



**An investigation into the Learning Culture in Irish
SMEs**

Master of Arts in Human Resource Management

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Submitted to the National College of Ireland

August 2019

National College of Ireland

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Abstract

Irish Small and Medium-Sized Enterprises (SMEs) represent 99.8% of all active enterprises in the Country. The aim of this study is to look at Irish SMEs from various sectors and uncover how such organizations support and use learning at all levels.

To Investigate, throughout the use of the structured questionnaire, “Dimensions of the Learning Organization Questionnaire” (DLOQ), the individual and the team’s perceptions about Learning in their organization and to analyse the perceptions related to the development of their capacity for learning.

To Identify if the Learning Culture is present in Irish SMEs and understand the main challenges they are facing when it comes to implementation of Learning strategies, perceived in literature as a strategic investment in human capital used to achieve better performance goals and generate competitive advantages. (Bhattacharya, 2014).

The use of this questionnaire will also help provide findings related to the strengths and areas for development towards Irish SMEs becoming learning organizations.

Declaration

Submission of Thesis and Dissertation to National College of Ireland

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Material submitted for award

(a) I declare that the work has been composed by myself.

(b) I declare that all verbatim extracts contained in the thesis have been distinguished by quotation marks and the sources of information specifically acknowledged.

(c) My thesis will be included in electronic format in the College Institutional Repository TRAP (thesis reports and projects)

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Master of Arts in Human Resources Management

Signature of research student:



Date: 14 August 2019

Acknowledgements

I thank NCI and Dr Caitriona Hughes, for sharing their knowledge and providing guidance and the opportunity for me to learn and develop myself in a personal and professional capacity. May the passion for learning be always present so that growth is unlimited.

I thank all my friends who showed their support by sharing my questionnaire and providing unfailing assistance as and when needed. Especially my friend, Bay who helped proofread part of the project. I will be forever grateful.

I am highly indebted to all the participants who gave their valuable time to answer my questionnaire. This project would not have been possible without their enthusiastic interaction and feedback.

I thank my colleagues at Telefonica for understanding and for being an important pillar during the development of this dissertation.

The past 12 months have been challenging and I would not have made it without the support of my mother Gildete, my partner Igor, my brother Tiago and my father Tarcizio who all showered me with their love and incredible support. They are the shining guiding stars of my life.

Lastly, I would like to give thanks to my beloved little brother Vinicius who passed away in August 2018. Without his inspiring encouragement I would not have moved over to Ireland or embarked on this course. He always believed in me and said we are all capable of great achievements and this is a big one for me.

I sincerely appreciate all the learning opportunities and am deeply grateful for all the help I've received. It's been a uniquely empowering journey.

Sincerely,

Jessica da Cruz Bezerra

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Abbreviations

CL Continuous Learning

CSO Central Statistics Office

DLOQ Dimensions of the Learning Organisations Questionnaire

ES Establish Systems

EU European Union

GVA Gross Value Added

HC Human Capital

HROD Human Resource and Organization Development

ICT Information and Communications Technology

ISME Irish SME Association

LCQ Learning Company Questionnaire

L&D Learning and Development

LO Learning Organization

NGO Non-governmental Organizations

OL Organizational Learning

SME Small and Medium Sized Enterprise

SL Strategic Leadership

TL Team Learning

Chapter 1

Introduction

1.1 Background and Motivation

A 2018 CIPD survey (HR Practices in Ireland) with more than 500 respondents, has shown that over the next 2 years the top priority of the organisations of all sizes will be focusing on Retention, Engagement and Development of employees with Talent Management (58%) being the biggest focus of companies followed by Leadership Development (51%).

The research question is worthy of study because Irish SMEs represents the biggest share of the Business Economy in Ireland and in the EU with over 23 million businesses across the Union (The Comision of The European Union Communities, 2003) and aside from its economic and technical functions, it plays a very important part with a social function as it has a broader reach when it comes to employing habitants and directly impacting the standard of living of a Country's population (Popescu, Chivu, Ciocârlan-Chitucea & Popescu, 2010).

As most of the Human Resources Development (HRD) literature focuses on large organisations and formal practices (Nolan, 2016) and strategic investments in human capital, including Learning, is seen as a way to achieve better performance goals and generate competitive advantages (Bhattacharya, 2014), the author would like to put forward the theme: "Are Irish SME's Learning Organizations?" to better understand the Learning Culture in Irish SMEs.

Investigating the importance of Learning and how Organizational Learning, as the central activity in the Learning Organizations, can be an extraordinary advantage for the SMEs' overall performance, growth and survival (Gephart, Marsick, Van Buren & Spiro, 1996).

1.2 Research Objectives

The objective of this research is to look at the Learning Culture in Irish SMEs and analyse any correlations with Learning Organization and

Organizational Learning. Throughout the use of the Dimensions of the Learning Organization Questionnaire (DLOQ) capture the perceptions of managers and non-managers of micro, small and medium-sized business in the Republic of Ireland explore how Irish SMEs can benefit from a strong Learning Culture. Explored further on chapter 3.

1.3 Outline of the thesis

Chapter 2 is the literature review where the researcher will investigate the main concepts related to this study, such as Learning Organization, Organization Learning, Leadership, Learning and Development and more. From first concepts to most recent studies and controversial observations, An explanation of measurement tools available to measure the Learning Organizations will also be explored on this chapter.

Chapter 3 will explain in depth the Research Question that gave inspiration to this research and a brief description of the measurement tool used.

Chapter 4 will explain the Research Methodology, Research Method, information about the Sample details and Strategies to collect and produce the data.

Chapter 5 brings the Analysis and Findings from the survey, background of the participants and the overall results.

Chapter 6 will bring the Discussion about the perceptions of the learning organization between the groups and general mean scores, also a full analysis of the main concepts and the analysis of the results by the different organization's sizes (micro, small and medium).

Chapter 7 will bring the Conclusion of this study and the researcher will then make a full analysis of what can be implemented in Irish SMEs. starting with the Recommendations, Limitations, Practical Implications, Timeline for implementation of the recommendations and costing of such strategy. At the end, a Personal Learning Statement will close the dissertation.

Chapter 2

Literature Review

2.1 Introduction

The literature review offers a deep understanding and explanation on definition and characteristics of SME, the features and importance of those organizations to the economy in Ireland and Europe.

This is followed by an exploration of what is meant by Human Capital, Learning, Organizational Learning and how the Learning Culture can impact, change and support businesses.

Organizational Learning, Learning Organization, Learning and Development are all reviewed from the aspect of the Learning Culture, its practices and tools and how they specifically relate to SMEs.

The role of leaders during implementation and maintenance of the learning culture is also investigated on this chapter.

The effectiveness of Learning Culture is explored, and the review concludes with an indication of the gaps in current research, its applicability, impact and importance for the overall performance of the business.

2.2 Small and Medium-sized Enterprises (SMEs)

Referred to as the backbone of Europe's economy and representing the biggest share of the Business Economy in Ireland and in the EU, SMEs are an important engine that keep the economy running with over 20 million business across the Union (The Commission of The European Union Communities, 2003).

SMEs represent 99% of all businesses in the EU (European Commission, n.d.) and according to the Business in Ireland 2015 study from the Central Statistics Office (CSO), Irish SMEs represent 99.8% of all active

enterprises in the Irish Business Economy, it holds 69.5% of persons engaged and it is responsible for 47.8% of total Turnover. It also represented a 39% of Gross Value Added (GVA) in the business economy in which 53.7% of this total came from the Small and Medium-sized enterprises from the Services sector (Central Statistics Office, 2015). There are also positive social impacts caused by the function of SMEs due to its potential source of jobs, directly impacting the standard of living of a Country's population and potentially boosting the economy (Popescu, et al., 2010).

2.2.1 SMEs Definition

The European Commission defines SMEs as organizations that hire fewer than 250 persons and have an annual turnover that does not exceed €50 million or a balance sheet not exceeding €43 million (The Commission of the European Union Communities, 2003). The Enterprises that fit these definitions can benefit from EU funding programmes that promote SMEs and offer help with reduced fees for EU administrative compliance.

| Company category | Staff headcount | Turnover | or | Balance sheet total |
|------------------|-----------------|----------|----|---------------------|
| Medium-sized | < 250 | ≤ € 50 m | | ≤ € 43 m |
| Small | < 50 | ≤ € 10 m | | ≤ € 10 m |
| Micro | < 10 | ≤ € 2 m | | ≤ € 2 m |

Table 1: EU Definition of SME (European Union, 2003) Commission Recommendation of 6 May 2003 concerning the definition of micro, small, and medium-sized enterprises. (2003/361/EC), Official Journal of the European Union, L 124/36, 20 May 2003

2.2.2 Irish SMEs Features and Developments

SMEs differ from large enterprises in varied ways. One of the advantages of having a small number of employees within an organization is that communication can be facilitated with ease and this makes it easier to propagate change within (Popescu, et al., 2010).

Its smaller proportions of stock, cash, machinery, equipment, furniture, bonds, buildings and other fixed assets, economically speaking, allows SMEs to have a relatively simple management strategy whilst also allowing adaptability and flexibility in relation to change in the external environment (Popescu, et al., 2010). Those and other features, allow SMEs to adapt and tailor themselves in accordance with changes imposed by the fast-changing economy and technologies advancements.

In Ireland, two of the most common reasons noted by Irish SMEs when it comes to requesting financing applications is investment and working capital. Across main bank applications in Ireland, in September 2018, the rejection rates for financing for Small firms was 15%, for Medium enterprises was 6.2%, whilst for Micro firms, it was 22.9% (Central Bank of Ireland, 2019), sowing the difficulty for Micro organizations in Ireland to honour its debts, decreasing the possibilities to maintain itself and furthermore, to grow from Micro to Small and Medium-sized organizations.

The Irish SME Report Ireland has shown that 30% of Irish enterprises invest more frequently into new business products and services when compared to EU peers, which suggests a higher tendency of Irish entrepreneurs to innovation than in most EU countries (Central Bank of Ireland, 2019).

The 2017 report highlighted that the structure of investment is as follow:

- Machinery & Equipment: close to 30%
- Land, Buildings & Infrastructure and Software, Data, IT & Website: both of which account for between 15% and 20%
- Training of Employees, Business Processes, R&D: each of which accounts for under 10 %

For future investments reasons, Irish SMEs mentions the below:

- 25% capacity expansion
- 35% replacement of existing buildings or equipment
- 25% new products

- 15% no investment planned.

For the purpose of this project and importance of SMEs to the Irish and EU economy, the author will consider the European Union (EU) definition of SMEs when collecting and analysing the data collected in order to investigate the Irish SME sector, taking into consideration their investing profiles, trends and opportunities for further developments.

2.3 Human Capital (HC)

Definition of HC is explained as *“The sum of knowledge, skills, experience and other relevant workforce attributes that reside in an organisation’s workforce and drive productivity, performance and the achievement of strategic goals”* (Matthewman & Matignon, 2004).

Organizations, regardless of size, will have the presence of human beings in their structure. Saying this, it is crucial to understand the relation between HC and the organization’s performance as they are both directly connected at some, many or all, points during an organization’s lifetime.

The demographics of Ireland’s workforce tells us Ireland is known for its well-educated, highly skilled and adaptable workforce that offers a strong foundation to all businesses in Ireland. It also helps attract direct foreign investment into the country, driving its economy in an even more competitive and globalized investment context (Skillnet Ireland, 2017).

Mayo mentions that for this to be positively introduced in organizations, the management’s perceptions of HR cannot be misunderstood and cannot be seen as only a cost that needs to be minimised as much as possible, instead, it must be seen as a way to offer positive contribution to the organization (Mayo, 2012).

HC measurement has already proved to be a crucial tool (CIPD, Chartered Institute of Personnel and Development, 2019), that if done correctly it can provide a data-driven approach that will help identify the most accurate people management practice(s) for the organization, driving the organization towards value creation, guaranteeing its sustainability and

long-term contributions to targeted learning and the learning organization, despite the fact that the HR might be seen differently in smaller companies and in the developing world (Mayo, 2012).

2.4 Concept and Definition of Learning

The dictionary definition of learning is: “the acquiring of knowledge and skill.” The ability and capacity for learning is intrinsic to a human being and it makes us capable to adapt and grow in our environments.

Learning helps deal with adversity, helping people recognize and action what needs to be done and how, correcting mistakes and preventing future problems (Argyris & Schön, 1978; Revans, 2011).

By changes in experiences, learning can be created, experienced and also provide a reflective view of its use. Moreover, integrated with new and more refined ideas it can be relearned (Kolb & Kolb, 2005). The concept shows the importance of encouragement of development throughout learning practices as individuals and organizations. Learning can thus be defined “as increasing one’s capacity to take effective action” (Kim, 1993).

2.5 Organisational Learning (OL)

2.5.1 Definition

The OL concept is hard to define because of its multidisciplinary extension. The topic has been studied by numerous varying disciplines from psychology, to sociology, industrial economics, management and others (Dodgson, 1993). Because of its nature, we do not have a singular overarching definition of the OL concept. That being said, it has been given several definitions, dependant on the field of study (Yeung, Ulrich, Nason & Von Glinow, 1999; Crossan, Lane & White, 1999).

The field of management offers a host of definitions when it comes to OL, none of which are wrong, however it doesn’t offer an all-encompassing definition that is equally pertinent across the broad areas of its application. Some of the definitions about OL are listed below:

- OL is a process that was developed to help identify mistakes and correct them (Argyris, 1977).
- The use of memory and past experiences is the basis upon which OL occurs and where knowledge, mental models and insights are shared (Stata, 1989).
- OL is part of the Strategic Planning of an organisation, helping to anticipate and adapt to global and local environmental changes rapidly (Mintzberg, 1994).
- OL is a culture that seeks continuous improvement by developing capabilities of thought and productivity (Marquardt, 1996).
- OL is the company's ability to create, retain and transfer knowledge within an individual, organizational and group level (Saadat & Saadat, 2016)

2.5.2 Earlier concepts

Earlier studies around this topic were first introduced by Cyert and March (1963), they noted that learning in organizations was a way to spur behaviour changes based and related to different events, this is recognized as the start point towards organizational learning (Crossan, Lane, White, Djurieldt, 1995).

Cangelosi and Dill (1965), one of the pioneers in studying the phenomenon of OL concluded that more studies and empirical work was needed to elaborate and to test the constructs of OL and that there was a need to look into interactions between employees and companies, changes in environment and other characteristics that influences the organization in order to identify the anticipation of learning.

Despite earlier studies from Cyert and March (1963) and Cangelosi and Dill (1965), it was not until 1970 that the concept started to receive more attention. March and Olsen (1975) explored the relation of the limitations of managers and how their behaviour would affect learning.

Since its appearance in early literature, the OL concept has become more popular over the years. For a better understanding about its history, it is important to highlight an early theory, the one of Multiple Levels of Learning and the Logical Typing of Signals from Gregory Bateson (1973) that mentions the capacity of human beings in becoming more skilled in learning and Learn to Learn.

Also important for the OL concept are the studies and approach about the Single and Double-Loop Learning from Argyris and Schön (1978) and their conclusion, mentioned below:

“Organizations learn through the collective capability of its members to learn... there is no organizational learning without individual learning, and that individual learning is a necessary but insufficient condition for organizational learning” (Argyris and Schon, 1978) and the Action Learning theory from Revans (1982).

On his 1977 publication, Chris Argyris makes the below statement: *“Organizational Learning is the process whereby members of the organization respond to changes in the internal and external environments of the organization by detecting errors that they then correct in order to maintain the central features of the organization”* (Argyris, 1977).

The Action Learning Theory says that Action Learning is an important tool for a strong approach and a great way for developing discipline. Revans also highlights that success is not a definite end when applying the Action Learning theory, but it can undoubtedly benefit individuals at a personal and professional level, consequently impacting positively at the organizational, group and individual levels (Revans, 2011).

2.5.3 Recent studies

OL is a dynamic and developing subject in literature and it is an effective method to tackle top-down bureaucracies and share knowledge that can be used to gain competitive advantages and increase the overall business, group and employee performance.

The application of learning is directly impacted by the process of learning and the outcome of learning. It is explained by the company's ability to *"create, accumulate, store, supplement and organize knowledge, policies and procedures, seeking competitive advantage"* (Dodgson, 1993) a topic explored by many researchers (Garvim, 1993; Pedler et al, Pedler, 1988; Pedler et al, 1989).

Multiple dimensions of OL have been presented since the mid-1960's and many more continue to appear with the explosive growth of knowledge and technology. Our rapidly changing modern world requires workers to upskill more often than ever before and knowledge is seen as a critical source to help build a more responsive organization (Saadat & Saadat, 2016).

Literature acknowledges that the core function of OL is to differentiate the organization from others through the use of Learning practices and structures, guaranteeing the business' sustainability and the generation of competitive advantage (Marsick, 2013).

Good comparisons and concise explanations of the different dimensions and scopes of OL can be found within the work published in the Journal of Intellectual Capital. The same article concludes: "OL has a direct positive effect on both HC indicators and enables firms to gain more benefits from the Performance Management System (PMS) in improving their HC" (Rompho & Siengthai, 2012).

In other words, OL is the base for and what makes the Learning Organization, a multidimensional profile which encompasses certain processes, activities and outcomes.

2.5.4 Application of Organisational Learning in Irish SMEs

Argyris, on his "Organisation Learning" work from 1999 highlights the significance for SMEs to learn at a more rapid pace in comparison to their competitors in order to gain competitive advantage in the market. He also mentions the importance to "develop a customer service responsive culture" to fulfil gaps in customer service and to help generate a comparatively superior better performance. (Argyris, 1999).

There is a deep intertwined link between OL and HC as Learning has shown to increase the inimitability of Human Capital (Hatch & Dyer, 2004), helping to gain sustainable advantages, moving in a similar direction to Argytis's work mentioned above.

When organizations facilitate continuous learning, it improves their own ability to learn at a much faster pace compared to their competitors, giving them a host of advantages (Pérez López, Montes Peón, & Vazquez Ordás, 2005) and improving productivity which consequently impacts the overall performance of the organization, group and its employees (Saadat & Saadat, 2016).

OL needs to be the central activity of the firm if they want to become a Learning Organization and avail of all its benefits (Gephart, et al., 1996). Recent studies states that there are strong connections between OL and Knowledge Management (Lakomski, 2005).

2.5.5 Organizational and Individual Learning and the Organizational Action

Dynamic and complex, OL has a different strategic process when compared with Individual Learning although the meaning of Learning remains the same (Kim, 1993). OL comes after the concept of Action Learning because learning is about thinking, knowing and remembering. It is only after the successful application of these actions can we insightfully determine if OL occurred within that environment (Argyris and Schon, 1996).

For an organisation to learn, the individuals working behind it must learn from it (Kim,1993; Dodgson, 1993). When facing challenging situations, it is crucial for its members to seek action in order to establish and stabilize the flow within the company and improve performance of the organization (Argyris and Schon, 1996).

Working as part of a successful team produces better results than individuals working alone, even if they have the same goals (Comstock,

2018) as this generates a connection with something bigger than themselves, i.e. it is about being connected.

2.5.6 Leadership role on Organizational Learning

Leadership is a process that works as a guide and facilitator, that influences and teaches employees to understand the group ethos of what is required and how it can be achieved, thereby acting towards a common goal (Yukl, 2006).

Different types of leadership and knowledge share can have a positive or negative impact on an individual's learning and on the achievement of the common goal. This will depend on where the knowledge is stored, how it is shared and the overall understanding of it (Breson, Nemanich, Waldman, Galvin, and Keller, 2006).

Although OL is a topic that has only gained a lot of attention in the last decade, it is seen by many researchers as a topic of extreme importance, strategically speaking as a crucial way to gain competitive advantage (DeGeus, 1988; Tsang, 1977). It still needs more exhaustive studies in relation to the role of top hierarchy members and the management team in the OL implementation (Crossan and Vera, 2004).

2.6 The Learning Organisation (LO)

Definition

Accordingly to Senge (1990) "A learning organization is a place where people are continually discovering how they create their own reality. And how they can change it" (Senge, 1990).

The need for organizations to survive and thrive in a volatile environment within our contemporary society has led to the development of the concept of the LO. Researchers recognises the importance of organizations to at least react to the rate of change to have a fighting chance to compete within the market. (DeGeus, 1988; Tsang, 1997).

A LO “is an organization that facilitates learning for all members and thereby continuously transforms itself” (Watkins and Watkins, 1996) in order to remain competitive and compliant to changes in the market (internal and external), environment and society (Jamali and Sidani, 2008) and to work together to solve problems. The LO motivates leaders within an organization to treat errors as learning experiences and to foster a responsive and participatory environment.

The LO equally encourages employees to improve their performance by questioning, learning, problem solving and by sharing their knowledge with colleagues (Comstock, 2018).

The formula of the LO could be define as below:

$$\text{Ongoing Training + Employee Development + Strategic Goals = Learning Organization}$$

Figure 1: The formula for the Learning Organisation

A LO is one “where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, and where collective aspiration is set free” (Senge, 1990).

2.6.1 Learning Organization, a Controversial Topic

Whilst several propagate the glories of a LO, there are researchers that argue that the topic is openly broad and abstract and there is an insufficient framework in place in that there are no definitive action plans for companies and managers to move towards a LO (Garvin, 1993).

They state this is simply an example of a management fad because it is a management theory that has no practical value and applicability (Adžić, 2018). Other critics say it is a concept that is very “Simplistic, poorly researched and poorly conceptualized” (Salama, 2001). There is a “lack of exact definition” (Driver, 2001) and it is merely seen as a popular fad in the academic circles (Adžić, 2018).

OL and knowledge creation are of extreme importance and deserve to be looked at carefully and in a smart manner in order to manage change and achieve better performance to overcome turbulent environments and move away from the simplistic ways we look at learning in modern organizations (Adžić, 2018).

According to Garvin (1993), there are three critical issues that need addressing in relation to the LO: Meaning, Management and Measurement. Once the “Three Ms” are resolved and addressed, it will give managers enough support to generate LO, without it, progress is unlikely (Garvin, 1993).

2.7 The Fifth Discipline

Senge (1990) mentions the instinctive capabilities humans have in relation to learning. He states that we are all learners and it is a human being’s nature to learn. In his view, historically, management techniques did not propagate a learning environment to understand, collate and share the available skills and knowledge. The most important reason for building a LO is to use the learning available to build a strategically adaptive and sustainable future for the organization and its employees.

The Learning Organisation differentiates from a Traditional Organization in five vital ways. The five basic Disciplines of the Learning Organization as categorised by Senge (1990) are noted below:

1. **Systems Thinking:** is the ability to identify interrelationships that gives form to the behaviour of systems instead of focusing only on linear cause-effect chains.
2. **Personal Mastery:** encouragement of reflection, self-development to continually clarify and deepen personal vision towards personal improvement to reach chosen purposes and goals.

3. **Mental Models:** deeply held internal pictures of the world and how it works in order to reflect, clarify and improve it and note how actions and decisions can be shaped by them.
4. **Building Shared Vision:** foster a strong sense of commitment throughout shared pictures of the future that can foster genuine enrolment using principles and practices rather than just generate compliance.
5. **Team Learning:** revise the way the organization is developing its collective thinking skills focusing on group learning activities instead of developing team processes (Senge, 1990; Yang, et al., 2004).

In any LO, the above disciplines will constantly change and improve along the journey as it is individually nurtured. Proficiency in the disciplines will developed as new patterns and learning are acquired over time (Senge, 1990).

2.8 Strategies to build a Learning Organization

Senge (1990) lists the guiding points below in order to become a LO:

- Thinking and acting strategically is the first step for leaders, at all levels, when it comes to creating a LO.
- Taking into consideration the aim of the organisation and knowing where to focus attention.
- Conducting an assessment with the intention to understand the level of the LO.
- Integrate learning and working: a way to naturally incorporate learning into day to day work and encourage reflection, such as What happened? What did we expect and What can we learn from it?
- Starting from where you are and with whoever is there: taking immediate action to react/predict future and current needs.
- Becoming Bicultural: never losing touch with global environments, working on language and strategies.

- Creating practice fields to intensify learning: by minimizing conflict through discussion and formal management structures already in place.
- Connect with the core of the business: to develop guiding ideas and intentions moisturised by a fertile soil.
- Building learning communities: connecting aspirations to organizational essence generates a community and a relationship based on shared meanings.
- Working with “the other”: to increase chances to partner with those who are different and embrace diversity of viewpoints as a key initiative that leads to strategic change.
- Develop learning structures: in order to facilitate training to frontline workers giving them the necessary knowledge and authority to improve their own processes.

2.9 Learning and Development (L&D)

Definition

Learning and Development is one of the HR activities that is directed at helping to maximise learning and growth in a given organization throughout the implementation of different courses, events and practices. Many theories have been developed and they can be categorized according to the level that it analyses and emphasise the learning process: individual, collective and workplace/organizational levels (Stewart & Cureton, 2014).

In general, an effective L&D practice and implementation needs to provide evidence of the value of the training intervention (Stewart & Cureton, 2014) by providing measures that proofs at to what extend it can impact, positively, adding value to the business.

The measurement needs to be clear and measured in relevant ways, such as capturing which training programs generated performance improvement (Stewart & Cureton, 2014) that lead to changes in behaviour that helped increasing revenue or helped reducing cost and generates better return on

investments contributing to the company's success (Easterby-Smith, 1986; Stewart & Rigg, 2011).

Then, needs to be re-evaluated in order to be improved, guaranteeing its main goal: to provide a learning experience to the employee despite difficulties and challenges when assessing the extent to which learning took place and control if training managers or practitioners as performing "up to standard" (Easterby-Smith, 1986),

2.9.1 Approaches to effective L&D

The purpose of an organizations is to achieve positive outcomes on returns on investments on the products and services offered throughout the organization of its workforce, available resources and investments (Watson, 2006) therefore the need for the strategy to be aligned with the purpose, direction and performance of the organization (Stewart & Rigg, 2011). Some strategies below:

- **Deliberate Strategy:** is about the intended direction planned by owners, managers, CEOs and/or board members of the organization, normally laid out following a staged heading (Values – Vision (or Mission) – Aims – Strategic Priorities – Actions – Objectives & Targets / Business Unit / Team / Individual > Measures of Performance).
- **Emergent Strategy:** are fluid strategies that combines at least some planning with incrementalism and experimentation to reflect rapid changes in environment such as rising costs, competition or lack of skilled workforce (Watson, 2006),
- **Cost Reduction Strategy:** this strategy can be seen as a good strategy for organisations with low skilled workforce and where employer brand is not seen as important, in those type of organizations, the training of its employees is considered a cost and not an investment, Instead of completely cutting training, this can be kept to a minimum where the company focus on absolute priorities

(training on healthy and safety for example) that will keep the organization legally compliant.

- **Resource-based Strategy:** the practices and decisions of this type of organisation will involve the attract, recruit, reward, engage, develop, exit and any other activity that that affects the employment relationship (considered in literature as Human Resource Management - HRM) and play an important part on the company's capacity to adapt, grow, compete and are central for employer brand, positively adding to organisation's long-term survival.
- **Competitive Strategy:** this strategy has two (2) traditions of thought, one focused on the generic competitive strategies (leading on cost, focus on niche or differentiation) and the other is a combination of resource-based strategy combined with the development of internal resources such as technology, supply chain management, capital, intellectual property, employee skills, and capabilities including knowledge management (Penrose 1959; Kay 1993; and Hamel & Prahalad 1994) leading to a hard-to-copy set of capabilities (Stewart & Rigg, 2011).

Whichever the strategy picked by the Strategic Partner / Change Agent / Administrative Expert, it needs to align those HR activities not only internally with each other, but externally align it with the organization's strategic direction in order to effectively become part of the strategic team (Stewart and Rigg, 2011). RH then will be able to implement L&D initiatives, offering a crucial collaboration for the organization and optimizing success to provide their business value and create a culture of alignment to business goals.

2.9.2 Learning Strategies

This research has shown the importance of learning for an organization and how it can positively impact the business offering efficient support to the organization in order to meet new challenges, improve practices, technologies and methods, maintaining competitiveness and grow.

For the purpose of this study, the author will present three (3) learning strategies that can be explored in the SME's scenario and which can help SMEs walking towards achieving continuous learning.

- **Formal learning strategy** is a structured training that contains a set of specific goals and evaluation criteria established (Stewart & Rigg, 2011). It can be done through workshops, lectures, seminars, presentations and classroom works, but it can to have a limited reach when it comes to transferring the formal course to apply into real work practices (Örtenblad, 2004).
- **Informal learning strategy** learning from experience on the job is one of the most common ways of informal learning (Örtenblad, 2004). The on-the-job learning and knowledge are context-dependent on the eyes of the learning organization (Stewart & Cureton, 2014) and are casual and many times not planned. Due to its fluidity and organic nature people sometimes do not even notice they are been trained. The lack of training goals makes it hard to confirm if they were effective as there were no measurements in place. Recently was discovered a high correlation ($p = .000$ to $p = .005$) between informal and incidental learning opportunities available and the participation on this activity with all of the seven dimensions of a learning organization (Nurmala, 2014, as cited in Watkins & Kyoungshin, 2018). This relationship is supported by other authors (Watkins & Kyoungshin, 2018) who, by collecting data from small and medium-sized organizations, found that “informal learning opportunities on the job created as part of a multiorganizational learning organization initiative led to organizational performance benefits “ (Kim & Marsick, 2013).
- **Knowledge Management:** it has been suggested that Knowledge sharing correlates positively to innovation and organizational performance (Wang & Wang, 2012) because it is the capacity to generate, collect, interpret and disseminate information across (Garvin, 2008). Knowledge management practices must be used in

a dynamic manner in order to keep fitting for purpose and can not be seen as the only way to improve the organization's performance.

2.9.3 Learning and Developing in Ireland

Ireland is well known for its well-educated workforce and for the good reputation on the high-quality education offered in the Country (Education in Ireland, 2018). Ireland has also been ranked the most competitive economy in the world by the IMD Competitiveness Ranking report, ranked as the 6th (2017), 12th (2018) and 7th (2019) best economies in the world (IMD, 2017; IMD 2018; IMD 2019), those two factors combined together have a big and very positive impact in a whole Country's economy.

National agency, Skillnet Ireland, an agency focused on the facilitation and promotion of workforce learning in Ireland through both formal and informal learning, themselves only are responsible for having assisted 16,462 companies and have trained 56,182 people in 2018 (56% male and 44% female), the numbers are on the rise when compared to 2017, where 49,194 people undertook training (58% male and 42% female) (Skillnet, Ireland, 2017; Skillnet, Ireland, 2018).

For those reasons, the author believes on the importance for organizations to keep investing in training and development of their workforce, the economy is spinning at a pace never ever seen before but it tends to slow down in Ireland in the next upcoming years (The National Competitiveness Council , 2018), technology is changing faster and faster, and, in order to keep ahead, or at least the same pace as competitors, it is important to all people in the organization create the habit of learning, make constant development part of their every-day routine to keep innovating and finding new and better ways to do their jobs.

2.10 Knowledge-Based Economy

The Knowledge-Based Economy label is giving to the most advanced practice of production and innovative applications in today's day. It comprises of the combination of technology and knowledge to change and enhance productivity and growth (Unger, 2018).

Its key feature is greater dependence on intellectual capabilities (learning), information and high skills levels rather dependency on physical processes or natural resources. It also generates increasingly need for access to all of this by business and public sectors (Unger, 2018).

SMEs have specific attributes that helps with the adaptation process when entering the knowledge-based economy: "In a knowledge-based economy context, SMEs should act as learning entities, by developing the most important resources they own: the human resources" (Popescu, et al., 2010).

Perhaps taking advantage of future trends and getting ready to adapt can be an advantage to companies of all sizes, but easier to SMEs to accommodate and implement as "...unlike larger organizations, SMEs enjoy a number of advantages, such as small number of employees, which facilitate communication and propagation of change within the organization, a smaller proportion of total tangible assets, economic and relatively simple management, adaptability and flexibility to changing external environment, entrepreneurial spirit, faster growth, development potential, but more intense interpersonal relationships and greater cohesion" (Popescu, et al., 2010).

2.11 Irish Services Sector and Future Challenges

A 2017 Ibec Report for Retail in Ireland demonstrated the intention of Irish retailers on planning to inject big investments back on its organizations. Major investments to be made is in its workforce and their skills, and in stores refurbishments and technologies in order to respond to the

competitiveness market generated in the industry from online trading and Brexit (Retail Ireland - Ibec, 2017).

Companies in the tertiary sector are demonstrating a great capacity to adapt to the most recent customer's demands and are investing more towards `omnichannels`, embracing new technologies and improving in-store experiences, proofing the need to business owners to prepare for the Knowledge-Based Economy (INSPIRE, 2014).

The demonstrated higher expectation from customers for a more efficient, quicker and better quality service, combined to the increasing number of Irish people that are now adept to online shopping (numbers going up and around 75% of line transactions go to foreign websites) it negatively impacts Irish jobs, business and the State's Tax revenue so such investments are crucial for the Irish retailers in the coming years (Retail Ireland - Ibec, 2017).

Chapter 3

Research Question

The researcher aims to measure the perceptions of managers and non-managers in Irish SMEs to understand the strengths and levels of the Learning Culture within.

By trying to establish a connection between the perception of managers and non-managers learning practices, the author will investigate if Irish SMEs can be considered Learning Organizations and if the Learning concept has any relationships with other organizational variables for the SMEs investigated here.

Despite the increasing amount of studies looking into Learning, the focus is still on Large organizations. There are few studies related to Learning in SMEs which suggests that it is not being explored and utilized to its full potential in companies.

The research question investigated here is: “Are Irish SME’s Learning Organizations?”. In order to further investigate this, the researcher will also investigate any relationship with the below sub-questions:

- How Irish SMEs are perceived by its individuals and their perceptions about their capacity to develop Learning in such environments?
- What are the main opportunities for Irish SMEs in relation to the 7 Dimensions?
- Is there a relationship between Learning practices and the SME’s overall performance?
- What are the perceptions of employees in Irish SMEs in relation to Learning culture and practices?

After analysing all those variants, it is the researcher’s expectation to be able to recommend a plan of action that can be adapted and used in an effective way by SMEs in Ireland and possibly, worldwide. The author expects to be able to sincerely offer a small but meaningful contribution to the continuation of the studies focused on Learning in SMEs.

3.1 Measurement Tool

By studying the Dimensions of the Learning Organization Questionnaire (DLOQ) and focussing on the 7 Dimensions of the workplace learning environment, the researcher will be able to measure important changes in Irish SMEs' cultures, systems, climates, and structures, those elements that can impact whether individuals learn, creating the learning culture (Marsick & Watkins, 1997). The 7 Dimensions of the Learning Organizations are:

1. Create Continuous Learning Opportunities
2. Promote Inquiry and Dialogue
3. Encourage Collaboration and Team Learning
4. Create Systems to Capture and Share Learning
5. Empower People Toward a Collective Vision
6. Connect the Organization to the Environment
7. Provide Strategic Leadership for Learning

The extended version complies of the analysis of two additional dimensions: Financial Performance and Knowledge Performance.

| Name of the Instrument | Holistic | Profound | Tested |
|---|----------|----------|--------|
| Pedler et al. (1991, 1997): The Learning Company Questionnaire | Yes | Yes | - |
| Mayo and Lank (1994): The Complete Learning Organization Benchmark | Yes | Yes | - |
| Tannenbaum (1997): Learning Environment Survey | - | Yes | Yes |
| Pearn et al. (1995): The Learning Audit | - | - | - |
| Sarala and Sarala (1996): Recognizing Your Organization | - | Yes | - |
| Redding and Catalanello (1997): Learning Organization Capability Assessment | Yes | - | - |
| Watkins and Marsick (1998): Dimensions of the Learning Organization Questionnaire | Yes | Yes | Yes |

Table 2: Comparison of learning organization Questionnaires (adapted from Moilanen, 2001).

DLOQ is the only questionnaire that fulfil the three aspects in the comparison table below (Table 2) from Moilanen (2001): 'Holistic',

'Profound' and 'Tested', making this questionnaire valid, deep and comprehensive (Moilanen, 2001; Jamali et al., 2009).

The DLOQ by Watkins and Marsick (1997, 1999) analyses the 7 Dimensions of the Learning Organization.

The DLOQ was selected to be used within this research as it has proven itself as a scientifically valid and reliable method (Yang, Watkins, & Marsick, 2004, Marsick, 2013).

Encompassing individual, organizational, global and team structures, the questionnaire is an effective tool to help assess Learning Organizations (Marsick and Watkins, 2003; Yang, 2003).

Chapter 4

Research Methodology

4.1 Introduction

Within this chapter the author will reveal the research methodology used in the study and explain why this is the most reliable and prevalent approach for the research. It will include the research philosophy, the approach, the strategy and the methods used to answer the research questions. The aggregated data and theoretical analysis will help provide conclusions for the principal question of this project.

Information as to how the data was collected, how the information was be used and analysed, and the methodologies used in previous similar researches will be used as guide. The end of this chapter will include the author's comments in relation to the study's strengths and limitations in relation to the research methodology used.

4.2 Research Philosophy

4.2.1 Epistemology

Epistemology is the study of knowledge and how to reach it. It is seen as “profoundly influenced by a natural science approach to what should count as acceptable knowledge” and it is directly related to the principle of Positivism because it also encourages the “application of methods of natural science to the study of social reality and beyond“ (Bryman, 2012).

4.2.2 Approach: Positivism

The term Positivism stretches beyond the study of social reality and embraces the below principles explained by Bryman (2012):

- **Principle of Phenomenalism** – “Only phenomena and hence knowledge confirmed by the senses can genuinely be warranted as knowledge”.

- **Principle of Deductivism** – “The purpose of theory is to generate hypotheses that can be tested and that will thereby allow explanations of laws to be assessed”.
- **Principle of Inductivism** – “Knowledge is arrived at through the gathering of facts that provide the basis for laws”.
- **Principle of Objectivism** – “Science must (and presumably can) be conducted in a way that is value free”.

Although Positivism is commonly associated with quantitative research, its use is sometimes described as restrictive. However, the importance of this strategy is to move from theory to data and to help provide material to develop and implement laws (Bryman, 2012).

Some of the disadvantages observed when it comes to positivism is that the approach is based on the experience as a trusted and valid source of knowledge, not taking into consideration other basic concepts, such as cause, time and space, which are not based on experiences.

4.3 Research Method

In this study, the researcher has gathered Quantitative data with Objective meaning. The Epistemological orientation is Positivism based on a Natural Science model combined with a deductive approach to the relationship between theory, research and strategy with a focus on Theory testing approaches (Bryman, 2012).

A macro-approach will be taken, using one validated questionnaire in order to support moving from Theory to Data (Deduction) gathering adequate quantitative data to establish the relationship and differences between groups and conditions and generate a conclusion.

“The purpose and goal of a survey is to describe specific characteristics of a large group of persons, objects, or institutions and to understand present conditions, rather than the effects of a particular intervention” (Park & Park, 2016).

As this study focuses on the current moment and occasion, quantitative research has been selected as the most appropriate strategy. This does not invalidate the possible integration of information from any qualitative data based future studies.

Although epistemology and ontology are connected with research methods, these connections are not deterministic and the research method in general, can and will be, more fluid and autonomous than what one single strategies' commitment can cover (Bryman, 2012).

4.3.1 Sample details and Selection

The sample of the population is an important factor when completing a research (Park & Park, 2016) and the group chosen for this research needs to be well-defined in order to have its representativeness validated, therefore, SMEs Business owners in Ireland and employees of Irish SMEs were contacted.

These were firstly selected by the easy access that the researcher had to 15 Business owners from different businesses in the tertiary sector, and then, by contacting 100 employees within Irish SMEs consisting of people the researcher also had direct access to. In addition, different people across the county were also contacted using the internet, social media, websites that focused on research (Call for Participants) and by using the Snowball effect.

To be selected for this research, the subject studied needed to own a business in Ireland that holds up to 249 employees or be employed by one and be over 18 years old. No further restrictions were applied.

In total, the survey received 82 responses, of which 70 of the subjects were eligible for the overall aim of this project.

4.3.2 Research Design Overview

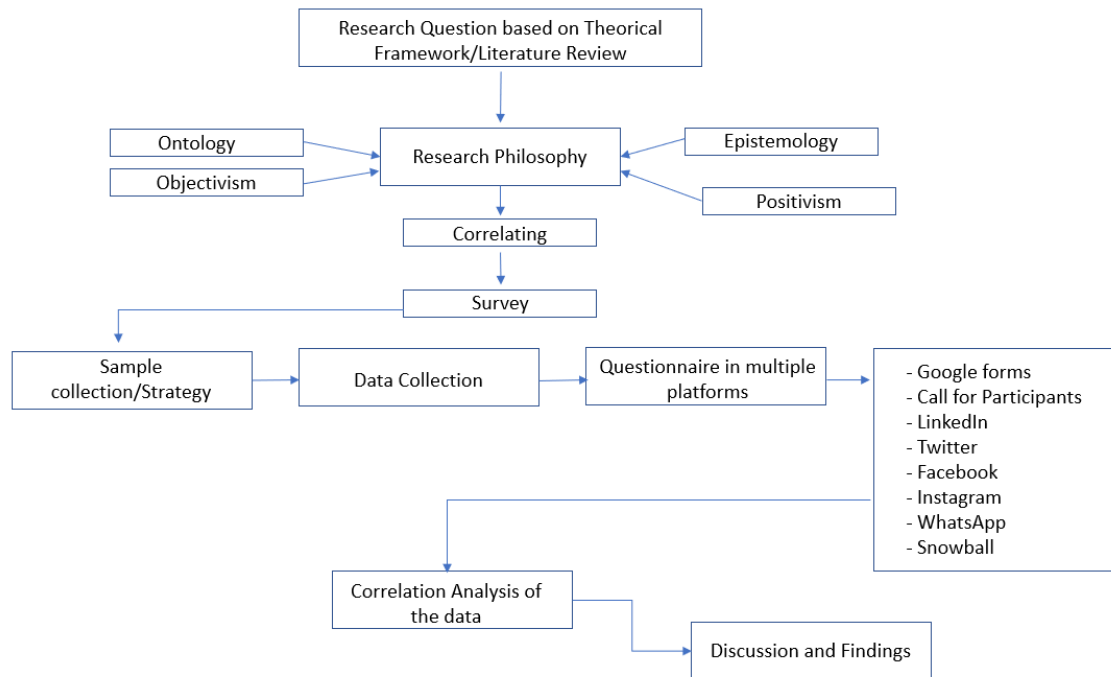


Figure 2: Research Design Overview

The figure above describes the set of methods and procedures used by the researcher and it is a representation of this study overview in which the steps denoted in the chart are discussed in other topics in this chapter.

4.4 Data Collection Methods

This research used Primary Data collection through methods of quantitative data collection and methods of correlation and mean analysis throughout the use of a validated and reliable questionnaire called Dimensions of the Learning Organization Questionnaire (DLOQ).

Quantitative method has the objective to look at social phenomena to predict and control outcomes, allowing the researcher the role to evaluate, measure and generalize the findings and encourage the replication of the same. Quantitative research is a good method for justification (Park & Park, 2016) which is what the outcome the researcher is aiming to prove.

In general, making comparisons with types of data and its findings is easier due to the type of research studied here, using the quantitative method. It is also a cheaper and quicker method to apply in relation to qualitative

research, however, this does not mean that the analysis is overly simplistic (Park & Park, 2016).

4.4.1 Reflective Statement

The researcher experienced different types of environments in organizations of all sizes during their work life, from organizations that view learning as a positive tool to and organizations that did not have any structured training in place at all and, somewhat, did not encourage this within.

The researcher has deeply benefited from experiences in her work life, and seen positive overall improvements when implementing training practices in teams that the researcher managed.

That means that it is possible that the personal approach to this research can contain personal bias, but being aware of this, it is the researcher's commitment to take this into consideration when analysing the results that are presented.

4.4.2 Strategy: Survey

The Dimensions of Learning Organizations Questionnaire (DLOQ), was emailed to entrepreneurs using an Online Survey Tool on Google Forms. It was shared in all social media platforms and also added onto the Call for Participants website in order to recruit more participants.

The Snowball effect method was widely encouraged by the researcher, where participants were asked to network and spread the word across their own circle of colleagues and friends to help reach out to the highest number of individuals who has the correct profile to complete the survey. The ISME (Irish Association of SMEs) also shared the link to the questionnaire on their Twitter page on the author's request.

Despite all efforts used to promote the survey, the author was only able to collect responses from 80 participants. This study can be viewed as a small

contribution to the field and be used as a foundation for further studies. Participation was voluntary and completely anonymous.

4.4.3 Dimensions of the Learning Organization Questionnaire (DLOQ)

The researcher will use a validated Structured Questionnaire, (DLOQ), adapted for an online format in an Online Survey Tool to collect and analyse the necessary data to identify if the learning culture in SMEs is present if there are differences in perceptions between managers and non-managers, assessing the Learning Organization.

The DLOQ questionnaire is organised into five sections and has a total of 60 statements. 43 of these are the main statements related to the overall employee's perception of their organization related to learning and general perceptions at an individual, organizational and team level. It has 13 additional questions to collect information about the organization's financial situation and demographics.

Participants were invited to fill in the questionnaire that uses the Likert scale, as the goal of the Likert scale is to "measure intensity of feelings about the area in question" (Bryman, 2012). Most of the items were measured for frequency on a six-point Likert scale ranging from 1 (Almost Never) to 6 (Almost Always).

Significant positive correlations between Dimensions of Learning Organisation and the organizational performance, such as financial, mission performance and knowledge, were found in a variety of studies (Kim, 2016; Watkins, 2017, Watkins & Kyoungshin, 2018).

The questionnaire was tested across different cultures and contexts (Hernandez and Watkins, 2003). In published studies the main finding is that the correlation across studies related to learning culture dimensions and performance can help the Human Resource Organizational Development leaders understand and acknowledge the importance of putting systems in place in order to offer support to continuous learning in their organizations (Watkins & Dirani, 2013), enabling the Learning

Organization to identify competencies that have the potential to drive fast organizational transformation and evolution (Marsick, 2013).

As briefly mentioned in Chapter 03, there are seven dimensions explored on the questionnaire, these are explained within the table below:

| Action imperative (dimension) | Definition |
|--|--|
| Create continuous learning opportunities (CL) | Learning is designed into work so people can learn on the job; opportunities are provided for ongoing education and growth |
| Promote inquiry and dialogue (DI) | People express their views and listen and inquire into the views of others; questioning, feedback, and experimentation are supported |
| Encourage collaboration and team learning (TL) | Work is designed to encourage groups to access different modes of thinking, groups learn and work together, and collaboration is valued and rewarded |
| Establish systems to capture and share learning (ES) | Both high- and low-technology systems to share learning are created and integrated with work, access is provided, and systems are maintained |
| Empower people toward a collective vision (EP) | People are involved in setting, owning, and implementing joint visions; responsibility is distributed close to decision making so people are motivated to learn what they are held accountable for |
| Connect the organization to its environment (SC) | People are helped to see the impact of their work on the entire enterprise, to think systemically; people scan the environment and use information to adjust work practices; and the organization is linked to its community |
| Provide strategic leadership for learning (SL) | Leaders model, champion, and support learning; leadership uses learning strategically for business results |

Table 3: Watkins and Marsick's Dimensions of a Learning Organization

Showing that there has been a conceptual change in building learning cultures and the growth in the importance of the Learning Organisation (Marsick, 2013).

4.5 Questionnaire introduction to respondents

The researcher adapted the Dimensions of the Learning Organization Questionnaire to an online format, using Google forms. The DLOQ was shared with the sample population using social media such as Twitter, Facebook, Instagram, LinkedIn and WhatsApp. It was also added to Call for Participants, a paid website focused on research across the globe.

The use of the Snowball effect was encouraged so the link to the form was shared by friends and participants in order to reach the highest number of eligible participants.

The link to the online questionnaire was also shared on the ISME (Irish Association of SMEs) twitter page which has over 8.000 followers broadening the reach of the research.

The link to the questionnaire was available from 08 June 2019 until 28 July 2019.

On the Call for Participants website, the Study Page recruited participants from 17 June 2019 until 10 July 2019. The page had 272 views of which 18 participants decided to take the survey. The website considers the number of participants undertook the survey even if they didn't finish the survey, which the researcher believes it happens to the majority of the participants coming from this source.

The researcher felt that there was some level of control as to who was participating and filling out the questionnaire, although, after analysing the data 10 out of 80 participants informed on question 58 of the questionnaire that their organizations had more than 249 employees. As such, the data from this sample was not considered in the final analysis as those employees did not fit the profile of SME employee/owners.

4.6 Analysis of the Data

Methods described here and the support of Deduction helped the researcher to move from Theory to Data on the findings of this research.

A combination of programs were used when preparing the data for analysis. After retrieving the information from Google forms, in excel format, the file was converted into CSV (Comma delimited) and then sent to R. A combination of Factor and Numerical data was used to produce the final results depending on the type of analysis required. Below is an overview of this process, already explained in detail within this chapter.

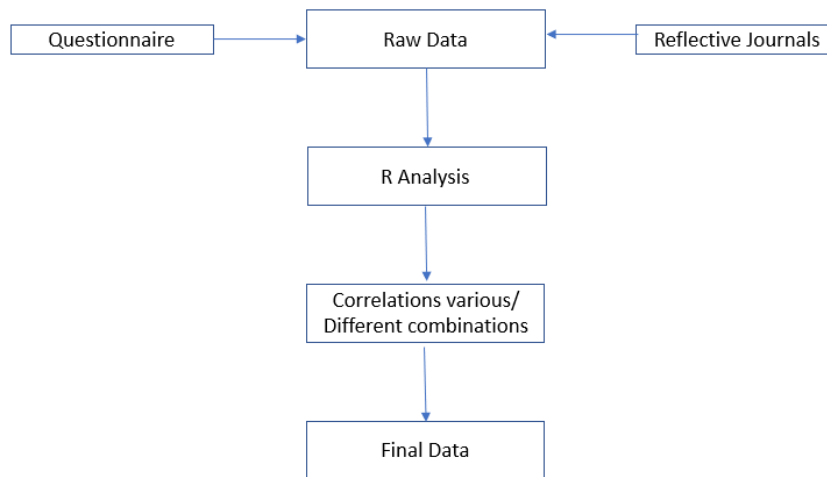


Figure 3: Correlation Analysis of the Data

4.7 Reliability and validity within the correlation approach

Quantitative reliability depends on the consistency of a measure of a concept. It also depends on three (3) main factors: Stability, Internal reliability and Inter-observer consistency, reflecting the researcher's ability to replicate the study and its findings (Bryman, 2012; Park & Park, 2016). This is analysed and explained further.

4.8 Ethical Considerations

The DLOQ was applied as an anonymous survey aligned with the ethical guidelines and procedures provided by NCI. The nature of the data collected did not request personal or identifiable information from the participants.

All information about the research was presented on the Participants Information Sheet that was provided to participants before starting the survey. This was followed by a mandatory field wherein Subjects were required to provide consent in order to proceed with the survey.

Participants were made aware that they could opt out at any time before or during the survey and were aware of the average length of time to complete the online questionnaire.

Chapter 5

Findings and Analysis

5.1 Background of participants

A total of 82 subjects participated in the survey, which 85% (70) of these were eligible and their perceptions were relevant for the main objective of this research. The participants consisted of a random sample from multiple organizations in Ireland. The descriptive analysis of the background of the eligible subjects is described below.

5.1.2 Descriptive Analysis

The first step of the research was to conduct a descriptive analysis of all variables, here, analysed as categorical variables. It is an important analysis to carry in order to understand the real sample size related to each section being studied. Conclusions from small sample sizes might not be accurate. See analysis below:

- Over 85% of the subjects work in the service sector, 2.85%, work in the educational sector (small sample), 2.85% work within non-profit organizations (small sample) and 8.57% of subjects work in manufacturing (small sample).
- 30% of the subjects reported that their organizations had an annual revenue under €500 thousand. 11.42% reported an annual revenue between €500 thousand and €1 million, 20% reported an annual revenue between €1 million and €10 million, 7.1% reported an annual revenue between €10 million and €43 million (small sample). 31.4% which formed the majority, reported that they did not know the annual revenue of their organizations.
- The subjects' roles in the organization included management 27.1%, non-management (hourly employee) 24.2%, non-management (technical /professional) 32.8%, owner or partner 14.2% and supervisor 1.42% (small sample).

- Their educational experiences ranged from graduate degree 52.8% to high school 24.2%, to undergraduate degree 20%, and 2.85% (small sample) did not complete high school.
- In relation to their organizations size, 35.7% work in Micro organizations 0 to 10 employees, 27.1% working on Small enterprises 10 to 49 employees and 37.1% are from Medium organizations 50 to 249 employees.
- The sample size of the eligible subjects (N= 70) were further divided into two (2) main groups, managers (n= 29) and non-managers (n= 41). The proportion is 58.6% (non-managers) and 41.4% (managers).

5.2 Interpreting the results on the DLOQ

When interpreting the results, it is important to remember that the questionnaire measures the *perceptions* of the people who participated in the survey (Marsick & Watkins, 1997), so the scores obtained here cannot be seen as an accurate picture of all SMEs in Ireland. That would require a much larger sample.

However, the use of the questionnaire can be seen as a starting point to the conversation around what people think about the seven (7) dimensions explored within the survey.

The best way to interpret the results is to look at the average response and the range or variation in response. Look at patterns when comparing responses within categories and compare lowest and highest averages side by side within each of the seven (7) Dimensions (Marsick & Watkins, 1997).

5.3 Analysis

5.3.1 Inferential test - Null Hypothesis

The results of each comparison hold a statistic called p-value. This statistic helps make conclusions on the viability of survey applied. If this value is higher than the significance level adopted, (error or α), it is possible to conclude that the H_0 (null hypothesis) is the true hypothesis, otherwise the H_1 (alternative hypothesis), is kept as the alternative hypothesis (Bryman, 2012). This is explored in further detail in the analysis.

5.3.2 t-Test and the Differences in Mean Score

The t-test is used to investigate any and all differences in scores between two groups of participants (managers and non-managers) on a variable (each of the seven (7) dimensions). The Shapiro-Wilk test was also considered, and a normality test was carried with the responses from the sample. The results are presented below.

When the p-value higher than 0.05, the normality hypothesis is considered satisfactory. The lower the p-value, the more the evidence indicates that the means for the responses within the categories differ (Royston, 1995). It is possible to state with 95% confidence that the means are deviations from the normal distribution when the p-value is lower than 0,05 (marked in red in the tables below).

5.3.3 Overall Results

A basic descriptive data analysis was completed in order to get a full understanding of the information on Means Score, Standard Deviation, and t-value. Results are compared between roles on the dimensions (Table 4) and overall (Table 5).

| Dimensions | Management | | Non-Management | | t-value | p-value | df |
|-----------------------|------------|-------|----------------|-------|---------|---------|--------|
| | Average | SD | Average | SD | | | |
| Continuous Learning | 3,764 | 1,582 | 3,582 | 1,227 | 0,655 | 0,515 | 59.264 |
| Dialogue & Inquiry | 4,305 | 1,801 | 3,890 | 1,634 | 1,531 | 0,131 | 63.076 |
| Team Learning | 4,379 | 1,054 | 3,874 | 1,866 | 1,827 | 0,072 | 62.963 |
| Embedded Systems | 3,362 | 1,260 | 3,325 | 1,197 | 0,126 | 0,900 | 65.534 |
| Empower People | 4,103 | 1,704 | 3,492 | 1,253 | 2,112 | 0,039 | 62.11 |
| System Connection | 4,339 | 1,814 | 3,805 | 1,427 | 1,824 | 0,073 | 62.275 |
| Strategic Leadership | 4,345 | 1,221 | 3,927 | 1,055 | 1,310 | 0,195 | 59.971 |
| Financial Performance | 4,402 | 1,442 | 3,736 | 0,876 | 2,808 | 0,007 | 53.547 |
| Knowledge Performance | 4,374 | 0,979 | 4,033 | 1,458 | 1,337 | 0,186 | 65.484 |

Table 4: Means (Average), Standard Deviations and t-Test Comparisons for Role in Organizations. N= 70, n (managers) = 29 and n (non-managers) = 41.

From this analysis, it is noted that, overall, Managers scored higher on all Dimensions then compared to Non-managers. That pattern is already identified within previous studies in that, the higher the role of the respondents, the more likely they will score the items higher (Marsick & Watkins, 1997) and that this is due to the way the Managers experiences those dimensions, which is just different from Non-managers.

In addition, Managers scored higher on Empowered People ($M= 4,103$, $SD= 1,704$) then Non-Managers ($M= 3,94$, $SD= 1,253$) $t(70) = 2,12$, $p < 0.05$. Managers scored higher on Financial Performance ($M = 4,402$, $SD = 1,442$) than Non-managers ($M=3,74$, $SD = 0.88$) $t(70) = 2,81$, $p < 0.05$.

This analysis concludes with 95% confidence that the difference between means on the two groups (managers and non- managers) are significant. Managers scored similar on Embedded Systems ($M= 3,362$, $SD= 1,26$) and Non-managers ($M=3,325$, $SD= 1,2$) $t(70) = 0,13$, $p > 0.05$.

| Dimension | Continuous Learning | Dialogue & Inquiry | Team Learning | Embedded Systems | Empower People | System Connection | Strategic Leadership | Financial Performance | Knowledge Performance |
|----------------|---------------------|--------------------|---------------|------------------|----------------|-------------------|----------------------|-----------------------|-----------------------|
| Sample Average | 3.673 | 4.098 | 4.127 | 3.344 | 3.798 | 4.072 | 4.136 | 4.069 | 4.204 |

Table 5: Overall DLOQ Means (Average) from Sample (N= 70).

Overall means range between 3.3 and 4.1, and between 3.3 and 4.37 within different roles. This is the result of the overall patterns on the perceptions of the sample population in relation to the strength of the learning culture in their organizations

The means collected from this study with Irish SMEs were slightly lower when compared with the meta-analysis made by Watkins and Dirani (2013). On that study, which was ran across 5 countries (Columbia, Korea, Malaysia, Lebanon and USA), and the sample size $N = 6,412$, the means ranged between 3.8 and 4.52 for all means (Watkins & Dirani, 2013).

Irish SMEs are showing a slight lower range, consequently, a weaker learning culture when compared to the overall means from the five nationalities mentioned above.

5.4 Responses

5.4.1 Chi-Square Test for each statement comparing Managers and Non-Managers

The Chi-square test was also applied in order to find the relationship between categorical variables and the *proportions* of each association. The higher the chi-value (χ) is, the lower the p-value will be, which gives more evidence that the groups responses are different (proportionally).

The proportions table for responses on items 1,2,3,4,5 and 6 are between $n = 29$ (Managers) and $n = 41$ (Non-Managers), totalling $N = 70$ responses on 55 statements. A p-value lower than 0.05 indicates differences in responses between Managers and Non-Managers have a significance level of 5%.

5.4.1 Continuous Learning – Create continuous learning opportunities

“Learning is designed into work so that people can learn on the job; opportunities are provided for ongoing education and growth” (Marsick & Watkins, 1997).

| Dimension | Statements | Role | 1 | 2 | 3 | 4 | 5 | 6 | χ | p-value | Average |
|---------------------|--|----------------|------------|------------|------------|------------|------------|------------|--------|---------|---------|
| CONTINUOUS LEARNING | 1- In my organization, people openly discuss mistakes in order to learn from them. | Management | 0,069 (2) | 0,172 (5) | 0,138 (4) | 0,207 (6) | 0,138 (4) | 0,276 (8) | 1,273 | 0,938 | 4,000 |
| | | Non-Management | 0,073 (3) | 0,122 (5) | 0,122 (5) | 0,244 (10) | 0,220 (9) | 0,220 (9) | | | 4,073 |
| | 2- In my organization, people identify skills they need for future work tasks. | Management | 0 (0) | 0,138 (4) | 0,207 (6) | 0,241 (7) | 0,207 (6) | 0,207 (6) | 4,184 | 0,523 | 4,138 |
| | | Non-Management | 0,098 (4) | 0,122 (5) | 0,122 (5) | 0,293 (12) | 0,220 (9) | 0,146 (6) | | | 3,854 |
| | 3- In my organization, people help each other learn. | Management | 0 (0) | 0,034 (1) | 0,138 (4) | 0,207 (6) | 0,241 (7) | 0,379 (11) | 0,903 | 0,970 | 4,793 |
| | | Non-Management | 0,024 (1) | 0,049 (2) | 0,122 (5) | 0,220 (9) | 0,244 (10) | 0,341 (14) | | | 4,634 |
| | 4- In my organization, people can get money and other resources to support their learning. | Management | 0,414 (12) | 0,172 (5) | 0,138 (4) | 0,069 (2) | 0,069 (2) | 0,138 (4) | 4,795 | 0,441 | 2,621 |
| | | Non-Management | 0,366 (15) | 0,122 (5) | 0,122 (5) | 0,146 (6) | 0,195 (8) | 0,049 (2) | | | 2,829 |
| | 5- In my organization, people are given time to support learning. | Management | 0,103 (3) | 0,069 (2) | 0,379 (11) | 0,172 (5) | 0,103 (3) | 0,172 (5) | 7,795 | 0,168 | 3,621 |
| | | Non-Management | 0,146 (6) | 0,293 (12) | 0,171 (7) | 0,122 (5) | 0,122 (5) | 0,146 (6) | | | 3,220 |
| | 6- In my organization, people view problems in their work as an opportunity to learn. | Management | 0,034 (1) | 0,069 (2) | 0,241 (7) | 0,310 (9) | 0,172 (5) | 0,172 (5) | 3,207 | 0,668 | 4,034 |
| | | Non-Management | 0,146 (6) | 0,098 (4) | 0,244 (10) | 0,268 (11) | 0,146 (6) | 0,098 (4) | | | 3,463 |
| | 7- In my organization, people are rewarded for learning. | Management | 0,310 (9) | 0,103 (3) | 0,138 (4) | 0,138 (4) | 0,207 (6) | 0,103 (3) | 3,291 | 0,655 | 3,138 |
| | | Non-Management | 0,293 (12) | 0,146 (6) | 0,146 (6) | 0,220 (9) | 0,073 (3) | 0,122 (5) | | | 3,000 |

Table 6: Continuous Learning

Lowest (2.6/2.8): statement number 4, means to support their learning, is confirmed with answers on the statement number 7, rewards for learning. It shows a low encouragement towards learning, there is little recognition for individual learning and team learning as per answers on statement number 18, rewards for achievement as a team/group. Overall more opportunities for ongoing training and development could be offered.

Statement number 4 has the lowest average between Non-managers across all statements.

Highest (4.7/4.6): statement number 3, people help each other learn, that is one of the main types of informal training (Örtenblad, 2004), a learning characteristics noted in SMEs it is related to statement number 1, where it shows they are open to discuss mistakes in order to learn from them, that is a characteristic of knowledge management (Wang & Wang, 2012). On other hand, in embedded systems, statement number 24 shows that the low score from Managers and Non-managers (3.5/3.3) states the opposite, where the organization does not make their lessons available. Work on

building trust and having consistency is a two-way street. It is important to share information so that the same mistakes are not repeated.

5.4.2 Dialogue and Inquiry – Promote inquiry and dialogue

“People gain productive reasoning skills to express their views, and the capacity to listen and inquire into the views of others; the culture is changed to support questioning, feedback and experimentation” (Marsick & Watkins, 1997).

| Dimension | Statements | Role | 1 | 2 | 3 | 4 | 5 | 6 | χ | p-value | Average |
|----------------------|--|----------------|-----------|-----------|------------|------------|------------|------------|--------|---------|---------|
| DIALOGUE AND INQUIRY | 8- In my organization, people give open and honest feedback to each other. | Management | 0,069 (2) | 0,103 (3) | 0,207 (6) | 0,345 (10) | 0,103 (3) | 0,172 (5) | 1,933 | 0,858 | 3,828 |
| | | Non-Management | 0,049 (2) | 0,171 (7) | 0,293 (12) | 0,244 (10) | 0,073 (3) | 0,171 (7) | | | 3,634 |
| | 9- In my organization, people listen to others' views before speaking. | Management | 0,069 (2) | 0,103 (3) | 0,172 (5) | 0,276 (8) | 0,345 (10) | 0,034 (1) | 9,099 | 0,105 | 3,828 |
| | | Non-Management | 0,146 (6) | 0,073 (3) | 0,366 (15) | 0,122 (5) | 0,171 (7) | 0,122 (5) | | | 3,463 |
| | 10- In my organization, people are encouraged to ask "why" regardless of rank. | Management | 0,103 (3) | 0,103 (3) | 0,138 (4) | 0,207 (6) | 0,207 (6) | 0,241 (7) | 4,652 | 0,460 | 4,034 |
| | | Non-Management | 0,122 (5) | 0,22 (9) | 0,244 (10) | 0,122 (5) | 0,171 (7) | 0,122 (5) | | | 3,366 |
| | 11- In my organization, whenever people state their view, they also ask what others think. | Management | 0,034 (1) | 0,138 (4) | 0,138 (4) | 0,241 (7) | 0,31 (9) | 0,138 (4) | 1,517 | 0,911 | 4,069 |
| | | Non-Management | 0,073 (3) | 0,122 (5) | 0,22 (9) | 0,195 (8) | 0,293 (12) | 0,098 (4) | | | 3,805 |
| | 12- In my organization, people treat each other with respect. | Management | 0 (0) | 0 (0) | 0,172 (5) | 0 (0) | 0,241 (7) | 0,586 (17) | 12,856 | 0,025 | 5,241 |
| | | Non-Management | 0,024 (1) | 0,024 (1) | 0,049 (2) | 0,268 (11) | 0,22 (9) | 0,415 (17) | | | 4,878 |
| | 13- In my organization, people spend time building trust with each other. | Management | 0,034 (1) | 0,069 (2) | 0,069 (2) | 0,103 (3) | 0,31 (9) | 0,414 (12) | 8,623 | 0,125 | 4,828 |
| | | Non-Management | 0,073 (3) | 0,024 (1) | 0,171 (7) | 0,268 (11) | 0,293 (12) | 0,171 (7) | | | 4,195 |

Table 7: Dialogue and Inquiry

Lowest (3.8/3.4): Statement number 9 is directly related to the second lowest scored statement (number 8) within this dimension. It is important note is to understand why the Non-manager subjects responses to statement number 10 differs so much from that of the Managers. Non-managerial subjects are not comfortable in expressing their views, perhaps due to hierarchy barriers. The differences between statement number 8 compared to number 1 also shows that there is a possible lack of trust in the climate of the organization.

Highest (5.2/4.8): Statement number 12 is directly related to the second highest scored statement (number 13) within this dimension. However, when looking at the low score on statement number 9 again it raises the following paradox: How can we award high scores to ‘treating each other with respect’ and ‘building trust’ (statements 12 and 13) but award a low score to ‘listening to others’ views’ (statement 9), which is a key element to

building both respect and trust. Another important point to note is the range in responses between the two groups on statement 12, where the proportions have proven to be different according to p-value. Managers scored differently on statement 12 than Non-managers χ^2 (5*, N = 70) = 12.85, $p = < .05$. The Null hypothesis is not valid anymore and the Alternative Hypothesis is correct. There are differences in perceptions within groups.

Statement number 12 has the highest average results between non-managers across all statements in the questionnaire.

5.4.3 Team Learning – Encourage collaboration and team learning

“Work is designed to use groups to access different modes of thinking; groups are expected to learn together and work together; collaboration is valued by the culture and rewarded” (Marsick & Watkins, 1997).

| Dimension | Statements | Role | 1 | 2 | 3 | 4 | 5 | 6 | χ^2 | p-value | Average |
|---------------|---|----------------|-----------|-----------|------------|------------|------------|------------|----------|---------|---------|
| TEAM LEARNING | 14- In my organization, teams/groups have the freedom to adapt their goals as needed. | Management | 0,034 (1) | 0,172 (5) | 0,034 (1) | 0,345 (10) | 0,207 (6) | 0,207 (6) | 12,083 | 0,034 | 4,138 |
| | | Non-Management | 0,122 (5) | 0,049 (2) | 0,293 (12) | 0,268 (11) | 0,098 (4) | 0,171 (7) | | | 3,683 |
| | 15- In my organization, teams/groups treat members as equals, regardless of rank, culture, or other differences. | Management | 0 (0) | 0,069 (2) | 0,034 (1) | 0,034 (1) | 0,172 (5) | 0,69 (20) | 8,841 | 0,116 | 5,379 |
| | | Non-Management | 0,024 (1) | 0,073 (3) | 0,073 (3) | 0,268 (11) | 0,122 (5) | 0,439 (18) | | | 4,707 |
| | 16- In my organization, teams/groups focus both on the group's task and on how well the group is working. | Management | 0 (0) | 0,103 (3) | 0,103 (3) | 0,241 (7) | 0,207 (6) | 0,345 (10) | 4,291 | 0,508 | 4,586 |
| | | Non-Management | 0,049 (2) | 0,049 (2) | 0,146 (6) | 0,317 (13) | 0,244 (10) | 0,195 (8) | | | 4,244 |
| | 17- In my organization, teams/groups revise their thinking as a result of group discussions or information collected. | Management | 0 (0) | 0,138 (4) | 0,207 (6) | 0,241 (7) | 0,138 (4) | 0,276 (8) | 3,513 | 0,621 | 4,207 |
| | | Non-Management | 0,073 (3) | 0,146 (6) | 0,220 (9) | 0,195 (8) | 0,195 (8) | 0,171 (7) | | | 3,805 |
| | 18- In my organization, teams/groups are rewarded for their achievements as a team/group. | Management | 0,103 (3) | 0,103 (3) | 0,207 (6) | 0,241 (7) | 0,138 (4) | 0,207 (6) | 2,128 | 0,831 | 3,828 |
| | | Non-Management | 0,098 (4) | 0,171 (7) | 0,268 (11) | 0,171 (7) | 0,171 (7) | 0,122 (5) | | | 3,512 |
| | 19- In my organization, teams/groups are confident that the organization will act on their recommendations. | Management | 0,034 (1) | 0,103 (3) | 0,207 (6) | 0,172 (5) | 0,310 (9) | 0,172 (5) | 6,688 | 0,245 | 4,138 |
| | | Non-Management | 0,195 (8) | 0,171 (7) | 0,146 (6) | 0,220 (9) | 0,171 (7) | 0,098 (4) | | | 3,293 |

Table 8: Team Learning

Lowest (3.8/3.5): Statement number 18 is consistent when it comes to lack of recognition/reward as per statements 4 and 7. How are people motivated to use those resources? Also, the perception of the non-managers on statement number 19 shows a large gap between their perceptions and their manager's perceptions in relation to support from the organization when it comes to listening to employees. On statement number 14, the proportions of responses are not the same. Managers scored differently on statement 14 than Non-managers χ^2 (5*, N = 70) = 12.08, $p = < .05$. In this

case, the Null hypothesis is also not valid, and the alternative Hypothesis is correct. There are differences in perceptions within groups.

Highest (5.3/4.7): A high score on statement number 15 allows sharing experiences and different ways of thinking. Treating members equally helps maintain a good environment and a collaborative working group, which was also scored high on statement 16. Perhaps if there is a bigger focus on giving honest feedback, as it seems that the atmosphere is favourable, it will improve dialogue within.

Statement 15 has the highest average between Managers across all the statements within the questionnaire.

5.4.4 Embedded Systems – Establish systems to capture and share learning

“Both high and low technology systems to share learning are created and integrated with work; access is provided; and systems are maintained” (Marsick & Watkins, 1997).

| Dimension | Statements | Role | 1 | 2 | 3 | 4 | 5 | 6 | χ | p-value | Average |
|------------------|--|----------------|------------|------------|------------|------------|------------|-----------|--------|---------|---------|
| EMBEDDED SYSTEMS | 20- My organization uses two-way communication on a regular basis, such as suggestion systems, electronic bulletin boards, or town hall/open meetings. | Management | 0,138 (4) | 0,207 (6) | 0,241 (7) | 0 (0) | 0,207 (6) | 0,207 (6) | 10,675 | 0,058 | 3,552 |
| | | Non-Management | 0,171 (7) | 0,244 (10) | 0,073 (3) | 0,22 (9) | 0,146 (6) | 0,146 (6) | | | 3,366 |
| | 21- My organization enables people to get needed information at any time quickly and easily. | Management | 0,034 (1) | 0,069 (2) | 0,276 (8) | 0,207 (6) | 0,103 (3) | 0,31 (9) | 6,008 | 0,305 | 4,207 |
| | | Non-Management | 0,073 (3) | 0,098 (4) | 0,244 (10) | 0,195 (8) | 0,268 (11) | 0,122 (5) | | | 3,854 |
| | 22- My organization maintains an up-to-date data base of employee skills. | Management | 0,31 (9) | 0,172 (5) | 0,172 (5) | 0,103 (3) | 0,103 (3) | 0,138 (4) | 1,830 | 0,872 | 2,931 |
| | | Non-Management | 0,22 (9) | 0,22 (9) | 0,146 (6) | 0,146 (6) | 0,171 (7) | 0,098 (4) | | | 3,122 |
| | 23- My organization creates systems to measure gaps between current and expected performance. | Management | 0,138 (4) | 0,138 (4) | 0,310 (9) | 0,172 (5) | 0,172 (5) | 0,069 (2) | 2,501 | 0,776 | 3,310 |
| | | Non-Management | 0,195 (8) | 0,146 (6) | 0,195 (8) | 0,195 (8) | 0,122 (5) | 0,146 (6) | | | 3,341 |
| | 24- My organization makes its lessons learned available to all employees. | Management | 0,138 (4) | 0,172 (5) | 0,207 (6) | 0,138 (4) | 0,172 (5) | 0,172 (5) | 3,899 | 0,564 | 3,552 |
| | | Non-Management | 0,195 (8) | 0,098 (4) | 0,195 (8) | 0,293 (12) | 0,098 (4) | 0,122 (5) | | | 3,366 |
| | 25- My organization measures the results of the time and resources spent on training. | Management | 0,345 (10) | 0,172 (5) | 0,207 (6) | 0,138 (4) | 0,069 (2) | 0,069 (2) | 0,953 | 0,966 | 2,621 |
| | | Non-Management | 0,293 (12) | 0,122 (5) | 0,22 (9) | 0,195 (8) | 0,098 (4) | 0,073 (3) | | | 2,902 |

Table 9: Embedded Systems

Lowest (2.6/2.9): Statement number 25 proportionally recognizes in both perspectives that there are no ways of general measurement for training reported in SMEs. The low score on statement number 25 is related to the second lowest score on statement number 22, where there is no orderly database for employee skill set, making it more difficult to track what they are skilled at and what needs to be improved. Also, Managers scored

differently on statement 20 than Non-managers $X^2 (5^*, N = 70) = 16.67, p = .10$. Null hypothesis is not rejected at the .05 level, but at 0.10 significance level.

Statement number 25 has the lowest average between Managers across all statements within the questionnaire.

Highest (4.2/3.8): The average high scores are low. SMEs appear to be lacking in high and low technology systems to share learning. The best scored statement is number 21, although people are enabled to get information across different teams any time quickly and easily, statement number 22 can be seen as a contradiction to the overall score as systems are not maintained, raising questions as to how knowledge is organized and managed locally.

5.4.5 Empowerment – Empower people towards a collective vision

“People are involved in setting, owning and implementing a joint vision; responsibility is distributed close to decision making so that people are motivated to learn what they are held accountable for” (Marsick & Watkins, 1997).

| Dimension | Statements | Role | 1 | 2 | 3 | 4 | 5 | 6 | χ | p-value | Average |
|-------------|---|----------------|-----------|------------|------------|------------|------------|------------|--------|---------|---------|
| EMPOWERMENT | 26- My organization recognizes people for taking initiative. | Management | 0,034 (1) | 0,034 (1) | 0,069 (2) | 0,207 (6) | 0,345 (10) | 0,31 (9) | 7,791 | 0,168 | 4,724 |
| | | Non-Management | 0,024 (1) | 0,098 (4) | 0,268 (11) | 0,244 (10) | 0,171 (7) | 0,195 (8) | | | 4,024 |
| | 27- My organization gives people choices in their work assignments. | Management | 0,103 (3) | 0,138 (4) | 0,069 (2) | 0,276 (8) | 0,172 (5) | 0,241 (7) | 13,138 | 0,022 | 4,000 |
| | | Non-Management | 0,073 (3) | 0,22 (9) | 0,39 (16) | 0,146 (6) | 0,098 (4) | 0,073 (3) | | | 3,195 |
| | 28- My organization invites people to contribute to the organization's vision. | Management | 0,069 (2) | 0,069 (2) | 0,207 (6) | 0,103 (3) | 0,172 (5) | 0,379 (11) | 7,761 | 0,170 | 4,379 |
| | | Non-Management | 0,122 (5) | 0,195 (8) | 0,098 (4) | 0,195 (8) | 0,22 (9) | 0,171 (7) | | | 3,707 |
| | 29- My organization gives people control over the resources they need to accomplish their work. | Management | 0,103 (3) | 0,103 (3) | 0,207 (6) | 0,207 (6) | 0,207 (6) | 0,172 (5) | 3,203 | 0,669 | 3,828 |
| | | Non-Management | 0,073 (3) | 0,244 (10) | 0,195 (8) | 0,244 (10) | 0,146 (6) | 0,098 (4) | | | 3,439 |
| | 30- My organization supports employees who take calculated risks. | Management | 0,069 (2) | 0,172 (5) | 0,207 (6) | 0,276 (8) | 0,172 (5) | 0,103 (3) | 3,073 | 0,689 | 3,621 |
| | | Non-Management | 0,171 (7) | 0,220 (9) | 0,220 (9) | 0,146 (6) | 0,146 (6) | 0,098 (4) | | | 3,171 |
| | 31- My organization builds alignment of visions across different levels and work groups. | Management | 0,069 (2) | 0,069 (2) | 0,172 (5) | 0,276 (8) | 0,241 (7) | 0,172 (5) | 3,838 | 0,573 | 4,069 |
| | | Non-Management | 0,122 (5) | 0,146 (6) | 0,268 (11) | 0,220 (9) | 0,146 (6) | 0,098 (4) | | | 3,415 |

Table 10: Empowerment

Lowest (3.6/3.1): Statement number 30 clearly states that the perceptions in relation to empowerment are low and this rarely applied in practice. Perhaps offering more guidance/training will help increase this perception, which is also related to statement number 27 where employees do not have choices in their work assignments. A focus on building a shared vision

will help get people involved, their responsibilities and goals will be clearer, motivating them to learn and consequently being held accountable for achieving success.

Highest (4.7/4.0): In this dimension there is a vast discrepancy in the average results between Managers and Non-managers (See Table 5 - Overall results). Statement number 26 is the one with the highest average on both groups, however, this contradicts statement number 27. Which has the largest gap in responses average within the seven Dimensions. Proportions are not the same as Managers scored differently on statement 27 than Non-managers $\chi^2 (5^*, N = 70) = 13.14, p = < .05$. The Null hypothesis is not valid anymore, the Alternative hypothesis is correct. There are differences in perceptions within groups.

5.4.6 System Connection – Connect the organization to its environment

“People are helped to see the impact of their work on the entire enterprise; people scan environment and use information to adjust work practices; organization is linked to community” (Marsick & Watkins, 1997).

| Dimension | Statements | Role | 1 | 2 | 3 | 4 | 5 | 6 | χ | p-value | Average |
|--------------------|--|----------------|-----------|-----------|------------|------------|------------|------------|--------|---------|---------|
| SYSTEM CONNECTIONS | 32- My organization helps employees balance work and family. | Management | 0,103 (3) | 0,034 (1) | 0,138 (4) | 0,138 (4) | 0,241 (7) | 0,345 (10) | 4,402 | 0,493 | 4,414 |
| | | Non-Management | 0,098 (4) | 0,122 (5) | 0,220 (9) | 0,171 (7) | 0,220 (9) | 0,171 (7) | | | 3,805 |
| | 33- My organization encourages people to think from a global perspective. | Management | 0,103 (3) | 0,172 (5) | 0,034 (1) | 0,172 (5) | 0,241 (7) | 0,276 (8) | 4,524 | 0,477 | 4,103 |
| | | Non-Management | 0,073 (3) | 0,146 (6) | 0,171 (7) | 0,171 (7) | 0,122 (5) | 0,317 (13) | | | 4,073 |
| | 34- My organization encourages everyone to bring the customers' views into the decision making process. | Management | 0 (0) | 0,069 (2) | 0,069 (2) | 0,069 (2) | 0,379 (11) | 0,414 (12) | 9,623 | 0,087 | 5,000 |
| | | Non-Management | 0,098 (4) | 0,073 (3) | 0,049 (2) | 0,268 (11) | 0,317 (13) | 0,195 (8) | | | 4,220 |
| | 35- My organization considers the impact of decisions on employee morale. | Management | 0,034 (1) | 0,172 (5) | 0,069 (2) | 0,103 (3) | 0,207 (6) | 0,414 (12) | 9,336 | 0,096 | 4,517 |
| | | Non-Management | 0,098 (4) | 0,098 (4) | 0,244 (10) | 0,195 (8) | 0,195 (8) | 0,171 (7) | | | 3,805 |
| | 36- My organization works together with the outside community to meet mutual needs. | Management | 0,207 (6) | 0,103 (3) | 0,138 (4) | 0,207 (6) | 0,207 (6) | 0,138 (4) | 3,008 | 0,699 | 3,517 |
| | | Non-Management | 0,220 (9) | 0,073 (3) | 0,293 (12) | 0,195 (8) | 0,122 (5) | 0,098 (4) | | | 3,220 |
| | 37- My organization encourages people to get answers from across the organization when solving problems. | Management | 0,034 (1) | 0,069 (2) | 0,138 (4) | 0,138 (4) | 0,379 (11) | 0,241 (7) | 6,696 | 0,244 | 4,483 |
| | | Non-Management | 0,146 (6) | 0,049 (2) | 0,317 (13) | 0,073 (3) | 0,268 (11) | 0,146 (6) | | | 3,707 |

Table 11: System Connections

Lowest (3.5/3.2): Statement number 36 holds the lowest average within this Dimension, which is not a positive perception experienced by both groups in relation to SMEs' connections with communities. Although it is the lowest score within this Dimension, it has a very proportional Chi-square result between perceptions from the two groups. Statement number

37 also had a lower average between Non-managers and it is related to statement number 21, about getting information quickly, which was the statement best scored under Embedded systems.

Highest (5.0/4.2): Statement number 34 has a high average within this Dimension but differences in perceptions are also proportionally high. Although the Dimension has a strong customer focus, strategies to adjust work practices to level overall perceptions are needed as they are not fully aligned. The adjustments will help increasing employee morale and sense of belonging.

5.4.7 Provide Leadership – Leaders model and support learning

“Leaders model, champion and support learning; leadership uses learning strategically for business results” (Marsick & Watkins, 1997).

| Dimension | Statements | Role | 1 | 2 | 3 | 4 | 5 | 6 | χ | p-value | Average |
|--------------------|--|----------------|-----------|-----------|-----------|------------|------------|------------|-------|---------|---------|
| PROVIDE LEADERSHIP | 38- In my organization, leaders generally support requests for learning opportunities and training. | Management | 0,207 (6) | 0,069 (2) | 0,138 (4) | 0,069 (2) | 0,207 (6) | 0,310 (9) | 3,671 | 0,598 | 3,931 |
| | | Non-Management | 0,098 (4) | 0,122 (5) | 0,171 (7) | 0,171 (7) | 0,195 (8) | 0,244 (10) | | | 3,976 |
| | 39- In my organization, leaders share up to date information with employees about competitors, industry trends, and organizational directions. | Management | 0,069 (2) | 0,172 (5) | 0,103 (3) | 0,138 (4) | 0,172 (5) | 0,345 (10) | 7,661 | 0,176 | 4,207 |
| | | Non-Management | 0,146 (6) | 0,073 (3) | 0,220 (9) | 0,122 (5) | 0,293 (12) | 0,146 (6) | | | 3,780 |
| | 40- In my organization, leaders empower others to help carry out the organization's vision. | Management | 0,138 (4) | 0,103 (3) | 0,034 (1) | 0,207 (6) | 0,207 (6) | 0,310 (9) | 4,484 | 0,482 | 4,172 |
| | | Non-Management | 0,098 (4) | 0,098 (4) | 0,122 (5) | 0,244 (10) | 0,293 (12) | 0,146 (6) | | | 3,976 |
| | 41- In my organization, leaders mentor and coach those they lead. | Management | 0,034 (1) | 0,138 (4) | 0,034 (1) | 0,241 (7) | 0,241 (7) | 0,310 (9) | 6,861 | 0,231 | 4,448 |
| | | Non-Management | 0,073 (3) | 0,146 (6) | 0,220 (9) | 0,220 (9) | 0,195 (8) | 0,146 (6) | | | 3,756 |
| | 42- In my organization, leaders continually look for opportunities to learn. | Management | 0,034 (1) | 0,034 (1) | 0,172 (5) | 0,172 (5) | 0,241 (7) | 0,345 (10) | 3,984 | 0,552 | 4,586 |
| | | Non-Management | 0,073 (3) | 0,146 (6) | 0,146 (6) | 0,220 (9) | 0,195 (8) | 0,220 (9) | | | 3,976 |
| | 43- In my organization, leaders ensure that the organization's actions are consistent with its values. | Management | 0,034 (1) | 0,034 (1) | 0,172 (5) | 0,138 (4) | 0,172 (5) | 0,448 (13) | 6,604 | 0,252 | 4,724 |
| | | Non-Management | 0,098 (4) | 0,024 (1) | 0,171 (7) | 0,293 (12) | 0,22 (9) | 0,195 (8) | | | 4,098 |

Table 12: Provide Leadership

Lowest (3.9/3.9): Statement number 38 is an important question to understand the reason the Alternative hypothesis is correct as the lowest scores related to the support managers give to employees in relation to learning opportunities and training. Both groups scored low and the proportion of responses is equivalent.

Another perception that raises questions is related to the lowest average for Non-managerial roles within this Dimension, statement number 41. There is a gap between perceptions in that, this is the third highest average between Managers, but it is the lowest among Non-managers.

Statement 39 is also important to note the gap between averages within the groups, perhaps communication is not effective and extra effort is required from management to share information with the teams.

Highest (4.7/4.0): statement number 43 indicates alignment on the way companies act in connection to its values. Journeying towards the same goals and sharing collective values and visions will underline behaviours and attitudes within an organization. It is important for leaders to act and perform in a manner consistent with the company's values, but also, it is crucial that the same leader acts as a model that champions and supports learning. This ties back to statement number 42; it can be a strategic resource to increase business results (Watkins & Kyoungshin, 2018).

5.4.8 Financial Performance

“State of financial health and resources available for growth” (Marsick & Watkins, 1997).

| Dimension | Statements | Role | 1 | 2 | 3 | 4 | 5 | 6 | % | p-value | Average |
|-----------------------|--|----------------|-----------|-----------|------------|------------|------------|-----------|--------|---------|---------|
| FINANCIAL PERFORMANCE | 44- In my organization, return on investment is greater than last year. | Management | 0,034 (1) | 0,069 (2) | 0,103 (3) | 0,241 (7) | 0,276 (8) | 0,276 (8) | 8,946 | 0,111 | 4,483 |
| | | Non-Management | 0,024 (1) | 0,171 (7) | 0,22 (9) | 0,268 (11) | 0,268 (11) | 0,049 (2) | | | 3,732 |
| | 45- In my organization, average productivity per employee is greater than last year. | Management | 0 (0) | 0,034 (1) | 0,103 (3) | 0,31 (9) | 0,31 (9) | 0,241 (7) | 12,045 | 0,034 | 4,621 |
| | | Non-Management | 0,049 (2) | 0,098 (4) | 0,341 (14) | 0,244 (10) | 0,22 (9) | 0,049 (2) | | | 3,634 |
| | 46- In my organization, time to market for products and services is less than last year. | Management | 0 (0) | 0,069 (2) | 0,172 (5) | 0,241 (7) | 0,241 (7) | 0,276 (8) | 13,383 | 0,020 | 4,483 |
| | | Non-Management | 0,073 (3) | 0,122 (5) | 0,366 (15) | 0,22 (9) | 0,195 (8) | 0,024 (1) | | | 3,415 |
| | 47- In my organization, response time for customer complaints is better than last year. | Management | 0 (0) | 0,034 (1) | 0,103 (3) | 0,138 (4) | 0,448 (13) | 0,276 (8) | 7,222 | 0,205 | 4,828 |
| | | Non-Management | 0,073 (3) | 0 (0) | 0,146 (6) | 0,293 (12) | 0,317 (13) | 0,171 (7) | | | 4,293 |
| | 48- In my organization, market share is greater than last year. | Management | 0,069 (2) | 0,103 (3) | 0,138 (4) | 0,103 (3) | 0,276 (8) | 0,310 (9) | 15,639 | 0,008 | 4,345 |
| | | Non-Management | 0,049 (2) | 0 (0) | 0,317 (13) | 0,317 (13) | 0,244 (10) | 0,073 (3) | | | 3,927 |
| | 49- In my organization, the cost per business transaction is less than last year. | Management | 0,172 (5) | 0,103 (3) | 0,172 (5) | 0,207 (6) | 0,138 (4) | 0,207 (6) | 8,941 | 0,111 | 3,655 |
| | | Non-Management | 0,073 (3) | 0,171 (7) | 0,244 (10) | 0,317 (13) | 0,171 (7) | 0,024 (1) | | | 3,415 |

Table 13: Financial Performance

This Dimension has the highest number of Null hypothesis and is invalidated. Proportions are not the same and the Alternative Hypothesis is correct. There are differences in perceptions within groups. Managers scored differently on statement number 45 than Non-managers X2 (5*, N = 70) = 12,04, p = < .05. Managers scored differently on statement number 46 when compared to Non-managers X2 (5*, N = 70) = 13,38, p = < .05. Managers also scored differently on statement number 48 than Non-managers X2 (5*, N = 70) = 15,64, p = < .05. This is the largest difference in perception in the whole questionnaire.

This Dimension shows levels of access to information might not be accurately reflected in the Non-managers' perceptions. This is something that can be improved by frequently sharing business updates with employees. Statement number 47 has the highest average between Managers within this Dimension, confirming that the response time for customer's complaints are better than last year. Followed by statement number 45 wherein average productivity per employee is greater versus last year.

5.4.9 Knowledge Performance

“Enhancement of products and services because of learning and knowledge capacity (lead indicators of intellectual capital)” (Marsick & Watkins, 1997).

| Dimension | Statements | Role | 1 | 2 | 3 | 4 | 5 | 6 | χ | p-value | Average |
|-----------------------|--|----------------|-----------|-----------|-----------|------------|------------|------------|--------|---------|---------|
| KNOWLEDGE PERFORMANCE | 50- In my organization, customer satisfaction is greater than last year. | Management | 0 (0) | 0 (0) | 0 (0) | 0,310 (9) | 0,241 (7) | 0,448 (13) | 10,933 | 0,053 | 5,138 |
| | | Non-Management | 0,024 (1) | 0,073 (3) | 0,171 (7) | 0,244 (10) | 0,268 (11) | 0,22 (9) | | | 4,317 |
| | 51- In my organization, the number of suggestions implemented is greater than last year. | Management | 0 (0) | 0,069 (2) | 0,138 (4) | 0,31 (9) | 0,241 (7) | 0,241 (7) | 5,956 | 0,310 | 4,448 |
| | | Non-Management | 0,049 (2) | 0,146 (6) | 0,122 (5) | 0,22 (9) | 0,366 (15) | 0,098 (4) | | | 4,000 |
| | 52- In my organization, the number of new products or services is greater than last year. | Management | 0,069 (2) | 0,069 (2) | 0,069 (2) | 0,241 (7) | 0,241 (7) | 0,310 (9) | 9,525 | 0,090 | 4,448 |
| | | Non-Management | 0 (0) | 0,098 (4) | 0,073 (3) | 0,146 (6) | 0,537 (22) | 0,146 (6) | | | 4,561 |
| | 53- In my organization, the percentage of skilled workers compared to the total workforce is greater than last year. | Management | 0,034 (1) | 0,138 (4) | 0,207 (6) | 0,241 (7) | 0,172 (5) | 0,207 (6) | 1,885 | 0,865 | 4,000 |
| | | Non-Management | 0,098 (4) | 0,073 (3) | 0,171 (7) | 0,268 (11) | 0,195 (8) | 0,195 (8) | | | 3,976 |
| | 54- In my organization, the percentage of total spending devoted to technology and information processing is greater than last year. | Management | 0,069 (2) | 0,069 (2) | 0,207 (6) | 0,069 (2) | 0,345 (10) | 0,241 (7) | 7,844 | 0,165 | 4,276 |
| | | Non-Management | 0,122 (5) | 0,073 (3) | 0,195 (8) | 0,22 (9) | 0,341 (14) | 0,049 (2) | | | 3,732 |
| | 55- In my organization, the number of individuals learning new skills is greater than last year. | Management | 0,172 (5) | 0 (0) | 0,172 (5) | 0,276 (8) | 0,138 (4) | 0,241 (7) | 12,884 | 0,024 | 3,931 |
| | | Non-Management | 0,073 (3) | 0,220 (9) | 0,195 (8) | 0,146 (6) | 0,268 (11) | 0,098 (4) | | | 3,610 |

Table 14: Knowledge Performance

Statement number 50 shows the second highest average amongst Managers on the entire questionnaire, showing their perceptions in relation to customer satisfaction, stating that it is higher than last year. This is in accordance with the previous Dimension where statement number 47, response rate to customer's complaints, was the highest scored.

On the other hand, Manager and Non-manager perceptions for statement number 55 shows that the number of employees learning new skills compared to last year scored lower on this Dimension. Proportions are not the same. Managers scored differently on statement 55 than Non-

managers $X^2 (5^*, N = 70) = 12,88, p = < .05$. Null hypothesis is not valid anymore, the Alternative hypothesis is correct. There are differences in perceptions within groups.

The employees' perceptions on the number of new products or services in the organization is greater than last year, it was the highest scored within this Dimension, proving what was mentioned earlier about the innovative spirit of SMEs when it comes to investments in products and services, +30% in Ireland when compared to other EU countries (Central Bank of Ireland, 2019).

5.5 Averages per categorical variables

Relevant data was also found when averages were calculated looking at categorical variables such as Role, Educational Experience and Number of employees. See below:

Number of employees:

| | 0-10 | 10-49 | 50-249 |
|-----------------------|-------|-------|--------|
| Continuous Learning | 3,857 | 3,496 | 3,582 |
| Dialogue & Inquiry | 4,527 | 3,807 | 3,801 |
| Team Learning | 4,440 | 3,965 | 3,827 |
| Embedded Systems | 3,320 | 3,237 | 3,436 |
| Empowered People | 4,160 | 3,570 | 3,474 |
| System Connection | 4,267 | 3,746 | 4,000 |
| Provide Leadership | 4,407 | 3,737 | 4,071 |
| Financial Performance | 4,213 | 3,877 | 3,917 |
| Knowledge Performance | 4,173 | 3,982 | 4,314 |

Table 15: Number of Employees

Overall, people in Micro SMEs scored considerably higher than people on Small and Medium-sized enterprises in Ireland. 'Dialogue and Inquiry' being the highest scored Dimension within Micro SMEs. 'Team Learning', the highest average on perceptions of employees of Small enterprises and 'Provide Leadership' the highest average scored by employees from

Medium-sized enterprises in Ireland. 'Embedded Systems' was the lowest scored Dimension for employees within all types of Irish SMEs.

Educational Experience:

| | did not complete high school | graduate degree | high school graduate | undergraduate degree |
|-----------------------|------------------------------|-----------------|----------------------|----------------------|
| Continuous Learning | 4,000 | 3,347 | 4,076 | 3,918 |
| Dialogue & Inquiry | 4,500 | 3,932 | 3,912 | 4,524 |
| Team Learning | 4,667 | 3,937 | 4,157 | 4,298 |
| Embedded Systems | 4,167 | 3,050 | 3,931 | 3,274 |
| Empowered People | 4,500 | 3,703 | 3,833 | 3,643 |
| System Connection | 3,833 | 3,905 | 4,108 | 4,274 |
| Provide Leadership | 4,667 | 3,757 | 4,412 | 4,548 |
| Financial Performance | 3,333 | 4,005 | 3,882 | 4,286 |
| Knowledge Performance | 5,167 | 3,946 | 4,373 | 4,393 |

Table 16: Educational Experience

Overall, the higher the degree awarded, the lower the averages scored in relation to perceptions of the Learning culture within the organizations. Although the subjects that recorded non completion of High School had an average score equal to or above 4 in 6 out of the 7 (main) Dimensions of the learning organization, the sample size for this population is too small to provide accurate conclusions.

Role:

| | Management | Non-Management [Hourly Employee] | Non-Management Technical/Professional | Owner/Partner | Supervisor |
|-----------------------|------------|----------------------------------|---------------------------------------|---------------|------------|
| Continuous Learning | 3,466 | 3,286 | 3,907 | 4,329 | 1,143 |
| Dialogue & Inquiry | 3,991 | 3,804 | 4,036 | 4,900 | 2,000 |
| Team Learning | 3,965 | 3,716 | 4,080 | 5,167 | 1,833 |
| Embedded Systems | 3,237 | 3,333 | 3,413 | 3,600 | 1,167 |
| Empowered People | 3,781 | 3,245 | 3,746 | 4,717 | 1,833 |
| System Connection | 4,044 | 3,569 | 4,087 | 4,900 | 1,333 |
| Provide Leadership | 4,035 | 3,794 | 4,138 | 4,933 | 1,333 |
| Financial Performance | 4,412 | 3,490 | 4,000 | 4,383 | 1,833 |
| Knowledge Performance | 4,412 | 3,892 | 4,246 | 4,300 | 1,500 |

Table 17: Role

Another pretty interesting analysis is in relation to the roles within the organizations. Their perceptions vary significantly. Owners/Partners scoring higher in all Dimension when compared to the other populations that participated in the survey. Due to small sample size of Supervisors, it is not possible to provide an accurate conclusion on this variable.

5.6 Cronbach's Alpha

Cronbach's alpha, α (coefficient alpha) is a measure of internal consistency and its results can be used to estimate the reliability of a questionnaire applied in a survey. Coefficient alpha measures the correlation between the responses within the questionnaire through the analysis of the participant's responses. It "calculates the average of all possible split-half reliability coefficients" (Bryman, 2012).

The Cronbach's Alpha test was applied to the responses within the DLOQ and the value of $\alpha = 0,973$ was obtained. It is therefore possible to confirm that the internal consistency of the questionnaire is excellent.

The same overall Cronbach's α of .97 for the questionnaire as a whole was confirmed by Watkins and Dirani (2013) in a meta-analysis of a study with "7,954 responses from 28 companies in five countries" (Watkins & Dirani, 2013).

Chapter 6

Discussion

The purpose of this study is to provide insights into the Learning Culture in Irish SMEs by analysing and comparing the differences in perceptions between Managerial and Non-Managerial populations from different sectors within companies that employ fewer than 249 people.

After analysing the data collected, it is possible to say that Irish SME's cannot claim to be Learning Organizations, although they demonstrated significant attributes that place them closer to this status.

The perceptions between Managers and Non-managers has proven to be different when analysing the mean scores between groups. The overall mean score from this survey has also been proven to be slightly lower when compared to the meta-analysis of data based on 7,954 responses from 28 companies across 5 countries (Watkins & Dirani, 2013), where the strength of the learning culture between those 5 nationalities were quite similar and the mean scores ranged from 3.8 to 4.2. In comparison Irish SMEs', means ranged from 3.3 and 4.1.

6.1 Perceptions of the Learning Organization

Combining Managers and Non-managers perceptions, the highest mean scored is on *Provide Leadership* (4.14); Managers' highest mean is on *Team Learning* (4.38) and Non-manager's highest mean is also on *Provide Leadership* (3.93).

By looking at the mean scores on each statement, the highest mean score for managers was on *Team Learning* (5.38 on statement number 15), and for Non-managers was on *Dialogue and Inquiry* (4.88 on statement number 12).

The lowest overall mean, for total sample size, Managers and Non-managers, within the *Embedded Systems'* Dimension. The only lowest score that differs when looking at individual statements from the Non-managers population is on *Continuous Learning* (2.83 on statement number 4).

Overall, Managers scored higher than Non-managers in all Dimensions, this is due to a Managers experiences within the organization, their access to resources are normally higher and their perceptions of the Non-manager's way of experiencing the organization is normally not clear (Marsick & Watkins, 1997), a pattern already noted in different studies (Watkins & Dirani, 2013; Marsick & Watkins, 1997).

6.1.2 Provide Leadership

The proportion of responses in this Dimension is very satisfactory, it has the highest positive findings within this research, which helps suggest that Irish SMEs have some characteristics of Learning Organizations.

The lowest mean within this Dimension is on a statement that recognizes the importance of leading and coaching. Leaders that mentor and/or coach the ones they lead move faster towards continuous learning (Birdthistle, 2006), and encouraging creativity helps foster innovation within (Berson et al., 2006).

Learning strategies should be used more frequently by Managers because they are responsible for maintaining and increasing the outputs of the organization. Learning strategies also motivate, stimulate and develop the workforce thereby increasing the chances to retain high-quality and talented employees (Fajčíková, 2016).

Another interesting analysis that has come to the fore is that Managers scored higher on Financial results. This could be due to (a) the differences in access to information and (b) to the lack of communication between groups. Improvements can be made by encouraging frequent meetings to share business updates. Internal communication tools, such as periodic newsletters or group reviews will also help increase consistency with information sharing. By encouraging employees to remain aware, informed and engaged about the business, improvements can be made within this Dimension.

6.1.3 Team Learning

The mean scores within this Dimension show that conditions are favourable when it comes to the positive atmosphere of the organizations in relation to equality and respect, perhaps a focus on giving and asking for honest feedback will help Managers understand their team's needs, especially in relation to recognition for individual and team achievements and recognition for learning.

By recognizing the learning contribution from employees to the organization (Marquardt, 1996) and through the use of rewards that cover learning actions, Managers can encourage individual and team learning.

Depending on the way knowledge is shared the outcome may differ (Breson et al., 2006), so a positive learning system that is aligned ensures that learning experiences are shared and the work itself gives people the freedom to collaborate and learn together. Taking advantage of different ways of thinking will help creating the results expected (Marquardt, 1996). Senge (1990) rightly recognizes the importance of an aligned team that shares a common vision and purpose.

A team that works in harmony will be more productive as it understands the benefits and efficiencies of collaboration and of building on everyone's work to achieve the collective goal (Senge, 1990).

Investment in training can be a struggle due to a SMEs' restricted financial resources however for an organization to maintain long term positive results, it is essential to take advantage of the skill set and knowledge available within the company and outside (Popescu, et al., 2010). SMEs are encouraged to implement regular and adaptive training to facilitate collaboration and encourage problem solving (Brien & Hamburg, 2014).

6.1.4 Embedded systems

The Dimension that focuses on capturing and sharing learning had the lowest score amongst all the groups analysed, confirming a pattern already noted on the meta-analysis by Watkins & Dirani (2013) where the data recorded Embedded Systems with the lowest score, but analysis states

that the overall patterns would depend on the cultural context (Watkins & Dirani, 2013).

The results presented here show a propensity to informality. Although this can be considered a pattern within small organizations, they would benefit from a greater focus.

There is a tendency to apply expectations on the learners to seek continuous learning, but the expectations from the organizations and its Managers should also be raised as they need to provide the structure and resources to nourish, support and facilitate learning (Watkins & Dirani, 2013).

Given the nature of SMEs, where getting access to information is quicker and easier (Popescu, et al., 2010; Brien & Hamburg, 2014), managers should develop systems that will help organize the available knowledge.

By developing shared databases or group web pages, employees will have easy access to training tools, security and risk procedures and business policies and profitability. This can aid organizations to improve their results within this Dimension without spending too much money, a limitation barrier for SMEs (Brien & Hamburg, 2014). The information can be updated by employees on a "regular" basis, granting knowledge management.

One last, but very important point within this Dimension, is the lowest mean score recorded by Managers on statement number 25 stating that, in their organizations, results of time and resources spent on training are barely measured.

This difficulty in measuring learning achievements has already being pointed out by researchers as constraints for the Learning Organization (Adžić, 2018; Garvin, 1993), although other case studies have shown evidence of correlational relationships between an enriched learning culture and organizational performance (Watkins & Kyoungshin, 2018).

6.1.5 Empowered People

This Dimension recorded the largest discrepancies in mean scores between Managers and Non-managers, proving that there are differences within the groups ($N < .05$). As pointed on statement number 30, employees do not feel that their organizations support them taking calculated risks, this is due to the lack of trust that could perhaps not developed through training.

Knowledgeable employees are more efficient and have a mindset focused on improvement which enhances productivity. A knowledgeable employee can achieve more and will naturally take ownership when making decisions, this has an impact on the entire organization. Adjustments can be made to working practices to distribute responsibilities and cultivate managerial perspectives onto non-managerial staff.

By creating, developing and sharing the group vision, an organization strategically allows its members to become an extension of its vision. Before empowering members, it is essential to have an aligned vision or it can create a variety of management problems (Senge, 1990), but once done correctly it has the power to develop a sense of belongingness, accountability and ownership.

6.2 Breakdown by Company Size

After analysing the means for each dimension on Micro, Small and Medium-sized enterprises, it is possible to confirm that in Micro organizations, the dimension with the highest mean score is *Dialogue and Inquiry*, in Small organizations *Team Learning* is the Dimension with the highest scores and in Medium organization, *Provide Leadership* is the one with the highest mean score. *Embedded System* was the dimension with the lowest mean score across the three organizational sizes. Different organizational sizes present different strengths but they all afford the same opportunity, to work and develop better processes to capture and share learning (embedded systems).

An interesting note on this is how the perceptions of *Dialogue and Inquiry* in micro organizations are more present. It is likely this is due to the developing spirit and strong sense of accountability in micro organizations, where building trust and listening to the views of every single member of the team matters and is encouraged in order to progress. Personal and Professional links are closer and tighter within this type of environment.

Chapter 7

Conclusion

The main purpose of this research was to investigate the learning culture in Irish SMEs and understand the differences in perceptions between managers and non-managers in order to conclude if Irish SMEs can be considered learning organizations.

Although Irish SMEs have many aspects of a learning organization, explored in depth on the previous chapters, they cannot claim to be Learning Organizations.

A learning organization is viewed as one that has the capacity to integrate people and structures in order to move towards continuous learning and change. As the integration layer is missing for this to be achieved within Irish SMEs, more systems must be created to capture and share knowledge effectively.

Areas such as better communication, knowledge sharing and creation of systems to track current and expected performances and skills must be homed in Irish SMEs, by doing this, they can upscale their learning culture and align their structures. This will beneficially work as a running engine that will help SMEs move towards a consistent Organizational Learning strategy and embed it within their culture.

SMEs are flooded with the external and internal dynamism and demands to create, every day more, a new source of competitive advantage in order to maintain themselves in the game (Darcy, et al., 2014). One important advantage large organizations have in relation to smaller business is that they have easy access and resources to provide learning, at all levels, but such environments can be recreated in smaller organizations and the sooner the talk starts, the better because nowadays investing in learning does not have to mean investing a lot of money, which is a pressure point for SMEs. They should aim at working smarter with the resources currently available until better conditions are presented to improve even further.

7.1 Recommendations

In this chapter the researcher will present several recommendations that can be implemented in Irish SMEs to strengthen their Learning Culture. In relation to the SMEs here studied, the below steps can be followed:

1. Undertake a survey within the organization (Redding, 1997), evaluate the results and gain a better understanding of the company's current status. This will help identify weaknesses, strengths and opportunities, so action can be taken by planning interventions where needed.
2. Change the way Learning is viewed in the organization: Efforts in creating the right environment for learning must be adopted, this will also nourish trust and consistency and encourage decision making at all levels. A Learning environment consist of four key aspects (Garvin, 2008): (a) *Psychological Safety* (employees must not be afraid to ask naïve questions and must be comfortable at expressing what they think), (b) *Appreciation of Differences* (by recognizing the value of alternative points of view, can help increase motivation and fresh ways of thinking), (c) *Openness to New Ideas*: Employees should be encouraged to think laterally and take calculated risks, opening space to the unknown (d) *Time for Reflection*: A supportive learning environment will provide time to pause and allow employees to review and contemplate processes vs problems
3. Redirect policies and procedures to shift the focus on learning. Endorse a cultural mindset where Learning is rewarded and encouraged, for example by offering flexible working hours or paid day off to study for a specialized course on an exam day.
4. To improve communication, have regular periodic updates sent via newsletters to employees' emails. Attach relevant copies to visible notice boards within the organization to proactively encourage discussion at group meeting points.

5. Make use of frequent staff meetings to reiterate goals, discuss business needs, share progress updates, make commendations and host Question and Answer sessions.
6. Encourage and facilitate action learning programs (Marquardt, 1996), they are effective and have relatively low implementation costs. Every employee can be a teacher and a learner, actively collaborating with the team and the organization. This can be done through shadowing, one-to-ones or job rotation for example.
7. Create more opportunities for ongoing training, formal and informal. Make use of available resources through free or low cost accessible online platforms such as articles and Ted-Talks. Or paid courses on LinkedIn Learning/Coursera/CIPD platforms or workshops and networking events (there are paid and free options). If required, encourage the creation of small and quick explanatory videos that can be used for training.
8. Encourage Managers to access courses about Leadership and Management to create self-awareness that will allow them to better lead and manage employees (leading by example).
9. Encourage personalized learning and distance learning on e-learning platforms as it guarantees easy access to high quality courses for different needs, from leadership to office tools. Where possible finance courses that will offer mutual benefits.
10. Create desktop processes and flow charts mapping all processes of the organization (Example, dealing with customer orders, or how to check delivery) and add all processes within the organization. Save these in a shared location and update them as require.
11. Create a database of employee's skills, this file can be created on Excel, nothing very elaborated and allocate shared responsibility to employees and management. It is a simplistic and effective tool to monitor progress, to compare and learn skills and to upskill via inhouse training or through education.
12. Develop hands on learning programs for junior and senior members alike. The more members interact with different parts and different levels within the organization, the more they can

understand, empathise and assist, thereby increasing overall growth.

13. Develop ways of periodically measure employee performances. This could be done through End of Year Review, results chart, checklist and regular one-to-one to track performance, collaboration and possible rewards.
14. People adjusts to work practices accordingly to perceptions on their environment, by encouraging charity initiative to increase morale and sense of belonging and by encouraging employees to bring their customer's views into the decision-making process will help keeping morale at a good level, and so will the flexibility to balance work and family.
15. Foster a healthy and happy workplace environment for employees, incentivise the incorporation of exercise in personal lives and organise social team events. A healthy workplace environment inspires loyalty, reduces absenteeism and increases the company moral.

7.2 Limitations and Practical Implications

Further analysis could include a Qualitative type of research, as a complementary way to gather more in-depth details that emphasize words and people's reactions rather than just using the simplicity of the Quantitative approach.

Another challenge was the capture of a larger sample size that could have given the researcher a 95% confidence for the overall research. For a large research using questionnaires, the ideal sample size is 500, leaving only 5% as margin of error. The researcher was able to collect 82 responses of which only 70 could fit in the profile/demographics of a SME.

In organizations where the survey was applied in more than one employee, it is possible that the seniority and authority of respondents could have influenced others.

Despite the full explanation given in writing to all respondents, there is a possibility that the reason for the survey and the concept of the items in the questionnaire were not fully understood by participants.

The availability of entrepreneurs to answer the questionnaire due to their workload and busy lifestyles could have had an impact on the number of replies from this group of subjects.

The high number of items in the questionnaire, 60 statements, must be considered as a constraint to participants in progressing the survey to completion, even knowing that they were short statements and the survey was not very time consuming (average 15 minutes). Even though the questionnaire, if analysing only the 7 dimensions, is composed of 43 statements, the researcher found it useful to analyse in full their perceptions across all the 9 dimensions.

Further studies could also include a longitudinal approach to investigate the change in perceptions over time after implementations of Learning Strategies in one single organization, confirming any possible relations with performance measurements as this is a critical line of the research and provides evidence that a Learning Organization helps improve performance (Watkins & Kyoungshin, 2018).

The results of the research contribute to the knowledge in the field of study and it is expected that, the people that got in touch with this survey, are now able to begin or maintain the conversation around the importance of learning in their organizations. It can also be used by leaders and managers in their organizations to help foster learning.

7.3 Timelines for implementation

Short-term goals: 1 month

- Identify the organization's strengths, weaknesses and competencies by completing surveys.
- Identify organization's competencies.

- Revise policies and procedures to shift focus on learning.
- Encourage action learning – not high implementation cost
- Subscribe to online learning platform (Coursera or LinkedIn Learning/Lynda which have group learning memberships for groups of four people or more).
- Introduce regular performance reviews for employee goals and skill sets.
- Start creating suitable atmosphere for learning.

Short-term goals: 2 months

- Have staff meeting to inform of changes already in place and future ones.
- Incentivise training for employees in ways best suited to the organization based on competencies required.
- Promote inhouse training and upskilling
- Start the creation of tracker for employee skills and processes. Make employees accountable for helping with their desktop processes, give them ownership.
- Create initiatives that rewards learning, good practices and personal development.
- Introduce written processes making employees accountable, allocating responsibility and ownership.

Medium-term goals: 6 months

- Develop a Human Resources (HR) department or allocate a specialized person the responsibility for Human Resources in the organization.
- Introduce Leadership Development Programs (Junior to Senior Managers)
- Introduce Employee Development Programs (Hourly employees to Supervisors)

- Review policies and procedures in place, introduce flexibility and changes as required. Issue regular updates.
- Introduce team building and group events to encourage social networking.
- Create compensation initiatives that rewards learning, good practices and personal development.

Long-term goals: 12 months

- View HR as a Strategic part of Board
- Complete End of Year Reviews to help compare and track performances.
- Complete the questionnaire again, assess and analyse the changes in perceptions.

7.4 Costings

- Implement formal training for Managers. This can be a 3-month course, consisting of 2 full days a month with full discussion on topics such as managing people, leading people and extracting the most of your employees, etc. This will cost the business approximately €4.000 per employee. Additional follow up training can be implemented, as required, tailoring it to the specific needs of the company.
- Implement formal training for Non-managers. Inhouse training developed in relation to all processes by the employees themselves via the desktop process and the investment will be in the form of their working hours. In general, putting in a desktop process map or user guide can be a medium-difficulty process, dependant on the subject, and can take anywhere from a few hours to a few days. However, once it is recorded, checked, approved and made available to other employees, they can benefit by having access to it.

- Cross skills, shadowing, learning-on-the-job can be used as both a formal and informal process.
- Purchase business membership on online platforms. The cost will vary depending on the size of the organization. Subscriptions to LinkedIn/Lynda can start as little as €30 a month for one person, alternatively, the company plan can cost for the business around €88 per employee for a year for companies with 249 employees).
- For the development of Human Resources department, hiring a specialized person in Ireland can cost between €40.000-€60.000 per annum.

7.5 Personal Learning

One of the most significant personal learning achievements whilst conducting this research was the development of analytical thinking, being able to look at the results of a survey and offer a course of action after identifying patterns within the sample studied.

Abilities such as time management, organization and prioritization were honed during this project as they are crucial to achieving important deadlines and targeting the topics to be studied.

This was a unique opportunity to focus on the topic of Learning. It has helped my understanding of professionally and personally, as in how it can be used to inspire people, retain people, share experiences, build on new ideas and much more. So interesting!

The importance of prioritising and choosing the question principal to the survey soon became clear as this is critical to a quantitative research. Also finding journals, articles and books to support the precise research was an exacting task.

The more you read about one topic the more you know and the more you need to study and learn. Narrowing down topics to work on and “sticking to the plan” was a constant challenge. It was humbling to remember that

this work is a small contribution to the field and not a creation of a brand-new concept.

Structure is everything in Business Research, from the planning to executing the project, having a clear vision, exhaustively researching the subject, applying the detailed survey, analysing the data, checking the facts and figures, etc. It all needs to be planned and executed strategically with regular infusions of patience.

Something that could have been done differently is choosing the right questionnaire sooner. It took some length of time to identify the best suited questionnaire for the selected research question. Perhaps having the survey ready at an earlier stage would have allowed time for additional respondents.

Business Research and important studies such as these in general offer guidance and directives to organizations which will be viewed and reviewed over the coming years and it has been an honour to be in a position to allow a societal contribution.

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Appendix

Information Sheet

ARE IRISH SMEs LEARNING ORGANIZATIONS?

I would like to invite you to take part in a research study. Before you decide, you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Ask questions if anything you read is not clear or if you would like more information, my contact details are located at the end of this information sheet. Take time to decide whether to take part or not.

WHO I AM AND WHAT THIS STUDY IS ABOUT?

My name is Jessica Bezerra, I am a part-time student at National College of Ireland (NCI) studying Human Resource Management (HRM).

In order to successfully complete the course, students are encouraged to produce a research study.

The topic here investigated is related to Learning Organization and Irish Small and Medium-sized Enterprises (SMEs) to assess the levels of an organization's Learning Culture.

WHAT WILL TAKING PART INVOLVE?

Taking part in this research will involve answering an online questionnaire, with 43 items with statements (with additional organizational performance scales and demographic data that adds up to 60 statements) where you will add your personal opinion onto a 6-point Likert-type scale ranging from 1 (almost never) to 6 (almost always).

In this questionnaire, you are asked to think about how your organization supports and uses learning at an individual, team and organizational level.

Do not worry! The survey will take approximately 15-20 minutes to complete.

The survey questions will be about Continuous Learning, Dialogue and Inquiry, Team Learning, Embedded Systems, Empowerment, System

Connections, Provide Leadership, Financial Performance and Knowledge Performance statements that are divided in Individual Level, Team Group Level and Organizational Level.

Your responses will be anonymous, and we do not collect identifying information such as your name, email address or IP address.

WHY HAVE YOU BEEN INVITED TO TAKE PART?

You have been invited to take part in this research because I want to explore your point of view in relation to Training in your organization or the organization that you are employed by, which is an Irish SME (Small and Medium-sized enterprise). This organization comprises of fewer than 250 employees, it is in Ireland and annual turnover does not exceed €50,000,000.00.

DO YOU HAVE TO TAKE PART?

Your participation in this research study is voluntary. You may choose not to participate. If you decide to participate in this research survey, you may withdraw at any time. If you decide not to participate in this study or if you withdraw from participating at any time, you will not any suffer any consequence whatsoever.

WHAT ARE THE POSSIBLE RISKS AND BENEFITS OF TAKING PART?

There are no known risks if you decide to participate in this research study, nor are there any costs for participating in the study. The information collected may not benefit you directly, but what I learn from this study should provide general benefits to employees, companies, and researchers. You will not benefit financially from participating on this research.

WILL TAKING PART BE CONFIDENTIAL?

This survey is anonymous, and all information provided for this study will be treated with confidentiality.

No identifying or personal information will be recorded from the survey, including information such as name, email address, IP address, company name, or usernames, so that your response cannot be identified.

HOW WILL INFORMATION YOU PROVIDE BE RECORDED, STORED AND PROTECTED?

Information provided will be stored in a folder in the researcher's personal computer (PC) and a backup file will be kept in a folder in an external Hard-Driver (HD), both password-protected. Only the researcher will have access to the data collected.

WHAT WILL HAPPEN TO THE RESULTS OF THE STUDY?

The results of this study will be used for scholarly purposes only and the dissemination of the final research product only consists in submitting the dissertation, so the Master of Arts in Human Resource Management is awarded by QQI at level 9 on the National Framework of Qualifications upon successful completion of the research.

WHO SHOULD YOU CONTACT FOR FURTHER INFORMATION?

Researcher: Jessica Bezerra – x17128846@student.ncirl.ie

Consent to Participate

ELECTRONIC CONSENT: Please select your choice below.

Clicking on the "agree" button below indicates that:

- you have read the above information
- you voluntarily agree to participate
- you are at least 18 years of age.

If you do not wish to participate in the research study, please decline participation by clicking on the "disagree" button.

Consent Form

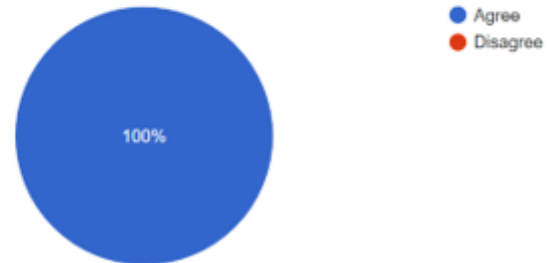


Figure 4: Mandatory section of the online form.

Mandatory field of the form, 100 % of participants agreed to participate on the research study, upon confirmation, they were able to proceed to the questionnaire.



Are Irish SMEs Learning Organizations?

National College of Ireland, IE

The topic here investigated is related to Learning Organization and Irish Small and Medium-sized Enterprises (SMEs) to assess the levels of an organization's Learning Culture and any possible links between Organizational Learning and the Performance of the firm.

Figure 5: Research advertising on the Call for Participants Website.

Submission of Thesis to Norma Smurfit Library

Submission of Thesis to Norma Smurfit Library, National College of Ireland

Student name: Jessica Bezerra

Student number: 17128846

School: National College of Ireland

Course: Master of Arts in Human Resources Management

Degree to be awarded: Masters of Arts in Human Resource Management

Title of Thesis: An investigation into the Learning Culture in Irish SMEs

One hard bound copy of your thesis will be lodged in the Norma Smurfit Library and will be available for consultation. The electronic copy will be accessible in TRAP (<http://trap.ncirl.ie/>), the National College of Ireland's Institutional Repository. In accordance with normal academic library practice all thesis lodged in the National College of Ireland Institutional Repository (TRAP) are made available on open access.

I agree to a hardbound copy of my thesis being available for consultation in the library.

I also agree to an electronic copy of my thesis being made publicly available on the National College of Ireland's Institutional Repository TRAP.



Signature of Candidate.

For completion by the School:

The aforementioned thesis was received

by _____ Date: _____