.048
S-L culture	370	1	5	3.580	1.100
	ABC	1	5	3.402	1.422
IGA	370	1	5	4.028	.846
	ABC	1	5	4.376	.811

Note: ABC's N=12, N=370 included ABC

All S-L factors are significant to increase S-L; skills, team-work, value creation S-L factors and IGA's variables are relatively higher in mean value than other S-L factors. It indicates that IGA is very important at management level and those key S-L factors enhance value of individuals by managing their functions and achieving their IGA more efficient matters. To ABC, it also suggests that an S-L self-assessment instrument which is a tool which enables upgrade of individual's S-L, is necessary to promote individual's S-L capabilities. In turn, S-L culture and S-L policy be established in ABC to increase individual's S-L capabilities so that individuals adopt S-L as a means of advancement in IGA. The management may consider some incentives based on IGA which generates better ideas and outcomes by utilizing S-L. In the bigger picture, a leadership paradigm may shift from a traditional top-down hierarchical structure to horizontal S-L should also be considered in a macro level.

The justification of sample: The mean value, the small number of N=12 out of ABC, will be different from N=370 as data shown from ABC crowded with skewness to the top end in ABC with a small sample so that the researcher confirms that the study applies N=370 for quantitative findings. Since most of respondents are in leadership position with long term business experience, the descriptive frequency statistics are in the form of management's insights which indicate what S-L factors are significantly impacted on IGA with conventional wisdom of management. In the study, the dependent variable related with independent variables is mathematically calculated.

4.3.2 Test of normality

The researcher examined data normality which described the frequency of scores in the quantitative survey's questionnaires to make sure if the data were normally distributed before analysing data. The tests included quantile-quantile (Q-Q) plots, histogram, Skewness & Kurtosis, Kolmogorov-Smirnova (K-S) & Shapiro-Wilk. Based on the results of the statistical analyses of K-S and Shapiro-Wilk Test of normality and all the p-values (Sig.=.000) of both of K-S and Shapiro-Wilk Test, the researcher concludes that the quantitative data are in normal distribution.

4.4 Statistics' findings of two separate exploratory factor analysis (EFA) of factors' models

EFA is aimed at validating the data, reducing the data if necessary, ensuring that if the data were loaded with correct variables and confirming if the measurement was correct (Pallant, 2011). The researcher identified the five S-L factors including cq-factor, sq-factor, tq-factor, vq-factor and gq-factor for IGA. EFA is then used to find appropriate factors suitable for this research by identifying groups of variables and by reducing a dataset if it is necessary (Field, 2009). The study of correlation between S-L factors and IGA in business processes in Canada is new, so that there were no specific S-L factors already existing to be analyzed for IGA. On the other hand, the confirmatory factor analysis (CFA) aims at confirming whether the data fit a proposition which is based on existing theories and researches. The standard factor analysis focuses on scientific study using mathematical methods. The researcher adapted the analytical framework of data analysis used by Cunningham (2013), Abu Hassan Asaari, Dwivedi & Lawton (2012) who approached EFA in a practical context.

4.4.1 EFA statistics in 8 factors model: Variance extracted, eigenvalues and loaded after rotation

Based on the quantitative data collected from 370 participants, factor analysis was conducted to explore S-L factors for IGA. It was aimed at validating the data, reducing the data if necessary, ensuring if the data were loaded with correct variables and confirming if the measurement was correct. Although the researcher grouped the five S-L factors in business process for IGA through the literature reviews, EFA is considered to be necessary to find appropriate factors suitable for this research. This section examined the principal component analysis (PCA) to examine the value of communalities which indicate an initial and extraction values, eigenvalues and loaded values after rotation to determine if items are valid to keep for analysis.

Variance extracted: Extraction of communalities examines the items' communalities' values to validate items for further analysis of PCA. The researcher utilized Kaiser criterion rule, which drops all components with eigenvalues under 1.0. PCA method extracted 8 out of 31 components. The extraction of communalities examined 31 items in this study. The initial value is 1, while value of extraction of each item using the method of PCA is between .339 and .869 as shown in Table 4.3. All items' extraction values are greater than .3 in loading. Based on the findings from extraction of communalities, the values of extraction of communalities indicate that all the set of variables are valid and correlated in communalities loading. It represents the principal component in communalities as the communalities loading value is greater than .3 (Abu Hassan Asaari, Dwivedi & Lawton, 2012, p.77).

**Table 4.3 Variances extracted 8 factors model: Communalities and component
Communalities Component Matrix^a**

ID	Initial	Extraction	ID	8 Component extracted							
				1	2	3	4	5	6	7	8
CQ1	1.000	0.842	GQ4	0.713		-0.328					
CQ2	1.000	0.585	VQ4	0.67							
CQ3	1.000	0.674	VQ2	0.616		-0.368					
CQ4	1.000	0.616	TQ3	0.612	-0.322						
CQ5	1.000	0.485	TQ5	0.61	-0.369						
CQ6	1.000	0.490	TQ7	0.593							
CQ7	1.000	0.832	VQ1	0.589							
SQ1	1.000	0.571	SQ2	0.587							
SQ2	1.000	0.493	SQ5	0.585							
SQ3	1.000	0.542	VQ3	0.562		-0.383			0.453		
SQ4	1.000	0.456	GQ7	0.55				0.38			
SQ5	1.000	0.482	CQ6	0.546							
SQ6	1.000	0.542	SQ3	0.529					-0.304		
SQ7	1.000	0.397	TQ2	0.528							
TQ1	1.000	0.444	TQ4	0.517	-0.339						0.389
TQ2	1.000	0.386	CQ5	0.515				0.429			
TQ3	1.000	0.604	CQ4	0.513							-0.475
TQ4	1.000	0.588	TQ6	0.507	-0.342	0.322	0.315				
TQ5	1.000	0.566	TQ1	0.498							
TQ6	1.000	0.661	VQ5	0.478							
TQ7	1.000	0.600	SQ4	0.476				0.335			
VQ1	1.000	0.576	SQ7	0.447						0.355	
VQ2	1.000	0.613	SQ6	0.431	-0.334			-0.332			
VQ3	1.000	0.728	VQ6	0.382	0.454	0.52	-0.385				
VQ4	1.000	0.608	GQ3	0.379	0.587		0.495				
VQ5	1.000	0.339	CQ3	0.366						0.507	-0.33
VQ6	1.000	0.857	CQ2	0.362	0.325					0.467	
GQ3	1.000	0.869	GQ6	0.352	0.359			0.375			
GQ4	1.000	0.675	SQ1	0.344					0.628		
GQ6	1.000	0.527	CQ7	0.306	0.619		0.505				
GQ7	1.000	0.574	CQ1		0.43	0.573	-0.375				
Count > 0.3 and extracted				24	2	1	0	0	0	0	0

Extraction Method: Principal Component

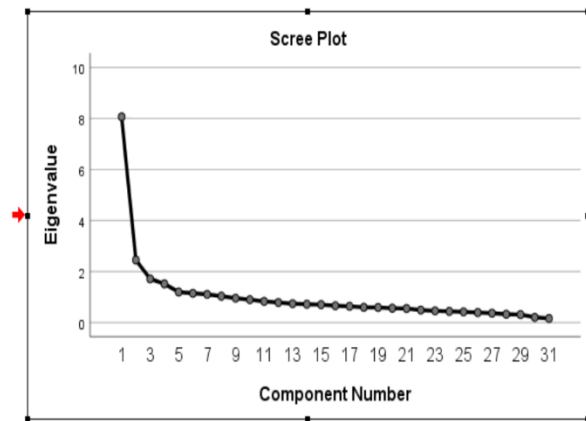
Extraction Method: Principal Component Analysis. a 8 components extracted.

Legend: See Appendix J for ID's descriptions. Items in a factor which are greater than .3 and extracted are highlighted in yellow.

8 Component Scree Plot: In Figure 4.1 generated from SPSS version 25, Scree plot shows that when one component moves toward 31st component, the eigenvalue drops.

Figure 4.1 Scree plot for eigenvalues and components

The scree plot is used to determine the cut-off for extraction of variables where the slope of the line changes.



This curve in the Scree plot, however, is difficult to interpret as to where the cut off point is because it begins to tail off after three factors, but there is another drop after four factors before a stable plateau is reached. Therefore, the researcher probably justifies the use of five factors given the large sample.

Where low loadings exists: The communalities in in Table 4.3 indicates that only one GQ4 exceeds 0.7. The average of the communalities is found by adding them up and dividing by the number of communalities (18.222/31=) 0.5878 while Jolliffe’s criterion suggests to retain factors with eigenvalues greater than 0.7 or 0.6 when the sample size is greater than 250. Component 6,7 and 8 have extracted 2, 3 and 1 item respectively and are lowered in the sample size N=370.

Where items are miss-specified: In component matrix in Table 4.3, Component 1 compromises of 30 items in components extracted. It includes cq-factor, 7 items; gq-factor, 4 items, sq-factor, 7, tq-factor, 7 and vq-factor 6. It indicates that those are miss-specified for analysis as a component includes all 5 factors without a specific factor. It may cause bias and will cause a substantial issue for finding correlations between S-L factors and with IGA.

Eigenvalues and loaded after rotation: The researcher ran PCA utilizing Kaiser criterion rule, which dropped all components with eigenvalues under 1.0. The purpose of the factor analysis rotation is to determine what components represent which items by clustering them, which helps to interpret and define factors. It is important to reduce the number of variables for further study on each S-L factor. The extraction method was a PCA and rotation method of Varimax with Kaiser Normalization and the rotation converged was in 9 iterations. Dien (2012) maximized factor loading by using the varimax rotation method. This generates sequential factors by rotating items to create a pattern of loading. EFA with varimax rotation identifies the factors to obtain a pattern of loading by variables and clustering them which help the interpretabilities of components. Interpretation of the result was that PCA method extracted 8 components which were greater than 1.0 in eigenvalue which contributed to the explanation of variances in the variables. In this study, the Varimax rotation suggested 8 components which can be an approximated solution. The rotated component matrix gives cluster of components where Component 1 comprises of 24 items, Component 2, 2; Component 3, 1. Meanwhile Component 4, 5, 6, 7 and 8 comprise 0, 0, 0, 0 and 0

respectively in the 31 items in total as shown in Table 4.3. The 8 components were between 1.032 and 8.063 in the initial eigenvalue and the percentage of variance was between 3.328 and 26.008 and cumulative percentage out of 8 components was 58.782% as shown in Table 4.4.

Table 4.4 Eigenvalues and extraction sums of squared loadings

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.063	26.008	26.008	8.063	26.008	26.008
2	2.453	7.914	33.923	2.453	7.914	33.923
3	1.712	5.522	39.444	1.712	5.522	39.444
4	1.516	4.891	44.335	1.516	4.891	44.335
5	1.195	3.854	48.189	1.195	3.854	48.189
6	1.147	3.699	51.888	1.147	3.699	51.888
7	1.105	3.566	55.454	1.105	3.566	55.454
8	1.032	3.328	58.782	1.032	3.328	58.782

Extraction Method: Principal Component Analysis.

Findings indicated that it did not provide a unique pattern of each component. One item is loaded across 8 components although each component has clustered items. For instance, 7 items (tq1 – tq7) which identify the tq-factor, are well clustered, while the other 7 components are mixed with vq-factor, gq-factor, sq-factor and cq-factor in components. From the scree plot, it was difficult to determine visually how many components. The researcher examined 5 fixed components generated by PCA for the justification of five factors. Table 4.5 indicates that only 3 components are extracted, furthermore component 1 contained 24 out of 31 items extracted which does not make sense, therefore the researcher investigated the 5 factors model.

4.4.2 EFA statistics in 5 factors’ model extracted by fixed number of factors in SPSS

The researcher investigated factors to explore S-L factors for IGA. The purpose was to reduce 8 factors to five factors and to ensure if the data were loaded with appropriate variables and to confirm the measurement. Since the researcher grouped the five S-L factors in business process for IGA through the literature reviews, EFA statistics was essential to ensure if factors were suitable for this research. This section examined the PCA to investigate the value of communalities which indicated an initial and extraction values,

eigenvalues and components loaded after rotation to decide if items are valid to keep or not for analysis.

Variance extracted: Extraction of communalities inspects the items' communalities' values if items are valid for further analysis of PCA. Varimax with Kaiser Normalization criterion rule was adopted to drop a component with eigenvalues if under 1.0. PCA method extracted 5 out of 31 components. The extraction of communalities examined 31 items in this study. The initial value is 1, while value of extraction of each item using the method of PCA is between .146 and .831 as presented in Table 4.5. All items' extraction values are greater than .3 in loading except CQ3, SQ1 and SQ7. The findings from extraction of communalities, the values of extraction of communalities show that all the set of variables are valid and correlated in communalities loading except 3 items.

Table 4.5 Variances extracted in 5 factors model by fixed number of factors in PCA

Communalities and component extracted in PCA

Communalities

Component Matrix^a

Legend: See Appendix J for ID's descriptions.

ID	Initial	Extraction	ID	Component extracted by 5 fixed number of factors in SPSS				
				1	2	3	4	5
CQ1	1	0.763	TQ6	0.747	-0.001	0.135	0.034	0.059
CQ2	1	0.346	TQ3	0.726	0.206	0.084	0.098	0.044
CQ3	1	0.298	TQ5	0.682	0.250	0.138	0.072	-0.061
CQ4	1	0.306	TQ7	0.681	0.117	0.259	0.022	0.062
CQ5	1	0.456	TQ4	0.622	0.171	0.134	0.013	-0.024
CQ6	1	0.316	TQ1	0.601	0.110	0.127	0.077	0.055
CQ7	1	0.793	TQ2	0.486	0.263	0.06	0.095	0.201
SQ1	1	0.146	VQ4	0.397	0.512	0.228	0.099	0.03
SQ2	1	0.459	SQ6	0.373	0.527	-0.171	0.000	-0.124
SQ3	1	0.387	SQ5	0.355	0.367	0.376	0.112	-0.193
SQ4	1	0.372	CQ6	0.333	0.326	0.297	0.103	-0.010
SQ5	1	0.453	SQ2	0.253	0.390	0.145	0.463	0.086
SQ6	1	0.461	CQ5	0.250	0.145	0.609	0.038	0.015
SQ7	1	0.249	CQ4	0.221	0.309	0.395	0.068	0.030
TQ1	1	0.398	CQ3	0.220	0.022	0.172	0.283	0.373
TQ2	1	0.358	GQ4	0.216	0.704	0.201	0.104	0.246
TQ3	1	0.589	VQ5	0.188	0.373	0.363	0.047	-0.151
TQ4	1	0.435	SQ3	0.183	0.496	0.323	-0.052	-0.017
TQ5	1	0.555	SQ1	0.162	0.176	0.289	0.068	-0.009
TQ6	1	0.581	VQ2	0.131	0.744	0.090	0.104	0.125
TQ7	1	0.549	VQ3	0.123	0.669	0.159	0.003	0.091
VQ1	1	0.493	SQ7	0.098	0.400	0.180	0.206	0.071
VQ2	1	0.605	SQ4	0.098	0.220	0.537	0.076	0.139
VQ3	1	0.496	GQ7	0.074	0.242	0.634	0.118	0.248
VQ4	1	0.483	GQ6	0.069	-0.091	0.563	0.223	0.290
VQ5	1	0.332	VQ1	0.060	0.613	0.239	0.172	0.165
VQ6	1	0.771	CQ2	0.057	0.221	0.058	0.518	0.150
GQ3	1	0.831	CQ1	0.055	-0.001	0.049	0.870	0.034
GQ4	1	0.654	GQ3	0.043	0.197	0.099	0.076	0.880
GQ6	1	0.464	VQ6	0.040	0.055	0.195	0.853	0.033
GQ7	1	0.541	CQ7	-0.009	0.111	0.120	0.080	0.872

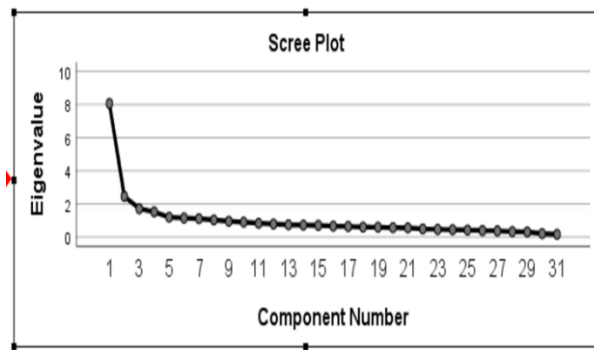
Average		14.94	>.3 & selected	7	10	6	4	3
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Extraction Method: Principal Component Analysis. a 8 components extracted. Rotation Method: Varimax with Kaiser Normalization. a Rotation converged in 7 iterations.

Items in a factor which are greater than .3 and extracted are highlighted in yellow.

5 Components' Scree Plot: In Figure 4.2 generated from SPSS version 25, Scree plot shows that when one component moves toward the 31th component, the eigenvalue drops.

Figure 4.2 Scree plot for eigenvalues and components in 5 factors model



The scree plot in Figure 4.2 is used to find the cut-off for extraction of variables where the slope of the line changes. This curve in the Scree plot shows that the 5th component where is the cut off point because it begins to tail off after the fifth factors, where a stable plateau is started.

Therefore, the researcher justifies five factors for IGA given the large sample in N=370.

Where low loadings exists: The communalities in in Table 4.5 show that only one TQ6 and TQ3 exceed 0.7. The average of the communalities is low in loading by adding them up and dividing by the number of communalities ($14.94/31=$) 0.4819 considering Jolliffe's criterion that suggests retaining factors with eigenvalues greater than 0.6 if the sample size is greater than 250.

Where items are mis-specified: In component matrix in Table 4.5, Component 1 has grouped well as a tq-factor with 7 items, however, the other components are mixed with other factors without a designated factor. It shows that those are mis-specified for analysis because each component includes mixed 5 factors except tq-factor and may cause a significant issue for finding correlations between S-L factors and IGA as well as regression analysis.

Eigenvalues and loaded after rotation: The researcher ran PCA utilizing Kaiser criterion rule to determine what components represent which items by clustering them. The extraction method was a PCA and rotation method of Varimax with Kaiser Normalization. for maximizing factor loading that generates sequential factors to create a pattern of loading. The result indicates that PCA method extracted 5 components and that the Varimax rotation suggested 5 components as a possible solution. The rotated component matrix gives cluster of components where Component 1, 2, and 3 comprises of 7, 10 and 6 items respectively, Component 4, 5 comprises 4 and 3 items respectively as shown Table 4.5. The 5 factors

model is better than 8 factors model in terms of finding factors for analysis out of the 31 items in total. The 5 components were between 1.195 and 8.063 in the initial eigenvalue and the percentage of variance was between 3.854 and 26.008 and cumulative percentage out of 5 components was 48.189% as shown in Table 4.6.

Table 4.6 Eigenvalues and extraction sums of squared loadings

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.063	26.008	26.008	8.063	26.008	26.008
2	2.453	7.914	33.923	2.453	7.914	33.923
3	1.712	5.522	39.444	1.712	5.522	39.444
4	1.516	4.891	44.335	1.516	4.891	44.335
5	1.195	3.854	48.189	1.195	3.854	48.189

Extraction Method: Principal Component Analysis.

Results of the 5 factors’ model indicated that only TQ1 through TQ7 are grouped well while others there are no unique patterns for each component, so the researcher decided to further investigate the 5 factors constructed through literature reviews (LR) and the justification of the five factors developed by LR.

4.4.3 EFA statistics in 5 factors’ model based on literature reviews (LRs)

The researcher inspected factors to explore S-L factors’ model that were discovered through the literature reviews supported by a thesis supervisor, examiners and theoretical domains as shown in Appendix I following Mensah (2014) who developed a set of S-L factors and their independent variables based on supportive conceptual domains. The conceptual domain leaders show the direction (Krafft et al., 2015) the study results will lead to in developing a matrix of factors and their independent items for IGA. The purpose of the 5 factors model created in the study based on the LR was to justify the 5 factors identified in the study to ensure that the data were loaded with suitable variables in each S-L factor and to confirm the measurement of scale. The five S-L factors are the essential elements in business process in ABC with consideration of who the individual is, what to achieve and how to achieve (Bryant & Kazan, 2012) in regard to characteristics capability; cq-factor, functional capabilities; sq-factor, tq-factor, and value creation capability; vq-factor and gq-factor.

EFA statistics in Table 4.7 presents two versions of variances extracted from the 5 factors model including those extracted by fixed number of factors in PCA from SPSS and by LR. One is from a communalities and component extraction in PCA as shown in Table 4.5, the other one is extracted from LR that are suitable for this research as supported by theoretical domains and the thesis supervisor. It examines the items to determine which items belong to which factors based on the level of loading and number of items loaded. For example, tq1 through tq7 are grouped together, so it is called tq3 which identifies team-work factor classified by SPSS. The 5 factors model extracted from SPSS is based on the value of initial communalities and extracted values, eigenvalues and components loaded after rotation to decide which items are usable for statistical analysis by adopting PCA as discussed in the section 4.4.2 including extraction of communalities that utilized rotation method of Varimax with Kaiser Normalization with a Rotation converged in 7 iterations and extraction values are greater than .3 to confirm that all the set of variables are valid and correlated in communalities loading.

Table 4.7 Comparison items extracted in 5 factors model by SPSS and based on LRs

Legend: See Appendix J for ID's descriptions. 'x' indicates an appropriate item in a component. It is based on the Table 4.5 for the component 5 fixed number of factors extracted by SPSS.

ID	Component 5 fixed number factors extracted by SPSS					Component's items based on LRs				
	1-tqs	2-vqs	3-sqs	4-cqs	5-gqs	1-cq	2-sq	3-tq	4-vq	5-gq
CQ1				x		x				
CQ2				x		x				
CQ3					x					
CQ4			x			x				
CQ5			x			x				
CQ6		x				x				
CQ7					x	x				
SQ1							x			
SQ2				x			x			
SQ3		x					x			
SQ4			x				x			
SQ5			x				x			
SQ6		x					x			
SQ7		x					x			
TQ1	x							x		
TQ2	x							x		
TQ3	x							x		
TQ4	x							x		
TQ5	x							x		
TQ6	x							x		
TQ7	x							x		
VQ1		x							x	
VQ2		x							x	
VQ3		x							x	
VQ4		x							x	
VQ5		x							x	
VQ6				x					x	
GQ3					x					x
GQ4		x								x

GQ6			x						x	
GQ7			x						x	
Count of 'x'	7	10	6	4	3	7	7	7	6	4

5 fixed number of factors model's extraction Method based on PCA. Rotation Method: Varimax with Kaiser Normalization and Rotation converged in 7 iterations.

4.4.4 Justification for five factors discovered by LRs

The 8 factors and 5 factors generated by SPSS did not make sense in discovering the factors for they were not grouped in S-L factors, although the 5 factors model of fixed number of factors is better. The researcher found that component items based on LR makes more sense in grouping by S-L factors and variables in each S-L factor supported by theoretical domains as it would contribute favorably to discovering correlations between the 5 S-L factors and IGA as illustrated in Table 4.8. The researcher also was advised the following messages from Andy Field who is an author, 'DISCOVERING STATISTICS USING SPSS'. Field (2009, p.661) suggests that "it should be used to guide the researcher in making various decisions: you shouldn't leave the computer to make them." Particularly, Field (p. 653) also advises a solution for a given dataset "In most circumstances the default of 25 is more than adequate for SPSS to find a solution for a given dataset. However, if you have a large dataset (like we have here) then the computer might have difficulty finding a solution (especially for oblique rotation). To allow for the large dataset we are using change the value to 30.", and "this criterion is accurate when there are less than 30 variables" (p.662), while the size of the dataset of the study is $N = 370$. The results of the 5 factors' model generated by SPSS does not have a unique pattern for each component. For example, each item is loaded across 4 factors such as cq-factor, sq-factor, vq-factor and gq-factor, they are not distributed to compose factors in a group except, only tq-factor is in clustered. Therefore, the researcher determined to choose the 5 factors constructed through the literature reviews (LR) for the following analyses with the following justification of five factors.

Factors and variables' justification is a process in which the researcher provides facts of statistical data and supporting materials in this study to carry on the study using 5 factors and their variables constructed through LR. The researcher considers all factors (=components in SPSS) generated from exploratory factor analysis, as that is the purpose of using factor analysis to generate a group of factors. However, the 5 factors generated through the literature reviews were the most important factors in this study as they are the factors

mentioned in literatures and the researcher's empirical research focusing on it as well as the hypotheses test. Five factors are constructed from the existing articles for theoretical source as discussed in the LR's chapter. For instance, the characteristics' factor is from the sources such as Ross (2014), Ugurluoglu et al. (2013); Benson & Campbell (2007); DiLiello & Houghton (2006); Neubert & Wu (2006); Lee, Sheldon, & Turban (2003); Grinnell (2001). See other factors in Chapter 2 Literature reviews. Those five factors focus on business process as emphasized in the research topic. The five factors including characteristics factor, skills factor, teamwork, value creation and goal achievement factor are significant in IGA. The participants surveyed based on those 5 factors described in 5 sections, each section deals with designated factor. The result of PCA generated 8 components; however, the researcher focuses on 5 factors in business processed as discussed in the literature review. When comparing 5 fixed components generated by PCA, the researcher discovered that the Pearson correlation values of 5 factors extracted from theoretical articles were more strongly co-related with individual goal achievement than with the 5 fixed components as presented in Table 4.8. For instance, Skills factor ($r=.656$), Teamwork factor ($r=.511$), Value creation factor ($r=.714$), and Goal achievement factor ($r=.561$) which all factors are strongly correlated as $r > .5$ (Weinberg & Abramowitz, 2008, p.130) with significant value (p -value) is .000 at the 0.01 level at 2 tailed which indicates strongly significant. The values of Pearson correlation based on 5 fixed components were relatively lower than LR version. Table 4.8 summaries why the researcher adopts 5 factors constructed through the LR.

Table 4.8 Comparison Pearson correlation 5 factors' model by PCA and LRs

Factors (Component ID generated by PCA, see Table 4.7)	Five fixed factors (components) generated by PCA	Five factors based on LR	Favorable
Individual Goal Achievement	1	1	
Characteristics factor (Component 4)	.351**	.454**	LR
Skills factor (Component 3)	.550**	.656**	LR
Teamwork factor (Component 1)	.511**	.511**	Same

Value creation factor (Component 2)	.775**	.714**	PCA
Goal setting factor (Component 5)	.282**	.561**	LR

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

The correlation value of Teamwork factor is the same ($r=.511$) as a keyword, ‘team’ or associated words to the team are in the statement of the quantitative survey questionnaires. When searching for the 5 S-L factors in business process and their variables, the researcher used a key word method to search 5 S-L factors, it could help to improve correlational values. Based on the findings above, the study was carried out using the five S-L factors because S-L factors were important drivers to strengthen correlational values. The statements below summarize the rationale why the researcher chose to move to fixing the EFA and extracting the five factors based on literature reviews.

Rationale summary:

- *Those five factors created through literature review are what the researcher is focusing on in the research.*
- *The five factors in the literature review are more significant factors than 5 fixed components version in correlation to IGA.*
- *The researcher desires focusing on five key factors, not 8 factors generated by PCA.*
- *The researcher needs five factors to answer the research questions.*
- *This study was developed to test five hypotheses as the five factors are as correlated.*
- *The five factors based on LR have 3 favorable (60%), while PCA has 1 favorable (20%) in the 5 fixed components according to the result of Pearson correlation test.*
- *Those five factors established from LR are related to business processes..*
- *All of those five factors are extracted from the existing academic articles.*
- *370 people participated in the survey section by section which designated each of the five factors.*
- *The 31 components of five factors based on LR were strongly correlated ($r > .5$) to each factor. The Kaiser-Meyer-Olkin (KMO) which measures sampling adequacy is .890 ($> .6$); all of the variables in the 31 items reported that Cronbach’s alpha was .911 which supports interpretation which is in high internal consistency; extraction of communalities are loaded between .326 and .880 ($> .3$) as illustrated in Table 4.5 and sufficient sample size ($N=370$) is used. Thus the 31 items in 5 components are accepted for further study.*

4.4.5 EFA statistics relating to IGA to demonstrate how 1 factor is extracted

There are three variables for IGA including ‘Expanding market’, ‘Efficient processes’ and ‘Better financial reports’. Based on the SPSS statistical analysis with 370 participants, 1 factor is extracted with 62.991 % as shown in Table 4.10 after analysing IGA variables. The purpose was to validate the data and reduce the IGA factors and to load with correct ones that enable to confirm the right measurement. The principal component analysis (PCA) was used to examine the value of communalities of an initial and extraction values, eigenvalues and loading after rotation if applicable to keep for analysis.

Variance extracted: Table 4.9 shows communalities and component matrix that examines the 3 items’ communalities’ values to validate them for further analysis of PCA. The Kaiser criterion rule was utilized to drop all components if eigenvalues is under 1.0. PCA method extracted 1 component out of 3 variables in this study. The initial value is 1, while value of extraction of each item using the method of PCA is between .463 and .730 as shown in Table 4.9. All items’ extraction values are greater than .3 in loading that indicates that all the set of variables are valid and correlated in communalities (Abu Hassan Asaari, Dwivedi & Lawton, 2012, p.77). For only 1 component extracted, there is no rotation for solution.

Table 4.9 Communalities and component matrix

Variances extracted in IGA variables, communalities and component extracted in PCA

Communalities

Component Matrix^a

Legend: IGAM - IGA Expanding marketing; IGAP - IGA Efficient processes; IGAF - IGA Better finance

ID	Initial	Extraction	ID	Component
				1
IGAM	1	0.463	IGAM	.681
IGAP	1	0.730	IGAP	.854
IGAF	1	0.696	IGAF	.835
Total	3	1.889	Total > .3	3

Extraction Method: Principal Component Analysis.

a 1 component extracted.

Rotated Component Matrix^a is a only one component was extracted. The solution cannot be rotated.

Table 4.10 Eigenvalues and extraction sums of squared loadings

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %

1	1.89	62.991	62.991	1.89	62.991	62.991
2	0.714	23.788	86.779			
3	0.397	13.221	100			

Extraction Method: Principal Component Analysis.

A Pearson correlation between IGA and its variables are linearly correlated as presented in Table 4.11. Expanding marketing, efficient business processes and better financial reports are strongly correlated to IGA.

Table 4.11 Pearson correlations between 1 IGA factor and 3 items

Items	IGA Marketing	IGA Process	IGA Finance	IGA-total
IGA Marketing	1			
IGA Efficient process	.380**	1		
IGA Better finance	.337**	.601**	1	
1 IGA factor	.712**	.843**	.818**	1

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

4.4.6 Internal reliability using the Cronbach alpha coefficient

For the 5 independents and 1 dependent factor that were extracted, the researcher assessed separately for internal reliability using the Cronbach alpha coefficient as suggested by Cronbach (1951), “the formula should be applied separately to items relating to different factors.” in Field (2009, p 675); Cronbach’s formula for alpha is in p.674:

Cronbach’s α is:

$$\alpha = \frac{N^2 \text{Cov}}{\sum_{\text{item}} S^2 + \text{Cov}_{\text{item}}}$$

Table 4.11 illustrates the Cronbach’s alpha statistics of internal reliability of measurement of 5 of S-L factors and 1 of IGA factor in the causal model. The Cronbach’s alpha value in IGA factor has been changed from the Table 3.2 Cronbach’s alpha statistics of reliability of measurement in the causal model since the IGA factors are extracted with 1 item from 3 items.

Table 4.11 Cronbach’s alpha internal reliability of measurement

Variables	5 of S-L factors and 1 of IGA factor’s Cronbach’s alpha value		
		Number of questions	Cronbach’s alpha value
Independent variables	5 of S-L factors		
	Characteristics factor	7	.600
	Skills factor	7	.700

	Teamwork factor	7	.819
	Value creation factor	6	.721
	Goal setting factor	4	.638
Dependent variables	1 of IGA factor	3	.704
Moderating variable	S-L culture	1	N/A
Totals	All items	35	.911

Note: Updated Cronbach's alpha statistics of reliability of measurement in the causal model from Table 3.2

4.4.7 Justification for extracting five S-L factors

Abu Hassan Asaari, Dwivedi & Lawton (2012) suggest that factor loading depends on the sample size. For significant factor loading; for instance, if a sample size is small, then the factor loading should be higher, while larger sample size relatively is lower in factor loading. For N=370 sample size, the recommended was .298 (p. 77), while all loading values in this study are greater than .3 which means that the researcher carries on study without deleting any factor for further research process. SPSS suggested 8 components while the researcher focused on five key S-L factors as shown in Table 4.12 below. All the questionnaires were fully tested from the original sources and 370 were participated in the study and mean value are between 3.543 and 4.144. The five S-L factors showed a very good internal consistency with Cronbach' alpha of .907 and .910. The correlation with dependent variables are .307 and .694. Considering the supportive statistical data, the researcher decided not to drop any S-L factor nor any questionnaires but keep the five S-L factors and questionnaires after discussing with a supervisor and an expert experienced in quantitative study (Ferreira, 2016).

Table 4.12 Exploratory factor statistics for justifications for extracting five factors

Factors	N	Number of questions	Source of questions	Mean value	S.D.	Cronbach alpha	Causal relation Yes/No	Correlation with dependent variables	SPSS suggested number of questions in 5 components
Cq-factor	370	7	-Houghton & Neck (2002, pp. 690-691)	3.543	1.153	.600	Y	.429-.621**	4
Sq-factor	370	7	-Wan-Gould (2011, pp. 281-290)	3.968	.898	.700	Y	.442-.656**	6
Tq-factor	370	7		4.144	.831	.819	Y	.291-.511**	7
Vq-factor	370	6	Allen (2012)	3.881	.994	.721	Y	.413-.714**	10
Gq-factor	370	4	-Marques-Quinteiro, Curreal & Passos, 2012)	3.600	1.086	.638	Y	.555-.561**	3

IGA: Dependent variables	370	3	-Marques- Quinteiro, Curren & Passos, 2012); -Houghton & Neck (2002, p. 682).	4.028	.846	.704	Y	1	3
S-L culture: Moderating variable	370	1	Houghton & Neck(2002)	3.580	1.100	N/A	Y	.291-.555**	1

** Significance level $p < .01$ (2-tailed); Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization. a Rotation converged in 6 iterations.

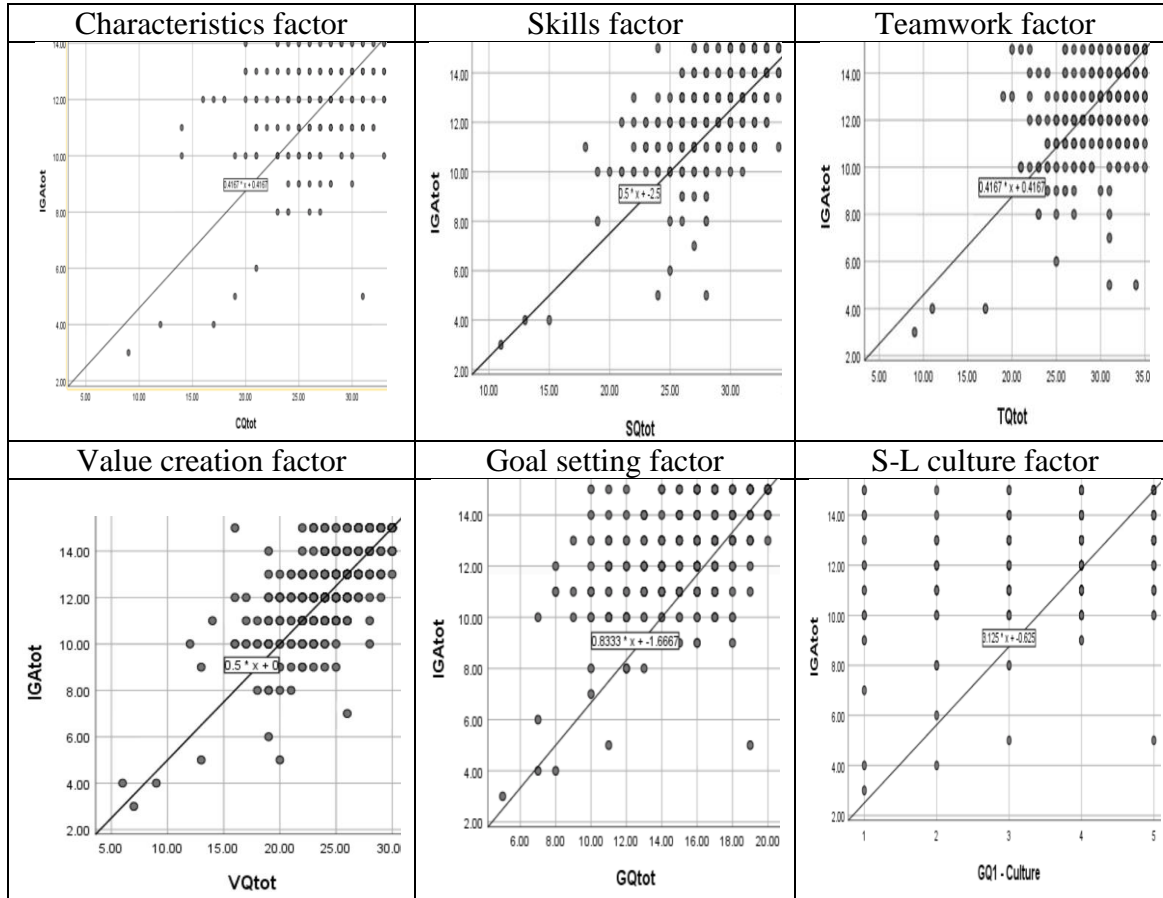
4.5 Simple regression analysis and findings

Simple regression examines a pair of variables' relationships and estimates the relationship between variables and provides correlation between two variables. Figure 4.3 summaries a model of S-L factors and IGA in linear regression that guides for interpretation of S-L factor and IGA; for instance, if R value is greater than .7, it means that S-L factor and IGA have positively strong relationship.

(Source: <http://faculty.quinnipiac.edu/libarts/polsci/Statistics.html>). R Square indicates the level of the data and how closely to fit the regression line. Standard Error of the estimate tells the differences between actual and estimated. R Square Change is the value when a block of S-L variables are added or removed. F Change and Significance of F Change indicate the degrees of freedom for the addition and for the removal. For instance, in the vq-factor linear regression value .714 (=R value); R square is equal to .510, which indicates 51.0% of the variation; R square Change indicates that if a vq-factor's variable was added or removed, then the linear regression value becomes .510 when vq-factor for IGA is .714;

Figure 4.3 shows the distribution of the S-L factor (x) against IGA (y). As (x) increases, (y) is positively affected based on enter method, in which all associated variables are entered. A scattered plot helps to expect the value of IGA with one of the S-L factors: characteristics, skills, teamwork, value creation and goal setting. A scatter plot shows a positive correlation between an S-L factor and an IGA. For example, IGA is on Y axis and individual's cq-factor is on the X axis. Pearson correlations between the two variables are positive as the pattern of dots slopes rises from lower left to upper right. It convinces the researcher that all of five S-L factors are positively correlated with IGA.

Figure 4.3 Scatter plots and simple regression for S-L factors and IGA



Scattered Plots (Generated using SPSS Version 5);

X axis: the five S-L factors (independent variables); Y axis: IGA (dependent variable)

Table 4.13 shows the level of significance of each S-L factor on IGA based on categorized ordinal datasets reflected in a Likert 5-point scale out of the online quantitative survey. The statistical finding confirms that there exists a positive relationship between each S-L factor and IGA as R is in between .454 and .714. It guides for explanation of relationship between S-L factors and IGA. For instance, $R = .714$ means that *value creation factor* and IGA are positively related with a positive direction and strong in strength. $R^2 = .51$ in which 51% is close to the regression line; standard error of the estimate = 1.408 which indicates a difference between actual and estimated; $R^2 \text{ Change} = .510$; it is the value when a block of value creation variables are added or removed. While even perfect correlation cannot predict cause and effect, correlations describe past occurrences and are a good description of future actions. Once *value creation factor* is the most significant factor in IGA, it will be utilized to bridge between the quantitative and qualitative study to generate actionable

knowledge such as S-L instruments: S-L pyramid and S-L self-assessment application and S-L development stages in ABC.

Table 4.13 Summary of S-L factors for IGA in linear regression

S-L factors	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
cq-factor	.454	0.206	0.204	1.792	0.206	95.618	1	368	0
sq-factor	.656	0.430	0.429	1.510	0.430	278.15	1	368	0
tq-factor	.511	0.261	0.259	1.728	0.261	130.179	1	368	0
vq-factor	.714	0.510	0.509	1.408	0.510	382.964	1	368	0
gq-factor	.561	0.315	0.313	1.665	0.315	168.971	1	368	0
S-L culture	.456	0.208	0.206	1.79012	0.208	96.675	1	368	0

In Table 4.14, Analysis of Variance (ANOVA) provides levels of unpredictable variability within a regression and a residual. Total data is 369 which is 1 of regression and 368 of residual; sum of squares which is the total variation and mean square. The distribution is F in df (degree of freedom), P value or significant (Sig.) value is .000 which is less than .001 which means that there is strong evidence that each S-L factor is a significant factor for IGA with greater than 99.9% certainty.

Table 4.14 ANOVA for S-L independent factors for dependent variable IGA

S-L Factors as a predictor		Sum of Squares	df	Mean Square	F	Sig.
cq-factor	Regression	307.11	1	307.11	95.618	.000
	Residual	1181.96	368	3.212		
	Total	1489.07	369			
sq-factor	Regression	449.769	1	449.769	159.256	.000
	Residual	1039.302	368	2.824		
	Total	1489.07	369			
tq-factor	Regression	389.108	1	389.108	130.179	.000
	Residual	1099.962	368	2.989		
	Total	1489.07	369			
vq-factor	Regression	759.371	1	759.371	382.964	.000
	Residual	729.7	368	1.983		
	Total	1489.07	369			
gq-factor	Regression	468.572	1	468.572	168.971	.000
	Residual	1020.498	368	2.773		
	Total	1489.07	369			

In overview, all 5 of the S-L factors are positively correlated with the IGA. It indicates the high level of significance of S-L factors influence on IGA. The results of statistical analyses including ANOVA, Coefficients and model summary support the interpretation that there is a positive correlation between each S-L factor and IGA. In addition, the scatter plot of S-L factors' supports values of IGA in the 'Y' axis using S-L factor in the 'X' axis.

4.6 Correlations statistics

Pearson correlation coefficient bivariate analysis is to find relationships between two variables. The values of the correlation coefficient (r) are between -1 and +1; if positive value then the relationship is strong, while 0 is no correlation; negative correlation indicates that an increase in a variable produces a corresponding decreasing value in the other variable (Neuman, 2003). A Pearson r of 1 either positive or negative signifies perfect correlation. According to Weinberg & Abramowitz (2008, p. 130), Pearson correlation coefficient values of r , if $(.5 \leq r \leq 1.0)$ then positively strong, if $(-1.0 \leq r \leq -.5)$ then negatively strong; if $(.3 \leq r < .5)$ then positively moderate; if $(-.5 < r \leq -.3)$ then negatively moderate; if $(r < .3)$ is positively weak, if $(r < -.3)$ then negatively weak. The Pearson correlation results are summarized in Table 4.15 and Figure 4.4.

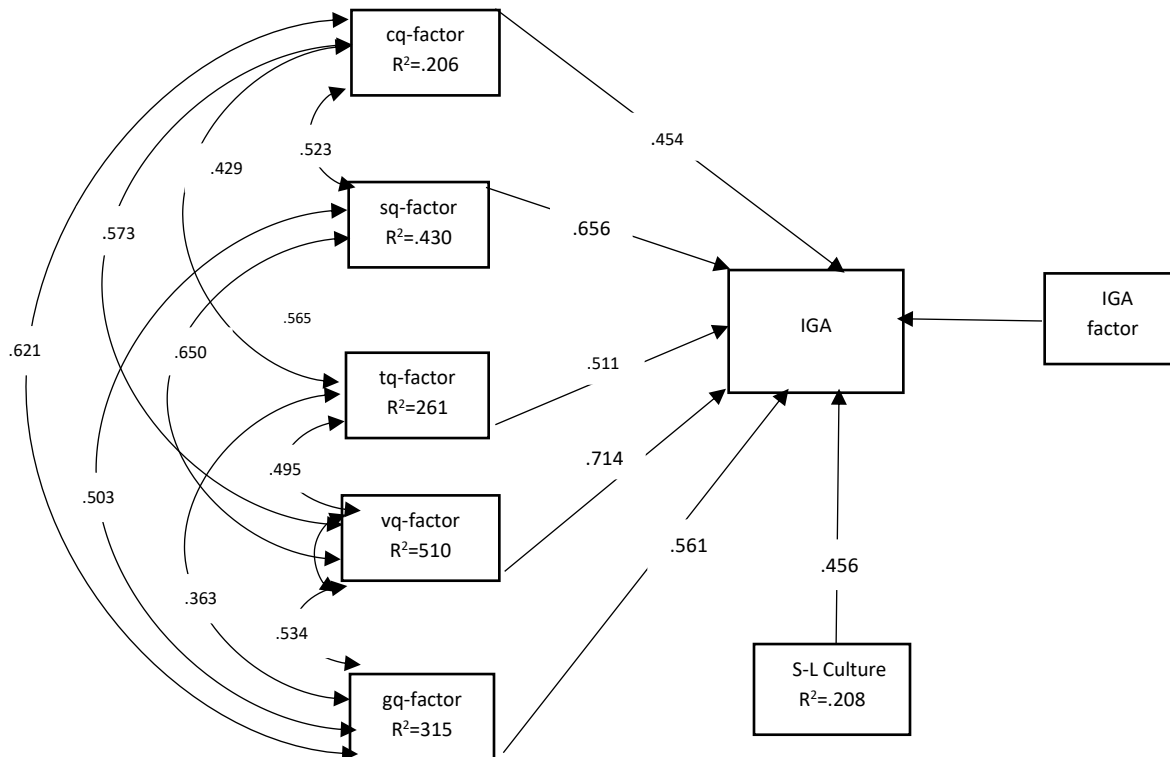
Table 4.15 Pearson correlations statistical findings

	CQF	SQF	TQF	VQF	GQF	CULF	IGA
CQF	1						
SQF	.523**	1					
TQF	.429**	.565**	1				
VQF	.573**	.650**	.494**	1			
GQF	.621**	.503**	.363**	.534**	1		
CULF	.449**	.442**	.291**	.423**	.555**	1	
IGA	.454**	.656**	.511**	.714**	.561**	.456**	1

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

Abbreviation: CQF: cq-factor, SQF: sq-factor, TQF: tq-factor, VQF: vq-factor, GQF: gq-factor, CULF: S-L culture

Figure 4.4 Summary of the correlations between five S-L factors and IGA



All figures are ** Correlations are significant at the level 0.01 level (2 tailed)

The result of Pearson correlation indicates that each of the five S-L factors and IGA were positively correlated from the positively moderate range from $r=.454$ to positively strong $r=.714$. Among the independent S-L factors, vq-factor was relatively stronger ($.423 \leq r \leq .714$) and S-L culture is also positively moderate ($.291 \leq r \leq .555$) to obtain IGA. It

indicates that all of the five S-L factors as well as S-L culture are very important in enhancing IGA.

The researcher checked if there were the possibilities of multicollinearity since some number are greater than .5. Tolerance indicates how much of the variability of a specific variable is not explained by other variables. Abu Hassan Asaari, Dwivedi & Lawton (2012) note that if tolerance's value is less than .1 then possibly multicollinearity or variance inflation factor (VIF) is greater than 10, and then it indicates multicollinearity. The results of Collinearity statistics analysis in this study indicate that the five S-L independent factors' tolerance's values are between .396 and .634 which is greater than .1, and VIF values are between 1.577 and 2.528 which are less than 10. Based on those facts, there is no issue of multicollinearity. A scatter plot helps to visualize the value of IGA with one of the S-L factors or S-L culture. A scatter plot shows a positive correlation between an S-L factor and an IGA; S-L culture and IGA. Pearson correlations between the two variables are positive as the pattern of dots slopes rises from lower left to upper right. It convinces the researcher that all of the five S-L factors are positively correlated with IGA; as well as S-L culture as shown in Figure 4.4 summarizes the quantitative research result of the correlation between S-L factors and individual goal achievement which this study has focused. The value creation factor is the most significant affecting individual's goal achievements, while characteristics factor is the least significant and teamwork factor is less important in IGA. It suggests that ABC should focus on increasing both S-L capabilities and building S-L culture for a better IGA focusing on the significant factors, as the consistency between individual S-L capabilities as well as S-L culture used to IGA begin with an S-L measurement and existing S-L culture in an organization (Houghton, Carnes & Ellison (2014).

4.7 Propositions tests and results

As Onwuegbuzie & Leech (2005) suggested that propositions began with the research questions (RQ) that allowed forecasts about the relationships between S-L variables and IGA. The following research question propositions are the center of this research in finding correlation between S-L factors and IGA. Regression analysis, linear approach, coefficients and collinearities are used statistically to test and validate propositions as Finardi (2013) has conducted Pearson correlation to investigate propositions. From 370 completed participants, the results of Pearson correlation confirmed that all the S-L factors have positive relation with IGA at $p=.01$ significant levels. As the ABC data is $N=12$, the researcher conducted propositions tests utilizing the completed dataset, $N=370$ which are combined the ABC's participants, to enrich the propositions test's results as shown in Table 4.16.

Table 4.16 Coefficients of S-L factors for IGA

S-L factors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.277	.607		0.456	.648		
cq-factor	-.068	.023	-.133	-2.937	.004	.51	1.962
sq-factor	.134	.027	.237	4.98	0	.463	2.16
tq-factor	.062	.02	.123	3.04	.003	.642	1.557
vq-factor	.232	.025	.433	9.21	0	.476	2.099
gq-factor	.142	.032	.205	4.435	0	.491	2.035
S-L culture	.143	.074	.078	1.941	.053	.648	1.544

* Significance level $p < .05$

* Tolerance is acceptable above .1 and VIF is acceptable below 10

In Table 4.15, a negative Beta weight of cq-factor is least positively ($B=-.068$) and significantly ($p=.000$) which indicates that a one-unit increases in the cq-factor makes IGA decreases by $-.068$ units. On the other hand, vq-factor is most positively ($B=.232$) and significantly ($p=.000$) related to IGA. In conclusion, the results indicated that vq-factor, gq-factor, sq-factor and tq-factor were statistically significant predictors in predicting IGA. In other words, vq-factor is the most beneficial S-L factor in achieving individual goals rather than cq-factor and tq-factor. Therefore, the findings support sub-propositions P1b, P1c, P1d and P1e, but does not support P1a. The result of P1 are blow.

P1: There is a significant correlation among the five perceived S-L factors and IGA.

Pla: Personal characteristics factor is positively related to IGA: No.

P1b: Skills factor is positively associated with IGA: Yes.

P1c: Tea work factor is positively linked to IGA: Yes

P1d: Value creation factor is positively related to IGA: Yes.

P1e: Individual goal setting factor is positively connected to IGA: Yes

Table 4.16 shows coefficients between S-L culture and IGA and S-L culture and S-L factors. S-L culture is significant ($p=.000$) which indicates that if one-unit increases in the S-L culture positively increase IGA and S-L factors. The results indicated that S-L culture is a statistically significant predictor in predicting IGA and S-L factors. Therefore, the findings support hypothese2.

P2: An organizational S-L culture moderates the relationship between certain perceived S-L factors and IGA.

The propositions were framed at answering the research questions to reach conclusions and potential managerial interventions in the study. *P1* answered *RQ1* and *RQ2* and *P2* answered *RQ3* and *RQ4*.

4.8 Actionable S-L self-assessment instrument for enhancement of IGA

This section discusses the logical flow of the thesis on how to reach a conclusion and creating the actionable S-L instrument based on the researcher’s research argument: Individual’s S-L capabilities impact on IGA.

Thesis logic flow:

- Good data collected with highly educated and experienced participants (N=370)
- Analysis I: Five S-L factors identified are significant: Exploratory factor analysis shows that factors loading are greater than .3.
- Analysis II: S-L factors identified are positively correlated to IGA: Pearson correlation *r* is between .307 and .647.
- Analysis III: Propositions tests’ results are favorable to S-L factors to increase IGA.

IGA.

• Conclusions: S-L factors identified are significant to IGA as illustrated in Table 4.17 that S-L capabilities are strongly correlated in IGA. The researcher suggests the actionable S-L measurement instruments for increasing S-L capabilities to make improvements of IGA relevant to ABC. The five S-L self-assessment instrument is developed based on the integrating results of the quantitative study as S-L factors leverages the strengths of the IGA in practice (Versland, 2013).

Table 4.17 Significance of S-L factors in IGA

Pearson correlation	IGA	S-L factors	S-L Culture
IGAs Pearson correlation Sig. (2-tailed) N	1		
S-L factors Pearson correlation Sig. (2-tailed) N	.732** .000 370	1	
S-L culture Pearson correlation Sig. (2-tailed) N	.456** .000 370	.539** .000 370	1

** Correlation is significant at the .01 level (2-tailed)

The researcher suggests to practice the five S-L self assessment instruments to enhance individual’s S-L capabilities in order to promote IGA.

Self-assessment 1: Focusing on value creation to achieve individual goals

Self-assessment 2: Developing skills of S-L

Self-assessment 3: Utilizing goal achievement S-L intelligence

Self-assessment 4: Empowering of S-L from personal characteristics

Self-assessment 5: Collaborating teamwork for constructive results

See Appendix D. The self-assessment of S-L starting with value creation S-L factor in 'DO' section and executing variable level and write the self-assessment.

4.9 Reflections and conclusions

The quantitative study aimed to find the correlations between the five major S-L factors and IGA to find out how S-L factors enhance IGA. In the study, the dependent variables related with independent variables were statistically calculated. The findings of the quantitative study were supportive to discover on how S-L factors enhance IGA (Bryant & Kazan, 2012). The researcher argued that the five S-L factors identified positively impact on IGA. Majority of the participants in the research were leaders and long term work experiences who contributed to the findings so that the findings were from management perspectives. Statistical analyses proved that the five S-L factors were significant to increase IGA as the five S-L factors could promote their S-L capabilities in dealing their realities more effective and efficient matters in archiving their goals. The statistical findings indicates that vq-factor, value creation factor is the most significant followed by gq-factor, sq-factor, tq-factor and cq-factor, characteristics' factor is the least impacting on IGA. The emergence of the quantitative study stresses that value creation is the most critical, while individual's characteristics is the least important. A possible reason that value creation is the most influential may be due to the organization's value creation driven mission. S-L culture is also important in achieving individual goals as S-L culture impacts on S-L factors as well as IGA as S-L culture influences individual working environment (Thamhain, 2004) which individuals work as a self-leader regardless of their titles (Witt, 2017). S-L culture also inspires an individual in IGA using self-leader minded working attitudes that in turn, is more constructive to value creation (Bligh, Pearce & Kohles, 2006). Those statistical findings proved propositions testing and answered research questions including the independent and dependent variables in a causal model and correlations between the variables. Despite S-L factors being correlated with IGA, the results of P1 testing indicated that cq-factor appeared not to make an impact on contribution to IGA. The result suggests that characteristics may not be a key factor impacting on IGA. It is matched with Bondi's (2000) empirical study that characteristics is not always a determining factor in IGA. Overall, the statistical findings confirm the significance of the S-L factors and S-L culture that are important in promoting IGA.

In these experimental regards, the researcher suggested an actionable S-L measurement instrument, based on the results of quantitative study, strengthening of individual's S-L capabilities leverages the strengths of the IGA in practice (Versland, 2013). In addition, given the evidence of the statistical findings, The top managerial leaders of ABC should highlight the S-L factors to advance IGA. Relating to effect of S-L culture, the correlations between S-L culture and IGA may not strong enough so that further studies may be necessary to embrace different dimensions. The researcher suggests that the development of S-L culture strategies for macro period's perspective to confirm implications of the quantitative results on managerial interventions that a leadership paradigm shifts from a traditional top down hierarchical structure to an S-L model. The actionable S-L measurement instrument was created based on statistical findings utilizing participants N=370 who included participants of ABC to create generalizable outcomes with sufficient participants (Field, 2009). Referring to the new findings through the quantitative study, the researcher will engage in an interview with cross-participants to discover on how S-L factors enhance IGA by capturing insights and sharing experiences (Mensah, 2014) in the following qualitative chapter.

CHAPTER 5 FINDINGS OF QUALITATIVE STUDY

5.1 Introduction

In light of the internal and external challenges that ABC faces, S-L becomes more significant in dealing with the realities individuals face in a various layer of ABC. Recognising the value of S-L, this chapter describes the qualitative research as Phase II which Denzin, Lincoln & Giardina (2006) utilized after the quantitative Phase I. The purposes of the qualitative study were:

- i) deepening the level of understanding, interpreting and confirming the results of the quantitative study through Howe's (2004) interpretive framework,
- ii) reflecting of quantitative findings
- iii) obtaining of a role of the two independent variables such as S-L factors and S-L culture in IGA
- iv) exploring issues and creating actionable knowledge of S-L culture development strategy and its key variables as the consequences, by analyzing data (Hesse-Biber, 2010) and by connecting (Cunningham, 2013) the findings in both quantitative and qualitative study.

5.2 Understanding and confirmation of quantitative findings

The following are what cross-participants had experienced in terms of understanding, and confirmation of quantitative findings. Firstly, the majority of cross-participants (see Appendix E qualitative interviewees) experience of understanding a 'self' and 'leadership' (S-L) in all layers in ABC, not only the leader's leadership, as a result of the presentation of the findings. Secondly, the five S-L factors are acknowledged and valued highly by participants as the five S-L factors are essential components for business process and for promoting opportunities for IGA. Thirdly the findings benefit individuals at any level in ABC by linking the significant factors in achieving their goals in the business process.

"Individual's goal achievement must follow the company goal of increasing value and may need to adjust from time to time focusing on creating values to the company. S-L is kind of self-leading towards the company goal of both long-term goals and short-term ones." (Participant 12)

"In the results of the study, the value creation factor is the most significant one impacting individual goal achievement. The result can assist the individuals and ABC in encountering and dealing with the internal and external demands and challenges in business process by understandings, adapting statistical findings." (Participant 5)

It appears that the findings from the quantitative study are evidences of the S-L impact which positively influences the daily activities in the business process. As vq-factor is the most

significant factor, while the cq-factor is the least significant factor, the vq-factor can be used for confirmation and to raise awareness of the significance of reaching an individual goal. In this way, the S-L factors, especially value creation is suggested to become more prominent and be adapted in the process of IGA in achieving company goals. Individuals in leader levels in ABC can also utilize S-L factors focusing on value creation in a different dimension of the individual goals. The qualitative study has confirmed the significance of the S-L factors by clarifying understanding of the findings of the quantitative study. The study suggests a new perception of S-L factors that are significant in contributing to IGA which in turn, impacts on ABC's realities. In short, the qualitative study has confirmed the significance of the correlations between S-L factors and IGA by clarifying understanding of the findings from the quantitative study.

5.3 Interviews outcomes perceived S-L factors and IGA

The descriptions of cross-participants are captured, assigned to a specific code and summarised into key themes. The section describes the second goal of the qualitative study that finds major themes reflecting qualitative findings to generate actionable knowledge. Abu Hassan Asaari, Dwivedi & Lawton (2012) indicate that emerging statistical findings of quantitative study and findings from the qualitative interviews strengthen the generation of actionable knowledge. Crockett (2015) discovered themes using the thematic qualitative analysis reflecting the interviews which may have an influence on managerial and professional S-L in ABC. The interviewees deal with realities requested by stakeholders. The individuals in sales and market department deal customers' requests in domestic and global markets and seek for opportunities for expanding markets, the individuals in other departments including designing, engineering and manufacturing seek for efficient processes of the customers' orders, such as on-time delivery and quality products. The individuals in financial and administrations focus on better financial results. In addition to the management dimensions, the qualitative study approaches S-L culture, education and leadership dimensions to discover how S-L factors increase IGA.

First, the researcher investigated how S-L factors impact on IGA through qualitative study. The following are the major themes discovered from articulations from the cross-participants. After analyzing the interviews, the research yielded major themes related to S-L factors for IGA by grouping, merging and prioritizing the participants' insights. The three of the major themes were presented under the three variables such as S-L factors, S-L culture and IGA. Interpretation of qualitative interview and discussion was a process of development of subthemes or codes, and a process of construction of themes from subthemes or codes utilized significant information and then, each of themes was discussed with a summary table and some sub codes were reused more than once in building a code or a theme (Creswell, 2017). The researcher adapted a framework of the qualitative analysis from Tadjallimehr (2018) and Kim (2015) to protect and secure participants by referring to them

as Participant1, Participant2, etc. and chose ‘theme’ and ‘sub-theme’ in naming conventions rather than ‘1st order’, ‘2nd order’, or ‘child’, ‘parents’, ‘grand-parents’ in naming.

5.3.1 Perceived S-L factors (Theme 1)

Theme 1: The value creation, goal setting and skills S-L factors are significant in IGA

Participants were asked to articulate their insights and ideas on the most significant S-L factors and the least in IGA for individuals dealing with challenges. The results revealed that most important was vq-factor followed by both gq-factor, sq-factor at an equally important while tq-factor and cq-factor were relatively less significant in IGA. It was matched the result of the quantitative study and the researcher derived confidence in the development of actionable knowledge focusing on the value creation factor in IGA. Table 5.1 illustrates the key themes and sub themes for Theme 1.

Table 5.1 Summary of theme 1

Key themes		Sub themes
Value creation, goal settings and skills S-L factors are significant in IGA.	Value creation S-L factor	<ul style="list-style-type: none"> - Acknowledging one’s own values - Affecting motivation - Contributing to the general good - Tangible and intangible values -Do more with less
	Goal setting S-L factor	<ul style="list-style-type: none"> -Establishing a plan of what I need to get to my destination -Setting individual goals to manage shortcomings. - A goal and needs to meet the success rate
	Skills S-L factor	<ul style="list-style-type: none"> - Preparing to learn and apply specific skills - Critical thinking skills - Reflexive action

The S-L factors were explored utilizing closed questions then the researcher asked participants to articulate each of the S-L factors and choose the best and least important S-L factor in IGA. After gathering the responses to the interview questions, thematic

analyses were conducted. The following responses demonstrate the value creation S-L factor, goal setting factor and skills S-L factor mentioned by the participants.

“S-L is the ability to acknowledge, understand and be conscious of one’s own values, perspectives, strengths, weaknesses, leadership propensity and emotional needs. ... it is the belief that whatever comes our way, we can handle it. We can take the feedback, accept, adjust and advance. With self-efficacy we can be more creative and innovative. The first skill of S-L is to stop and step back from the things that trigger us to react; because when we react, we are being controlled by the trigger. the second skill is to consider our intention: intention is what is important to us, our values and what we are trying to achieve. By being intentional we can start to live a life of choice. Intention precedes any purposeful action behavior rather than a reaction. Actions have effects which the self-leader evaluates via feedback. Influence is the result of purposeful action. We must positively influence ourselves and the world around us if we are to make a change. Impact is how intention and influence are measured in the world.” (Participant 4)

The interviewee directly expressed that value creation S-L factor is critical in IGA and the following responses show the perceptions of the participant.

“Value creation is important as it gives meaning and purpose to self-leadership. This is how the self contributes to the general good. This is essential as it leads to one managing oneself into the future or creating one’s future to the extent possible. It will be the ability to introspect, not to give oneself too much credit, the ability to criticize oneself and not to be disabled by such self-examination, a willingness to be uncertain, to live with doubt and still be able to go on with living and delivering ... one can learn to engage in reflexive action. I would emphasize ongoing reflexive activities to remain current with the changes in the environment.” (Participant 3)

“We have been relatively more focused on our own goals, in accuracy of the work in the business process rather than value creation through empowering ourselves. It is obvious that successful individual and organization understand that the purpose of business is to create and build value for its stakeholders such as customers, suppliers, employees, as well as its shareholders by dealing with business realities. Actual value of organization is based on its true value including all aspects of both tangible and intangible values. This intrinsic value of S-L may not be a reference to the current value in practice, but in it-self for future value creation through self-beliefs.” (Participant 8)

“Furthermore, in an environment of ‘do more with less’ and cost cutting, S-L skills are required to be successful. Once company goals are set and understood, self-leaders will monitor themselves relative to the goal and make adjustments as required. This can involve anything from doing things differently to asking for help. Self-leaders will not

give up without a fight. They will try to find a way to succeed knowing if that if they are successful at meeting their goals, they will be creating value for the company. I believe knowledge of value creation is inherent in a person with S-L skills. They want to create value by doing what is necessary to meet their goals. The challenging part is ensuring that self-leader are using their skills to meet goals and create value that are aligned with the overall company goals. If they are not aligned, then the resource is not being effective; something a self-leader would not want.” (Participant 10)

“On the self-leadership factors, I subscribe to the individual goal setting because it shows growth and progression in one self-designed to help solve future problems and create new opportunities. The value creation factor is pertinent..... self-leaders manage themselves for value.....they constantly seek to be better and looks at their lives as one would a balance sheet to see if indeed there is growth and whether their self- worth has increased in their own eyes and those around them. Every day is a new experience. Every decision is for a new goal; if goals are changed then we have teamwork; everything has to start with a goal and needs to meet the success rate in the face of difficulties.” (Participant 9)

It suggests the value creation is the primary goal of IGA. Creating value for stakeholders help in the form of better products, service, efficient process and insures good returns. In general, the interviewee expressed that value creation and goal setting S-L factor are critical in IGA as those create opportunities and help solve problems.

5.3.2 Perceived S-L culture for IGA (Theme 2)

Theme 2: S-L culture is moderate for IGA

All participants responded that the S-L culture has a good relationship with the IGA regardless of any S-L factors. Table 5.2 demonstrates the key theme and sub themes for Theme 2.

Table 5.2 Summary of theme 2

Key themes	Sub themes
S-L culture is moderate for IGA.	Being ready to have self-leaders
	Trusting employees are the best leaders of themselves
	Setting expectations from the very beginning
	Setting time for conversation with individuals
	Facing realities
	Continuous improvement

S-L culture would bring about a visionary attribute in an individual mindset to find ways of driving performance and bringing in more revenue by making processes more efficient.

“S-L looks for continuous improvement, brings productivity as a key indicator of performance and asks the question what could go wrong in order to assess risks and develop mitigations. S-L brings a greater attention to detail which is useful and forces an S-L individual to run numbers that interrogate the value being created and why for corrective action and without prompting.” (Participant 7)

S-L culture could enhance IGA in several ways:

“Independent thinking people are bound to question reasons for doing things, which is a positive thing, if you take it as an opportunity to develop. Self-leaders also expect to be given true authority over their own work. Bouncing them around from one task to another without clear reasoning is bound to kill employees’ self-leading behaviors fast. Ask new employees, how they would do their work most efficiently, and how they would improve things. Encourage them to make changes themselves and to bring up concerns. Focus on S-L qualities already in the hiring process. The way the person applies for the company and performs in the interviews can tell something about the way they will perform. ... A conversation may be one of the best ways to initiate organizational development in a company full of self-leaders.” (Participant 4)

It suggests that S-L culture in ABC is needed to link to business process to create value creation. For instance, all the participants have been accustomed to a traditional leadership which is a top down management between a direct line leader and a subordinate. Furthermore, S-L business culture is a leading them as leaders and subordinates need to understand which dimensions of S-L can be utilized in ABC in accomplishment of individual goals.

“The results of organizational culture generate results in common sense coalition. We believe the organization faces critical challenges in global markets, but individuals have little hope of solutions. Since value creation is the most significant predictor of goal achievement, S-L culture should be growing especially value creation S-L culture. However, although the conceptual idea is present, we need coherent S-L culture in business process.” (Participant 8)

The link between value creation S-L culture and successful IGA across ABC is for a common sense coalition, sharing the benefits of S-L culture. Building a business culture for S-L can value the strengths of individual’s S-L in ABC, as the S-L centered business culture can be valuable at both management and administrative individual level in practice. Moreover,

“Without a good culture regardless of S-L knowledge or S-L strategies, you won’t be successful. Understanding the importance of workplace culture is vital; Investment in the development of good culture is valuable to get the best returns out of them. It sounds obvious, but often it takes time and requires a lot of work to implement. So, we need to determine which dimensions of S-L culture can be utilized in practice and measure the S-L effect in practice.” (Participant 9)

Furthermore, to have S-L culture throughout ABC,

“In an environment where resources are continually asked to do more, an important part of being successful is the skill of S-L. This skill will allow individuals the ability to determine the best methods to achieve goals. This type of environment also requires flexibility and constant change in approaches to meeting goals. A self-leader will constantly be looking at alternative means. They will not be hampered by a one size fits all mentality and the more ways individuals can solve real problems, the better understanding they will have of issues that can affect their goal and be in a better position to be successful. To have S-L culture throughout the organization would increase the rate of companywide goal attainment.” (Participant 10)

Given the internal and external dynamic and competitive context, it is suggested that S-L culture should be understood and deployed in all layers in ABC as the participants suggest, utilizing its concepts as a primary basis within a business culture. Thus, once the participants have learned that vq-factor is the most significant, the best possible S-L culture includes the S-L value creation dimensions of goal setting, finding alternative resources, a sense of ownership and coping with realities. A gradual paradigm shift from tradition leadership to S-L driven culture in practice.

5.3.3 Value creation is essential for IGA (Theme 3)

Theme 3: Value creation is essential for IGA.

Individuals achieve their goals in dealing with the demand of stakeholders in terms of expanding market, efficient business processes and better financial reports. All participants responded that they can achieve their goals better in dealing with their challenges utilizing self-productivity. Table 5.3 shows the key theme and sub themes for Theme 3.

Table 5.3 Summary of theme 3

Key themes	Sub themes
Value creation is essential for IGA	Clarity of significance of S-L on how to create value
	Development of specific skills for efficient process
	Adopting new technology to add value
	Efficient ways to reduce cost

	Challenging to value creation
	Seeking opportunities for creating value
	Motivation towards challenges for a new value creation

“As with any area of operation, by having clarity as to why it is important to operate in this market, and what are needed to do personally in order to make an impact; such as learning new skills or developing specific characteristics. Further, the nature of expanding markets would suggest specific skills in regard to team management, unless the expanding market allows for a technology approach, in which case new technology skills may be needed. Business processes seem often to be followed unquestioningly, and therefore to be able to make them more efficient we need to be able to step back to understand why this process is being used, is it being applied in the most efficient way, is there new technology that could help. We need to be able to question and think critically. As with the processes, financial reports are often a foreign language to those who could benefit from understanding them the most. S-L may therefore take us towards learning how to understand them, or to arrange for them to be presented in a way that is more understandable or relevant.”
(Participant 6)

“S-L for me means being aspirational in one’s personal goals and being deliberate and brutal in their achievement. S-L means taking a cue and / or front line in solving problems and being proactive in mitigating the “what if” questions that arise and challenging the “why so we....” Or what makes me think the way that I do.... I have discussed because it shows growth and progression in one self-designed to help solve future problems and create new opportunities for the future. Self-leaders and/or manager themselves for value.....they constantly seek to be better and look at their lives as one would a balance sheet to see if indeed there is growth and whether their self-worth has increased in their own eyes and those around them.” (Participant 7)

“In my critical reflection, the center of S-L is the person who, more than anything else makes the difference. ... self-leaders are constantly developing value creation, self-awareness, self-confidence, self-management, and self-efficacy. S-L should be at the foundation of any leadership development initiative, and it should be reviewed at each career progression. Intention and identity will change with advancement and the need to effectively influence and impact will increase dramatically. In addition, this can greatly affect our motivation towards our work especially for bosses. If they know how to lead themselves then it would be easy for them to lead their employees.” (Participant 4)

5.3.4 S-L strategy is critical for the development of S-L culture (Theme 4)

Theme 4: S-L strategy is critical for development S-L culture in ABC.

The participants articulated their insights and ideas on the S-L strategy to build S-L culture. The S-L capabilities, S-L knowledge, value creation focused S-L strategy and paradigm shift from traditional leadership to S-L were essential for construction of S-L culture. Table 5.4 summarizes the key theme and sub themes for Theme 4.

Table 5.4 Summary of theme 4

Key theme	Sub themes
S-L strategy is essential to construct S-L culture.	Practicing S-L instruments to empower S-L capabilities
	Promoting value intensive S-L knowledge
	Constructing value creation S-L strategy
	Paradigm shift from traditional leadership to S-L
	Value creation driven S-L culture

S-L strategies is essential to construct S-L culture;

“The results of organizational culture generate results in common sense coalition. We believe the organization faces critical challenges in global markets, but an individual by himself/herself has little hope of solutions. Since value creation is the most significant predictor of goal achievement, S-L culture should be growing especially value creation S-L culture. However, although the conceptual idea is present, we need coherent S-L culture in business process. Without a good culture regardless of S-L knowledge or S-L strategies, you won’t be successful. Understanding the importance of workplace culture is vital; Investment in development of good culture is valuable to get the best returns out of them. It sounds obvious, but often it takes time and requires a lot of work to implement. So, we need to determine which dimensions of S-L culture can be utilized in practice and measure the S-L effect in practice.” (Participant 9)

“In an environment where resources are continually asked to do more, an important part of being successful is the skill of S-L. This skill will allow individuals the ability to determine the best methods to achieve goals. This type of environment also requires flexibility and constant change in approaches to meeting goals. A self-leader will constantly be looking at alternative means. They will not be hampered by a one size fits all mentality and the more ways individuals can solve real problems, the better understanding they will have of issues that can affect their goal and be in a better position to be successful. To have S-L culture throughout the organization would increase the rate of companywide goal attainment.” (Participant 10)

S-L strategy for value creation;

“Is S-L the same as self-drive? Individuals have their own level of S-L; each of us does not have to be a leader to work like a leader, as we can often work independently. Time spent waiting for a direct line leader could be time spent doing what we need to achieve goals. We could reduce idle time dramatically, especially since we need to improve value creation.” – participant 2; “We have been relatively more focused on our own goals, in

accuracy of the work in the business process rather than value creation through empowering ourselves. It is obvious that successful individual and organization understand that the purpose of business is to create and build value for its stakeholders such as customers, suppliers, employees, as well as its shareholders by dealing with business realities.” (Participant 11)

“Actual value of organization is based on its true value including all aspects of both tangible and intangible. This intrinsic value of S-L may not be a reference to the current value in practice, but in itself for future value creation through self-beliefs. Furthermore, in an environment of ‘do more with less’ and cost cutting, S-L skills are required to be successful. Once company goals are set and understood, self-leaders will monitor themselves relative to the goal and make adjustments as required. This can involve anything from doing things differently to asking for help. Self-leaders will not give up without a fight. They will try to find a way to succeed knowing if that if they are successful at meeting their goals, they will be creating value for the company.” (Participant 10); “S-L looks for continuous improvement, brings productivity as a key indicator of performance and asks the question what could go wrong in order to assess risks and develop mitigations. S-L brings a greater attention to detail which is useful and forces an S-L individual to run numbers that question the value being created and why for corrective action and without prompting.” (Participant 7)

Strategies for promoting S-L knowledge;

“It is hardly believed that there are S-L factors which influence goal achievement. I focus on setting goals rather than utilizing S-L. It is hard to understand that value creation factor is the most significant. Every day is a new experience. Every decision is for a new goal; if goals are changed then we have teamwork; everything has to start with a goal and needs to meet the success rate in the face of difficulties. End of day, you may have a goal; and what happens internally to reach your goal. You have strong S-L knowledge, and some don’t. The reward is recognition. What drives a person to attain a goal are S-L and training in S-L knowledge. While S-L should be aligned to organizational goals, I believe knowledge of value creation is inherent in a person with S-L skills. They want to create value by doing what is necessary to meet their goals. The challenging part is ensuring that self-leader are using their skills to meet goals and create value that are aligned with the overall company goals. If they are not aligned, then the resource is not being effective; something a self-leader would not want.” (Participant 10)

Practicing S-L self-assessment;

“Micro level, S-L should be trained to learn what motivates individuals and how S-L could be beneficial. The finds are very interesting. Teamwork is less important; value creation is the most important. The previous Management’s ten business principles which had impacted positively on business process, no longer exists under new Management due to the copyright.” (Participant 10)

Yet, ABC still requires traditional leadership, however, competition in the domestic and global markets and the pace of rapid changes demand innovative leadership actions on facing challenges to achieve expected results. Now is the time to capitalize on individual S-L capabilities and maximize individual S-L by developing S-L strategies for constructing S-L culture in the research context.

5.4 Interview outcomes perceived business management dimensions

The purpose of the interview outcomes perceived business management dimensions is to identify the key themes and attributes of business dimensions and discover the attributes of the business dimensions. The reason is that the researcher intends to prove the S-L factors' attributes are embedded in business management dimensions. The Table 5.5 illustrates the key themes and business dimensions including expanding market, efficient processes, better financial report, education, business strategies, business culture and leadership type. The Table 5.5, Figure 5.1 and Figure 5.2 are analyzed based on same interviews discussed in the findings perceived S-L factors in section 5.3.

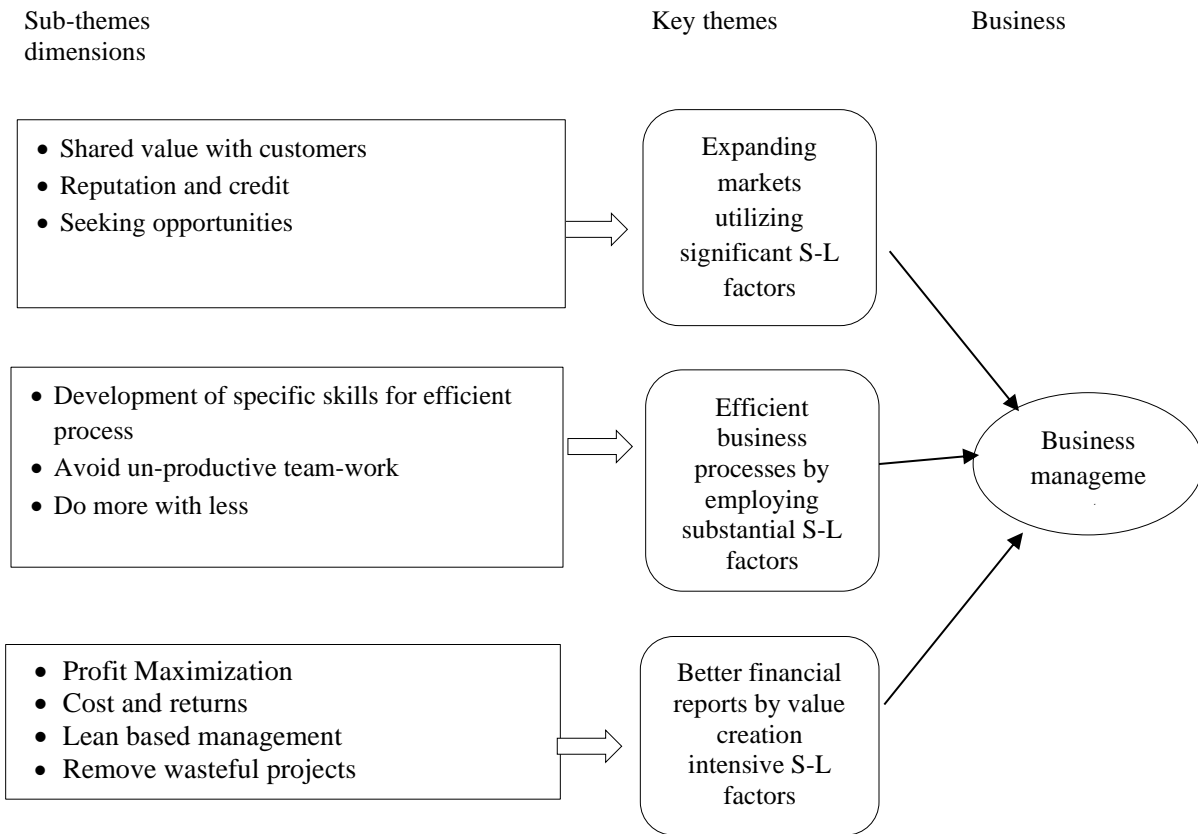
Table 5.5 Key themes perceived business dimensions

Key themes	Business dimensions	Attributes of the business dimensions
<ol style="list-style-type: none"> 1. Shared value with customers 2. Reputation and credit 3. Seeking opportunities 	Expanding market	Motivation towards challenges for a new market
<ol style="list-style-type: none"> 4. Development of specific skills for efficient process 5. Avoid un-productive team-work 6. Do more with less 	Efficient processes	Do more with less and efficient ways to reduce process time
<ol style="list-style-type: none"> 7. Profit Maximization 8. Cost and returns 9. Lean based management 10. Remove wasteful projects 	Better financial report	<p>Acknowledging one's own values, affecting motivation and contributing to the general good;</p> <p>Creating tangible and intangible values through efficient ways to reduce cost</p>
<ol style="list-style-type: none"> 11. Need an S-L self-assessment instruments for measurement 12. Essential of education of S-L knowledge 	Education	Establishing a plan of what I need to get to my destination by setting individual goals to manage shortcomings. A goal and needs to meet the success rate by learning and applying

		specific skills; Critical thinking skills and reflexive action
13. Building value creation S-L strategy 14. Linking the value creation S-L strategy to ABC strategy	Business strategies	Promoting of individual's goal achievement for building value creation S-L strategy and integrating strategy of S-L and ABC's business strategy. Utilizing S-L instruments strategy and paradigm shift from traditional leadership to S-L culture on S-L strategy; Human resource S-L management strategy and facilitating self-empowering workforce for creating better value S-L and continuous value creation strategy through S-L beliefs. Linking the value creation S-L strategy to ABC strategy as an individual is regularly practicing S-L instruments and integrating value added S-L and the business realities. Value added human resource management and cognitive-focused value creation human resource strategies
15. Critical S-L culture development	Business culture	Unleashing the power of S-L and linking the value creation S-L culture to ABC to increasing value creation driven S-L culture in practice; Promoting of individual's goal achievement and measuring the S-L; Should be ready to have self-leaders; Trusting employees are the best leaders of themselves, setting expectations from the very beginning and setting time for conversation with individuals for facing realities for continuous improvement and linking S-L culture to value creations.
16. Leadership paradigm change needed 17. Creating harmonized S-L model for a macro period	Leadership type	Paradigm shift from traditional leadership to S-L culture through practice of S-L instruments and creating macro level harmonized S-L model

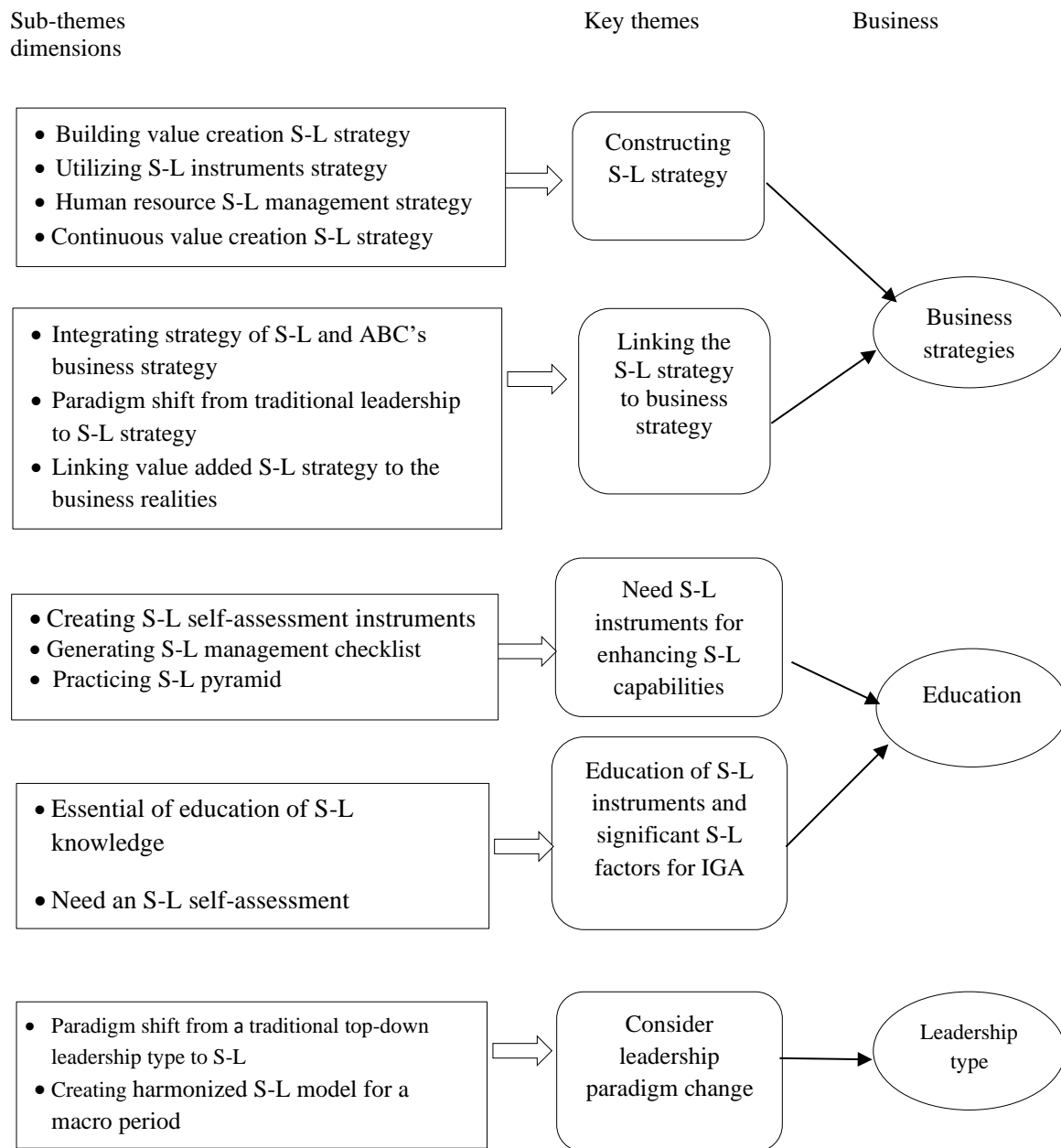
(Sources: Interviews in section 5.3)

Figure 5.1 Themes perceived business management of market, process and financial report



The Figure 5.2 demonstrates the sub-theme and key themes and business dimensions from the perspectives of business strategies, education and leadership type.

Figure 5.2 Themes perceived business dimensions for S-L culture development



5.5 Actionable knowledge of S-L culture development strategy for enhancement of IGA

This section discusses on how to reach a conclusion and creating the actionable knowledge based on the qualitative findings:

Thesis logic flow:

- Researcher's argument I: S-L factors impact on business management including

expanding market, efficient business processes and better financial reports.

Researcher's argument: II) S-L culture strategy influences business dimensions.

- Good data collected from a CEO and managers of various department of ABC
- Theme I: S-L factors identified are significant in IGA: vq-factor, gq-factor and sq-factor are relatively more significant than tq-factor and cq-factor.
- Theme II: S-L culture is moderate for IGA.
- Theme III: S-L Value creation is essential to IGA through in dealing with realities.
- Theme IV: S-L strategy is important for development of S-L culture.

Conclusions: Value creation S-L factors identified is the most significant to IGA and S-L culture is moderately correlated in IGA. The researcher suggests the actionable S-L culture development strategy plan for increasing of IGA relevant to ABC. The S-L culture strategic plan is developed based on the integrating results of the qualitative study such as value creation focused S-L culture influences the strengths of the IGA in practice (Versland, 2013). In general, management level individuals articulated the qualitative findings for long term business views centered on value-centered S-L culture and S-L strategies, while administrator level of individuals discussed more daily tasks regarding S-L knowledge and S-L instruments in practice. The researcher identifies top 10 significant S-L variables for S-L cultural development that impact on IGA as well as business managements.

Top 10 key S-L variables for culture development strategy: Value creation has already been a part of ABC's mission which encourages individuals to create value for customers, suppliers, shareholders and employees. However, S-L culture in ABC was not extant nor linked to business process to create value creation. All the participants have been accustomed to a traditional leadership which is a top down management between a direct line leader and a subordinate. The result pointed that S-L culture is a leading theme as it related to S-L factors in practical implication because leaders and subordinates need to understand which dimensions of S-L can be utilized in ABC in IGA. It suggests a link between value creation S-L culture for organizing positive and successful IGA across ABC for a common sense coalition, sharing the benefits of S-L culture. Building a business culture for S-L can value the strengths of individual's S-L in ABC, as the S-L centered business culture can be valuable at both management and administrative individual level in practice. Given the internal and external dynamic and competitive context, it is suggested that S-L culture should be understood and deployed in all layers in ABC as the participants suggest, utilizing its concepts as a primary basis within a business culture. Thus, once the participants have learned that vq-factor is the most significant, the best possible S-L culture includes the S-L value creation dimensions of goal setting, finding alternative resources, self-recognition of self-value.

A gradual paradigm shift from traditional leadership to S-L driven culture with focus on vq-factor in practice is suggested. S-L strategy is an approach to plan and direct individual goals which posits that S-L is positively correlated with individual's goals. Several participants claim that they have S-L using constructive thoughts to empower themselves and interpreting S-L as self-management in reaching their goals. The S-L strategy helps to lead and influences other co-workers who are an essential part of business as a means for not only self-empowering but also for managing and empowering others (Crossman, 2004). The findings from the participants suggest that the most significant factors for IGA are those that establish value creation S-L strategies and engaging in those strategies to achieve their goals. Coping with realities and creating a sense of ownership may further enhance value creation. It suggests that individuals are the source of value creation using both tangible and intangible resources. ABC may focus on S-L strategy for self-development, self-management and control that provide individuals with value creation tools. It can lead individuals to the right path to attain their goals using their S-L. It also helps to increase an individual's S-L capability to align their daily tasks to fulfillment of individual goals. An individual's S-L knowledge should be grounded and embedded in ABC for the future. Having an increased knowledge of S-L is required to construct continuous learning and practice of S-L as an individual's role to reach his/her goals. The participants emphasized reaching daily results and yearly goals. Individuals have different goals and different ways of contributing to a larger set of goals. In terms of deficiency of S-L knowledge in ABC, business was traditionally driven by team goals; individuals paid less attention to S-L in which the individual's S-L factors are linked to IGA. Value creation concentrated on S-L knowledge is still not strong enough in ABC in terms of understanding the correlations between S-L factors and their variables. S-L is the determination to reach the goals so that even if a problem arises, individuals can react, placing the emphasis on IGA for value creation. S-L knowledge can promote self-identification, self-awareness, positive perceptions of self-knowledge and learning on how to extract and utilize the five S-L factors of IGA. S-L knowledge can be individual based with emphasis on vq-factor. Ultimately there is an S-L paradigm shift through the individual's S-L discipline to intrinsic-centered rewards in achieving IGA. The researcher acknowledged that it is essential for individuals to learn value creation centered S-L in terms of identifying the type of S-L, learning how to utilize S-L in achieving goals in business with a self-directed and intrinsic rewards approach. All the participants were surprised that vq-factor was the most significant that included their roles in ongoing individual tasks and projects especially value creation sensitive ones. Individuals felt that the results of the study were beneficial; however, a few of them had negative thoughts towards adapting S-L factors as a way to IGA which was still a matter of individual preference. Individuals need to practice the five S-L factors to demonstrate to themselves the advantage of value creation in achieving their individual aims.

The researcher recognized that participants were aware of the value of S-L and acknowledged that value creation focused S-L culture in practice would be beneficial. After

aggregation of the subthemes/codes to form codes and themes through merging and exploring reflection processes in a cycle (Creswell, 2017), the following items are selected as top 10 key strategies of development of S-L culture. Those strategies will be evaluated on how impact on IGA counting the demands from stakeholders.

- Empowering & measuring S-L capabilities
- Value creation driven S-L culture in practice
- Paradigm shift from traditional leadership to S-L culture
- Building value creation S-L strategy
- Integrating value creation S-L and ABC's strategy
- Human resource S-L management strategy
- Learning about value intensive S-L knowledge
- Learning about intrinsic S-L value creation
- Practicing S-L instruments for value creation
- Practicing S-L instruments for applicability to ABC

5.6 Case study

Case study is a step in the interpretations and conclusions obtained through qualitative processes. The study is approached a within-case or intra-case utilizing a single case searching for themes while cross-case requires multiple cases to find generalizable findings in differences and similarities (Creswell, 2017). The researcher examines the key codes/subthemes for evaluation to discover what their impacts are on countering the challenges including global competition, high demands from the Management and fulfilment of multiple roles which are faced by ABC.

5.7 Strengths and weaknesses of qualitative approach

The strength of the qualitative study is that it allowed the researcher to approach ABC to provide an actionable knowledge through assessment by various levels of individuals in ABC. It increased the ability to focus on understanding of their S-L as well as its significance, its values and beliefs which can assist in their goal achievement. Thus, the benefit of the qualitative study was that the researcher understood which S-L drivers were needed to increase an individual's S-L capabilities. The weakness, however, was the time-taken; the researcher spent 3 – 4 weeks more time than on the quantitative survey in conducting qualitative survey dealing with individuals due to the issue of accessibility, availability and their responses as Yauch & Steudel (2003) had experienced.

5.8 Reflections and conclusions

The semi-structured qualitative interview took place with twelve key stakeholders of ABC. The researcher initially presented the findings from the quantitative study aiming at

interpretation, deeper understanding and confirmation of the results of the quantitative study. By discussing the findings of the quantitative study, sharing the insights and experiences of the participants utilizing open-ended questions, the researcher pursued integrating results after interpreting interviews, coding and categorizing themes in an inductive process (Creswell, 2017). The qualitative interviews assisted the researcher to discover perceptions of individuals about S-L factors, S-L culture and IGA in ABC and to corroborate the findings of the needs for development of specific contextual S-L culture stages for managerial intervention strategies for IGA in ABC. The interview responses showed that the vq-factor, gq-factor and sq-factor are significant, while tq-factor and cq-factor are exhibited less important in IGA.

The integration of the findings confirmed that there were needs for development of S-L culture and that the entity would benefit by constructing and by focusing on value creation centered S-L culture development stages such as stage 1: enhancing S-L capabilities, stage 2: promoting S-L knowledge, stage 3: building S-L strategies and stage 4: establishing S-L culture. The findings indicated that S-L culture development stages were appropriate for ABC in the long run to satisfy stakeholders' demands for fewer people with more responsibilities due to the nature of management in work environments. Furthermore, the findings shed light on the development of S-L culture to address and to clarify the positive consequences of S-L at individual and organizational levels. Reflecting on the findings of generating actionable knowledge of S-L culture development variables and S-L paradigm, the evaluation of actionable S-L instruments including S-L self-assessment applications created from the quantitative study is described in the following evaluation chapter which will lead the ABC to reap further benefits.

CHAPTER 6 EVALUATIONS AND DISCUSSIONS

6.1 Introduction

The chapter presents the overall findings of the study that are results of a mixed sequential quantitative and qualitative studies engaged in ABC and suggests sustainable actionable S-L instruments and S-L culture development strategy that positively impact on IGA. The evaluation involves validation of the actionable knowledge to promote individual S-L capabilities for IGA and development of S-L culture in ABC research context (See Appendix F). It aims at evaluation to provide empirical evidence on how actionable knowledge created in the study benefits to IGA and ABC (See Appendix G) and to suggest managerial intervention strategies which is discussed in the intervention, limitation and recommendation chapter. The researcher argued that managers' interviews and discussions afford practical and useful insight on evaluation (Barbour, 2008). The evaluation of the findings becomes the empirical work whose outcomes are the framework for managerial intervention strategies. Once ABC's managements decide, the actionable knowledge may be used for future implementation for action to enhance individual capabilities of S-L, to manage better their individual goals' achievements and to develop S-L culture in ABC.

6.2 Overall findings of the study and actionable knowledge

The overall findings provides the outcomes from a mixed sequential research of quantitative and qualitative method in order and fulfillments of the study to achieve research goals and objectives on how S-L factors enhance IGA as well as how S-L culture development is relevant to ABC. Table 6.1 illustrates a summary of result from the study, actionable knowledge and evaluation's plan.

Table 6.1 Overall findings of the study and actionable knowledge for evaluations

Research method	Data source	Findings	Note
Phase I: Quantitative study	N=370 On-line survey	-Key S-L factors in the most significant order in IGA: <ul style="list-style-type: none"> • vq-factor • gq-factor • sq-factor -S-L factors in the less significant order in IGA: <ul style="list-style-type: none"> • tq-factor • cq-factor -S-L culture significantly moderate in IGA	Including participants from ABC
Phase II: Qualitative study	N=12 Interview	-Perceived key S-L factors that positively impact on IGA in a significant order: <ul style="list-style-type: none"> • vq-factor • gq-factor; sq-factor -S-L factors that are less significantly related with IGA: <ul style="list-style-type: none"> • tq-factor; cq-factor -S-L culture significantly moderate in IGA	Cross-participants

Integration	Findings from both quantitative & qualitative study	Utilizing S-L factors and S-L culture as positively impacting on IGA from business management views -The need for strengthening S-L capability focused value creation on IGA -The need for S-L culture development strategic plan	
Actionable knowledge	Based on findings of quantitative and qualitative study	-S-L instruments for enhancement of S-L capabilities that are significant to achieve individual goals -S-L culture development strategy	
Evaluation plan	On-line survey N =12; Evolutions and discussions with N=7	-S-L instruments for enhancement of individual S-L capabilities to increase IGA -S-L instruments benefit to IGA: expanding market, business process and financial report in management dimensions - S-L culture development strategy benefits to IGA countering realities -S-L culture and S-L instruments benefit to ABC in a long term macro scale	On-line survey: Cross-participants; Evaluations and discussions with managers

6.3 Evaluation and discussions of actionable knowledge

The evaluation has been done with key managers of ABC (see Appendix H) as means of engaging in and evaluating the actionable knowledge of the S-L instruments and S-L culture development strategy to reflect the findings for practical use in dealing with challenges of IGA. Prior to the evaluation of actionable knowledge, the senior manager, global controller who is a key contact ABC and the researcher had discussed and agreed to the following:

- i) the participants evaluate top three significant S-L factors including vq-factor, gq-factor and sq-factor out of the five factors,
- ii) the evaluation survey is conducted after a month's period of practice of S-L instruments,
- iii) the evaluation is compared before and after practicing of S-L instruments,
- iv) all participants are voluntary including a volunteer recorder. In addition, the research follows all necessary ethical approval and visitor's compliance required by ABC.

The main focuses of evaluations are

- i) How do S-L instruments help to increase S-L capabilities in terms of business management dimension including expanding markets, efficient business process and better financial reports of IGA?

- ii) How do S-L culture development strategy promote IGA encountered challenges demanded by stakeholders?
- iii) How S-L instruments and S-L culture development strategy benefit ABC in a long term macro scale

6.4 Actionable knowledge of S-L instruments

The actionable knowledge instruments including i) S-L pyramid ii) S-L self-assessment, and iii) S-L management checklist. The S-L pyramid emphasizes the significance of S-L factors by depicting the five S-L factors: cq-factor, sq-factor, tq-factor, vq-factor and gq-factor including their variables in attaining individual goals. It suggests that the most significant S-L factor, the vq-factor is often chosen whereas the cq-factor, tq-factor is less frequently selected in daily activities. The researcher adapted a pyramid concept as S-L is a daily practice (Kruckeberg, Amann & Green, 2011, p. 98). Appendix D.7 represents a hierarchy of significant correlations between S-L factors and IGA in which each S-L factor and its variables are shown in their different significant levels of correlations. It is described as a pyramid having the most significant S-L factor at the bottom and the least significant S-L factor at the top, formed by the results of the quantitative study. It demonstrates the S-L factors of achieving individual goals with vq-factor as the base representing the most important factor and the cq-factor at the top demonstrating the least. The researcher recommends that individuals choose more frequently the vq-factor in practice to meet the stakeholder's demands as selecting the higher correlation items in choosing S-L factors and their variables is an indicator of the more successful strategy. The five S-L self-assessment and S-L management checklist in practice are developed based on the results of the quantitative study. It is self-disciplinary by utilizing the individual's convenient time and location and it allowed for monitoring their own improvement of S-L capabilities. The five S-L self-assessment instrument is to enhance individual's S-L capabilities to promote IGA. The study suggests focusing on the vq-factor which is the most significant factor for IGA by recognizing the value of the work, being constructive to create value, keeping a sense of ownership in value creation, reflecting value focused individual goal setting as well as overcoming challenges in creating value. According to the study, the teamwork S-L factor is less impactful on IGA among the five S-L factors; the research advises that teamwork can be utilized, if necessary, for sharing insights and experiences to complete IGA.

6.5 Evaluations and discussions of S-L instruments

The researcher chose the inferential evaluation approach to test the findings. Data was collected before exposing S-L instruments and then a month after exposing S-L instruments to see how useful the S-L instruments are in practice for enhancement of S-L capability focusing on the significant S-L factors. It aims to reach a conclusion on the basis of evidences on how improve individual S-L capabilities for IGA.

6.5.1 Evaluation of S-L instruments on enhancement of individual S-L capabilities

The evaluation of a comparison of S-L capability's changes before and after was conducted in a month period which allowed utilizing an available sample. The result of the survey showed that the majority of participants supported the vq-factor which is the most significant factor in achieving an individual goal. For example, vq-factor has increased from 4.07 to 4.2, gq-factor from 3.54 to 3.68 and sq-factor has decreased from 4.13 to 4.0 in scale in self-assessment. The S-L instruments reinforced in action and pointed to the right direction to enhance individual's S-L capabilities by focusing on the significant S-L factors such as vq-factor and gq-factor. Participants was before, N=13 and after, N=12 and empirical test period was a month between before and after. Work constraint did not allow the researcher using the same number of participants in data collection nor long term commitments due to the individual's own busy commitments under a new management. Table 6.2 show the S-L enhancement.

Table 6.2 Descriptive statistics: S-L self-assessment of S-L capability instruments

Factor Statistic	Value creation factor			Goal setting factor			Skill's factor		
	Before	After	Difference	Before	After	Difference	Before	After	Difference
Min	1	1	0	1	1	0	1	1	0
Max	5	5	0	5	5	0	5	5	0
Mean	4.07	4.20	.13	3.54	3.68	.14	4.13	4.0	-.13
Median	4.07	4.20	.13	3.54	3.68	.14	4.13	4.0	-.13
S.D	.87	.81	-.06	1.06	.86	-.2	.78	.78	0

This suggests mean values of value creation factor and goal setting factor have increased that indicates that individuals applied significant S-L factors to increase IGA. It indicates that the participants have focused on significant S-L factors to promote their S-L capabilities as the results of the study suggested to enhance their S-L capabilities.

6.5.2 Evaluations and discussions of S-L instruments on business management dimensions

ABC has customers across the world and also has to deal with competitors throughout the world. Expanding market is critical to meet the demand from the mother company and to seek rapid growth opportunities. Execution of the efficient business process is important to optimize utilization, performance and productivity. For example, manufacturing quality products, improving on-time delivery and reducing warranty work are significant in business processes to generate profit in ABC. The evaluation of S-L instruments focuses on the practical perspective in terms of expanding market; on increasing efficacy and presenting profitable financial reports based on the discussions of the participants of the managers of ABC. The researcher avoided to use direct position name of a participant for secure participants, rather used 'MRG' which stands for a manager that includes the CEO, directors, managers, and a global controller.

Expanding market: MGR 2 said,

“By using S-L instruments in a way of new initiative, new idea and by aligning with the company goal and customer’s demands, there are benefits to ABC in expanding markets.”

MGR1 added,

“It would help develop a level of ownership of the decisions made and increase the chance of successful execution. Further it would help the individual grow in their skill set and shorten the decision making process, resulting in greater productivity. Customer satisfaction would increase due to quicker resolution to the request and/or issue that is being discussed. Customers like to talk to a person who is able to make decisions and this would further build a level of trust between sales and customer. I would set broad guidelines for each team member so they understand their level of decision making. Continue to iterate that it’s the team members decision to make and they can ask for my opinion in what they would like to do but I would not tell them what I would do unless specifically asked. Also, I would provide feedback on decisions that were well made and encourage a discussion on things that me be improved; I would never tell they were “wrong.” In my own case I would try to resolve any challenges to be as much a win-win scenario for a stakeholder but and again make communication as quick as possible.”

It shows that individuals can enhance their S-L capabilities and deliver value driven products and service which meet customer expectations and exceed customer satisfaction which in turn leads to expanding markets.

Business processes: MRG 3 pointed out that

“S-L quality can eliminate wasteful tasks and have more efficiency and continuous improvement. S-L instruments discovered are another word for initiative and ambition benefiting the company in business process as S-L capabilities are aligned with individuals to improve process in the light of their efficiency and flexibility. As the five S-L factors are founded on the business process, S-L instruments assist in promoting individual efficiency and continuous improvement process and S-L instruments are tools to maximize better and efficient managing operations of business process overall because S-L is self-focused leadership.”

MGR 5 shared his insights;

“Employees are working independently, developing personal goals and working to exceed them and being proactive instead of reactive. They are analysing risk in processes and developing a corrective action before a customer complaint occurs. The employees monitor together throughout the year and increase the challenge of the goal if the goal set too low. They determine what demands the stakeholders are expressing and develop a plan to achieve those demands.

It suggests that S-L instruments can increase efficient business processes by reducing wasteful process, focusing on continuous improvement, and taking corrective action to achieve individual goals. It indicates that long term practice of S-L instruments benefit to business processes.

Financial benefit: MGR 6 supported that “S-L qualities lower cost and increase profits. Knowing company goals and aligning individuals’ goals with company goals, is a better theme that goals will be met with S-L qualities. In business, maximizing profits is the process by which ABC makes a decision to adopt a new approach such as S-L instruments that returns the financial benefit to ABC, which relies on the fact that profits are generated where there is efficiency and utilization of individual’s S-L capabilities.”

The responses from a head of each department support that S-L instruments benefits to the department to meet the demands from stakeholders in dealing with expanding market, efficient business process and better financial report. S-L self-assessment instruments should be allowed for an individual has his/her own S-L capabilities to deliver achievements with individual’s highly efficient performance; combining with value creation outcomes for stakeholders.

6.6 Evaluations and discussions of S-L culture development strategy

The researcher identified ten major S-L culture development variables in the development of S-L culture (Lee, 2008). The variables include S-L instruments for value focused S-L enhancement; value creation concentrated S-L knowledge; constructive value creation intensive S-L strategy and S-L culture establishment which requires long-term practice. Lee suggests justifying a further investigation on how the findings contributed to the development of value creation S-L culture which in turn, would add a new insight into the S-L business process consequences of more value driven S-L culture in ABC.

6.6.1 Discussions and evaluations of S-L culture development strategy on business management

S-L culture development strategy have been intended to suggest a management strategy for ABC which has faced challenges. The business challenges include parent’s management demands, global leadership in markets, high level of customer service and individual’s multiple roles. It aims alignment with business goals and to support development of S-L culture that in turn supports long-run business success. Meeting a parent company’s high demands is about perceptions of how S-L development culture values the individual’s contribution to parent company’s demands. Table 6.3 illustrates that the S-L culture development variables put in a favorable position with over 50% to meet parent’s organization’s high demands, provide customers high level of services and manage multiple roles while maintaining global leadership in markets. It suggests three points that S-L culture development is a long term strategy, impacts more significantly on internal stockholders’

requests than external stakeholders' requests, and the variables of S-L strategy identified requires deeper S-L knowledge and S-L practice to more contributes to business managerial dimensions.

Table 6.3 Evaluation of S-L culture development strategy on management

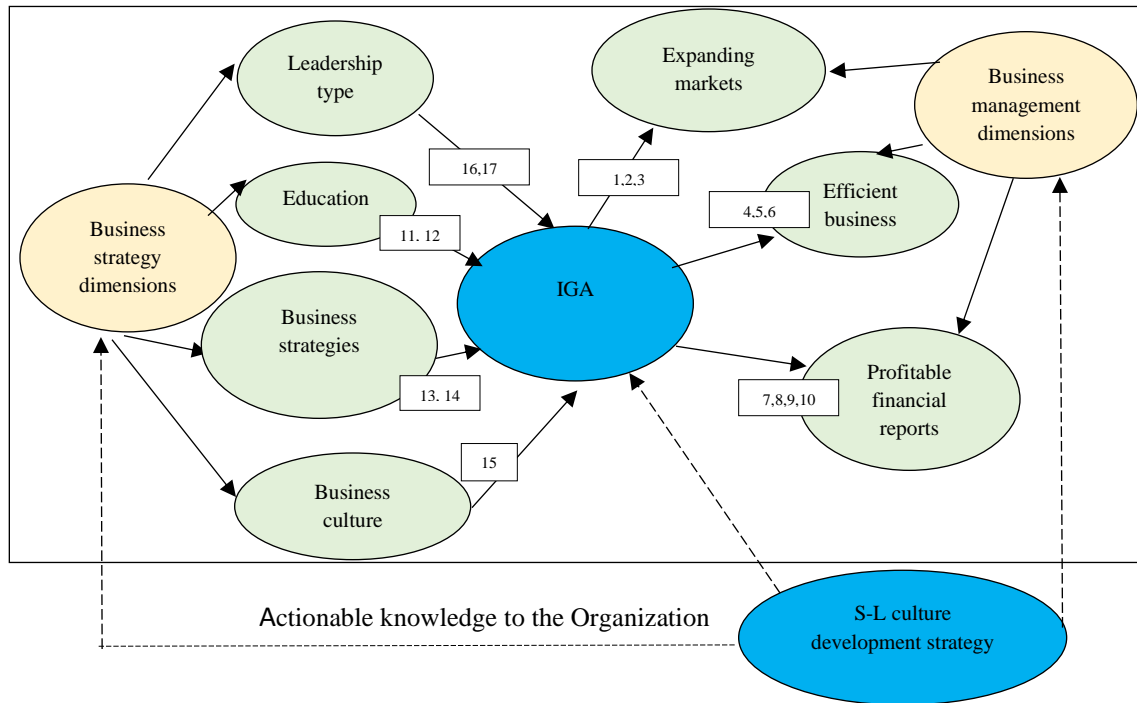
Challenges S-L culture development strategy	Meet Parent's Management high demands	Maintain global leader position in market	Provide customers high level of services	Manage multiple roles
1. Empowering S-L culture	50%	20%	60%	60%
2. Value creation driven S-L culture in practice	50%	30%	50%	40%
3. Paradigm shift from traditional leadership to S-L culture.	20%	40%	30%	20%
4. Building value creation S-L strategy	30%	30%	50%	50%
5. Integrating value creation S-L and ABC strategy	50%	30%	30%	30%
6. Human resource S-L management strategy	30%	40%	40%	30%
7. Learning about value intensive S-L knowledge	20%	40%	60%	30%
8. Learning about intrinsic S-L value creation	30%	30%	50%	30%
9. Practicing S-L instruments for value creation	50%	10%	60%	40%
10. Practicing S-L instruments for applicability to ABC	30%	40%	40%	50%

(Based on valid data from N=13; 3 participants did not answer the questions.)

6.6.2 Discussions and evaluations of S-L culture development strategy on business strategy

The actionable knowledge of S-L culture development strategy are jointly discussed with managements of ABC. The strategies which are inside the square are existing business strategies and the outside one in blue color is the newly created actionable S-L culture development strategy. The model presented in Figure 6.1 illustrates the interrelations between the business dimensions and S-L culture development strategy and directions of the impacts.

Figure 6.1 Interrelationship between S-L culture strategy and business strategy



Note: Arrow indicates interrelationship between actionable S-L culture development strategy and business dimensions (Source: Adapted from Tadjallimehr, 2018, p. 90)

Key themes numbers in 1.Shared value with customers 2.Reputation and credit 3.Seeking opportunities 4. Development of specific skills for efficient process 5. Avoid un-productive team-work 6. Do more with less 7. Profit Maximization 8. Cost and returns 9. Lean based management 10. Remove wasteful projects 11. Need an S-L self-assessment instruments for measurement 12. Essential of education of S-L knowledge 13. Building value creation S-L strategy 14. Linking the value creation S-L strategy to ABC strategy 15. Critical S-L culture development 16. Leadership paradigm change needed 17. Creating harmonized S-L model for a macro period

It indicates that IGA is a core engine that has relations to enrich business activities by clarifying what to achieve and how to achieve goals (Bryant & Kazan, 2012). For example, without IGA, how to expand markets, how to improve business processes and how to generate better profits cannot be pursued. S-L culture strategy also have a relation to business management dimension as well as business strategy dimension. It may give a greater chance of contribution to ABC’s businesses on both business management dimension as well as business strategy dimensions as shown in the themes of S-L culture development strategy embedded in each of business dimensions. In these regards, S-L strategy development may have an influence on business activities. This section examines the impacts of the S-L culture development strategy with key managers on the expanding market, business processes and financial reports as Barbour (2008) suggests valuing participants to impact on ABC changes. The following are comments from the participants that show the impacts on business management dimensions.

Expanding market: Benefits in terms of improvement of customer service and requirements, emerging markets and market strategies;

“S-L development stages help to look outside the box & look for improving, customer service, handle multiple roles and looking for emerging markets etc. It allows keeping focus on the bigger picture in expanding markets and in customer service. S-L culture benefits studying customer requirements and finding alignment with customer’s firms. Expanding business tends to require a shift in strategy of a company. An S-L culture that utilizes S-L instruments will be open to new ideas to increase business by export into markets; S-L culture development stages may help in getting individuals to open their minds to different ways of exporting.” (MRG 3)

Business processes: Benefits in aspects of resource management, efficiency and effectiveness in business processes:

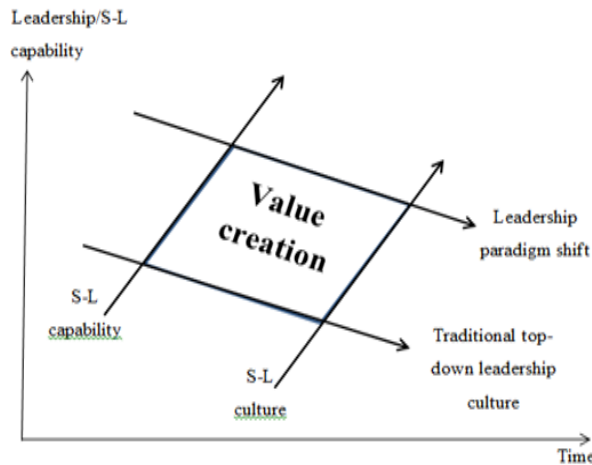
“S-L culture development stages look for more products and customers and R&D which need resources to be available for do business processes and these need to be correct and balanced utilizing more resourceful individuals. By implementing S-L employees should become more effective and accurate. Improved accuracy means less rework, improved, more efficient use of resources. With the better self-understanding that comes with S-L, I would expect the individual would be more aware as to what degree business processes were helping them to achieve their goal, and therefore look to improve the process where appropriate.” (MGR 4)

“The effects of S-L culture development in stages contribute to developing S-L culture in ABC. Those S-L stages benefit a long term S-L promotion strategy for better business processes which eliminate unproductive cost and increases efficiency which impacts improvement of all processes within the organization.” (MGR 7)

Financial reports: Benefits from the financial perspective in terms of saving cost and increase in volume of profits:

“S-L qualities would drive individuals to more training, and self-improvement to increase capabilities and increase volume of sales and profits for the organization. S-L culture development stages offer the benefit that there is less need for micro managers; if managers or supervisors are gone, the department keeps working.” (MGR 6)

6.7 Evaluations and discussions of S-L culture strategy in a macro scale



This section discussed the short-term or mid-term benefits to ABC. Figure 6.2 illustrates the harmonized conceptual S-L culture model in a long-term macro scale in evaluation of S-L instruments and S-L culture development strategy on how it benefits ABC. The time period is not defined, but the benefits are expected over a long-term in development S-L culture. S-L capabilities and S-L culture are facing upward while traditional top-down leadership culture is downward and leadership paradigm is gradually shifting to S-L mode.

leadership paradigm is gradually shifting to S-L mode.

Figure 6.2 S-L culture strategy conceptual model in a macro scale

The following are comments from the key manages who discussed the benefits to ABC over the long term.

“There are benefits in a somewhat innovative goal setting of S-L capability as opposed to individual top down leadership. It requires less micro management. Harmonized S-L culture should eventually merge with top-down culture showing that they work together.” (MGR 3)

“Harmonized is equal to synchronized. Chasing the same goals yet, self-awareness & self-directing resources to find information. Want a culture that cultivates the idea but it needs to be a testing process.” (MGR 4)

“The harmonized S-L culture model could contribute to human resource strategies although the time frame may be hard to estimate to produce value creation. The consequences of the harmonized S-L model require building S-L practice and S-L strategies. There has to be a culture of enacting S-L as a working tool and this has to be done by raising awareness of what it takes to apply S-L.” (MGR 6)

6.8 Improved and potential changes in ABC

ABC possessed limited S-L knowledge, S-L instruments for measurement and S-L culture that need to be built to enhance IGA. ABC has learned to concentrate on S-L strategies that can contribute to the best IGA in dealing with realities. Enhancing individuals’ S-L capabilities and constructing S-L culture strategies practice over time can assist ABC to properly utilize individual S-L across ABC to enhance IGA. ABC also acknowledges where

to focus on S-L factors to manage individuals in order to expand markets, to increase order capturing rate, to retain high customer satisfaction, to reduce warranty jobs which are critical for efficient business processes and profitable financial reports which are required to meet demands from stakeholders. All layers of individuals also have learned that S-L culture is necessary to achieve individual goals in the long run. Some deal with the lean based management in ABC, which reduces any wasteful processes and resources, while others embrace increasing IGA by activating S-L capabilities. ABC has learned which type of individual contributes most to ABC through IGA processes and how to manage work forces. Also, considering the multiple roles that individuals currently face, ABC understood the significance of individuals' S-L in achieving their goals and actually using S-L. Furthermore, The researcher and managers of ABC has discussed whether it is best to have harmonized S-L culture that needs to be a balance in a traditional hierarchical top-down structure and S-L. Although, the researcher presented the way to maximize the value creation concept in an S-L culture model, we do not know much about the positive or negative consequences of the use of the harmonized conceptual S-L culture model and thus the need a further study. S-L instruments and S-L culture may impact not only individual goal achievements but also organizational goal achievements. The following is a feedback comment from ABC on S-L instrument and S-L culture development strategy to promote goal achievement capabilities at an individual and organizational level. As discussed above, S-L instruments and S-L culture development strategy have benefits to IGA in ABC.

Feedback comments from ABC on benefits from study results: A senior manager of ABC provided a feedback comment about the reaction to the product of the research which leverages the strengths of the findings in practice (Versland, 2013).

“As ABC runs on a lean base, the S-L qualities are an important part of meeting our goals. We as an organization have strived to install this type of ABC culture. Your study is interesting in that it provides data that supports the correlation of various factors such as skills, value creation, individual goal setting, etc. to S-L. This provides a framework that can help improve organizational culture by understanding these correlations. They would be helpful in the hiring process to increase the probability of new hires having the S-L skills that would more readily fit into the existing business culture. Your study also provides a framework by which training can be tailored to individuals to improve their overall S-L skills and their correlation to company goals. In today's competitive, global environment where productivity, efficiency and the ability to improve on these skills is a real win for any organization.” (a senior MGR)

6.9 Reflections and conclusions

The evaluation of S-L instruments and S-L culture development strategy were tested and discussed in the merged results with managerial individuals. The benefits to ABC were in the fields of enhancing individual's S-L, development of S-L culture, dealing with ABC

realities, expanding market, improving business processes and financial benefits such as profits in practice. It confirmed that the key managers in ABC were strongly interested in the findings of the study and in reflecting changes in actions to incorporate ABC realities with a pragmatic approach. The study discussed short and long-term impacts of S-L culture development strategy to make S-L instruments useful in S-L culture development relevant uniquely to ABC. The evaluations evidenced that the actionable knowledge, S-L instruments created from the study will contribute to the enhancement of individual's S-L capabilities to enhance IGA in managerial dimensions. The quality of individual S-L capabilities and S-L culture development strategy ultimately will enhance expanding markets, better business processes and profitable financial report to meet stakeholders' demands. The results of the study will suggest ABC with managerial interventions that make a value creation S-L work environment by practicing S-L instruments and constructing S-L culture to enhance IGA. In the next chapter, conclusions and implications will be discussed to present fulfilment of the study and implications for business practitioner as well as scholar-practitioner.

CHAPTER 7 CONCLUSIONS & IMPLICATIONS

7.1 Introduction

The purpose of this study was to discover how S-L factors enhance IGA. The research started with identifying the five significant S-L factors and then proceeds to discover the correlations between each S-L factor and individual goals. The significant correlation levels of S-L factors and achieving individual goals are discovered. To accomplish the search purpose, the thesis dedicated research questions to quantitative and qualitative studies and adapted Ivankova's (2015) methods of a mixed sequential quantitative and qualitative study. The findings of the study were presented and followed by discussions with managers to reflect on the study and consequences of outcomes to ABC. The framework facilitated the discussion directed toward linking and integrating the statistical findings from the quantitative method with the findings from the qualitative method in practice at this ABC. This chapter is comprised of the research achievement in fulfilment of research goals and objectives and the originality of the study followed by implications for the business practitioner and scholar-practitioner.

7.2 Achievement of the study

The study developed, tested and delivered the research outcomes in achieving the research goals and objectives focusing on the five S-L factors in business process in obtaining individual goals. The conclusion is summarized on three dimensions including fulfilment of the research goals and objectives, and contribution to original research. The research has developed S-L instruments and S-L culture development strategy which are comprehensive to make a contribution to ABC in practice. In addition, the study makes contributions to academic community by filling a gap in the existing S-L literature by identifying key S-L factors and providing correlations between S-L factors and IGA.

7.2.1 Fulfilment of research goals

The practical goal of the study was to produce an S-L solution that would help ABC in dealing with realities to meet the requirements from the various stakeholders to achieve individual goals.

Goal 1: Development of S-L instruments for ABC to enhance the individual's S-L capabilities

The research presents and provides practical S-L instruments in Appendix D with evidences of the five significant S-L factors for IGA. The finding of the study suggests a new direction in business process from a teamwork driven management which is a relatively less significant factor according to the result of the study, rather to motivate value creation intensive management which is the most significant S-L factor.

Goal 2: Creating a high level of S-L culture development strategy, which have a contribution to encountering challenges demanded of ABC from the stakeholder.

Building upon a high level of S-L culture development in macro period for ABC, the study serves as the first S-L study to examine the five major S-L factors and posits an S-L culture development for ABC to achieve individual goals and to assist in dealing with realities. It offers an S-L mission and S-L development that connects the major themes in the study such as S-L culture and S-L strategy and S-L knowledge and S-L self-assessments from the research findings.

The diverse participants in the quantitative study and qualitative studies at all layers in ABC have helped fulfill the aim of this research. Those participants helped to discover practical S-L instruments and S-L culture development for practitioners.

7.2.2 Fulfilment of research objectives

For achieving the goal, the study addressed and fulfilled (Crockett, 2015) the five strategic objectives: i) to identify the S-L factors which have significant correlations between S-L factors and IGA; ii) to provide correlations between each S-L factor and IGA; iii) to find correlations between an S-L factor and another S-L factor in achieving individual goals; iv) to find the variables of each S-L factor and find correlations between a variable and an S-L factor in achieving IGA; v) to propose implications for ABC by integrating the findings of the quantitative and qualitative study.

To make progress and to achieve those objectives, the researcher discovered the relevant five S-L factors through the literature reviews that have been done on five different perspectives of S-L factors in business process and considered the practical implications for ABC. For instance, the research pursued the research objectives to meet the needs and be able to apply the findings to ABC which encountered internal and external challenges in realities such as ongoing global competition, parent company's high demands and individuals' multiple roles and responsibilities. For S-L development in ABC, the S-L self-assessments and S-L management checklist are suggested focusing on S-L culture, S-L strategy and S-L knowledge. The study has committed to including fulfilment of the research goals and objectives which has related to contributions and implications for practice.

7.2.3 Originality of the research

The study contributes to originality by both its theoretical and its practical implications. Colquitt & Zapata-Phelan (2007) make theoretical contributions by testing the propositions in a deductive approach. The study formulated propositions in the quantitative study and confirmed these propositions. The researcher provided new insights into the S-L instruments and S-L culture development strategy by identifying the five S-L factors in

achieving individual goals and explored S-L factors in the business process and found their correlations. Additionally, the study developed a set of managerial intervention strategies for implications of findings in practice and as a means of inspiring future research in this S-L field.

Colquitt & Zapata-Phelan also argue that proposition testing is important not only for theoretical contributions but also for implications in practice because practical applications of these implications are supported by theories with statistical evidence supporting outcomes and with the objective analysis application for greater validity for data preparation.

The fulfillment of the study contributes to future literature (Crockett, 2015) to fill the deficits in the existing literatures by providing both future practitioners and researchers with the results of the study with original thinking. For instance, the quantitative findings of the correlations between S-L factors and IGA delivered new and original findings of S-L factors in pursuing IGA. Most importantly, the study approached business management dimensions and S-L culture development strategy involved many experienced expert individuals participating in the findings to build theoretical contributions by adapting quantitative and qualitative studies. The findings of the quantitative study were presented, interpreted and were confirmed through the cross-participants' contribution to the findings for empirical evidence (Colquitt & Zapata-Phelan, 2007) in constructing theoretical contributions beneficial to S-L fields.

For the validation of the theoretical findings, the researcher ensured that research procedures that were used while processing the research kept the integrity and credibility utilizing validation. The propositions tests and practical evidences in a given empirical context can help strengthen theoretical contributions and can be inputs for discovering more comprehensive theories. The primary goal of the study was not building a new theoretical base but creating actionable knowledge in practice, thus the researcher suggests that a future researcher may establish a goal setting in building, reporting, testing, evaluating and expanding a theory (Colquitt & Zapata-Phelan, 2007) based on dynamic and long term quantitative and empirical studies in greater theoretical contributions.

The consequences of the theoretical findings of core relations between S-L factors and IGA eventually reflected contributing to originality in creating the practical S-L instruments by applying the theoretical findings by incorporating consequences. The study also contributes to originality in making practical contributions by generating S-L instruments to self-assess S-L scale to develop S-L culture strategy filling a gap in the S-L field in ABC.

7.3 Study Implications

The study responded to the research questions and fulfilled the research goals and objectives related to how S-L factors and IGA are correlated and how S-L instruments benefit ABC in dealing with realities in practice. Findings are significant not only to the

target organization but also inspire implications that lead to further study for a business practitioner and a scholar-practitioner as described below.

7.3.1 Implications for the business practitioner

This study provided correlations between S-L factors and IGA which provides rigorous evidence in matters of S-L for IGA as follows. The following are future practical implications which may affect IGA within business processes in ABC.

First, the findings of this research provide ABC with a better understanding of the S-L factors that affect IGA. ABC should seek an S-L culture which encourages individuals to empower themselves and to make changes focused on their value creation where appropriate. It is also important that individuals have deeper understanding of S-L to achieve their individuals' goals. The study suggests development of S-L culture strategy as with McCullough (2007) who studied ways to incorporate S-L factors into a schedule to achieve individual goals. The study also recommends that the vq-factor, for an individual to achieve his/her goal, should be a primary objective and is considered to be the most significant to enable individuals to achieve multiple and dynamic individual goals.

Secondly, this study provides the advantage of generating actionable knowledge for practice from the specific research context. The findings of the research were obtained from experienced experts through the quantitative as well as qualitative study. The findings of S-L instruments can be utilized by ABC by adapting the findings to development of S-L culture to drive enhancing S-L and increase S-L capabilities of IGA. In addition, it can promote S-L capabilities in the IGA which are encountered by ABC in business dimensions including expanding markets, efficient business processes and better financial reports.

Thirdly, the research findings have important S-L instruments for practitioners who aim to enhance S-L capabilities and develop an S-L culture in ABC. Understanding significant S-L factors and correlations between an S-L factor and IGA appears to be an instrument to promote S-L capabilities and develop an S-L culture for growth in business dimensions in ABC. In particular, S-L should be acknowledged and used practically to counter challenges and consequences to construct S-L culture and to maintain a leader in global markets and to meet to the demands of parent's company and to manage multiple roles in business management dimensions.

Lastly, aspects like the design of S-L instruments and the development of S-L culture strategy have been paid less attention to in ABC although ABC faces a critical role in supplying to utility businesses across the world and in meeting the demands from the stakeholders. Thus, the rationale for this research is that the practice of S-L requires an understanding of the power of S-L and continued efforts for development of S-L culture. The findings of the research may have, in the long run, the potential to enhance the overall business process, even considering the efficient processes and commercial and economic side to meet the stakeholders demands and expectations. Therefore, individuals in ABC are

encouraged to adopt and practice S-L instruments. In return, the findings may help to promote individual efficiency, productivity and overall ABC performance and ultimately benefit expanding markets, business process and financial sides.

7.3.2 Implication for a scholar-practitioner

The study makes contributions to theoretical advancement by filling a gap in the existing S-L literature by providing correlations between S-L factors and IGA focusing on business managements. The findings however, draw attention to S-L factors for IGA in business processes and make it possible to increase the number of future researches that would contribute more to scholastic findings as the business increasingly runs on lean-based management.

First, the study suggests an overall understanding of the five major S-L factors and their correlations from the active leaders of the participants. Then the study helps construct statistical findings to depict conceptual findings in significant levels of S-L factors.

Secondly, it also suggests that future studies should be addressed through different organizational cultures, business philosophies and business strategies in research settings as the study was limited to and conducted in Canadian work contexts. Since S-L study is still unpopular and unfavorable to a scholastic study, the study can suggest a promotion of S-L study as a part of the leadership field. The S-L factors for IGA are numerous; in general, however, the study has provided the five S-L factors which could be a foundation of future S-L factor studies as well as being a benefit for future S-L scholar-practitioners in advancing the deeper findings of S-L factors for IGA.

Thirdly, replicating this study in other research settings and different nations would provide opportunities to confirm whether or not the significant S-L factor is influenced by the regions and research settings. The research, in general, has initiated the study of S-L factors focusing on business processes for IGA for future researches articulating and exploring the S-L factors and their correlations for IGA.

Lastly, a top down and hierarchical leadership style often lacks the flexibility and dynamism in rapidly changing work settings. It is apparent therefore, that S-L sets are needed in business managements for innovative behavior at work with regards to high demands and expectations from the multiple stakeholders. The feedback below is about the findings of the research from a scholar-practitioner's perspective:

“The S-L application that you have set up via the five S-L self-assessments is extremely important to enhance individual S-L in both business processes and at the personal level. I believe that the S-L implications for an S-L culture development in the organization will be important, not only for enhancing and unleashing the power of S-L but will also provide an avenue for an S-L culture in general, to help ABC meet realities. In addition, I believe your findings will greatly complement previous studies in organizational and individual

leadership with the impetus to drive and broaden existing scholarly knowledge of the field.”

7.4 Reflections and conclusions

Ultimately, individuals have their own levels of S-L which influence achieving their goals in practice. Thus, S-L quality is an important element in dealing with both internal and external demands to achieve individual goals consistent with ABC goals. The subject company has been endeavoring to establish an S-L culture in ABC as described, with the motto “Leadership is your responsibility.” This timely study sought out S-L factors and their correlations and provided a platform that supports constructing S-L culture and self-disciplinary S-L instruments. The framework can help improve S-L culture by understanding the significant S-L factors and their correlations. Furthermore, in managerial change perspectives, the research findings would be utilized in the hiring process and development of professional capacities as having S-L capabilities would increase the efficiency of IGA. ABC would be readier to meet to the business requirements in encountering both internal and external demands. The study also generated an actionable S-L application which could be an instrument with which individuals can evaluate themselves to improve their S-L capabilities and make a connection to the ABC goals. The S-L research helps to improve productivity, efficiency and the ability to contribute to a global business environment according to the feedback from ABC for implication for a business practitioner.

From the point of view of implications for the scholar-practitioner, the S-L application that is developed via the five S-L self-assessments in the study is particularly important to promote an individual’s S-L in business processes. The S-L implications for S-L culture development strategy in ABC will be significant as they will not only utilize the power of S-L but will also offer an avenue for S-L culture, in general, to help meet stakeholders’ requirements as well as to drive and broaden existing scholarly knowledge in the S-L field.

S-L instruments practical applications could impact upon any layer’s individuals as S-L instruments dedicate the promotion of S-L capabilities in a user-friendly way which affect quality of individual’s S-L and neither limit to any specific individuals nor to any time and are always available to an individual. S-L instruments may be great personal development tools for the 21st century professional’s ‘iLeadership’ (Kruckeberg, Amann & Green, 2011). Therefore, an understanding of significant S-L factors and correlations with IGA will help individuals and organization’s policymakers to enhance S-L capabilities and establish S-L culture for improvement of value creation . The continual enhancing of S-L ensures that S-L provides ABC tangible benefits and outcomes. The limitations and recommendations for a future researcher utilizing the research results are highlighted in the following chapter.

CHAPTER 8 INTERVENTIONS, RECOMMENDATIONS & LIMITATIONS

8.1 Introduction

The goal of the research is to find the correlations between S-L factors and IGA within business processes in Canada using evidence from the research. For achieving the goal, the study addressed the five strategic objectives exploring S-L factors and sub-variables, inter-correlations and possible implications in practice. To make progress and to achieve those goals and objectives, the study designed, developed and identified the five S-L factors and each factors' variables through researcher's work experience and literature reviews that have been done on five different perspectives of S-L factors. The quantitative method is first used to obtain the results using a large number of participants and then cross-participants contribute to the qualitative findings. It was a sequential research processes to better understand, interpret and confirm the results of the quantitative study and integrating individuals' insights to generate actionable knowledge. The researcher explored current literature to document evidence of the findings as well as extension to the existing literature to fill the gap in current knowledge. The study delivered the relevant correlations between S-L factors and IGA and suggested S-L culture development strategy to ABC. The results of the study discovered that the five S-L factors are significant to IGA, three S-L factors such as vq-factor, gq-factor and sq-factor are relatively more important to IGA, and especially vq-facto is the most significant factor in IGA. The findings also presented that S-L culture positively impact on IGA as well as business managements including expanding market, efficient business process and better financial reports. The researcher has developed the intervention strategy and plan for actionable changes that provide innovative S-L instruments and S-L culture development strategy to ABC that faces internal and external challenges in IGA. Based on the findings of the research, the following are the intervention strategy, the limitations and recommendations for future research.

8.2 Interventions strategy

ABC constantly seeks for changes to meet the requirements of internal and external customers, shareholders and stakeholders. It is worth presenting the result of the research which studies the correlation between S-L factors and IGA, as it helps to develop the individual's S-L and "unbiased decisions" (Greenwood & Levin, 2007, p. 116) on individual's S-L; this research was evaluated the findings with collaborative key managers. The research will be developed as a contribution to ABC in which individuals benefit from findings of the research in practice to enhance their S-L for achieving individual goals and to assist them with the possible solutions in dealing with realities. ABC is not always looking for academic knowledge, so the findings from the research should be considered to be transferable knowledge and to be local actionable knowledge (Brydon-Miller, Greenwood & Maguire, 2003). It enables the outcomes of the research to be applied in ABC using statistic attempt, (Greenwood & Levin, 2007) which utilize a set of analytical tools of research to discover the findings and in which the result can be favorable or unfavorable to link to local knowledge. In this way, the result of the research can be applied to wider and

broader organizational contexts. Although there is no one correct solution to cover S-L factors for IGA, the results of the research bring to ABC critical findings.

8.2.1 Strategy on knowledge transfer of S-L instruments

This section discusses guidelines that can be utilized to determine for which individual type would be best to acquire knowledge of S-L instruments in Appendix D. The researcher adapts the general framework of new knowledge acquisition from the results of the research of Greenwood & Levin (2007, p. 124) as shown in Table 8.1 below. It presents how to transfer actionable knowledge of S-L instruments to different five types of individuals depending on how individual can manage or control the document and instructions with or without an assistance of the researcher or an expert.

Type I: An individual who used to have document and instruction using visual or graphical examples. The researcher needs to provide them with directive ways for acquisition of findings.

Type II: A distinct individual who uses instructions and documents to absorb actionable knowledge and has loyalty to an organization or a specific someone.

Type III: A specific person who uses instructions and documents depending on her/his capabilities of capturing actionable knowledge. The researcher encourages Type III to choose the individual preferences and allow the individual to seek every possible new alternative in actionable knowledge acquisition. The Type III acquires actionable knowledge as the ABC's citizenship for job security and self-empowerment's purposes.

Type IV: A explicit individual who utilizes instructions and documents depending on organization's internal and external situation rather than her/his own need. Type IV prefers learning from own practice and experience of actionable instruments viewed with long-term outcomes and creative approaches in attaining new actionable knowledge with considering returns with a sense of organizational commitment.

Type V: A unique individual who practices instructions and documents depending on organization's internal and external situation, and who learns from her/his own practice and experiences of actionable knowledge. Type V learns without explicit instructions and adopts new actionable knowledge with a sense of ownership of ABC.

Table 8.1 Intervention plan for actionable knowledge transfer of S-L instruments

Individual's type in knowledge transfer	Elements of actionable knowledge acquisition	Perspective of actionable knowledge acquisition	Decision of actionable knowledge acquisition	Commitment to actionable knowledge acquisition
Type I	Instructions and document driven	Use visual and graphical examples	Provide them with directive and analytical ways	Acquisition of new actionable knowledge to be loyal to ABC or to someone.
Type II	Use instructions and documents depending on individual's capabilities of absorbing new actionable knowledge acquisition	Use visual and graphical examples	Give them details and have them to direct observations	Acquisition of new actionable knowledge to be loyal to ABC or to someone.
Type III	Use instructions and documents depending on individual's capabilities of absorbing new actionable knowledge acquisition	Have them choose the individual preferences	Allow them to seek every possible alternative in new actionable knowledge acquisition	Acquire actionable knowledge as the ABC citizenship, job security and self-empowerment
Type IV	Use instructions and documents depending on organization's internal and external situation	Have them learn from their own practice and experiences of actionable knowledge	Viewed with long-term results and creative approaches to obtain new actionable knowledge	Consider Organizational returns with a sense of organizational commitment.
Type V	Use instructions and documents depending on organization's internal and external situation	Have them learn from their own practice and experiences of actionable knowledge	Intuitive design without explicit instructions	Adopt new actionable knowledge with ABC commitment and with a sense of ownership of ABC

(Source: Adapted stages of skills acquisition from Greenwood & Levin, 2007, p. 124)

The researcher also developed a contextual intervention strategy on transferring actionable knowledge of S-L instruments to fit the local needs. ABC has been running business based on a traditional top-down leadership type with individuals pursuing their goals with minimum knowledge of S-L factors and S-L culture. The contextual intervention strategy improves contextually relevant reflective findings of actionable S-L instruments from multiple dimensions from the specific aspects of physical, economic, political and ethical context (Kummerrow & Kirby, 2014). It helps to link to the needs of ABC and strengthen the results and credibility of the findings of actionable S-L instruments and

emphasizes on the parameters that include confirming, reflecting, useful, practical and incorporate, clear action, actual use and integrity for the best fit:

Physical context: The researcher or an expert makes sure that the S-L instruments are located at a physical place for both the managerial and administrative individual.

Economic context: It is an economic perspective that the researcher will provide benefits or costs by adopting or adapting S-L instruments.

Political context: It is related to the managerial individual's influences on administrative individuals and how it affects S-L instruments for administrative individuals.

Ethical context: It is about the integrity issue of how individuals respond with honest as part of their individual goals.

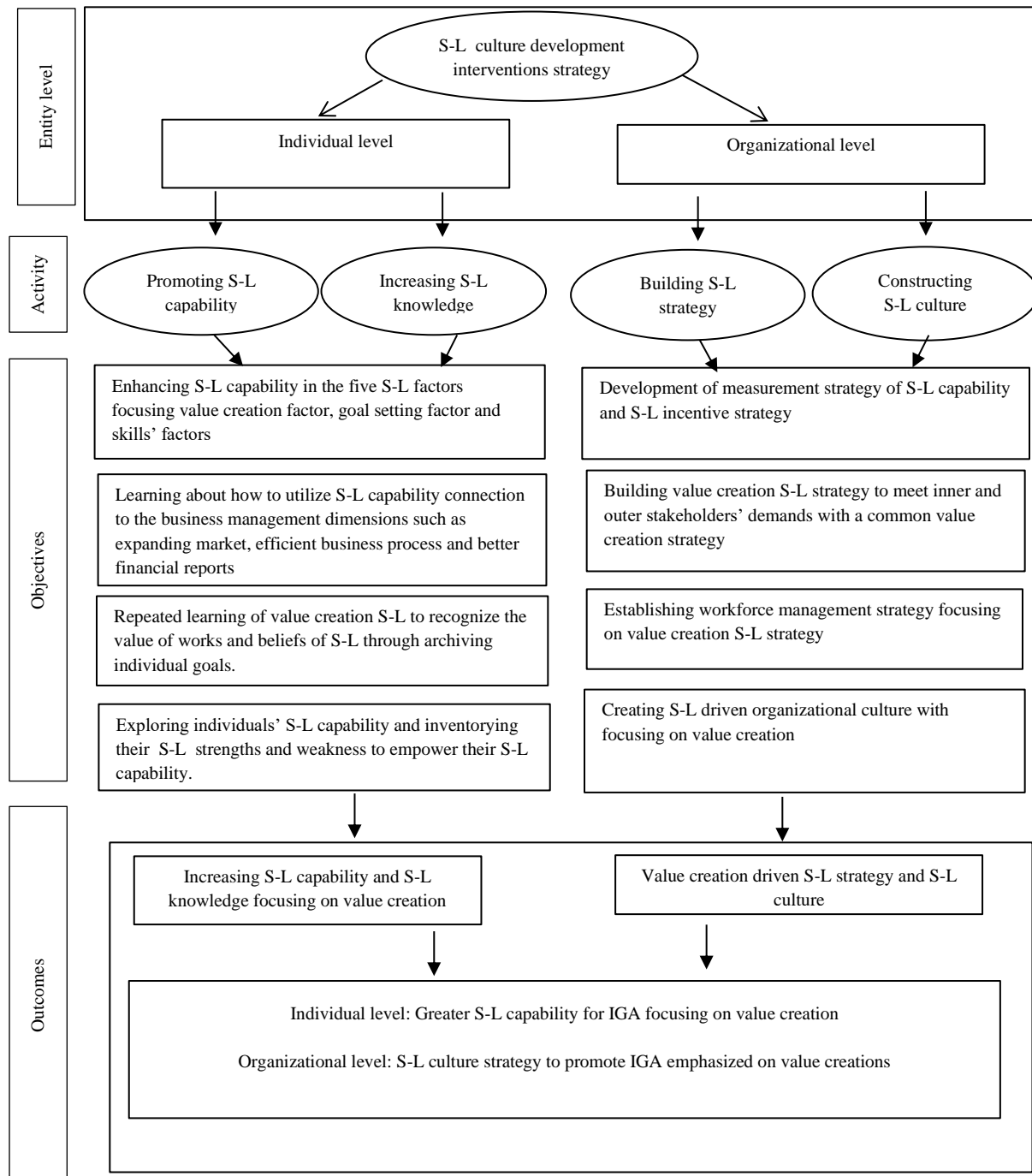
8.2.2 Intervention strategy for development of S-L culture

There has been a discussion with management of ABC to create practical solutions and the benefits of S-L culture development which establish an S-L culture including the better value creation S-L culture in macro period (Caceci, 2017). Since the follow up plan requires several years, the scope of the study is to suggest intervention strategy, not executing the strategy in practice. The following are suggestions for possible future implementation in ABC's S-L development strategy for both individual and organizational levels. The key variables of the study discovered for enhancement of IGA that creates an important part of changes of ABC in both individual level and organizational level. The researcher adapted Harell et al.'s (2016) intervention model to present the strategic activity, objectives and outcomes in development of S-L culture in ABC:

i) Individual level: Providing S-L instruments to enhance individual S-L capability for IGA

ii) Organizational level: Proposing S-L strategy for a long term benefits of S-L culture

Figure 8.1: Intervention strategy for S-L culture development recommended



(Source: Adapted the intervention model from Harell et al., 2016)

8.2.3 Intervention of execution strategy of S-L culture development

This section discusses the execution of the proposed intervention strategy that includes both individual and organizational strategy to develop S-L culture in ABC. Although the execution strategy may, in particular aspects, require managements' further involvements to finalized it. In this regard, the S-L culture development strategy can be

refined through the targeted use in ABC. For this study, the intervention execution strategy is an initial plan to motivate ABC based on the use of S-L instruments and S-L culture development developed in the study.

Individual level for execution strategy: It involves training of S-L concept and S-L instruments, practising of S-L instruments to expand S-L capabilities in practice focused on value creation are recommended for all individuals including both managerial and administrative individuals to address enhancement of S-L capabilities focused in significant S-L factors in IGA. Five weeks S-L training for one S-L factor per a week for the five S-L factors and six months practice of S-L instruments of S-L pyramid, S-L management checklist and S-L self-assessments. Once individuals have appropriate knowledge, the next stage is incorporate practising of S-L instruments on regular basis that involve organizing and focusing on significant S-L factors in practice; monitoring S-L capabilities; evaluating S-L capabilities before and after practice of S-L instruments; promoting S-L capabilities; soliciting regularly self-feedback on S-L enhancements; monitoring six months of S-L self-assessment and S-L levels and evaluating six months of growth of value creation in expanding markets, efficient process and financial reports at regular periods.

Organizational level execution strategy: It suggests that providing S-L development program for S-L vision & S-L mission and S-L culture in four weeks training; establishing long-term S-L culture development strategy and strategy of implementing a maximizing value creation S-L model in a macro term in two years’ timeframe and launching the S-L development program to individuals and supervising sub-Ordinator on progress of S-L capabilities. The next stage is creating S-L paradigm shift in work-context from top-down leadership to S-L in three years’ timeframe along with creating S-L culture implementation committee for development of a guidance, purpose and processes on S-L culture by initiating and motivating individuals moving toward S-L culture. The Table 8.2 summaries intervention of execution strategy of S-L culture development that the researcher adapted from Kim’s (2015) execution model.

Table 8.2 Intervention strategy for execution of S-L culture development

Phase	Activity / Estimated time period 5 years
1	Pres-stage for intervention strategy: Organizing S-L culture establishment committee and reviewing S-L culture development strategy and plan suggested. It includes physical distribution S-L instruments, organizing individual knowledge acquisition types, categorizing managerial and administrative individuals and preparing contextual intervention checklist
2	S-L culture development stage I: Training in S-L instruments, training in S-L concept & S-L instruments developed, practicing S-L pyramid, monitoring S-L self-assessment, and evaluating S-L capabilities. Establishing a plan of what an individual need to get to a destination by setting individual goals to manage shortcomings. A goal and needs to meet the success rate by learning and applying specific skills utilizing critical thinking skills and reflexive action.

3	S-L culture development stage II: Enhancing S-L knowledge, re-organizing individuals type I, II, III, IV & V; transferring S-L knowledge of S-L concept, S-L instrument & S-L culture to help to attain an individual goal as knowledge of value creation is essential in a person with S-L capability.
4	S-L culture development stage III: Development of S-L strategy, building long-term S-L culture development strategy and creating implementation strategy of a value creation intensive S-L model. Building value creation S-L strategy by utilizing S-L instruments for human resource S-L management strategy for continuous value creation.
5	S-L culture development stage IV: Construction of S-L culture, motivating individuals moving toward S-L culture; reviewing leadership paradigm shift from top-down to S-L model. Integrating strategy of S-L and ABC's business strategy and seeking actively for a possible paradigm shift from traditional leadership to S-L strategy and linking value added S-L strategy to the business management strategy. Unleashing the power of S-L and linking the value creation S-L culture to ABC culture to increasing value creation driven S-L culture in practice.

8.3 Recommendation for strategy makers and decision makers

Georgianna (2015) emphasized that S-L strategies are important to successfully deal with IGA. ABC's commitments are critical to enhance S-L capacities of all levels of individuals in ABC and continuously increase IGA. Caldwell (2009) identifies practical consequences of S-L practical application and the S-L mission which provide justification for a practitioner to understand the S-L factors which are affecting innovative IGA (Sesen, Tabak & Arli, 2017). The following reforms are recommended to contribute to the actionable S-L knowledge.

S-L policy and S-L culture for strategy maker and decision maker : Houghton, Carnes & Ellison (2014) found that measurement of S-L capabilities utilizing S-L instruments is the first step in development of S-L culture in an organization to better reflect the organizational features. The results of the research recommends that S-L culture development is a long term processes and focuses on internal stakeholders' requests as a priority in building S-L culture. The policy and management of human resources, as well as individual evaluation of performance and policy of personal development need to be clarified; the purpose and justification for adaptation of the significant S-L factors needs to be brought out focusing on vq-factor, gq-factor and sq-factor. The researcher proposes that ABC should focus on promoting individuals' S-L capabilities and constructing S-L culture for a better outcome of IGA in dealing with business managements, as IGA begins with individual S-L capabilities as well as S-L culture in an organization (Houghton, Carnes & Ellison) that matches with the results of the study. It raises the requirements of organizational policy which guides how the five S-L factors provide opportunities for growth in businesses management and operation. The researcher suggests that finding a champion in managers, getting influential individuals and a facilitator must be equipped to implement S-L instruments and S-L culture that influences the individual's working environment (Thamhain, 2004) in which individuals work as a self-leader regardless of their positions (Witt, 2017).

ABC and individuals need to recognize that S-L is associated with IGA and is important for the real workplace. In addition, the effects of the five S-L factors and benefits of the S-L implication model may make it difficult to immediately measure returns, however, the research posits that there must be long-term commitments to intervene in the development of the individual's S-L by building S-L culture, S-L strategy and expanding S-L knowledge at the individual level and S-L capabilities to participate in ABC's S-L enhancing commitments. From the long-term perspective of S-L strategies, ABC may consider not only its' main office but also the sub-divisions and joint-ventures, possibly extended to the upper parent's organizational level which have to adapt S-L capabilities at their sites. The point is that the existing perceptions of S-L especially at all levels of workforces may move forward as beneficiaries of S-L schemes to maximize capabilities of individual's S-L to serve not only ABC but also sub-divisions and parent's organization for current and the future opportunities for growth. The researcher advises five year' strategy to construct S-L culture in ABC. It is a long process to build S-L culture shifting from a traditional hierarchical leadership structure to S-L culture, but it would provide benefits ABC that is running under a lean based running management.

Management of individual's S-L knowledge: Transforming from the research findings to individuals is critical as the limited individual's S-L knowledge as well as the strengthening of S-L knowledge are fundamental sources which positively affect IGA. Practicing the S-L pyramid and S-L self-assessment application are practical options for individuals to promote the individual's S-L and increasing S-L knowledge. Furthermore, continued education and training of S-L schemes found from the study may have the individuals draw richer pictures of incentives with the use of S-L and convince individuals of its to help to increase their goal attainments. ABC may develop an S-L improvement plan in which individuals share S-L knowledge in practice and which will enhance the individual's overall S-L knowledge across ABC. And yet, self-willingness of individuals would work better in carrying out the enhancement of individual's' S-L. Therefore, ABC may maintain flexible S-L knowledge management that raises collaborative S-L in the processes of individual's goal accomplishments. For instance, S-L knowledge includes self-learning capabilities, creating value contributing to organizational capital by strengthening the S-L knowledge and integrating it into new S-L knowledge; these trends emerge in a multilevel organization as here, individuals are proactive taking in adaptations of findings.

This study represents a first step in discovering the correlations between the five S-L factors and IGA to make propositions of actionable S-L instruments to develop S-L culture in ABC. Therefore, further study is recommended to understand better and to develop more practical S-L culture in stages as Houghton, Carnes & Ellison (2014) point out that S-L culture would be advantageous to achieve individual goals by effectively leveraging the capabilities of knowledge individuals.

8.4 Recommendations for future researchers

The research had discussed with cross-participants problem solving on critical issues faced by individuals and then toward making improvements in achieving their goals drawn on the results of the study. The researcher suggested future researchers, strategy and decision makers in the research context for implications for ABC to have individuals practice S-L instruments and to consider changing ABC's leadership culture from the existing top-down leadership style to create S-L culture relevant to pragmatic solutions in practice. Campbell (2013) addressed S-L challenges in reconciling different political ideologies, religious differences, traditions and cultures. This study offers recommendations regarding the future research on correlations between S-L factors and IGA for both a researcher and for ABC. Recommendations for researchers are to avoid any biases during the research process and in procedures for a future research. It includes research settings, research methods, quantitative questionnaires formulation and key stakeholder's group interviews and discussions in qualitative study and generalizable S-L factors, which are based on the research analysis and conclusions. The consequences of the study below might be appropriate for a future academician in the scholarly aspect.

Research settings: The researcher focused on S-L factors in business process regardless of the S-L positions in achieving IGA. The CEO of ABC asked the researcher if the study could be analysed in two focused group such as born self-leader group and self-leader made group. It did not identify the different type of S-L positions such as born S-L or made S-L in generation of correlations between S-L factors and IGA. The outcome was based on combined both S-L types in data analysis. Future research can select different S-L positions and compare the differences between them in finding the correlations between S-L factors and IGA.

Research contexts: The research subject, ABC has joint-ventures in Asia, sub-divisions in north America. This research had for its scope ABC in Canada for the study excluding joint-ventures and sub-divisions in offshores. The future researcher of ABC may define different divisions as focused groups and compare them to find differences. In order to create generalizable outcomes, the researcher collected data using online survey limited to Canadian office, full time work-forces. A future researcher could include different work cultures, visions and missions, as well as business strategies approaches that link diverse S-L perspectives and integrate them from different perspectives. The S-L factors identified were focused on business processes based on who individual is, what to achieve individual goals and how to achieve them (Bryant & Kazan, 2012) The S-L factors regarding IGA may have to be changed to meet the demands from different research approaches.

Research methodology: In terms of research method and methodology, this study adopted methods in the quantitative and cross-participants contribution to the findings in a sequential approach, which limited triangulation of cross checking the results from both methods

because a quantitative study was primary while the qualitative study was auxiliary. Conducting a future study, a new researcher may use a concurrent quantitative and qualitative design (Ivankova, 2015) which enables better understanding of the workforce's S-L issues and to cross check the grounded S-L factors in the results through triangulation method for more validation of data and credibility as a result.

Key stakeholder's group: The study adopted the methods in sequential the quantitative and qualitative approaches. To explore in more depth the correlations between S-L factors and IGA, the argument exists about the notion that diversity in a group may result in varied significant correlations between them. Future research needs to better understand wider and diverse cross-participants contribution to more robust findings, Swann, et al. (2004) heightens the serious consequences on diverse groups and the variances in yielding outcomes.

Justification of factor analysis: The researcher adopted an exploratory factor analysis to discover the correlations between S-L factors and IGA in business process. Although the SPSS statistical application provides scientific information for the statistical analysis, it was necessary for the researcher to make justifications because the five S-L factors were more significant than the results of the 5 fixed components (=factors in the study) analyses in SPSS. The research suggests justifying the result of an exploratory fixed factor analysis calculated from SPSS version 25. Further, the researcher was interested in the five S-L factors, however, research could be focused on a specific S-L factor, for example vq-factor found from the quantitative study, which significantly influences correlation to IGA. Thereby a future researcher offers a more in depth study on the vq-factor and provides opportunities for generating relevant actionable knowledge in practice and repeatable outcomes (Shento, 2004). On the other hand, the study searched and defined the five S-L factors for the correlations to meet research purposes through the literature reviews; however, there could be more significant S-L factors which can be generalizable crossing the process of IGA. Instead of using five fixed components analysis in exploratory analysis, a future researcher may consider adoption of components generated by the SPSS.

Research confirmation: The researcher used the quantitative study method to discover the relative importance of the five S-L factors in the survey. This means that the survey highlights which factors are considered important or recurring frequently for participants. The data from qualitative study brought out broad categories and themes that helped the researcher in evaluating findings from the quantitative study. The researcher is not further confirming the actionable knowledge through action research due the limitations of access as a retiree. Hence the study becomes a proposition for future implementation which can be taken up by other researcher for confirmation or modifications to suit their particular context.

8.5 Research Limitations

In this section, the five fundamental limitations of practical findings are discussed to provide the solutions to the S-L real problems in encountering the realities by ABC.

Research resources: The research specifically focuses on exploration of the correlations between S-L factors and IGA, but resources of the S-L study are limited. Therefore, the researcher had to adopt, adapt and integrate leadership researches in pursuing the research.

Research method: Although S-L stream in business process continues, the significance in empirical practice since Manz & Sims (1980) through Ross (2014) was limited to finding the research methods which were approached with the quantitative and qualitative findings along with AR. The study tried to review both quantitative and cross-participants contribution to the findings approach for supporting statistical and quantitative findings that drew on and extended to the upper echelons of S-L.

Research participants: There were limitations in the assessment of participants of the qualitative phase from the side of ABC. A multi-level of individuals would have permitted the data collection and analysis of a more diverse group of individuals who could participate in further interviews for their level of understanding, interpretation and confirmation of the quantitative findings, reflecting the changes in practice. Another constraint of the study was that it was conducted within a small organization while Ho (2006) used a key stakeholder's group interview and discussion in a large organization. The purpose of the qualitative study was a reflection on the implications of the qualitative findings in ABC.

Findings validation: Although this study supports factors and variables of S-L generalizing to a globalized organization in the Canadian context, the study posits that further validations of the results are required on S-L practical implications using larger volume of participations with consideration of different business cultures and contexts in research settings.

Challenges in implementation: Key challenges in implementing the findings in practice are efficient transfer of the findings to ABC as well as executing them in ABC. Moreover, identifying and measuring individuals' level of S-L and constantly monitoring their S-L capabilities are challenges using minimum overhead costs. S-L culture development strategy does improve business managements dimensions over time but learning and adapting the findings do matter. The study did not investigate the enhancement of individual's S-L capabilities in a long term period and how it contributes to IGA nor how S-L culture development strategy impacts on business management in an organizational level; rather the study presented the increasing of S-L capabilities in a short term period and key ten S-L strategy variables were examined to present the impact of different challenges in achieving individual goals.

All these challenges and limitations were the key obstacles in dealing with the research processes and adoption of the research findings in finance and production sensitive

work contexts. Thus, the challenges to implementation have placed reliance on managements and the individuals' understanding of the value of S-L factors for IGA and adopting the findings of S-L culture development strategy.

8.6 Reflections

The first goal of the study was to identify the key S-L factors in achieving individual goals and to find the significant degrees of correlations between S-L factors and IGA. The second goal was to generate actionable S-L knowledge to promote S-L capabilities and provide S-L culture development stages to ABC to assist in dealing with diverse challenges with limited human resources. Neither individuals nor organization were aware of S-L and did not pay attention to S-L capabilities to tackle their realities, although some literature stress the importance of S-L (AbuShmais, 2013; Bandura, 2012; Bryant & Kazan, 2012). To achieve the thesis goals, the study explored and discovered the five S-L factors and pursued the on-line quantitative survey for generalizable findings utilizing the subject participants.

The results of the quantitative findings from the statistical analyses were interpreted and evaluated through the qualitative study and discussions with key stakeholders. Based on the results of the quantitative study, the actionable S-L applications such as S-L pyramid and S-L self-assessment were created to promote individual's S-L capabilities and to provide a foundation to construct S-L culture stages in ABC. The subsequent quantitative survey with the participants of ABC, interviews and discussions with key stakeholder evaluated the findings. The results of the study confirmed that the S-L self-assessment applications promoted individual's S-L capabilities and positively impacted on problem-solving in dealing with challenges according to the empirical test. S-L culture development stage also helped to establish a value creation driven S-L culture in ABC in the macro period. All the findings in the study are practical, achievable, measurable and relevant to benefits individuals and organization. The above findings allow the researcher to formulate conclusions that might reflect an individual's S-L in ABC as the following research reflections and personal reflections confirm.

8.6.1 Research reflections

Greer & Virick (2008) have highlighted the importance of leadership for all organizational individuals for future leadership positions. It indicates that the future leadership models will focus on S-L in a more self-guided and self-directed leadership mode for IGA within an organization. This study aligns with the research results indicating the five S-L factors affecting IGA. This research confirms that the five S-L factors are positively correlated with IGA and suggests that the five S-L factors help individuals to be more active in value creation in business by increasing their capabilities and abilities of the five S-L factors for IGA. In researcher's perspective, all of us are S-L holders or S-L holders with various different talents and gifts. The study encourages individuals to identify their own S-L, enhance a richer S-L capability and contribute their S-L to ABC by delivering value-

driven outcomes. Hopefully, every member of businesses will become an actor who holds S-L and makes the workplace more creative, constructive and productive, creating contexts for greater outcomes. The study is the first attempt to approach the five S-L factors and correlations between the S-L factors and IGA, focusing on the business process in Canada. Moreover, this study foresees a future research on S-L in the business process to achieve individual goals at multiple levels in ABC and in diverse working contexts. It includes a different business culture, business values and a business philosophy across the world's contexts. Finally, we are living an extension of the individual's S-L, $i(S-L)$ in ABC seeks to heighten individual's S-L to organizational S-L, $o(S-L)$ facilitate a global S-L $g(S-L)$ which Steers, Sanchez-Runde & Nardon (2012) have searched for the essential formula of global leadership related to an achievement of individual goals, for instance in the formula:

$$i(S-L) = o(S-L) = g(S-L).$$

8.6.2 Personal reflections

The thesis reflects the continuity from the study of the doctoral nine-course works and the doctoral development plan (DDP) which are required before writing the thesis. The lessons learned from those studies helped the researcher develop and improve in conducting the thesis project from a framework through design, analysis and findings as a scholar-practitioner as well as a researcher (Crockett, 2015). In particular, while studying leadership, the researcher found that S-L was not one of the leadership styles. It enlightened the researcher to focus on the S-L area as a choice of the thesis' project so that other researchers might become more interested in the S-L field and so that S-L might become one of the leadership styles in the future. The researcher offers S-L as one of the leadership styles as S-L influences individuals at any layer in ABC including leaders and their subordinates as S-L leading oneself (Clawson, 2008) and leading others (Furtner, Rauthmann & Baldegger, 2013).

As a retiree over 73 years old, the doctorate in business and administration (DBA) was a challenging program with the limitations of assessment of ABC and the availability of individuals from ABC. The researcher has learned that the researcher's own S-L creates the values of life after retirement and motivates the researcher to pursue his personal goal reaching out to a doctorate level in memory of the researcher's parents, to contribute to the research context and to fill the gap in the S-L academic field; these impetus generated the researcher's energy and enthusiasm to commit to this study. The researcher who had served over 30 years in the same ABC in Canada coming from a minority as well as with English as a second language, had utilized the researcher's own S-L while working in ABC which had changed several times of owners, policies and management. Furthermore, the researcher had to overcome the cancer of the esophagus by vigorously activating S-L when the researcher was in the stage of the final draft writing of the thesis. It encouraged the researcher to share S-L experiences acknowledging self-value and self-commitment to devote the great values to a student who is in a challenging situation for study.

What the researcher has learned through the conduct of the thesis project is that a valuable life is the maximization of individual's own S-L creating values and contributing to ABC and more. In the researcher's experience, S-L conquers an age issue, language barrier and even helps to cure health problems. In the researcher's humble mind, the outcomes of the study hopefully become a state of the art in S-L; "S-L is a foundation of IGA."

APPENDICES

Appendix A - Measurement scales of online survey questionnaires

Part I: Self-leadership factors (Houghton & Neck, 2002, p. 682; Marques-Quinteiro, Curral and Passos, 2012, p. 559)

Please indicate ‘Strongly significance’ using a scale from 5 and ‘Strongly insignificance’ using a scale from 1.

Section 1: Personal characteristics factor impacting IGA

1. Sometimes I find I’m talking to myself (out loud or in my head) to help me deal with difficult problems I face. 1 2 3 4 5
2. I think about my own beliefs and assumptions whenever I encounter a difficult situation. 1 2 3 4 5
3. I try to surround myself with objects and people that bring out my desirable behaviors 1 2 3 4 5
4. I pay attention to how well I’m doing in my work. 1 2 3 4 5
5. When I have a choice, I try to do my work in ways that I enjoy rather than just trying to get it done with. 1 2 3 4 5
6. Before beginning a task, I prepare myself looking for information that I believe I may need. 1 2 3 4 5
7. When I have successfully completed a task, I often reward myself with something I like. 1 2 3 4 5

Section 2 Skill’s self-leadership factor affecting IGA

8. I use written notes to remind myself of what I need to accomplish. 1 2 3 4 5
9. I try to mentally evaluate the accuracy of my own beliefs about situations I am having problems with. 1 2 3 4 5
10. I usually am aware of how well I’m doing as I perform an activity. 1 2 3 4 5
11. I find my own favorite ways to get things done. 1 2 3 4 5
12. During task performance, when I find I lack any necessary skills, I try to find a way to obtain them so I can succeed. 1 2 3 4 5
13. I can usually maintain my composure even under stressful situations. 1 2 3 4 5
14. I often mentally rehearse the way I plan to deal with a challenge before actually face the challenge. 1 2 3 4 5

Section 3: Teamwork self-leadership impacting on IGA

15. I take initiative to reach out to others and I always volunteer my help. 1 2 3 4 5
16. I am sensitive to people’s feeling and can often detect non-verbal responses. 1 2 3 4 5
17. I respect other people’s opinion and enjoy sharing ideas and experiences. 1 2 3 4 5
18. I respect individual difference and I get along with almost anyone. 1 2 3 4 5
19. I encourage individual creativity and I create learning opportunities for others. 1 2 3 4 5
20. My team members and I always help one another in completing a project. 1 2 3 4 5
21. I engage my team members in project planning and decision-making. 1 2 3 4 5

Section 4: Value creation self-leadership affecting IGA

22. I make a point to keep track of how well I’m doing at work (school) 1 2 3 4 5
23. I think about the goals that I intend to achieve in the future. 1 2 3 4 5
24. I write specific goals for my own performance. 1 2 3 4 5
25. Demonstrates beliefs that are consistent with actions. 1 2 3 4 5
26. I hold myself fully responsible to the success of my work. 1 2 3 4 5
27. When I’m in difficult situations I will sometimes talk to myself (out loud or in my head) to help me get through it. 1 2 3 4 5

Section 5: Achievement goal setting self-leadership intelligence for IGA

28. When I do an assignment especially well, I like to treat myself to some thing or activity I especially enjoy. 1 2 3 4 5
29. I consciously have goals in mind for my work efforts. 1 2 3 4 5
30. I sometimes openly express displeasure with myself when I have not done well. 1 2 3 4 5
31. I seek out activities in my work that I enjoy doing. 1 2 3 4 5

Part II: Individual goal achievement (Marques-Quinteiro, Curral and Passos, 2012; Houghton & Neck, 2002, p. 682).

Please indicate ‘Strongly significance’ using a scale from 5 and ‘Strongly insignificance’ using a scale from 1.

1. Before I start performing a task, I try to improve my knowledge so I can perform better. 1 2 3 4 5
2. I establish specific goals for my own performance. 1 2 3 4 5
3. I work toward specific goals I have set for myself. 1 2 3 4 5

Part III: Self-leadership culture (Houghton & Neck, 2002, p. 682).

Please indicate ‘Strongly significance’ using a scale from 5 and ‘Strongly insignificance’ using a scale from 1.

1. I use my imagination to picture myself performing well on important tasks. 1 2 3 4 5

Part IV: Personal demographic information:

Please respond to the following personal demographic information. All responses are confidential.

Age

- Less than 20 years old
- 20 – 29
- 30 – 39
- 40 – 49
- 50 and plus years old

Level of education

- Secondary School / High School
- College / Certificate after secondary school
- Degree
- Postgraduate Degree

Length of employment throughout your careers as a fulltime worker

- 0 – 5 years
- 6 – 10 years
- 11 – 15 years
- 16 – 20 years
- 21 and plus years

Position in your organization where you work.

- Leaders’ group including top managements, managers and supervisors
- Non leaders from senior to junior clerical / administrative / employees’ group

Thank you very much for your participation. You are encouraged to invite another qualified participant to join in the study.

Appendix B – The sponsor letter from the research context

February 04, 2015

University of Liverpool

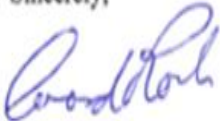
Re. Sponsor letter – Quantitative Study of Correlation between Self-leadership Factors and Individual Goal Achievement focusing on Business Process in Canada

Student Name – KwangSoo (Joseph) Kim in DBA

Watts International is a manufacturer of heat transfer products with facilities in London, Ontario, Canada, Salem Ohio USA, and a joint-venture in China. Our products service the Power Generation and Distribution markets worldwide through in house Regional Sales Managers and a network of Sales Representatives. Our vision is to be the supplier of choice for cooling products to the Power Industry by creating value for our customers, employees, and owners through continuous quality and productivity improvements. Watts is currently owned by Watts Corporation, a publicly traded corporation in North America. With facilities located throughout the world Watts is a global provider of value-added, technology-based products and services for the power and other industrial markets.

Watts continues to encourage and support Joe as he moves forward with his thesis. As a means of support to help in the gathering of necessary data, Watts will encourage its employees to complete the online survey provided by Joe.

Sincerely,



Andrew Hinch

Appendix C – Interview questions

I. Self-leadership factors

1. What makes the individual goals successful in general with reference to aspects of each self-leadership factors such as
 - a. characteristic's factor,
 - b. skill's factor,
 - c. teamwork factor,
 - d. value creation factor and
 - e. individual goal setting factor.

What are your thoughts about the above self-leadership factors?

Any other self-leadership factor would you like to add?

2. If you would apply one of those self-leadership factors in dealing with your work, which self-leadership factor do you think the most significant in general in achieving your goals? why?
3. Which self-leadership factor above do you apply the least important in achieving your goals? Why?
4. What are your recommendations to increase individual self-leadership?

II. Self-leadership culture

1. How would you describe self-leadership culture could enhance individual goal achievements in terms of;
 - a. expanding market
 - b. efficient business processes
 - c. better financial reports
2. What are your recommendations to create S-L culture in your organization?
(Tips: S-L Instruments, S-L Knowledge, S-L Strategy, S-L cultural context)

III. Individual goal achievements

1. What aspects of self-leadership factors enhance expanding market?
2. What aspects of self-leadership factors improve business processes?
3. What aspect of self-leadership factors increase financial reports?

Appendix D – Self-leadership self-assessment instruments for enhancement of IGA

How to measure the level of self-leadership (S-L) by S-L variables

- Read ‘Do’ the item and scale self-assessment between 1 and 5.
- Apply the adjustment number by multiplying self-assessment scaled and adjustment number which means that the correlation weight is applied to the self-assessment.

Scales of self-assessment:

1: Strongly has not done, 5: Strongly has done. Performance at 3 or higher in measurement of scale per each of themes is desirable. Adjustment number: 1 is the highest significant and others are weighted based on the significant level.

Appendix D.1 S-L enhancement instrument focusing on value creation S-L

Value creation S-L affects individual goal achievement by recognizing the value of works, having beliefs and being conducive to create value, keeping a sense of ownership in value creation, reflecting value focused individual goal setting and overcoming challenges for creating value.

Theme / Item	Do	Self-assessment scale 1 to 5 (A)	Adjustment number (B)	Self-assessment scale after adjustment number (A)*(B)
Self-recognition	You keep track of your work and scale how well you have done.		.95	
Finding alternative resources	You plan for the alternative resources for next your goals.		.97	
Goal setting for specific ones	You write down a specific goal you intend to achieve.		1	
Keep consistency in value creation	You demonstrate consistent actions in value creation.		.93	
Have strong beliefs in coping with realities	You encounter realities with your own beliefs.		.76	
Distinctive self-attitude from other	When having difficulty, you talk yourself through it.		.72	
Have a sense of ownership	Improving necessary knowledge and skills, before you start work.		.84	
Total score			NA	

(Adapted sources: Allen, 2012; Marques-Quinteiro et al., 2012; Wan-Gould, 2011; Houghton & Neck, 2002). Adjustment number = 1 is based on $r = .725$

Appendix D.2 S-L enrichment instrument for development of skills of S-L

Skills' self-leadership factor influences accomplishment with the intention of improvement, adaptation of new skills, enhancement what individual is doing, reflection on own skills and interaction with other individuals as illustrated below.

Theme / Item	Do	Self-assessment scale 1 to 5 (A)	Adjustment number (B)	Self-assessment scale after adjustment number (A)*(B)
Self-proactive action skills	You use written notes to remind yourself of what you need to accomplish.		.75	
Self-efficacy skills	You evaluate your own efficiency dealing with challenges.		1	
New technology adaptation skills	You are aware of how well you can do better as you precede an activity of adaptation of new skills.		.94	
Soft skills of interaction	You find your own favorite ways to get things done by using soft skill of interaction.		.87	
Hard skills	When you find you are lack of necessary skills, you try to find a way to obtain them so you can succeed.		1	
Self-learning and self-competence skills	You maintain your self-learning and self-competence even under stressful situations.		.87	
Self-empowering skills	You use self-empowering to get what needs to be done.		.96	
Total score			NA	

(Adapted sources: Allen, 2012; Marques-Quinteiro et al., 2012; Wan-Gould, 2011; Houghton & Neck, 2002). Adjustment number = 1 is based on $r = .628$

Appendix D.3 S-L improvement instrument through goal setting intelligence

Achievement S-L goal setting is intelligence for individual goal attainment, which include establishing specific settings of goal's level, staying energized to achieve a goal, monitoring the progress toward the targeted goal and when completed reward yourself.

Theme	Do	Self-assessment scale 1 to 5 (A)	Adjustment number (B)	Self-assessment scale after adjustment number (A)*(B)
Positive Cognitive mind for goal accomplishment	You use your good imagination of achieving your work well.		.97	
Self-reward for goal accomplishment	When doing an assignment well, you treat self-reward well.		.91	
Self-constructive mind for goal achievement	You constructively think your goals in your mind until completing.		1	
Execute goal setting for reaching	You keep working toward specific goals until accomplished.		.91	
Utilization of skills for goal attainment	Seeking for utilization of skills in your work that you enjoy doing.		.90	
Total score			NA	

(Adapted sources: Allen, 2012; Marques-Quinteiro et al., 2012; Wan-Gould, 2011; Houghton & Neck, 2002). Adjustment number = 1 is based on $r = .737$

Appendix D.4 S-L empowering instrument from personal characteristics

Personal characteristics impacts individual goal achievement; focuses thinking on the positive side, facing reality, self-directing, self-motivating from a leader's perspectives, seeking available resource and having a sense of autonomy from personal characteristics' perspective.

Theme / Item	Do	Self-assessment scale 1 to 5 (A)	Adjustment number (B)	Self-assessment scale after adjustment number (A)*(B)
Self-positive-thinking	You are positively talking to yourself to deal with difficulties.		.85	
Self-determination	You think about your own beliefs whenever encountering a challenge.		.83	
Self-leader-characteristics	You use self-leader's characteristics to achieve desirable goals.		1	
Self-motivation	You pay attention to self-motivation on how well you are doing in your work.		.86	
Self-directed-governance	When you have a choice, you do your work in ways that you direct to enjoy rather than just to get it over with.		.86	
Self-resource-management	Before beginning a task, you prepare for self-resources that you may need.		.79	
Self-intrinsic-reward	When having successfully completed a task, you reward yourself with something you like.		.91	
Total score			NA	

(Adapted sources: Allen, 2012; Marques-Quinteiro et al., 2012; Wan-Gould, 2011; Houghton & Neck, 2002). Adjustment number = 1 is based on $r = .628$.

Appendix D.5 S-L collaborating teamwork for individual constructive results

Teamwork can be utilized for adapting and sharing ideas and experiences, respecting individual differences and coordinating their talent in completing your goal.

Theme / Item	Do	Self-assessment scale 1 to 5 (A)	Adjustment number (B)	Self-assessment scale after adjustment number (A)*(B)
Motivating others in a team	Taking initiative to reach out others who needs helps and you voluntary help them.		.86	
Requesting others in a positive way in a team	Having positive ways, when you requesting others for their assistance.		.81	
Sharing insights and information in a team	You enjoy sharing ideas, opinions and experiences with others.		1	
Managing disagreement in teamwork	Respecting individual's differences, when you have disagreement.		.88	
Helping one another in a team	You encourage others' creativity and learning opportunities.		.96	
Coordinating individual goal to the teamwork	You coordinate one another in completing a goal in a team.		.97	
Targeted goal alignment to teamwork	Engaging in a team project to achieve a targeted goal.		.97	
Total score			NA	

(Adapted sources: Allen, 2012; Marques-Quinteiro et al., 2012; Wan-Gould, 2011; Houghton & Neck, 2002). Adjustment number = 1 is based on $r=.754$

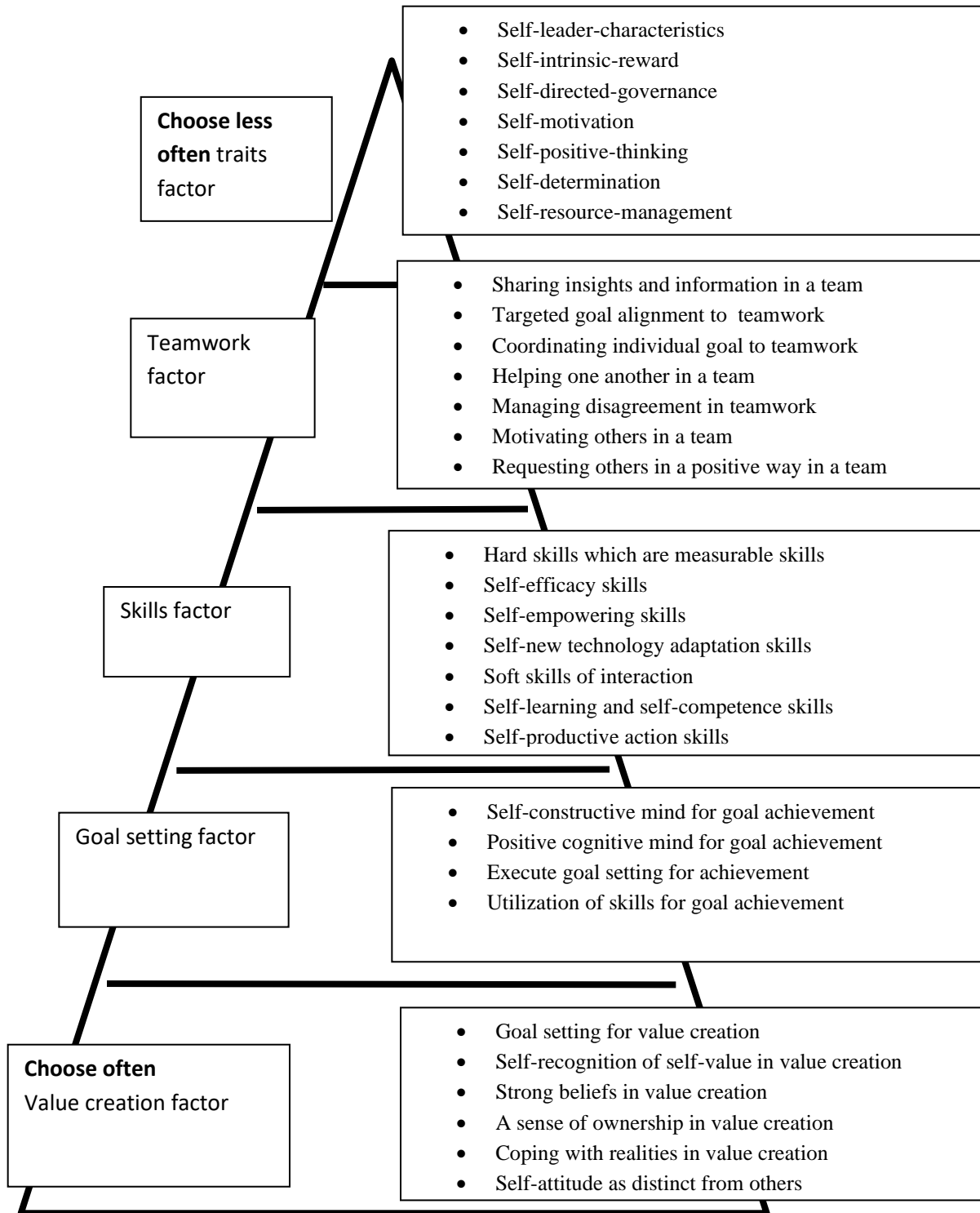
Appendix D.6 S-L management checklist

The following are significant statements in enhancement of S-L to achievement individual goals based on the result of the research. You may read and practise as often as possible.

1. You write down a specific goal you intend to achieve.
2. You plan for the alternative resources for next your goals.
3. You keep track of your work and scale how well you have done.
4. You demonstrate consistent actions in value creation.
5. When you find you lack of the necessary skills, you try to find a way to obtain them so you can succeed.
6. You evaluate your own efficiency dealing with challenges.
7. You use self-empowering to get what needs to be done.
8. You are aware of how you can do better as you proceed in the adaptation of new skills.
9. You use self-leader's characteristics to achieve desirable goals.
10. Having successfully completed a task, you reward yourself with something you like.
11. When you have a choice, you do your work in ways that you enjoy rather than just to get it over with.
12. You pay attention to self-motivation on how well you are doing in your work.
13. You constructively keep your goals in mind until completion.
14. You use your imagination to achieve your work.
15. You establish a specific level of achievable goals.
16. When doing an assignment well, you self-reward yourself.
17. You enjoy sharing ideas, opinions and experiences with others.
18. Engaging in a team project to achieve a targeted goal.
19. You coordinate with one another in completing a team goal.
20. You encourage others' creativity and learning opportunities.

(Adapted sources: Allen, 2012; Marques-Quinteiro et al., 2012; Wan-Gould, 2011; Houghton & Neck, 2002).

Appendix D.7 S-L pyramid to improve individual goals



Appendix E – Qualitative interview participants

**INTERVENTION SESSION FOR QUALITATIVE DATA COLLECTION
ATTENDANCE RECORD**

RESEARCH TOPIC: A Study of Correlation between Self-Leadership Factors and Individual Goal Achievement Focusing on Business Process in Canada

DATE OF SESSION: November 17, 2015

DURATION OF SESSION: noon – 1:00pm, 1 Hour (Lunch and learn session)

RESEARCHER: KwangSoo (Joseph) Kim *KwangSoo Kim*
DBA Student of University of Liverpool, UK

OBJECTIVES: By presenting the findings from the quantitative study, enhance creating actionable knowledge in practice

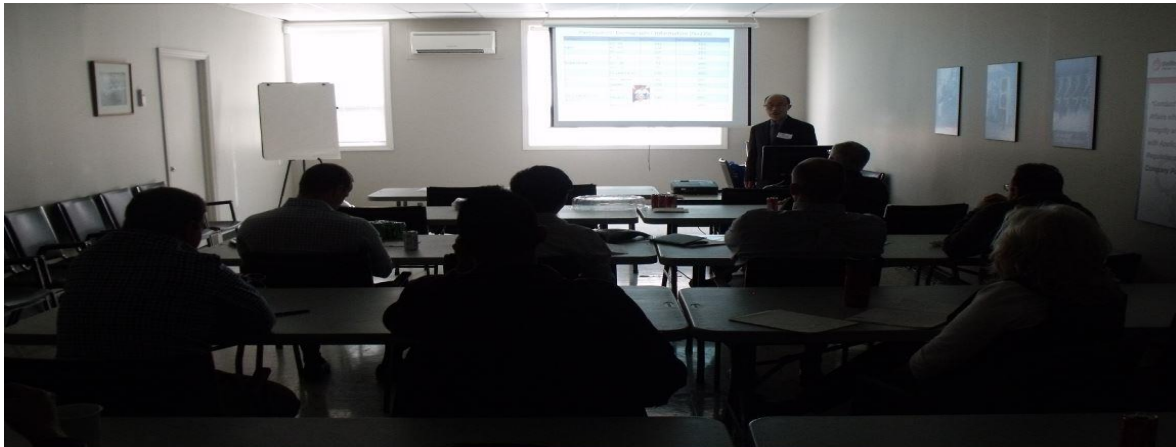
VOLUNTARY ATTENDEES:

NAME	SIGNATURE
<i>Sam</i>	<i>[Signature]</i>
<i>Brian</i>	<i>[Signature]</i>
<i>Sam</i>	<i>[Signature]</i>
<i>Shawn</i>	<i>[Signature]</i>
<i>Liam</i>	<i>[Signature]</i>
<i>FEREY</i>	<i>[Signature]</i>
<i>Qije</i>	<i>[Signature]</i>
<i>John</i>	<i>[Signature]</i>
<i>Alan</i>	<i>[Signature]</i>
<i>Sean</i>	<i>[Signature]</i>
<i>GRE</i>	<i>[Signature]</i>
<i>Stacy</i>	<i>[Signature]</i>

Protected for individual privacy protection and security

VOLUNTARY RECORDER:
SAMUEL HAYDA

Protected for individual privacy



(Picture: A presentation of quantitative findings and intervention session for qualitative data collections on November 17, 2015 in the meeting room of the organization; the researcher was in front of the audiences)

Appendix F - Questions of qualitative interviews for evaluations of findings

This is to obtain general reflections and recommendations from the group of ABC after presentation of the findings from the study.

1. How the S-L pyramid and self-assessment concept could benefit ABC?

Practicing of S-L pyramid: Focus on value creation
Self-assessment to enhance S-L capability (5-scales)
(TIPs: Development of self-leaders and S-L culture)

2. How S-L stages help to deal with realities? (Markets, business processes and finance)

Stage I: Practicing S-L instruments
Stage II: Enhancing S-L knowledge
Stage III: Building S-L strategy
Stage IV: Establishing S-L culture

3. How do S-L culture development key variables assist to develop S-L culture?

Empowering S-L & measuring S-L
Paradigm shift from traditional leadership to S-L culture
Building S-L strategy & integrating S-L into ABC strategy
Creating a Human resource S-L management strategy
Learning about S-L knowledge & intrinsic S-L capability
The use of S-L instruments for applicability to ABC

4. How is harmonized conceptual S-L culture's model below benefit ABC?

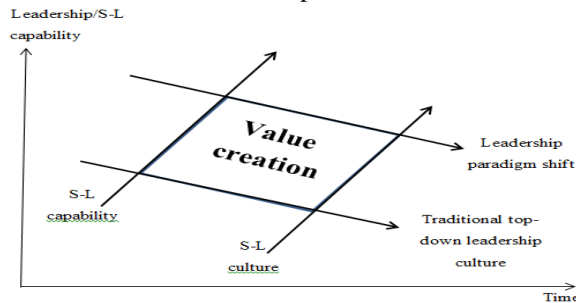


Figure I.1 Harmonized conceptual S-L culture's model

5. How would you reflect S-L instruments to take benefits of expanding markets, business process and finance?

(TIPs: Management demands, global leader in markets, customer expectations and multiple roles)

6. What are your recommendations to create value centered S-L culture?

(Tips: S-L pyramid, S-L self-assessment and 4 stages of S-L culture)

Appendix G - Measurement scales for evaluations

Reflecting the scale of those questionnaires, the weight of each item is equally using the Likert 5-point rating scales between ‘Strongly significance’ using a scale from 5 and ‘Strongly insignificance’ using a scale from 1.

Part I: Self-leadership factors (Houghton & Neck, 2002, p. 682; Marques-Quinteiro, Curral and Passos, 2012, p. 559)

Please indicate ‘Strongly significance’ using a scale from 5 and ‘Strongly insignificance’ using a scale from 1.

Section 1: Personal characteristics factor impacting IGA

1. I use written notes to remind myself of what I need to accomplish. 1 2 3 4 5
2. I try to mentally evaluate the accuracy of my own beliefs about situations I am having problems with. 1 2 3 4 5
3. I usually am aware of how well I’m doing as I perform an activity. 1 2 3 4 5
4. I find my own favorite ways to get things done. 1 2 3 4 5
5. During task performance, when I find I lack any necessary skills, I try to find a way to obtain them so I can succeed. 1 2 3 4 5
6. I can usually maintain my composure even under stressful situations. 1 2 3 4 5
7. I often mentally rehearse the way I plan to deal with a challenge before actually face the challenge. 1 2 3 4 5

Section 2 Skill’s self-leadership factor affecting IGA

8. I make a point to keep track of how well I’m doing at work (school) 1 2 3 4 5
9. I think about the goals that I intend to achieve in the future. 1 2 3 4 5
10. I write specific goals for my own performance. 1 2 3 4 5
11. Demonstrates beliefs that are consistent with actions. 1 2 3 4 5
12. I hold myself fully responsible to the success of my work. 1 2 3 4 5
13. When I’m in difficult situations I will sometimes talk to myself (out loud or in my head) to help me get through it. 1 2 3 4 5

Section 3 Individual goal setting factor influencing IGA

14. When I do an assignment especially well, I like to treat myself to some thing or activity I especially enjoy. 1 2 3 4 5
15. I consciously have goals in mind for my work efforts. 1 2 3 4 5
16. I sometimes openly express displeasure with myself when I have not done well. 1 2 3 4 5
17. I seek out activities in my work that I enjoy doing. 1 2 3 4 5

Part II: Dealing with challenges utilizing S-L

Please check one or more which are applicable. (S-L: self-leadership)

4.1 Dealing with challenges in practice. Please check one or more which are applicable. (S-L: self-leadership)

	Meet Corporate high demands	Maintain global leader in market	Provide customers high level of services	Managing multiple roles
Empowering S-L culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Value creation driven S-L culture in practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paradigm shift from traditional leadership to S-L culture.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Building value creation S-L strategy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Integrating value creation S-L and Organization's strategy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Human resource S-L management strategy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Learning about value intensive S-L knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Learning about intrinsic S-L value creation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Practice S-L instruments for value creation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Practice S-L instruments for applicability to Organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix H – Group interview and discussion participants

ATTENDANCE RECORD

RESEARCH TOPIC: A study of correlations between self-leadership factors and individual goal achievement

DATE OF SESSION: December, 13, 2017

DURATION OF SESSION: Noon – 1:00 pm, 1 Hour (Lunch and learn session)

RESEARCHER: Kwnag-Soo (Joseph) Kim

DBA student of University of Liverpool, UK

OBJECTIVES: By evaluating the self-leadership instruments/propositions found from the study, the researcher measures impacts of S-L instruments, reflections of findings and recommendations to develop value creation focused S-L culture in an Organization.

VOLUNTARY ATTENDEES:

SIGNATURE

VOLUNTARY ATTENDEES:	SIGNATURE
ARR	Lead Rob
TIA	[Signature]
KEV	[Signature]
[Signature]	[Signature]
Sho	[Signature]
SE	[Signature]

VOLUNTARY RECORDER:

ARR	Protected for personal protections and security	[Signature]
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Appendix I – A matrix of S-L factors and their independent variables for IGA

Mensah developed a matrix using a set of S-L factors and their variables based on supporting conceptual domains. The conceptual domain in general guides the future direction (Krafft et al., 2015) of the study results in ABC for promoting S-L both managerial and professional in practice.

Dependent variables	Independent variables	Criteria	S-L theoretical domains
Personal characteristic factor (Personality traits)	<ul style="list-style-type: none"> - Positive-thinking - Self-determination - Intrinsic-reward - Leader minded characteristics, - Self-directed-governance, - Self-resource-management - Self-motivation 	Focus thinking on the positive side; Self-direction on individual goals; Facing difficult situation; Self-motivation for achieving individual goals; Approach an individual goal from a leader's perspectives of usefulness and ethics; Keep track of the progress; Seek available resource; Have a sense of independence.	Self-leader (Ross, 2014), Goals achievement theory (Ugurluoglu et al., 2013; Campbell, 2013; Neubert & Wu, 2006; Lee, Sheldon & Turban, 2003; Prussia, Anderson & Manz, 1998); Self-direction, self-determination, self-learning & self-motivation (Lee, Sheldon & Turban, 2003). Individual's capabilities of self-efficacy (Bandura, 2012) & self-control (Grinnell, 2001); Self-leadership domain theory emphasizing the characteristics (Benson & Campbell, 2007)
Skills factor (Adaptation skills)	<ul style="list-style-type: none"> - Self-learning and self-competence skills - New technology adaptation skills - self-empowering skills - self-efficacy skills - Hard skills - Self-proactive action skills - Soft skills of interaction 	Accomplishment with the intention of improvement; adaptation of new skills; enhancement of what individual is doing, self-empowering to achieve the goal, belief reflecting on own skills; establishment of different scenarios on dealing with an individual goal; a set of skills in oneself and others for finding a more efficient way; proactive planning with positive mind; interaction skills with others	Theories of self-directed learning skills (Martz & Manz, 1991); the interrelationship skills competency (Wan-Gould, 2011, Wegge et al., 2010); applied technical skills theory (Furtner, Sachse & Exenberger, 2012); (Curral & Marques-Quinteiro, 2009; Carmeli, Meitar & Weisberg, 2006), skills for efficient and effective process (Summerfield, 2014; Kerr et al., 2006; Neck & Manz, 1992, skills of intrinsic motivation and innovative behaviour (Gomes, Curral & Caetano, 2015; Curral & Marques-Quinteiro, 2009), skills of proactive and constructive behaviours (Bright, Amos & Francois, 2013)
Teamwork factor (Managing, promoting & successful teamwork)	<ul style="list-style-type: none"> - Sharing insights and information in a team - Coordinating individual goals and teamwork - Targeted goal alignment to teamwork - Helping one another in a team - Requesting others in a team in a positive way - Managing disagreement in team - Motivating others in a team 	Adapt to other people's opinion, share ideas and experiences; respect individual differences and coordinate their talents; align the targeted goal to teamwork; help one another in completing the goal; requesting others in a positive and responsive way; manage disagreement; find an alternative solution; motivate others to explore a problem; deal with challenges; and integrate other's insights to reach a goal.	Teamwork and shared leadership theory (Hoch, 2013); teamwork and self-leader theory (Malmir & Azizzadeh, 2013), teamwork and self-efficacy theory (Hauschildt and Konradt, 2012), teamwork and trust relationship theory (Hauschildt & Konradt, 2012); teamwork and team's proficiency (Hauschildt & Konradt, 2012); teamwork and coordination theory (Iles & Feng, 2011); teamwork and goal achievement (Iles and Feng, 2011); teamwork and empowerment theory (Cordery et al., 2010), teamwork and self-leadership (Betts & Santoro, 2007))
Value creation factor (increase the worth of works, create value for stakeholders)	<ul style="list-style-type: none"> - Self-recognition of self-value - Strong beliefs in value creation - A sense of ownership - Distinctive self-attitude from others - Goal setting for value creation - Coping with realities 	Recognize the value of works; have beliefs in value creation, be conducive to create value; monitor the progress of value creation; keep a sense of ownership in value creation; have distinctive self-attitudes in value creation; reflect value focused individual goal setting; intend to create value; overcome challenges for creating value; find alternative resource for value.	Value creation attitudes theory (Abdullah & Siti-Nabiha, 2012; Bligh, Pearce & Kohles, 2006); value creation and cognition, attitude and behaviour (Ross, 2014); value creation and self-reward & self-punishment theory (Ho & Nesbit, 2013); value creation driven goal setting theory (Wan-Gould, 2011); Individual interaction & value creation theory (Bligh, Pearce & Kohles, 2006); self-motivation and value creation theory (DiLiello & Houghton (2006)
Goal setting factor (goal achievement driven cognitions, attitudes and behaviours)	<ul style="list-style-type: none"> - Positive cognitive mind sets for a goal attainment - Executing goal sets to achieve individual goals - Utilization of skills' sets for goal reaching - Building self-constructive mind sets for goal achievement 	Establish specific settings of goal's level; be passionate about the individual goal; stay energized to achieve a goal; consciously have goals in mind, work toward specific goals, monitor the progress toward the targeted goal; when completed a goal reward yourself, use appropriate skills to facilitate the innovation while achieving a goal; have constructive mind to overcome difficulties.	Self-reward and goal achievement (Furtner & Rauthmann, 2011); personal characteristics and goal achievement (Lee, Sheldon & Turban, 2003); goal directed behaviours and goal achievement (Godwin, Neck & Houghton 1999)

Appendix J - The details of the causal model and testable propositions

The measurement scales aim at creating an online survey instrument to obtain S-L measurement in the data analysis. For “the reliability and validity of the measurements” (Schmitz, You-Cheong & Lilien, 2014, p.8), the researcher adopted the existing survey questionnaires developed. Reflecting the scale of those questionnaires, the weight of each item is equally using the Likert 5-point rating scales.

The selection criteria to find a matching questionnaire are:

- i) select the latest articles such as revised self-leadership questionnaires,
- ii) 5-point rating scales as possible,
- iii) choose the questionnaire which is the most closely adaptive to the variables of this research,
- iv) have a relation with an IGA.

• Dimensions and testable propositions

Proposition 1 (P1): There is a significant correlation among the five perceived S-L factors and IGA.

P1a: Personal characteristics factor is positively related to IGA.

P1b: Skills factor is positively associated with IGA.

P1c: Teamwork factor is positively linked to IGA.

P1d: Value creation factor is positively related to IGA.

P1e: Individual goal setting factor is positively connected to IGA.

Proposition 2 (P2): An organizational S-L culture moderates the relationship between certain perceived S-L factors and IGA.

Legends: CQ: Personal characteristic factor; SQ: Skills factor ; TQ: Teamwork factor; VQ: Value creation factor; GQ: Goal setting factor; IGAM: IGA in marketing expansion; IGAP: IGA in efficient business processes; IGAF: IGA in better financial reports; CULF: S-L culture

Dimension: S-L factors as of independent variables and linking to testable propositions

Section 1: Personal characteristics factor impacting IGA and linking to testable proposition P1a: Personal characteristics factor is positively related to IGA.

Scale items	Statement and sources in parentheses	Sub-items of S-L factor	SPSS ID
1	Sometimes I find I'm talking to myself (out loud or in my head) to help me deal with difficult problems I face (Houghton & Neck, 2002).	Self-positive-thinking	CQ1
2	I think about my own beliefs and assumptions whenever I encounter a difficult situation (Houghton & Neck, 2002)	Self-determination	CQ2
3	I try to surround myself with objects and people that bring out my desirable behaviors (Houghton & Neck, 2002)	Self-leader-characteristics	CQ3
4	I pay attention to how well I'm doing in my work. (Houghton & Neck, 2002).	Self-motivation	CQ4
5	When I have a choice, I try to do my work in ways that I enjoy rather than just trying to get it over with (Houghton & Neck, 2002).	Self-directed-governance	CQ5
6	Before beginning a task, I prepare myself looking for information that I believe I may need. (Marques-Quinteiro, Curral & Passos, 2012).	Self-resource-management	CQ6

7	When I have successfully completed a task, I often reward myself with something I like (Marques-Quinteiro, Curral & Passos, 2012).	Self-intrinsic-reward	CQ7
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Section 2: Skills factor impacting IGA and linking to testable proposition P1b: Skills factor is positively associated with IGA.

Scale items	Statement and source	Sub-items of S-L factor	SPSS ID
8	I use written notes to remind myself of what I need to accomplish (Houghton & Neck, 2002).	Self-proactive action skills	SQ1
9	I try to mentally evaluate the accuracy of my own beliefs about situations I am having problems with (Houghton & Neck, 2002).	self-efficacy skills	SQ2
10	I usually am aware of how well I'm doing as I perform an activity (Houghton & Neck, 2002).	New technology adaptation skills	SQ3
11	I find my own favorite ways to get things done (Houghton & Neck, 2002).	Soft skills of interaction	SQ4
12	During task performance, when I find I lack any necessary skills, I try to find a way to obtain them so I can succeed (Marques-Quinteiro, Curral & Passos, 2012).	Hard skills	SQ5
13	I can usually maintain my composure even under stressful situations (Houghton & Neck, 2002).	Self-learning and self-competence skills	SQ6
14	I often mentally rehearse the way I plan to deal with a challenge before actually face the challenge (Wan-Gould, 2011, p.80).	self-empowering skills	SQ7

Section 3: Teamwork self-leadership impacting on IGA and linking to testable proposition P1c: Teamwork factor is positively linked to IGA.

Scale items	Statement and source	Sub-items of S-L factor	SPSS ID
15	I take initiative to reach out to others and I always volunteer my help (Wan-Gould, 2011).	Motivating others in a team	TQ1
16	I am sensitive to people's feeling and can often detect non-verbal responses (Wan-Gould, 2011).	Requesting others in a positive way in a team	TQ2
17	I respect other people's opinion and enjoy sharing ideas and experiences (Wan-Gould, 2011).	Sharing insights and information in a team	TQ3
18	I respect individual difference and I get along with almost anyone (Wan-Gould, 2011).	Managing disagreement in teamwork	TQ4
19	I encourage individual creativity and I create learning opportunities for others (Wan-Gould, 2011).	Helping one another in a team	TQ5
20	My team members and I always help one another in completing a project (Wan-Gould, 2011).	Coordinating individual goal to the teamwork	TQ6
21	I engage my team members in project planning and decision-making (Wan-Gould, 2011).	Targeted goal alignment to teamwork	TQ7

Section 4: Value creation self-leadership affecting IGA and linking to testable proposition P1d: Value creation factor is positively related to IGA.

Scale items	Statement and source	Sub-items of S-L factor	SPSS ID
22	I make a point to keep track of how well I'm doing at work (school) (Houghton & Neck, 2002).	Self-recognition of self-value in value creation	VQ1

23	I think about the goals that I intend to achieve in the future (Houghton & Neck, 2002).	Finding alternative resources for creating value	VQ2
24	I write specific goals for my own performance (Houghton & Neck, 2002).	Goal setting for value creation	VQ3
25	Demonstrates beliefs that are consistent with actions (Allen, 2012).	Strong beliefs in value creation	VQ4
26	I hold myself fully responsible to the success of my work (Wan-Gould, 2011, p.76)	Coping with realities in value creation	VQ5
27	When I'm in difficult situations I will sometimes talk to myself (out loud or in my head) to help me get through it. (Marques-Quinteiro, Curral and Passos, 2012).	Distinctive self-attitude from others	VQ6

Section 5: Achievement goal setting self-leadership intelligence for IGA and linking to testable proposition P1e: Individual goal setting factor is positively connected to IGA.

Scale items	Statement and source	Sub-items of S-L factor	SPSS ID
28	When I do an assignment especially well, I like to treat myself to some thing or activity I especially enjoy (Houghton & Neck, 2002, p.682).	Self-reward for goal achievement	GQ1
29	I consciously have goals in mind for my work efforts (Houghton & Neck, 2002, p.682).	Self-constructive mind for goal reaching	GQ2
30	I sometimes openly express displeasure with myself when I have not done well (Houghton & Neck, 2002, p.683).	Passionate attitude for goal accomplishment	GQ3
31	I seek out activities in my work that I enjoy doing (Marques-Quinteiro, Curral and Passos, 2012, p.559).	Utilization of skills for goal achievement	GQ4

Dimension: IGA as of dependent variables

Scale items	Statement and source	Sub-items of S-L factor	SPSS ID
32	Before I start performing a task, I try to improve my knowledge so I can perform better (Marques-Quinteiro, Curral and Passos, 2012).	A sense of ownership in value creation	IGAM
33	I establish specific goals for my own performance (Houghton & Neck, 2002, p.682).	Setting a level of goal accomplishment	IGAP
34	I work toward specific goals I have set for myself (Houghton & Neck, 2002, p.682). (GQ5)	Execute goal setting for attainment	IGAF

Dimension: S-L culture as of a moderating variable and linking to testable Proposition 2 (P2): An organizational S-L culture moderates the relationship between certain perceived S-L factors and IGA.

Scale items	Statement and source	Sub-items of S-L factor	SPSS ID
35	I use my imagination to picture myself performing well on important tasks (Houghton & Neck, 2002, p.682).	Positive Cognitive mind for goal attainment	CURT

REFERENCES

- Abdullah, Z & Siti-Nabiha, A (2012), 'Leadership and change management: A case study of pemancar', *Asian case research journal*, 16(1), pp. 115-132.
- Abfalter, D (2013), 'Authenticity and respect: Leading creative teams in the performing arts', *Creativity and innovation management*, 22(3), pp. 295-306.
- Abu Hassan Asaari, M, Dwivedi, A & Lawton, A (2012), *Academic leadership and work-related attitude*. British library EThOS
- AbuShmais, E I (2013), *A quantitative examination of self-leadership impact on organizational commitment of IT employees in US companies*. Capella University.
- Aggarwal, C (2011), *Social network data analytics. [Electronic Book]*. New York : Springer
- Ajzen, I, Czasch, C & Flood, MG. (2009), 'From intentions to behavior: Implementation intention, commitment and conscientiousness. *Journal of applied social psychology*, 39(6), 1356-1372. Available from: 10.1111/j.1559-1816.2009.00485.x.
- Akkermans, HA & van der Horst, H (2002), 'Managing IT infrastructure standardisation in the networked manufacturing firm. *International Journal of production economics*, 75(1-2), pp. 213-228.
- Allen, P A (2012), *A correlational analysis of the spiritual leadership survey versus authentic leadership questionnaire in Non-denominational mega-church organizations*. University of Phoenix.
- Alves, J C et al. (2006), 'A cross-cultural perspective of self-leadership', *Journal of Managerial Psychology*, 21(4), pp. 338-359. Available from:10.1108/02683940610663123.
- Amaratunga, D et al. (2002), 'Quantitative and qualitative research in the built environment: Application of "mixed" research approach', *Work Study*, 51(1), pp. 17-31.
- Anderson, SE & Jamison, B (2015), 'Do the Top U.S. Corporations Often Use The Same Words in their Vision, Mission and Value Statements?', *Journal of Marketing & Management*, 6(1), pp. 1-15.
- Arista, P & Parahyanti, E (2018), 'The use of mastering self-leadership training to improve self-leadership and innovative work behaviour', *Diversity in unity: Perspectives from psychology and behavioral sciences* pp. 545-552 New York, NY, US: Routledge/Taylor & Francis Group PsycINFO.
- Atkinson, E (2004), 'Thinking outside the box: An exercise in heresy', *Qualitative inquiry*, 10(1), pp. 111-129, Available from: 10.1177/1077800403259495.
- Auster, ER, Wylie, KK & Valente, MS (2005), *Strategic organizational change*. Houndmills, basingstoke : Palgrave macmillan.
- Badaracco, J (2006), 'Leadership in Literature', *Harvard business review*, 84(3), pp. 47.
- Balmer, DF et al. (2018), 'Positive Change in Feedback Perceptions and Behavior: A 10-Year Follow-up Study', *Pediatrics*, 141(1), pp. 1-8. Available from: 10.1542/peds.2017-2950.
- Barnaghi, P, Sheth, A & Henson, C (2013), 'From data to actionable knowledge: Big data challenges in the web of things', *IEEE Intelligent Systems*, 28(6). Available from: 10.1109/MIS.2013.142.
- Barnes, B (2012), *Transcending the power of hierarchy to facilitate shared leadership*. Florida: Nova Southeastern university
- Bandura, A (2012), 'On the Functional Properties of Perceived Self-Efficacy Revisited', *Journal of management*, 38(1), pp. 9-44.
- Barbour, R (2008), *Doing Focus Groups*. London: Sage.

- Barnham, C (2015), 'Quantitative and qualitative research', *International journal of market research*, 57(6), pp. 837-854, Available from: 10.2501/IJMR-2015-070.
- Benson, MJ & Campbell, JP (2007), 'To Be, or Not to Be, Linear: An Expanded representation of personality and its relationship to leadership performance', *International journal of selection and assessment*.
- Beskow, LM, Check, DK & Ammarell, N (2014), 'Research participants' understanding of and reactions to certificates of confidentiality', *Transactions of the american fisheries society*, 143(6), pp. 12-22. Available from: 10.1080/21507716.2013.813596.
- Betts, S & Santoro, M (2007), 'Integrating leadership theories and team research: A conceptual framework based on level of analysis and type of control', *Journal of organizational culture, communications & conflict*.
- Bezzina, F & Saunders, M (2014), 'The pervasiveness and implications of statistical misconceptions among academics with a special interest in business research methods', *Electronic Journal of business research methods*, 12(2), pp. 29-40.
- Blasimme, A, Maugeri, P & Germain, PL (2013), 'What mechanisms can't do: Explanatory frameworks and the function of the p53 gene in molecular oncology', *Studies in history and philosophy of biological and biomedical sciences*, 44(3), pp. 374-384.
- Bligh, M C, Pearce, C L & Kohles, J C (2006), 'The importance of self- and shared leadership in team based knowledge work: A meso-level model of leadership dynamics', *Journal of managerial psychology*, 21(4), pp. 296-318.
- Bondi, A (2000), *Characteristics of Scalability and Their Impact on Performance*. Available from: https://www.researchgate.net/profile/Andre_Bondi/publication/221556521/ (Accessed: 17 February 2019).
- Brandimarte, P (2011), 'Quantitative methods. [electronic book]: An introduction for business management', Hoboken, N.J. : Wiley, 2011.
- Bright, M, Amos S, E & Francois S De K (2013), 'A confirmatory factor analytic study of a self-leadership measure in South Africa', *South african journal of human resource management*.
- Bryant, A & Kazan, A (2012), *Self leadership: How to become a more successful, efficient and effective leader from the Inside Out*. McGraw-Hill.
- Brydon-Miller, M, Greenwood, D & Maguire, P (2003) 'Why Action Research?', Available from: 10.1177/14767503030011002.
- Budría, S & Ferrer-I-Carbonell, A (2018), 'Life Satisfaction, Income comparisons and individual traits', Review of income and wealth. Available from: 10.1111/roiw.12353.
- Busby, A K (2005), *Validity study of the leadership attitudes and beliefs scale III*. Proquest: UMI dissertations publishing.
- Caceci, M (2017), *Build-a-culture-of-self-leadership-for-better-results*. Available from: <http://excelperform.com/build-a-culture-of-self-leadership-for-better-results> (Accessed: 12 December 2017).
- Caldwell, C (2009), 'Identity, self-awareness and self-deception: Ethical implications for leaders and organizations', *Journal of business ethics*, 90, pp. 393-406.
- Campbell, A (2013), 'In-depth analysis of global leadership challenges', *Mustang journal of business and ethics*. Proquest, 5, pp. 69-76.
- Caprara, G V et al. (2008), 'Longitudinal analysis of the role of perceived self-efficacy for self-regulated learning in academic continuance and achievement', *Journal of educational psychology*, 100(3), pp. 525-534. Available from: 10.1037/0022-0663.100.3.525.
- Carmeli, A, Weisberg, J & Meitar, R (2006), 'Self-leadership skills and innovative behavior at work', *International*

- journal of manpower*. Available from: 10.1108/01437720610652853.
- Campos-Sánchez, A, del Carmen Sánchez-Quevedo, M, Crespo-Ferrer, PV, García-López, JM & Alaminos, M (2013), 'Microteaching as a Self-Learning Tool. Students' Perceptions in the Preparation and Exposition of a Microlesson in a Tissue Engineering Course', *Journal of Technology and Science Education*, 3(2), pp. 66-72.
- Caverlee, J et al. (2007), 'Workflow management for enterprise transformation', *Information knowledge systems management*, 6(1/2), pp. 61-80.
- Churchman, C (1967), 'Management science', *Application series*, 14 (4), pp. 141-142.
- Clawson, J G S (2008), 'Leadership as managing energy', *International Journal of organizational Analysis*, 16(3), pp. 174-181. Available from: 10.1108/19348830810937943.
- Coghlan, D. & Brannick, T. (2010), *Doing action research in your own organization*. 3rd ed. London: Sage.
- Colquitt, J A & Zapata-Phelan, C P (2007), 'Trends in theory building and theory testing: A five-decade study of the academy of management Journal', *Academy of management journal*, 50(6), pp. 1281-1303. Available from: 10.5465/AMJ.2007.28165855.
- Cooper, D, Schindler, P, (2014), *Business Research Methods*. 12th ed. Irwin: McGraw-Hill.
- Corcoran, JM (2017), 'A reading of deuteronomy as a model of continuity, adaptation and innovation for contemporary discussions of Anglican liturgy'.
- Cordery, et al. (2010), 'The impact of autonomy and task uncertainty on team performance: A longitudinal field study', *Journal of organizational behavior*, 31(2/3), pp. 240-258.
- Creswell, J (2017), *Qualitative inquiry and research design: Choosing among five approaches*. 3rd. London: Sage.
- Crockett, L (2015), *Palliative care needs of pediatric patients & their families*. A thesis presented to the University of Liverpool.
- Cronbach, L (1951), 'Coefficient alpha and the internal structure of tests', *Psychometrika*, 16(3), pp. 297-334. Available from: 10.1007/BF02310555.
- Cronbach, L & Shavelson, R (2004), 'My current thoughts on coefficient alpha and successor procedures', *Educational & psychological measurement*, 64(3), pp. 391-418.
- Crossan, M, Vera, D & Nanjad, L (2004), *Transcendent leadership: strategic leadership in dynamic environments*. University of Western Ontario, London, Canada.
- Crossman, A (2004), 'The new Superleadership: Leading others to lead themselves', *Long range planning*, (37, 3), pp. 279-280.
- CSU (1993), *Colorado State University tutorial on validation. Writing@CSU*. The Writing studio. Available from: <http://writing.colostate.edu/guides/research/relval/index.cfm> (Accessed: 22 January 2016).
- Cunningham, J (2013), *Using a mixed methods sequential design to identify factors associated with African American mothers' intention to vaccinate their daughters aged 9 to 12 for HPV with a purpose of informing a culturally-relevant, theory-based intervention*. A thesis presented to the University of Alabama.
- Currall, L & Marques-Quinteiro, P (2009), 'Self-leadership and work role Innovation: Testing a mediation model with goal orientation and work motivation', *Revista de Psicologia del Trabajo y de Las Organizaciones*, 25(2), pp. 165-176.
- Dargenidou, C, McLeay, S & Raonic, I (2007), 'Ownership, investor protection and earnings expectations', *Journal of business finance & accounting*, 34(½), pp. 247-268. Available from: 10.1111/j.1468-5957.2006.00663.x.

- Day, D (2001), 'Leadership development: A review in context', *Leadership quarterly* 11(4), pp. 581-613.
- Deenitchin, I, Dmitriev, D & Hebenstreit, G (2015), 'Process leadership and managing process performance: Two elements that make the difference in process management', *Journal of Securities Operations & Custody*, 8(1), pp. 46-55.
- Denzin, NK, Lincoln, YS & Giardina, MD (2006), 'Disciplining qualitative research', *International journal of qualitative studies in education* (QSE), 19(6), pp. 769-782.
- Dhammika, KS, Ahmad, FB & Sam, TL (2012), 'Job satisfaction, commitment and performance: Testing the goodness of measures of three employee outcomes', *South Asian journal of management*, 19(2), pp. 7-22.
- Dickson, M, Waters, Y & López-Gydosh, D (2012), 'Stakeholder expectations for environmental performance within the Apparel Industry', *Journal of corporate citizenship*, 45, pp. 37-51.
- Dierendonck, D & Dijkstra, M (2012), 'The role of the follower in the relationship between empowering leadership and empowerment: A longitudinal investigation', *Journal of applied social psychology*, 42, pp. E1-E20.
- DiLiello, T & Houghton, J (2006), 'Maximizing organizational leadership capacity for the future: Toward a model of self-leadership, innovation and creativity', *Journal of managerial psychology*, 21(4), pp. 319-337.
- Dorfman, P W (2004), 'International and cross-cultural leadership' In Punnett, B., & Shenkar, O., eds. Handbook for international management research. Cambridge, Mass.: *Blackwell Business*. pp. 267-349.
- Easterby-Smith, M, Thorpe, R & Jackson, P (2012) *Management Research*. 4th ed. London: Sage.
- Ensley, M, Pearson, A & Sardeshmukh, SR (2007), 'The negative consequences of pay dispersion in family and non-family top management teams: an exploratory analysis of new venture, high-growth firms', *Journal of business research*, 60, pp. 1039-1047. Available from: 10.1016/j.jbusres.2006.12.012.
- Ferreira, C (2016), *Factors Influencing the Performance of Shared Services Centres*. A thesis presented to the University of Liverpool.
- Fetters, M, Curry, L & Creswell, J (2013), 'Achieving integration in mixed methods designs—Health Services Research', 48(6), pp. 2134-2156.
- Field, A (2009), *Discovering Statistics using SPSS*. London: Sage.
- Finardi, U (2013), Correlation between Journal Impact factor and citation performance: An experimental study', *Journal of informetrics*, 7, pp. 357-370. Available from: 10.1016/j.joi.2012.12.004.
- Friedrich, T, Griffith, J & Mumford, M (2016), *The Leadership Quarterly*, 27(2). pp. 312-333
- Friz, et al. (2004), 'Forming innovative leaders: The leadership skills certificate program of the bio region, Chile, 2004', *National collegiate inventors & innovators alliance*. Proquest, pp. 179-186.
- Fryer, M (2011), *Ethics and organizational leadership*. [electronic book] : developing a normative model.
- Furtner, M & Rauthmann, J (2011), 'The role of need for achievement in self-leadership: Differential associations with hope for success and fear of failure', *African journal of business management*, 5(20), pp. 8368-8375.
- Furtner, MR, Rauthmann, JF & Baldegger, U (2013), 'Leading yourself and leading others: Linking self-leadership to transformational, transactional and laissez-faire leadership', *European journal of work and organizationbal psychology*, 22(4), pp. 436-449.
- Furtner, M, Sachse, P & Exenberger, S (2012), 'Learn to influence yourself: Full range self-leadership training', *Journal of the Indian academy of applied psychology*, 38(2), pp. 294-304.
- Furtner, M, Sachse, P & Rauthmann, J (2015), 'Unique self-leadership: A bifactor model approach', *leadership*,

- 11(1), pp. 105-125. Available from: 10.1177/1742715013511484.
- Gandolfi, F, Stone, S & Deno, F (2017), 'Servant Leadership: An Ancient Style with 21st Century Relevance', Review of International Comparative Management / Revista de Management Comparat International, 18(4), pp. 350-361.
- Georgianna, S (2015), 'Addressing risk factors associated with women's sexually compulsive behaviors through psycho-education and self-leadership development', *Sexual Addiction & Compulsivity*, 22(4), pp. 314–343.
- Godé, C (2016), Team coordination in extreme environments. [electronic book] ; work practices and technological uses under uncertainty, London, England;: iSTE :, 2016.
- Godfrey, M & Buckingham, M (n.d.), 'Time and motion', *sight and sound*, 17(5), pp. 9.
- Godwin, JL, Neck, CP & Houghton, JD (1999), 'The impact of thought self-leadership on individual goal performance: A cognitive perspective', *Journal of management development*, 18(2), pp. 153-170.
- Gomes, C, Curral, L & Catano, A (2015), 'The mediating effect of work engagement on the relationship between self-leadership and individual innovation', *International journal of innovation management*, 19(1). Available from: 10.1142/S1363919615500097.
- Goodpaster, KE (2017), 'Human Dignity and the Common Good: The Institutional Insight', Business and Society Review: *Journal of the Center for Business Ethics at Bentley College*, 122(1), pp. 27-50.
- Granville, V. (2008) SAS vs. SPSS. Available from: <https://www.analyticbridge.datasciencecentral.com/group/sasandstatisticalprogramming/forum/topics/2004291:Topic:5022> (Accessed: 28 December 2018).
- Greenwood, D J & Levin, M (2007), *Introduction to action research.2nd ed.* Thousand Oaks, California: Sage
- Greer, CR & Virick, M (2008) 'Diverse succession planning: lessons from the industry leaders', *Human Resource Management*, 47(2), pp. 351–367.
- Grieves, K (2018), 'Generating bespoke value and impact evidence to inform a thought leadership approach to service engagement at The University of Sunderland', *Performance Measurement & Metrics*, 19(1), pp. 53-65. Available from: 10.1108/PMM-09-2017-0041.
- Grinnell, J P (2001), *An application of configurational theory to compare CEO leadership styles in entrepreneurial organizations*. ProQuest: UMI dissertations publishing.
- Hames, JL & Joiner, TE (2012), 'Resiliency factors may differ as a function of self-esteem level: Testing the efficacy of two types of positive self-statements following a laboratory stressor', *Journal of social & clinical psychology*, 31(6), pp. 641-662. Available from: 10.1521/jscp.2012.31.6.641.
- Harell, et al. (2016) 'Reducing tobacco use among low socio-economic status youth in Delhi, India: outcomes from project ACTIVITY, a cluster randomized trial', *Health Education research*, 31 (5), pp 624-638 Available from: <https://academic-oup-com.liverpool.idm.oclc.org/her/article/31/5/624/2198127?searchresult=1#36049919> (Accessed: 06 May 2019).
- Hatcher, T (2005), 'Research integrity: Ensuring trust in the academy', *Human resource development quarterly*, 16(1), pp. 1-6. Available from: 10.1002/hrdq.1120.
- Hauschildt, K & Konradt, U (2012), 'Self-leadership and team members' work role performance', *Journal of managerial psychology*, 27(5), pp. 497-517.
- Helmut, N (2016), 'The interaction matrix: from individual goal-setting to the four modes of coexistence', *Kybernetes*, no. 1, pp. 87. Available from: 10.1108/K-09-2014-0192.
- Hitchcock, J A (2014), *An exploration of organizational collective motivation and the influence of the SOAR framework to build organizational collective motivation*. Lawrence technological university.

- Hesse-Biber, S N (2010), *Mixed methods research : Merging theory with practice*. New York, NY, USA: Guilford press, 2010. Proquest ebrary.
- Ho, D. (2006), 'The Focus Group Interview: Rising to the challenge in qualitative research methodology', *Australian review of applied linguistics*, 29(1), pp. 5.1-5.19.
- Ho, J & Nesbit, P (2011), 'A refinement and extension of the self-leadership Scale for the Chinese context', *International journal of health care quality assurance*, 24(5), pp. 450-476.
- Hoch, J E (2013), 'Shared leadership and innovation: The role of vertical leadership and employee integrity', *Journal of business and psychology*, 28(2), pp. 159-174.
- Hoch, J & Kozlowski, S (2014), 'Leading virtual teams: Hierarchical leadership, structural supports and shared team leadership', *Journal of applied psychology. Social sciences citation index*, 99(3), pp. 390-403.
- Holian, R & Coghlan, D (2013), 'Ethical issues and role duality in insider action research: Challenges for action research degree programmes', *Systemic practice & AR*, 26(5), pp. 399-415, Available from: 10.1007/s11213-012-9256-6.
- Houghton, J, Carnes, A & Ellison, C (2014), 'A Cross-cultural examination of self-leadership: Testing for measurement invariance across four cultures', *Journal of Leadership and organizational Studies*, 21(4), pp. 414-430. Available from: 10.1177/1548051813515753.
- Houghton, J. D. Christopher & Neck, P. (2002) 'The revised self-leadership questionnaire: Testing a hierarchical factor structure for self-leadership', *Journal of Managerial Psychology*, 17(8), pp. 672-691. Available from: 10.1108/02683940210450484.
- Houghton, J D, Ellison, C N & Carnes, A (2014), 'A cross-cultural examination of self-leadership: Testing for measurement invariance across four cultures'. *Journal of leadership & organizational studies*, 21(4), pp. 414-430. Accessed : 17 February 2019. doi:10.1177/1548051813515753.
- Houghton, J & Neck, C (2002), 'The revised self-leadership questionnaire: Testing a hierarchical factor structure for self-leadership', *Journal of managerial psychology*, 17(8), pp. 672-691. Available from: 10.1108/02683940210450484.
- Houghton, J et al. (2012), 'Effective stress management: A model of emotional intelligence, self-leadership and student stress coping', *Journal of management education*, 36(2), pp. 220-238.
- Howe, K (2004), 'A critique of experimentalism', *Qualitative inquiry*, 10(1), pp. 42-61.
- Huber, G, Miller, C & Glick, W (1990), 'Developing more encompassing theories about organizations: The centralization-effectiveness relationship as an example', *Organization science*, 1(1), pp. 11-40.
- Iles, P & Feng, Y (2011), 'Distributed leadership, knowledge and information management and team performance in Chinese and western groups', *Journal of technology management in China*, 6(1), pp. 26-42.
- Ivankova, N (2015), *Mixed methods applications in action research from methods to community action*. Sage.
- Jackson, S.A (2005), An evaluation of pastoral self-leadership and church health in church plants. Asbury theological seminary. ProQuest.
- Jensen, J C. Neck, C & Beaulieu, R (2015) 'Self-action leadership: A qualitative, nomological expansion of self-leadership theory rooted in atmospheric and astronomical metaphor', *Journal of leadership and management*, 3(1), pp. 67-78.
- Johnson, P. & Duberley, J. (2000). Understanding management research: An introduction to epistemology . London: Sage Publications, p.11-61.
- Joiner, B & Josephs, S (2007), 'Developing agile leaders', *Industrial & commercial training*, 39(1), pp. 35-42. Available from: 10.1108/00197850710721381.

- Jones, A (2007), *Capture and analysis of quantitative proteomic data*. The University of Liverpool repository.
- Jones, FR (2010), Working with self-management courses. [electronic book]: the thoughts of participants, planners and policy-makers.
- Jooste, K. & Cairns, L (2014) 'Comparing nurse managers and nurses' perceptions of nurses' self-leadership during capacity building', *Journal of nurses management*, 22(4), pp. 532-539. doi: 10.1111/jonm.12235.
- Kaldi, S & Xafakos, E (2017), 'Student teachers' school teaching practice: The relation amongst perceived self-competence, motivation and sources of support', *Teaching and Teacher Education*, 67, p. 246-258. Available from: 10.1016/j.tate.2017.05.019.
- Kane, J (2007), *The problem of politics: Public governance and leadership*. Public Governance
- Kazan, A (2000), 'Exploring the concept of self-leadership: Factors impacting self-leadership of Ohio americorps members', *Dissertation abstracts international section A*. 60(11-A), pp. 3870.
- Kelly, EP (2000), 'A Better Way to think about business: How personal integrity leads to corporate success', *Academy of management executive*, 14(2), pp. 127-128. Available from: 10.5465/AME.2000.3819313.
- Kerr, R et al. (2006), 'Emotional intelligence and leadership effectiveness', *Leadership and organizational development journal*, 27(4), pp. 265-279. Available from: 10.1108/01437730610666028.
- Kim, R (2017), Mixed methods action research: Intervention strategies for employee turnover in ethnic Asian enterprises in New Zealand. A thesis presented to the University of Liverpool, UK.
- Kotter, JP (2007), *Leading Change*. Bloomsbury business library - Management library.
- Krafft, M et al. (2015), 'The evolution of marketing channel research domains and methodologies: An integrative review and future directions', *Journal of retailing*, 91(4), pp. 569-585. Available from: 10.1016/j.jretai.2015.05.001.
- Kruckeberg, K Amann, W & Green, M (2011), *Leadership and personal development: A tool box for the 21st century professional*. Charlotte, North Carolina: Information age publishing.
- Kummerow, E & Kirby, N (2014), *Organizational culture concept, context and measurement - volume II - renew very good book about evaluation*. Singapore: World scientific publishing.
- Laukkanen, E, Halonen, P & Viinamaki, H (1999), 'Stability and internal consistency of the offer self-image questionnaire: A study of finish adolescents', *Journal of youth and adolescence*, 28(1), pp. 71-77.
- Lee, CJ (2008), *Relationship development impacts on small suppliers and their larger customers in the Taiwanese electric industry*, A thesis presented to the University of Bournemouth, Poole, England.
- Lee, FK, Sheldon, KM & Turban, DB (2003), 'Personality and the goal-striving process: The influence of achievement goal patterns, goal level and mental focus on performance and enjoyment', *Journal of applied psychology*, 88(2), pp. 256-265.
- Lenzen, SA et al. (2017), 'Disentangling self-management goal setting and action planning: A scoping review', *Plos One*, 12(11), p. e0188822. Available from: 10.1371/journal.pone.0188822.
- Lewis, CC et al. (2015), The Society for Implementation Research Collaboration Instrument Review Project: A methodology to promote rigorous evaluation. *Implementation Science: IS*, 10, pp. 2. Available from: 10.1186/s13012-014-0193-x.
- Liamputtong, P (2009), 'Qualitative data analysis: Conceptual and practical considerations', *Health promotion journal of Australia*, 20(2), pp. 133-139.
- Lin, L (2014), 'Organizational structure and acculturation in acquisitions: Perspectives of congruence theory and task

- interdependence', *Journal of management*, 40(7), pp. 1831-1856. Available from: 10.1177/0149206312442385.
- Lincoln, YS & Cannella, GS (2004), 'Dangerous discourses: Methodological conservatism and governmental regimes of truth', *Qualitative inquiry*, 10(1), pp. 5-14.
- Locke, EA & Latham, GP (2004), 'What should we do about motivation theory? Six recommendations for the twenty-first century?', *Academy of management review*, (29, 3), pp. 388. Available from: 10.5465/AMR.2004.13670974.
- Lovelace, KJ, Manz, CC & Alves, JC (2007), 'Work stress and leadership development: The role of self-leadership, shared leadership, physical fitness and flow in managing demands and increasing job control', *Human resource management review. The Future of leadership development*, 17, pp. 374-387.
- Magnuson, A et al. (2016), 'Shared goal setting in team-based geriatric oncology', *Journal of oncology practice*, 12(11), pp. 1115-1122. Available from: 10.1200/JOP.2016.013623.
- Malmir, A & Azizzadeh, F (2013), 'Evaluation and providing solutions for self-leadership', *International public management review*, 14(2), pp. 66-86.
- Manz, C C (1992), 'Self-leading work teams: Moving beyond self-management myths', *Human relations*, 45. pp. 1119. Available from: 10.1177/001872679204501101.
- Manz, C C (1992), 'Self-leadership the heart of empowerment', *The Journal for quality and participation*, 15(4), pp. 80.
- Manz, C C (1986), 'Self-leadership: Toward an expanded theory of self-influence processes in organizations', *Academy of management review*, 11(3), pp. 585-600.
- Manz, C C & Neck, C P (2004), *Mastering Self-Leadership: Empowering yourself for personal excellence*. Pearson Prentice-Hall
- Manz, C C & Sims, H P Jr (1980), 'Self-management as a substitute for leadership: A social learning theory perspective', *Academy of management review*, 5(3), pp. 361-367.
- Margherita, A (2014), 'Business process management system and activities: Two integrative definitions to build an operational body of knowledge', *Business Process Management Journal*, 20(5), pp. 642-662. Available from: 10.1108/BPMJ-04-2013-0050.
- Marino, J J (2007), 'A new paradigm for organizational change: Involving customers and stakeholders in the improvement process', *Journal for quality & participation*, 30(1), pp. 10-12.
- Markham, S & Markham, I (1995), 'Self-management and self-leadership re-examined: A levels-of-analysis perspective', *The leadership quarterly*, 6(3), pp. 343-359.
- Marques-Quinteiro, P & Curral, LA (2012), 'Goal orientation and work role performance: Predicting adaptive and proactive work role performance through self-leadership strategies', *The journal of psychology: Interdisciplinary and applied*, 146(6), pp. 559-577. Available from: 10.1080/00223980.2012.656157.
- Marques, J F (2009), *Awakened leaders: born or made?* Woodbury University, Burbank, California, USA.
- Marques-Quinteiro, P, Curral, L & Passos, A (2012), 'Adapting the revised self-leadership questionnaire to the Portuguese context', *Social indicators research*, 108. 3, pp. 553-564. Available from: 10.1007/s11205-011-9893-7.
- Mathieu, J (1991), 'A cross-level nonrecursive model of the antecedents of organizational commitment and satisfaction', *Journal of applied psychology*, 76(5), pp. 607-618. Available from: 0.1037//0021-9010.76.5.607.
- McClaren, N (2015), 'The methodology in empirical sales ethics research: 1980-2010', *Journal of business ethics*, 127(1), pp. 121-147. Available from: 10.1007/s10551-013-1871-3.

- McClaren, N (2013), 'The personal selling and sales management ethics research: Managerial implications and research directions from a comprehensive review of the empirical literature', *Journal of business ethics*, 112(1), pp. 101–125.
- McCullough, C (2007), 'Developing You!. *T+D*, 61(12), 64-67. Available from: <http://search.ebscohost.com.ezproxy.liv.ac.uk/login.aspx?direct=true&db=a9h&AN=27746439&site=eds-live&scope=site> (Accessed: 10 May 2016).
- McGregor, M & Dawson, J (2009), *Using coaching to enhance the leadership adaptability of retail executives*. British library EThOS,
- Mensah, K (2014), *Linking Precaution to adaptive co-management to adapt rural water resources to climate change in Ghana*. A thesis presented to the University of Guelph, Canada.
- Mirghafoori, S., Sharifabadi, A. and Takalo, S. (2018) 'Development of causal model of sustainable hospital supply chain management using the Intuitionistic Fuzzy Cognitive Map (IFCM) method', *Journal of Industrial Engineering and Management*, 11(3), 588-605. Available from: 10.3926/jiem.2517.
- Murphy, S E & Ensher, E A (2008), 'A Qualitative analysis of charismatic leadership in creative teams: The case of television directors', *Leadership quarterly*, 19, pp. 335–352.
- Neck, C & Houghton, J (2006), 'Two decades of self-leadership theory and research', *Journal of managerial psychology*, 21(4), pp. 270-295.
- Neck, C et al. (2013), 'Self-leadership: a cognitive resource for entrepreneurs', *Journal of small business & entrepreneurship*, 26(5), pp. 463-480. Available from: 10.1080/08276331.2013.876762.
- Neck, C P, Nouri, H & Godwin, JL (2003), 'How self-leadership affects the goal-setting process', *Human resource management review*, 13(4), pp. 691-707. Available from: 10.1016/j.hrmr.2003.11.009.
- Neck, C P & Manz, C C (1992), 'Thought self-leadership: The influence of Self-talk and mental imagery on performance', *Journal.organ. behaviour*, 13(7), pp. 681-699.
- Neck, C P, Stewart, GL. & Manz, CC (1996), 'Thought self-leadership as a framework for enhancing the performance of performance appraisers', *Journal of applied behavioral science*, 31(3), pp. 278-302. Available from: 10.1177/0021886395313004.
- Nelson, A (2000), 'Book reviews: Mastering self-leadership: Empowering yourself for personal excellence Charles C. Manz and Christopher P. Neck Prentice-Hall, Inc. 1999 132 pages', *Journal of leadership & organizational studies*, 7(1), pp. 139.
- Neubert, M & Wu, J (2006), 'An investigation of the generalizability of the Houghton and Neck revised self-leadership questionnaire to a Chinese context', *Journal of managerial psychology*, 21(4), pp. 360-373.
- Neuman, W. (2003), 'Social research methods : Qualitative and quantitative approaches' (5th ed., Relevance of social research). Boston: Allyn and Bacon.
- Niglas, K (2009), 'How the novice researcher can make sense of mixed methods designs', *International journal of multiple research approaches*, 3(1), pp. 34-46.
- Northouse, P G (2007), *Leadership : theory and practice*. Thousand Oaks: Sage.
- Nurs, J. (1994), 'A Consumer's Guide to Causal Modeling: Part I. PMC2905793', *Journal of pediatric nursing*, 9(4): pp. 268–271.
- Onwuegbuzie, A J. & Leech, N L (2005), 'On becoming a pragmatic researcher: the importance of combining quantitative and qualitative research methodologies', *International journal of social research methodology*, 8(5). pp. 375-387.
- Overmars, K P, Groot, WT & Huigen, M A (2007), 'Comparing inductive and deductive modeling of land use

- decisions: Principles, a model and an illustration from the Philippines', *Human ecology: An interdisciplinary journal*, 35(4), pp. 439-452. Available from: 10.1007/s10745-006-9101-6.
- Pearce, C & Manz, C (2011), 'Leadership centrality and corporate social Ir-responsibility (CSIR): The ameliorating effects of self and shared leadership on CSIR', *Journal of business ethics*, 102(4), pp. 563-579.
- Pihl-Thingvad, S (2014), 'Is self-leadership the new silver bullet of leadership? An empirical test of the relationship between self-leadership and organizational commitment', *Management revue*, 25(2), pp. 103-124.
- Pallant, J (2011), *SPSS Survival Manual. [Electronic Book] : A Step By Step Guide To Data Analysis Using SPSS*, Maidenhead : McGraw-Hill.
- Podsakoff, P MacKenzie, S, Jeong-Yeon, L & Podsakoff, N (2003), 'Common method biases in behavioral research: A critical review of the literature and recommended remedies', *Journal of applied psychology*, 88(5), pp. 879.
- Polit, D F & Beck, C T (2010), 'Generalization in quantitative and qualitative research: Myths and strategies', *International journal of nursing studies*, 47(11), pp. 1451-1458. Available from: 10.1016/j.ijnurstu.2010.06.004.
- Topper, E F (2009), 'Fish or pickle? Customer service in libraries', *New library world*, 110(1/2), pp. 92-94. Available from: 10.1108/03074800910928612
- Pratoom, K & Savatsomboon, G (2012), 'Explaining factors affecting individual innovation: The case of producer group members in Thailand', *Asia pacific journal of management*, 29(4), pp. 1063-1087.
- Prussia, G E anderson, J S & Manz, C (1998), 'Self-leadership and performance outcomes: the mediating influence of self-efficacy', *Journal of organizational behaviour*, 19, pp. 523-538.
- Quinteiro, P, Passos, A & Curral, L (2016), 'Thought self-leadership and effectiveness in self-management', *teams. Leadership*, 12(1), pp. 110-126. Available from: 10.1177/1742715014543579.
- Raelin, J A (2003), *Creating leaderful organizations: How to bring out leadership in everyone*. Berrett-Koehler, San Francisco.
- Redick, A, Reyna, I, Schaffer, C & Toomey, D (2014), 'Four-factor model for effective project leadership competency', *Journal of information technology & economic development*, 5(1), pp. 21-35.
- Reichard, R J & Johnson, S K (2011), 'Leader self-development as organizational strategy', *The Leadership quarterly*, 22, pp. 33-42. Available from: 10.1016/j.leaqua.2010.12.005.
- Ren, H & Tienan, W (2014), 'Complementary technology and long-term shareholder value of acquiring firm in technology acquisitions', *Journal of applied sciences*, 14(2), pp. 101-111. Available from: 10.3923/jas.2014.101.111.
- Research Ethics Application Form (2013), University of Liverpool, UK.
- Roberts, H & Foti, R (1998), 'Evaluating the Interaction between self-leadership and work structure in predicting job satisfaction', *Journal of business and psychology*, 3, pp. 257-267.
- Ross, S (2014), 'A conceptual model for understanding the process of self-leadership development and action-steps to promote personal leadership development', *Journal of management development*, 33(4), pp. 299-323. Available from: 10.1108/JMD-11-2012-0147.
- Rowell, L L, Polush, E Y, Riel, M & Bruewer, A (2015), 'Action researchers' perspectives about the distinguishing characteristics of action research: A Delphi and learning circles mixed-methods study', *Educational action research*, 23(2), pp. 243-270. Available from: 10.1080/09650792.2014.990987.
- Rudd, A (2013), *Self, value and narrative. [electronic book] : a Kierkegaardian approach*.
- Ruth, M (2017), 'Conceptual model', Salem press encyclopedia.

- Sanchez, J (2013), *The relationship among self-leadership, social capital, social effectiveness and organizational efficacy in US navy recruiting*. Dissertation abstracts international section A. Proquest.
- Saunders, M, Lewis, P & Thornhill, A (2012), *Research Methods For Business Students*. [Electronic Book], n.p.: Harlow : Pearson, 2012., *University of Liverpool Catalogue*, EBSCOhost, Available from: <http://search.ebscohost.com.ezproxy.liv.ac.uk/login.aspx?direct=true&db=cat00003a&AN=lvp.b3210454&site=eds-live&scope=site> (Accessed: 22 March 2018).
- Schilling, M A (2008), *Strategic management of technological innovation*. Boston: McGraw-Hill.
- Schmitz, C, You-Cheong, L & Lilien, G (2014), 'Cross-selling performance in complex selling contexts: An examination of supervisory- and compensation-based controls', *Journal of marketing*, 78(3), pp. 1-19.
- Schaik, S M, O'Brien, BC, Almeida, S A & Adler, S R (2014), 'Perceptions of interprofessional teamwork in low-acuity settings: a qualitative analysis', *Medical Education*, 48(6), pp. 583-592. Available from: 10.1111/medu.12424.
- Sesen, H, Tabak, A. & Arli, O. (2017) 'Consequences of Self-Leadership: A Study on Primary School Teachers', *Educational Sciences: Theory and Practice*, 17(3), pp. 945–968.
- Shento, A K (2004), 'Strategies for ensuring trustworthiness in qualitative research projects', *Education for Information*, 22(2), pp. 63-75.
- Shoab, F & Kohli, N (2017), 'Employee engagement and goal setting theory', *Indian journal of health & wellbeing*, 8(8), pp. 877-880.
- Sinha, N, Kakkar, N K & Gupta, V (2012), 'Uncovering the secrets of the twenty-first-century organization', *Global business & organizational excellence*, 31(2), pp. 49-56. Available from: 10.1002/21414.
- Signe, P (2014), 'Is self-leadership the new silver bullet of leadership? An empirical test of the relationship between self-leadership and organizational commitment', *Management Revue*, 2, p. 103.
- Smith, P J, Sadler-Smith, E, Robertson, I & Wakefield, L (2007), 'Leadership and learning: facilitating self-directed learning in enterprises', *Journal of European industrial training*, 31(5), pp. 324-335.
- Song, Y (2009), 'The leadership effectiveness in the process of planned organizational change', *Public organization Review*, 9(3), pp. 199-212.
- Sorensen, R & Severinsson, E (2008), 'Beyond profession: Nursing leadership in contemporary healthcare', *Journal of Nursing Management*, 16 (5), pp. 535–544.
- Shah, S K & Corley, K G (2006), 'Building Better Theory by Bridging the Quantitative–Qualitative Divide', *Journal of Management Studies*, 43(8), pp. 1821-1835. Available from: 10.1111/j.1467-6486.2006.00662.x.
- Sonu, D, Oppenheim, R, Epstein, S & Agarwal, R (2012), 'Taking responsibility: The multiple and shifting positions of social justice educators', *Education, citizenship and social justice*, 7(2), pp. 175-189.
- Statisticssolutions (2019), 'Factor analysis exploratory factor analysis', Available from: <https://www.statisticssolutions.com/factor-analysis-sem-exploratory-factor-analysis/> (Assessed: October. 21, 2019).
- Stewart, L (2007), 'Pressure to lead: what can we learn from the theory?', *British Journal of Occupational Therapy*, 70(6), pp. 228-234.
- Stewart, G, Courtright, S & Manz, C (2011), 'Self-leadership: A multilevel review', *Journal of management*, 37(1), pp. 185-222.

- Stewart, G L & Barrick, M R (2000), 'Team structure and performance: Assessing the mediating role of intrateam process and the moderating role of task type', *Academy of management journal*, 43(2), pp. 135-148.
- St. Pierre, E A (2004), 'Refusing alternatives: a science of contestation', *Qualitative inquiry*, 10(1), pp. 130-139. Available from: 10.1177/1077800403259494.
- Summerfield, M R (2014), 'Leadership: A simple definition', *American journal of health-system pharmacy*, 71(3), pp. 251-253.
- Swann, et al. (2004), 'Finding Value in Diversity: Verification of Personal and Social Self-Views in Diverse Groups', *Academy of Management*, 29(1), Available from: <https://doi.org/10.5465/amr.2004.11851702> (Accessed: 21 October 2018).
- Tadjallimehr, M (2018), Adoption of Corporate Social Responsibility in a Large International Financial Corporation in Switzerland from the Triple Bottom Line Sustainability Viewpoint. A thesis presented to the University of Liverpool.
- Taştan, S (2013), 'The influences of participative organizational climate and self-leadership on Innovative behavior and the roles of job involvement and proactive personality: A survey in the context of SMEs in Izmir', *Procedia*, social And behavioral sciences, 75, pp. 407-419. Available from: 10.1016/j.sbspro.2013.04.045.
- Tantos, A (2019) 'Dimensional reductions' University of Thessaloniki; DataCamp
- Thamhain, H J (2004), 'Linkages of project environment to performance: lessons for team leadership', *International journal of project management*, (7), pp. 533.
- Tianjiao, Q (2014), 'Product diversification and market value of large international firms: A macroenvironmental perspective', *Journal of international marketing*, 22(4), pp. 86-107.
- Toor, S & Ofori, G (2008), 'Taking leadership research into future a review of empirical studies and new directions for research', *Engineering construction & architectural management* (09699988), 15(4), pp. 352-371.
- Ugurluoglu, O, Ozer, O, Santas, F & Saygili, M (2013), *Exploring the impacts of personal factors on self-leadership in a hospital setting. International journal of health planning and management.*
- van Marrewijk, M (2004), 'A value based approach to organization types: Towards a coherent set of stakeholder-oriented management tools', *Journal of business ethics*, 55(2), pp. 147-158.
- Verstrand, T M (2013), 'Principal Efficacy: Implications for Rural "Grow Your Own" Leadership Programs', *Rural Educator*, 35, pp. 1.
- Vítková, E, Chovancová, J & Veselý, D (2017), 'Value driver and its impact on operational profit in construction company', *Procedia computer science*, 121(), pp. 364-369. Available from: 10.1016/j.procs.2017.11.049.
- Wan-Gould, C (2011), 'A correlational study of event planners' personality traits, soft skills competency and self-leadership. dissertation abstracts international section A', *University of Phoenix*, 72(6-A), pp. 2073.
- Wegge, J et al. (2010), 'Promoting work motivation in organizations: Should employee involvement in organizational leadership become a new tool in the organizational psychologist's kit?', *Journal of personnel psychology*, 9(4), pp. 154-171. Available from: 10.1027/1866-5888/a000025.
- Weinberg, S L & Abramowitz, S K (2008) *Statistics Using SPSS: An Integrative Approach..* 2nd Edition.
- Wirth, R. A. (2004), The Relationship Between Self-Leadership and Self-Initiated Change Leadership: Personal Empowerment for Emergent Organizational Change. Dissertation Submitted to the University of Walden.
- Witt, D (2017), *New research underscores benefits of a self-leadership culture.* Available from: <https://leaderchat.org/2017/06/01/new-research-underscores-benefits-of-a-self-leadership-culture/> (Accessed: 12 March 2018).
- Xiao, H & Ma, Z (2015), 'Business ethics in Canada, China and Taiwan: A three-culture study on the perceived ethicality of negotiation strategies', *Nankai Business Review International*, 6(2), pp. 106-127. Available from: 10.1108/NBRI-12-2014-0044.

- Yauch, C & Steudel, H (2003), 'Complementary use of qualitative and quantitative cultural assessment methods', *Organizational research methods*, 6(4), pp. 465-481.
- Yuan, B et al. (2012), 'Increasing emotional intelligence of employees: evidence from research and development teams in Taiwan', *Social behavior & personality: An international journal*, 40(10), pp. 1713-1724.
- Zaharia, D E (2016), 'The Effective Leader's Qualities', *Valahian Journal of Economic Studies*, 7(1), pp. 77-82.
- Zyl, E (2012), 'The Relationship between self-leadership and certain personality traits among a group of first-line Supervisors', *Journal of social sciences (0971-8923)*, 31(2), pp. 159-165.