
# Managing Change for Environmental Sustainability: An International Comparison of Small and Medium Enterprises in the Fabric and Textile Industry

A thesis submitted by

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## ABSTRACT

As environmental sustainability (ES) efforts gain traction globally, pressure is mounting for small and medium enterprises (SMEs) to also 'go green'. Literature pertaining to change management in SMEs in a variety of geographical regions is available; however very little is known regarding ES intentions, initiatives, change management and outcomes in SMEs, especially within the specific context of the Fabric and Textile (FT) Industry. This study uses in-depth interviews to gather rich data from 12 ES 'champions' in the FT industries of Canada, the US and Australia. The results help to fill theoretical gaps relating to attitudes, motivations, barriers, change management, and outcomes of ES change in SMEs. Furthermore, an international comparison is completed. The research contributes to motivational and change management theory for both small and medium enterprises and sustainability change.

The findings indicate that by far the most important factors that influence ES change include attitudes such as seeing social, economic and emotional value in ES, perceived behavioural control as in SME owner/managers believing they have control for the most part to make the change, subjective norms including books, people, timing, culture, government, and motivations, which were to inspire and promote change, internal values, to educate others, business success, environmental impact, personal health, and to prove others wrong. However, often intentions and motivations can be present without any ensuing action. Barriers such as price, consumers, cost, infrastructure and government, and expectations as in to make change, job satisfaction, buy-in, financial success, and nothing, help or hinder the conversion of the influential factors into actions. Once an SME in the FT industry begins its change journey, the ES actions including fibre choice, recycling, decrease in fossil fuel use, dyes and printing choices, alternative energy, design and modality are determined to be much more important than having a strategic or written plan, which was identified as being primarily in the DNA of the owner-manager, creating an ES culture either through leading by example or communicating well, or leadership style - either hands off or hands on. Lastly, the results of this study provide a lengthy list of positive organisational outcomes, including happier and harder working staff, cost savings, helping communities through local economies, employment and awareness, adapting a competitive strategy, helping, and personal pride.

The dissertation concludes with commentary on both theoretical and methodological implications for researchers, practical implications for SME managers and policy makers, and implications for further research.

## CERTIFICATION OF DISSERTATION

I certify that the ideas, research, results, analyses and conclusions reported in this dissertation are entirely my own effort, except where otherwise acknowledged. I also certify that the work is original and has not been previously submitted for any other award, except where otherwise acknowledged.

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Signature of Student Date

ENDORSEMENT

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Signature of Supervisor/s Date

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# CHAPTER 1 – INTRODUCTION

## 1.1 Background

Reputable international journals such as the International Journal of Operations and Production Management (IJOPM 2014) and Human Resource Management (HRM 2009) have recently stressed the critical importance of environmental sustainability, not only in pursuit of triple bottom line (environmental, social and economical) outcomes but also its operational linkages that extend to aspects beyond the firm such as the supply chain and communities (Walker et al. 2014). These journals not only emphasise the need to better understand environmental sustainability issues within the larger context of triple bottom line outcomes, but also the need for greater insights into different aspects of sustainability. Further, they call for greater insights into research along a behavioural and human factors line by focusing on the role of individual managers in influencing environmental sustainability as well as the less explored topic of how small and medium enterprises (SMEs) can improve environmental sustainability in a wide range of contexts (Walker et al. 2014).

Environmental Sustainability (ES) involves a variety of either process or product changes within a firm in order for less harm to come to the environment. Common strategies of doing so include environmental sustainability management (ESM), green supply chain management (GSCM), cleaner production, innovative processes and product innovation. ES change is not simply a chance to meet mandated pollution levels, market oneself as “green”, or decrease a firm’s carbon footprint. Rather, “the best companies view sustainability not only as a chance to contribute to social goals, but also as a powerful source of competitive advantage and a matter of corporate survival” (Mahler 2007, p. 60).

With environmental crises and subsequent controls on the rise globally, many firms are reassessing their ES policies and procedures, including SMEs. However, the dearth of research on the role of behavioural factors in ES and how to successfully navigate ES change in SMEs highlight the need for a study, particularly on managing ES change in SMEs, in sectors other than manufacturing. The Organisation for Economic Co-operative Development (OECD Working Party on SMESs and Entrepreneurship 2010) found that many SMEs do not have the impetus or the resources to become environmentally sustainable, unlike their larger counterparts. Further, the contrasting academic research indicating that in some cases “going green” could in fact hinder

business performance, particularly in manufacturing (Qinghua Zhu et al. 2007; Dam & Petkova 2014) does nothing to convince or motivate the SMEs who may consider ES change initiatives.

However, ES practices have been proven to improve business outputs as far back as the mid 1990s, when in 1996 McLaughlin and Klassen showed "Significant positive returns … for strong environmental management … and significant negative returns were measured for weak environmental management…" (page 1199). The academic literature is beginning to show that ES change in business is not only necessary but also beneficial, while at the same time, pressures build from various stakeholder groups and governmental regulations for businesses to be ES. But where does a SME begin when implementing and adapting to ES change? The aim of this research is to examine what and how attitudes, social referents and motivations influence SME ES champions in the Fabric and Textile (FT) industry's intentions and ultimate behaviour and actions in achieving positive organisational outcomes. Within the context of this study an ES champion is defined as a company that is a leader in reducing its environmental impact at levels beyond regulatory compliance, and usually has received recognition as being "green" (Runhaar et al. 2008).

An outcome of this will be to provide SMEs with the framework necessary to "go green", in a variety of geographic locations and perhaps even multiple industries, at a time when ES change is not just a competitive advantage but an ethical imperative.

### 1.2 Justification for the Research

In developed countries 95 percent of all businesses are SMEs and they employ 66 percent of the active population (Intel 2011). SMEs are critical to both employment and economic sustainability in national and international economies as they employ over 300 million people worldwide (Intel 2011). SMEs are often defined as firms with less than 200 employees (Australian Bureau of Statistics 2002) however for the purposes of this research a definition of 5-99 employees is used (Cameron & Massey 1999). Market forces, population change and technological advances are making SMEs ever more important (Curran 1996). The APEC (Asia-Pacific Economic Cooperation 2015) has made the development and strengthening of SMEs a priority area due to the potential that SMEs have for future economic growth (APEC 2015). SMEs have also been identified as key to the economic future of Australia because they provide over half of all jobs and account for nearly 90% of private sector firms in Australia (ABS 2011). Despite this situation there remains a paucity in research on SMEs in general (Curran 1996; McAdam & Armstrong 2001).

SMEs are major contributors to pollution and other environmental issues such as carbon emissions and water and air pollution; yet SMEs have been largely ignored by the environmental Government agencies and they tend to be unaware of the impact they have on the environment and the legislation that governs them (Hillary 2004). Moreover, a 2011 Carbon Down Research Report found that Victorian SMEs are significant carbon emitters, accounting for 39% of the state's total business emissions (Rothberg 2011) and an OECD 2011 Review found that US SMEs contributed between 15% and 20% of the air and water pollution in the USA in 2001 (OECD 2010). Despite this, managing change to achieve positive outcomes for environmental sustainability, while well-researched in some areas, is still in its early stages of research within the context of SMEs. Business has the potential to solve many of the world's problems – problems that it has had a hand in creating. Direct pressures from the natural world such as water shortages and climate change demand that environmental stewardship immediately develop in both business strategy and culture.

The justification for undertaking the research described herein is based firstly upon the identification of a theoretical gap in relation to ES change management in SMEs. As indicated earlier, SMEs are the heart and lungs of the world's economies. Yet at a time when many firms will soon be required - both through competitive strategies and government regulation - to become more environmentally sustainable, very little is known about how the attitudes and motivations of SME managers impact upon the intention of SMEs to adopt environmentally responsible practices, and once these intentions are turned into positive environmental sustainability behaviour, how SMEs manage the change required to achieve positive ES outcomes (Wiesner et al. 2010).

For example, SMEs have been studied in relation to their success in managing change such as Total Quality Management initiatives (Yusof & Aspinwall 2000). Their ability to innovate (Todtling & Kaufmann 2001), to implement reengineering (McAdam 2000) and to develop new products (Huang et al. 2002) have all been researched, as well as how they strategically manage new initiatives (Woods & Joyce 2003). However, there is not only very little known related to the factors influencing the intentions of SMEs to implement ES, but also how specific ES change management pathways for SMEs are followed in order to achieve positive organisational outcomes. Furthermore, of the limited research that exists within the SME context with regard to ES change management, most research has focused upon specific behavioural change management factors (Banham 2005; Benn et al. 2004; Wiesner & Poole 2009; Benn & Baker 2009), with less

focus upon what factors impact upon the intentions and motivations of SMEs to commence and follow through with ES initiatives.

In addition, owing to the unique characteristics of SMEs, change management best practices and theories that work for larger organisations cannot necessarily be applied to SMEs (Banham 2005). The lack of expertise, knowledge and resources of SMEs is a theme emphasised by various researchers (Jones & Macpherson 2006; Williams 2014; Perez-Sanchez et al. 2003). Further, Hillary (2004) supports these sentiments by stressing that SMEs have been largely ignored by environmental government agencies and they tend to be unaware of the impact they have on the environment and the legislation that governs them.

SMEs are often left behind in the endeavor for ES despite increasing pressures for adoption of ES practices due to the lack of understanding of their ES management processes and practices (Wiesner et al. 2010). ES as it relates to change management adds an additional dimension of complexity to the research. Furthermore, ES change management success has been connected to a variety of factors including multinationality, export-orientation, and size. Unique answers are thus needed to address the change management challenges of SMEs.

A report released by the OECD indicated that SMEs are not adequately equipped in either dealing or engaging with environmental issues (OECD Working Party on SMEs and Entrepreneurship 2010). Very little attention has been given to developing SMEs' ability to meet these new expectations, especially relating to organisational change capabilities required for ES. For SMEs to transition towards ES, it is essential that the main barriers to eco-innovation and ES implementation are identified. Furthermore, strategies must be implemented to encourage SME investment in eco-innovation and sustainable practices. Moore and Manring (2009) suggested that in order for SMEs to successfully manage the organisational change required to move to ES, they need a strategic framework. Thus, in order to promote ES in SMEs globally, we must identify ways to measure SMEs' progress towards implementing ES, and identify ES initiative options and methods that may be useful to policy making (OECD Working Party on SMEs and Entrepreneurship 2010). This requires a stock-taking of the existing successful measures being employed.

Unlike some other studies conducted on ES change in SMEs generally (Chadee, Wiesner & Roxas 2011; Wiesner et al. 2010; Del Brío & Junquera 2003; Hillary 2004; Perez-Sanchez et al. 2003), the focus of this study is on SME ES champions within the Fabric and Textile (FT) industry.

The FT industry is a very large industry worldwide (Gries & Veit 2012) with extreme impacts on the environment (Hasanbeigi & Price 2012). Both of these aspects and more will be discussed in depth in Chapter 2. With regard to the potential of this study to fill a practical gap, very few resources are available to FT Industry SMEs who wish to pursue more and better ES policies and procedures. In particular, there is currently no best practice models specifically developed for the FT industry to guide SMEs through their ES change management journey and their progression toward becoming a sustainable enterprise. Hence, in order to promote sustainable business across countries, cultures, and industries, new ES change management models must be developed that can be shared with other SMEs globally and can help to promote ES in SMEs despite the current barriers or lack of resources.

### 1.3 Objective and Research Questions

In view of the discussion above, the main objective of the research is to determine what factors impact upon the intentions of small and medium enterprise (SME) environmental sustainability (ES) champions in the Canadian, the American and Australian Fabric and Textile (FT) industry to behave in an environmentally sustainable way, and furthermore, how they manage their environmental sustainable change journeys.

The following research questions and sub-questions will inform this research objective:

**RQ1:** What factors influence the intentions of SME ES champions to behave in an environmentally sustainable way in the Canadian, the American and Australian FT industry?

RQ1a: What and how do attitudes impact ES champions in the FT industry's intentions and ultimate actions in implementing ES initiatives?

RQ1b: What and how do subjective norms impact ES champions in the FT industry's intentions and ultimate actions in implementing ES initiatives?

RQ1c: What and how does perceived behavioural control impact ES champions' intentions and ultimate actions in implementing ES initiatives?

**RQ2:** What motivates ES champions in the Canadian, the American and Australian FT industry to engage in environmental sustainability?

**RQ3:** What factors play a role in converting the intentions of SME ES champions in the Canadian, the American and Australian FT industry into behaviour/action?

**RQ4:** How do SME ES champions in the Canadian, the American and Australian FT industry manage their ES change journeys?

**RQ5:** What organisational outcomes do SME ES champions in the Canadian, the American and Australian FT industry achieve from their ES initiatives?

### 1.4 Expected Outcomes and Contributions of the Research

An outcome of this study is the development of a conceptual framework for ES change management in SMEs in the FT industry. Even though Wiesner et. al. (2010) and Chadee et. al. (2011) already identified initial key factors that are required for a SME to adapt successfully through environmental sustainability change, their study did not include any FT SMEs. However by focusing exclusively on the FT industry, this study could build upon their framework and other work on ES change management in SMEs (Wiesner et al. 2010; Johnson 2013; Lee & Klassen 2008; Linnenluecke & Griffiths 2010), while developing a tailored framework specifically for the FT industry.

Furthermore, uniquely this study goes beyond behavioural change management factors to also examine what and how attitudes, subjective norms/social referents, and perceived behavioural control impact SME ES champions in the FT industry's intentions and ultimate actions in implementing ES initiatives. Examining these factors in the Canadian, American and Australian context will bring a new perspective to ES research owing to the fact that a cross country study like this has not been conducted previously. The cross country nature of the study will provide a comparative context where SMEs within the FT industry could learn from each other. Understanding the factors impacting upon SMEs' ES intentions and the patterns of behaviour of SME ES champions in textile manufacturing across three countries will infuse new knowledge on ES change management. This research will inform how FT SMEs could be better positioned through successfully managing ES change.

The study has the potential to be of value to both participating and non-participating SMEs. The results of this research have the potential to afford a better understanding on how FT SME ES champions use ES change management practices to deal with changing environmental demands. The results may also be of value in informing government policy as the various levels of policy makers implement ES programs to assist FT SMEs in becoming environmentally sustainable. The

research is also expected to raise awareness of successful ES change practices for the SMEs participating in the research.

The final result of the research involves a step by step best practices framework/model for small and medium enterprise (SME) environmentally sustainable (ES) change in the Fabric and Textile (FT) industry. This model will be useful for policy makers, SME managers, and entrepreneurs. Apart from finding answers to the research questions posed in the next section, this study will provide a framework through which more effective ES support could be provided to FT SMEs. This support could be achieved through the provision of strategic advice to SMEs in the FT industry regarding the role and benefits of ES in creating a competitive advantage for these firms.

The outcomes of the study will also assist FT SMEs with guidelines to develop policies (formal or informal) to address ES issues and will assist FT SMEs with supporting stakeholder (internal and external) engagement processes regarding ES issues with readily accessible guidelines. By analysing the organisational outcomes of engaging in an ES change journey, it is expected that this study will add to the business case for sustainability. Lastly, this study contributes to the body of change management literature; this body of literature now includes a greater understanding of ES change management and barrier and motivations for ES change in the FT industry, as well as positive organizational outcomes due to ES change.

### 1.5 Definitions of Key Terms

Brief definitions of terms utilised in this study are provided below:

- **SMEs:** There are many definitions of small and medium enterprise (SME). However, the working definition of SMEs for this research initiative was firms employing between 5 and 99 full time workers (Cameron & Massey 1999).
- **ES Champions:** organisations who have either won ES awards within the last 5 years, or are considered by their peers as true leaders in ES in their industry, or who simply on their own accord adhered to far stricter environmental controls and standards than necessary (Taylor et al. 2012).
- **Change Management:** change management means continually renewing a firm's direction, structure, and capabilities such that the needs of customers, which continuously change, are able to be met (Todnem & By 2005).

- **Environmental Sustainability (ES)**: involves a variety of either process or product changes within a firm in order for less harm to come to the environment. It "is about making responsible decisions that will reduce your business' negative impact on the environment" (Small Biz New South Wales n.d.).
- **Environmental Management Systems (EMS):** a systemized approach to planned and programmed change aimed at determining, implementing and supporting environmental policy and management (Hillary 2004; Morrow & Rondinelli 2002). EMS include recycling, remanufacturing, and reuse, and these practices mainly focus on internal and external process capabilities. EMS is not the same as ES change management, but it can be used as an approach to managing ES change.
- **FT (Fabrics and Textiles):** fabrics and textiles include natural fibres such as wool, silk, linen, cotton and hemp, as well as man-made polyamides, acrylics and other synthetic fibres made from petrochemicals (Tobler-Rohr 2011).
- **Business Outcomes:** triple bottom line business outcomes (environmental, social and financial) all intended to contribute to positive business outcomes as defined in many papers as outcomes of corporate social responsibility (Buciuniene & Kazlauskaite 2012; Visser 2010; Marrewijk 2003).

### 1.6 Brief Overview of Methodology

This study occurs within a phenomenological paradigm, whereby the research is concerned with understanding behaviour from the frame of reference of the participant (Hussey & Hussey, 1997). Qualitative research is predominantly focused on exploration, discovery and inductive logic. This study will employ both an exploratory and a descriptive research design. The use of an exploratory design is warranted primarily owing to the limited empirical evidence available regarding ES champions, particularly those in the FT industry (Hussey & Hussey, 1997; Ghauri et al., 1995). Together with an exploratory research design, a descriptive research design in the form of in depth interview research is employed.

The research methodology in this study involves in-depth semi-structured interviews conducted with 12 SME owner-managers responsible for ES leadership in each participating SME. The data is then qualified and quantified using NVivo techniques. The selection of participants for the interviews, the purpose of the interviews, the development of the interview schedule, the

interview data collection and analysis, and limitations on the use of interviewing for data collection are further discussed in Chapter 4.

This research approach is considered by the guidelines of USQ as "Low Risk"[1] and ethics clearance was granted through the Higher Research Ethics Committee (HREC) of the University of Southern Queensland (USQ), ethics clearance number H15REA099. There are several limitations in qualitative research, which may have an impact upon the results. Further, delimitations include the restriction to just one industry as well as the geographic restrictions. Both the limitations and delimitations are outlined in greater detail in Chapter 4.

## 1.7 Structure of the Thesis

This thesis is organised into six chapters. Chapter 1 provides the background to the study, outlines the research problem, provides justification for the research and discusses the intended contribution of the research. Furthermore the research objective and questions are outlined and key terms in the study are defined. A brief overview of the methodology is provided. Finally the structure of the study is outlined.

Chapter 2 provides the context and theoretical background of the multiple issues in the study. In particular this chapter seeks to provide a context within which the study is found by offering a background for sustainability and the fabric and textile industry, as well as a platform from which to explore complexities of motivational theories, organisational change (specifically within the SME context). The Literature Review chapter, Chapter 3, is organised into sections based on the research questions posed in the study. This chapter discusses the relevant research for attitudes, motivations, sustainability initiatives, drivers, barriers, and outcomes of ES change in SMEs, and in the FT Industry context where research is available.

Chapter 4 provides a description of the research design and research methods employed in this study as well as the theoretical basis for each. Details of the interview methodology are discussed, including the measurement instrument, data collection and sampling, statistical analysis and coding of the data. Limitations and delimitations as well as the reliability and validity of the type of data collection are explored. And finally, ethical considerations and compliance is detailed.

Chapter 5 presents the quantitative analysis of the data. The results in relation to each

[1] http://www.usq.edu.au/research/support-development/research-services/research-integrity-ethics/human/risk

research question are presented and the hypotheses regarding the research questions are tested.

Chapter 6 presents a discussion, with interpretation and integration of the literature and the interview data. Further, it discusses various implications for SME managers and policy, identifies directions for future research and draws some final conclusions.

## 1.8 Summary

This chapter laid the foundations for the rest of the thesis by first introducing the research problem and research issues. Secondly, the research was justified and definitions were presented. Thirdly, the methodology was briefly described and justified, the limitations and delimitations were summarised and finally the structure of the thesis was outlined. The next two chapters comprise a critical discussion of the literature relevant to this study.

# CHAPTER 2 – CONTEXT OF THE STUDY

## 2.1 Introduction

The context of the study will be explained in this chapter. Contextualizing the study in this chapter aims to direct the reader toward understanding some essential underlying definitions, assumptions, limitations and theoretical underpinnings prior to the more technical literature review in the following chapter.

Sustainability and environmental sustainability (ES) are the first elements to be contextualized within a description of what sustainability and ES are as concepts. Sustainability as it relates to business and the current business culture is explored. Environmental sustainability and some of the more common routes being used in business today to attain it are also discussed. This section sets the stage for the remainder of the chapter.

The following section is meant to contextualize the limitations of the research, namely, geography, textiles manufacturing, and small and medium enterprises (SMEs). Participants were selected based on their geographic location (Canada, the USA and Australia), the nature of their business (textiles manufacturing) and they needed to fit within the definition of both an SME and ES champion (explained later in this chapter). In contextualizing the Fabric and Textiles (FT) Industry, great effort is made to help the reader understand the environmental damages caused by this industry and the mitigation strategies that companies and consumers can make to reduce this damage. In contextualizing SMEs, their particular characteristics are explored as they related to ES change. Research gaps are identified in part through the contextualization of the study, and again in the literature review in the following chapter.

In the last section of this chapter, theoretical underpinnings of the study are discussed. Attitude and intention theories particularly that of the Theory of Planned Behaviour (TPB) as well as motivational theories such as the Self Determination Theory and Expectancy Theory help to explain underlying motivations for change. These theories are connected to ES change in business by literature where possible. Change management, particularly as it relates to ES change management, is underpinned by the Dunphy-Stace Contingency Model. These theoretical underpinnings, much like the contextualization of the study, prepare the reader for the literature review which follows.

## 2.2 The Concepts of Sustainability

The word ‘sustainable’ is often used in business terms to describe a firm’s ability to sustain itself (primarily in a financial sense). ‘Sustainability’, can therefore be financial sustainability – a firm’s ability to generate returns on investment in the long term. Another common way the word sustainability is used in business, describes a firm’s impacts on both the social and ecological environment (Benn & Dunphy 2014)

Triple bottom line objectives (social, environmental and financial) work in tandem to make a company sustainable or not. Attaining genuine sustainability requires that a company positively contribute to society and limits its negative impacts on the environment while remaining financially viable. The term sustainable development was first coined at the United Nations Conference on the Human Environment in 1972 (Conference & Environment 1972), and now the most widely used definition is from the World Commission on Environmental Development: “Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p. 17).

Since the publication of this report, there has been an abundance of science proving that global climate change is happening and that it is caused by human activity, the nightly news often details health and social issues in factories world wide, and the emergence of movements such as “We are the 98%” has increased awareness to the global inequality of wealth and health distribution. These developments have caused consumers, both aware and weary of these facts, to demand more, forcing businesses to navigate ways to operate in a less unsustainable way. It is this second sense of the term ‘sustainability’ that will be used throughout this dissertation.

Another complicating factor in any contemporary discussion on sustainability is that companies may be motivated to become sustainable for a wide variety of reasons including improving business outputs, saving the planet, saving money, brand differentiation, connecting to community, supporting health and culture, responding to stakeholder concerns, and/or that the owners/managers simply believe it is the right thing to do (Wilhelm 2013). Furthermore, different companies mean different things when they say ‘sustainability’. Some examples include: offering goods or services at the lowest possible price so all consumers can afford them; selling only organic, fair trade or local products; making a profit; making a quality product with a long life or a product that is recyclable; reducing a product’s footprint; providing safe and healthy working

conditions; producing zero waste or zero emissions; and for some it may simply mean successfully passing their family owned company on to the next generation (Wilhelm 2013).

For example, in an interview for the documentary "The Corporation" (Achbar, Abbott, Simpson & Bakan 2004), Ray Anderson, the late CEO and founder of Interface, the world's largest manufacturer of sustainable flooring, explained what sustainability means to him: "Can any product be made sustainably? Well, not any and every product. Can you make landmines sustainably? Well, I don't think so … There's a more fundamental question than that about landmines. Some products ought not to be made at all. Unless we can make carpets sustainably, you know, perhaps we don't have a place in a sustainable world, but neither does anybody else, making products unsustainably." After an epiphany and motivation from his staff, Anderson vowed to climb (what he dubbed) 'Mount Sustainability' and has since turned his company into a world leader in sustainable design and production (Anderson 2010).

### 2.2.1 Environmental Sustainability

In the context of sustainability a variety of other topics will be discussed in order for the reader to grasp both where the researcher and where the research is coming from. Here, the concept of environmental sustainability will be explained, using several more common methods as examples of how companies are striving for environmental sustainability.

Business has three basic issues to face in relation to sustainability: what it takes, what it makes, and what it wastes, and at this point, quite simply put, "our business practices are destroying life on earth" (Hawken, 2010, p. 15). The analogy between the role of never-ending economic growth, that is assumed by neoclassical economists, and a cancer cell is obvious. Cancerous cells, if not contained and managed, will lead to death of the host. Similarly, many corporations are maladaptive, predatory, thoughtless and harmful to all but a few. Yet, because corporations are the dominant institution of our time, it is corporations who are in the best position to innovate, and thus improve the social justice and environmental issues that affect us all. Businesses can increase the wellbeing of human-kind through community service, ethical action and creative invention. They can act in ways that are restorative to society and the environment. It is possible that businesses can become more environmentally sustainable in as many different ways as they can operate successful companies: promote gender equality, healthy workplace initiatives, environmental initiatives, volunteer activities in communities, water clean-up days, support

education, fund innovation and many more..

However, the current economic system, government policies and controls, some corporate cultures can make it challenging for many businesses to act in more sustainable ways. Much of culture is rooted in language. Native Hawaiians have many words to describe a wave, the Inuit have even more words to describe snow, and yet business has only two words to describe "success": Net and Gross - or perhaps just one: Profit. Therefore, costs or profits, by definition, do not factor in whether people or places were exploited, resources depleted or lives lost. Quality and quantity are not differentiated in the current corporate culture and model of profit, nor in the economic or political spheres (Hawken 2010). This lack of sophistication adds to the challenge of endorsing business activities that have any other value other than monetary.

Many business managers/owners believe that if their businesses do not continue to grow they will fail. Many ecologists believe however that if business continues its ceaseless growth, it will destroy the world around it (Hawken 2010). As we have seen, a key aspect of sustainability is environmental sustainability (ES). And it is increasingly critical that businesses begin to incorporate this into the culture and language of business. Within the context of this study environmental sustainability in business is defined as either process or product changes within a firm in order for less harm to come to the environment. It is about making responsible decisions that reduce a business' environmental impact while at the same time aiming to provide for their present needs without sacrificing the needs of the future - simple, basic needs, like clean water, air and food.

When Paul Hawken wrote the first edition of "The Ecology of Commerce - A Declaration of Sustainability" in 1993, sustainability was not a commonly addressed topic in business. Since then business has come a long way in its understanding and awareness of environmental and social issues. One success story often told is that of the previously mentioned Ray Anderson. After having read Hawken's Ecology of Commerce, Ray Anderson set a goal for Interface to have a net zero environmental footprint by 2020 - an almost impossible task in the Fabric and Textile (FT) industry. Anderson and many "champions" like him believe it is an ethical imperative for companies to become environmentally sustainable - immediately.

Prior to the Industrial Revolution, business commerce and business culture were both regulated by the surrounding natural processes. Solar energy was captured by food and trees and this was the extent to which humans were able to turn nature into commerce. Now that stored solar

energy, in the form of fossil fuels, is able to be readily extracted, a large majority of humans no longer live in synch with natural cycles. Instead, many people have created an artificial life, shadowed by waste, degradation and pollution. Corporations leave 11.4 billion tons of hazardous waste behind every year (Hawken 2010) causing many people to suffer in the wake of it.

Industry discharges effluence into waterways, releases chemicals into the air, and injects toxins deep into the earth. Doing business today is typically an energy-intensive endeavor that devours resources, and both large and small businesses are responsible for this plunder. Until recently we (businesses and consumers who support them) have consistently chosen the resource hungry path of least resistance, and in the process of taking too much, we are also wasting too much. This is a classic short term gain for long term pain scenario. Whenever we pollute or degrade the earth with these toxins or this waste, we are destroying our natural capital and in this way reducing our ability to sustain ourselves long term (Hawken 2010).

The FT industry was the first to revolutionize production to a state of economic rewards of scale that since have never ceased (McDonough & Braungart 2002b). These rewards of scale, specifically in terms of cost efficiency, quickly became apparent to both producers and consumers. Soon after virtually all production became industrialized - healthcare, farming, food, etc. (McDonough & Braungart 2002b). In Western Canada, a large portion of industry is forestry, where old growth forests are clear cut and systematically row-planted-single-species forests are replanted, only to be harvested again in 40 years (MacLeod 2012). Many countries, like Canada, derive much of their wealth from natural resources, but we have not found a way effectively to preserve that wealth, and many companies are no different.

The logical response to these issues is to design manufacturing processes such that they no longer create hazardous waste in the first place. A growing number of companies in recent years have begun asking themselves, 'How do we conduct business sustainably?' For a business to become environmentally sustainable (ES), the motivations to change must be intrinsic (Pelletier et al. 1999). Then, either processes or products (or both) may change. An overall culture may change. Goals must be set and progress measured, and soon what was once work becomes habit - all in order for less harm to come to the environment. Furthermore, a growing number of consumers are beginning to take a real interest in the sustainability aspect of the products they buy. The EcoLabel Index indicates approximately 50 programs in 1990 across 246 countries that qualify products according to their environmental impact. In 2010 that number exceeded 350, while 108 of those

labels apply to the FT industry (EcoLabel Index n.d.)

While many organisations claim to do their part by using energy-efficient equipment or increasing recycling efforts, some have taken their ES efforts to the next level by basing their entire business model on it. Common strategies of environmental sustainability management (ESM) include green supply chain management (GSCM), cleaner production, innovative process and product innovation (also called sustainable innovation). This may range from a simple change in an accounting firm to go paperless, to a large manufacturing company creating a closed loop, local and net zero manufacturing process in order to produce their goods. Moreover, Sustainable Innovation, Industrial Ecology and Cradle to Cradle design and production are ever increasingly used strategies used in manufacturing that work well to limit, if not altogether eliminate adverse environmental impacts.

#### 2.2.1.1 Sustainable Innovation

Eco-innovation involves any or all three of: process innovation, product innovation, or organisational innovation to either benefit the environment or avoid negative environmental impacts (Beise & Rennings 2005; Rennings 2000). In producing goods and services, increasing eco-efficiency or eco-effectiveness leads to process innovations that clean up production. Process innovations such as closed loop production or 'industrial symbiosis', manage outputs that would normally be considered "wastes", and through altering ways of using resources, overall business operations become more eco-efficient (Altham 2007). An example of process innovation includes the aforementioned Industrial Ecology concept. Product innovations can involve improvements of a product or service. Eco-design such as Cradle to Cradle (discussed in 2.2.2.3) improve the environmental impact of a product by using more benign materials (ex: organic or recycled), materials that last longer and are more durable, materials that require less energy in their life span. Further, product innovation can involve an entirely new development all together, such as renewable energy technologies (Hart & Milstein 2003). Finally, an organisation can reorganise routines, structures and management within a firm, known as organisational innovations; moreover, more formalized management systems such as environmental management systems (EMS) are considered one aspect of organisational innovation (Rennings & Rammer 2011).

#### 2.2.1.2 Industrial Ecology

Our current industrial system looks at production in a linear fashion. Materials are imputed, products come out. From this linear system, hazardous wastes are produced and products are neither recycled nor returned. In manufacturing what is good for the bottom line can be wasteful of resources and harmful to life. This is because we use wasteful methods today, in our linear systems, because they may often be the cheapest solution. However, industrial processes, which harm and waste, are by definition less economic in Industrial Ecology (IE) and therefore more costly in the long run. The core principles of IE suggest businesses can create waste but then use it. They can make what was once considered waste into something profitable. Because of this shift in thinking, IE is one of the most comprehensive strategies for sustainable industrial methods (Frosch 1994). IE integrates infrastructures at a large scale through a design that links artificial ecosystems with the natural global ecosystem. Companies practising IE try to connect their material and waste flows in an attempt to eliminate pollution. Manufacturing processes are tailored in IE so that the by-products of a manufacturing process become the raw materials of subsequent processes. The carrying capacity of nature is considered in IE, accomplished through industrial design emphasising dematerialisation (using less material per unit of the output), decarbonisation (a large-scale shift away from carbon based fuel) and minimising inputs and outputs by improving industrial processes and materials employed (Hawken 2010).

#### 2.2.1.3 Cradle to Cradle Design

In order to manufacture any product, a certain amount of embedded energy is involved. But much of that energy can be saved, reused, or even used as ‘food’ (adding energy or materials back into the system) by careful design and construction. Under this intelligent product concept, products or services are created and recreated in increments that extend their life far into the future, and with every product or by-product imagined even before it is made. Ecologically intelligent products can be either compostable/biodegradable or technically cyclical, in which the basic elements of a product continually circulate as a valuable nutrient to the system (McDonough & Braungart 2002b). Cradle to Cradle design begins with the assumption that waste never exists. From this starting point, a product is made following rules of nature. It is an “industrial re-evolution” where we take from the environment but in turn give something back (McDonough & Braungart 2002a).

## 2.3 Context of the Study

The previous section introduced the context of sustainability and environmental sustainability (ES) as well as explained the axiomatic bias of the researcher. This section will now introduce additional important contexts of the research, including geography, the Fabric and Textile (FT) industry, small and medium enterprises (SMEs) and ES champions. The focus of the study is geographically constrained to Canada, the USA and Australia and industrially constrained to the FT industry. The reasons for this are discussed below. Further, SMEs are a focus of the study for the research gap identified as well as their unique characteristics compared to their larger and more often researched counterparts. Lastly, champions of ES are the primary focus of the research such that rich learning can come from companies leading the way.

The research within these contexts is unique due to the multiple facets of the study: SMEs, ES, the FT industry, and geographical locations. However, it is not the context per se that is important but the what these aspects mean to the research. This will be explained in the Theoretical Underpinnings section following the context sections in this chapter.

### 2.3.1 Geographical Context of the Study: North America and Australasia

The country where a firm is located strongly influences the adoption of ES practices. For example, Abreu et al. (2012) compared Corporate Socially Responsible (CSR) practices (related in part to the environment since CSR generally refers to the triple bottom line of people, planet and profit already discussed) in textile firms in China and Brazil. They found that Brazilian firms have many more CSR practices in place than Chinese firms, suggesting that the CSR differences between countries likely result from the unique history and culture of their business systems. It is important to recognise that countries have different cultures and expectations relating to environmental laws, consumer expectations, labour rights, labour laws and employment safety expectations, etc. Moreover, all of these factors affect how products are both made and consumed within a country along the spectrum of being made sustainably.

In the case of this study, Canada, the United States of America (USA) and Australia have similar cultures, languages, economies and laws and for these reasons, this is the chosen geographical context of the study, allowing for an international comparison. Each country will now be discussed as they relate to environmental sustainability and textiles manufacturing.

#### 2.3.1.1 Environmental Sustainability in North America and Australia

Canada, the USA and Australia are all resource-rich countries and many citizens of these countries pride themselves in the abundance and beauty that their countries provide. While it appears that the consumers in all of these countries are becoming more environmentally conscious every year, the same cannot be said for all of their businesses. This could be because the governments and democratic structures differ, as do demographics and economies – causing different challenges and opportunities to businesses within them.

In Canada, individual provinces govern the majority of their natural resources, and laws to protect them reside within provincial borders. British Columbia and Quebec are the only two provinces that promote carbon taxes and carbon caps and trade. Interestingly, these are the two provinces best known for their economic dependence on renewable resources, lumber and maple syrup respectively, whereas the remainder of the country is better known for its dependence on non-renewables to thrive economically, primarily the oil and gas industry (Gosselin, Hrudey, Naeth, Plourde & Therrien 2010).

Although the current Canadian Federal Government is (at the time of writing) pushing to build an oil pipeline in a crucial Boreal Rainforest, and this government is well known to devalue the planet (Mandel n.d.), the Department of Sustainability has published a recent guide on this government's plan for a sustainable future (Canada 2013). This plan aims to achieve greater ES through typical bureaucratic measures such as linking development planning and reporting to the government's core planning and reporting processes. The four priority themes for Canada's ES promotion include: Addressing climate change and air quality; protecting nature and Canadians; maintaining water quality and availability; and shrinking the environmental footprint (Canada 2013). The plan further promotes synergies between ES and economic initiatives through such endeavors as international trade and supporting discussions in trade and investment negotiations to ensure that both economic growth and the conservation of the environment are mutually supported (Canada 2013).

Consumers in Canada are becoming more aware and active in purchasing ES products and policies as well as interested in CSR initiatives within the companies they support. Recently, both Future Shop (the largest Canadian box store for electronics) and Target (an American big box store) shut down all of their Canadian stores. This is largely due to trends in consumer behaviour of reverting back to supporting local economies, expecting more ES policies from their stores, and

a preference to shop online (Affairs 2004). Canadian consumers are becoming more value-based consumers, taking into account both how and where something they are considering buying was made, and this has led to a growing market demand for products made that are certified Fair Trade or certified organic (Affairs 2004).

Like the Canadian case, US government similarly walks a fine line between economic and environmental security. Several reports suggest that ES is becoming integrated into the fabric of a growing number of American companies. For example, Ernst and Young, in cooperation with GreenBiz Group, conducted a survey of 272 sustainability executives in 2011 to explore developments in corporate sustainability programs (Ernst & Young 2012). The report indicates that 76 percent of respondents anticipate that natural resource shortages will affect their core business objectives over the next 3-5 years and 65 percent of respondents stated their CFO is now involved in sustainability planning. Further, the report showed how CFOs, employees and customers are all driving organisations to become less unsustainable. Despite the lack of regulation to address climate change, greenhouse gas reporting and reduction efforts have risen from a very low base among corporations in the US, and interest in water usage, efficiency and stewardship is on the rise as well (Ernst & Young 2012). Moreover, a Price Waterhouse Coopers report indicated that over 80% of investors consider sustainability in investment choices in the US (Price Waterhouse Cooper's n.d.).

Per capita, Australia's greenhouse emissions are higher than any other developed country (National Sustainability Council 2013). Moreover, changes in federal politics in recent years have done little to motivate businesses to enact or continue with ES behaviours. In 2014, investments in renewable energy rose to record levels worldwide, but sunk by 35% in Australia, reportedly due to uncertainty triggered by the Abbott government's review of the industry (Hannam 2015). Deloitte reported that it would be necessary for Australian companies to engage with social and environmental trends in order to compete globally, and "social and environmental issues are no longer simply the government's responsibility or part of a company's philanthropic efforts," (Asutralia Business Trends 2014, p. 11). However at this stage, it seems as though very few businesses are taking heed in Australia and it remains to be seen what changes in policies may emerge as a result of the new Turnbull led Coalition government.

#### 2.3.1.2 Fabric and Textile Manufacturing in Canada, the USA and Australia

Although the Fabric and Textiles (FT) industry will be further discussed in section 2.3.2, the manufacturing of such in the context of Canada, the US and Australia will be discussed here. At the present time, the vast majority of textiles are produced in China and India but pockets of manufacturing can be found in all three countries (Tao & Fu 2007). Cotton is a common crop in the USA and Australia. Wool is a staple in both Australia and New Zealand, and hemp is coming to the fore in Canada.

According to the Natural Resource Defense Council, nearly 98 percent of all apparel items bought in the United States are imported from abroad (NRDC n.d.).The Environmental Protection Agency (EPA) regulates textiles manufacturing under a federal law called the Resource Conservation and Recovery Act (RCRA). Under RCRA, textile manufacturers based in the US are required to follow certain procedures when disposing of, transporting, storing, or treating hazardous waste. RCRA also provides federal recycling and pollution prevention options to help textile manufacturers decrease the amount of hazardous waste they generate (US EPA 2002).

NAFTA (The North American Free Trade Agreement) had a devastating effect on local production of almost all goods within North America (Henry 2014).. Prior to January 1, 1994 when NAFTA was signed, most American textiles were produced in America; however, once NAFTA was ratified, the attitude of business was to get out or go out of business and many of the largest textile companies were forced into bankruptcy (Henry 2014). From 1994 to 2001 US textile imports increased by 88.5% (Oh & Suh 2003).

Similarly, tariffs imposed in Australia over the last few decades, meant in theory to protect manufacturing, have had deleterious effects on the local FT industry. In 1972 over 350,000 people worked in the FT industry in Australia and a very large proportion of textiles and fashion sold in Australia was manufactured there. After the John Howard Coalition was elected in the early 1995 and a 25% tariff cut was introduced, many Australian companies were forced to cut their labour force in half and in many cases they simply went out of business. Since then, the FT industry in Australia has not recovered. It currently employs just over 10% of its 1972 workforce tally (Fashion 2014). Today in Australia, the FT sector contributes $5.2 billion annually in industry value added to Australia's economy. It employs as few as 39,000 people across approximately 12,400 business (Fashion 2014). Most of the Australian cotton is exported, and only 2% is milled locally for textiles (Khabbaz 2010).

Due to this situation in Australia, even if a company wants to be sustainable, it is forced to access fibres from China and India – a far cry from a green supply chain (NRDC n.d.). The greenest form of textile found in North America is organic cotton, grown primarily in the middle eastern part of the US and processed into textiles there. This is not the case in Australia, however. The current status of organics in Australia is much further behind that of North America. The president of the Australian Cotton Industry, however, argues that Australia is a leader in "sustainable farming" practices, without a single organic crop (Chris Larsen n.d.). In any event, Australian cotton production practices have undergone considerable changes over the last 25 years, including widespread use of Genetically Modified (GM) cotton varieties, and more efficient water use. The indirect on-farm energy use (mostly the embodied energy for the purpose of manufacturing farm fertiliser chemicals and machinery for use in cotton farming) is the most significant component (average 77%) of total cotton production in Australia (Khabbaz 2010). This percentage could be abated if Australia were to embrace organic practices.

Instead of cotton, hemp or even flax, all of which could be grown organically in Australia but are not, the most sustainable textile produced there is wool. Like all textiles, wool can be produced in a more or less sustainable. However, even the less sustainable methods of raising sheep trump the pesticide and water dependence of the cotton industry's current status. Further aspects of environmental impacts of specific textiles as well as mitigation strategies for the textile industry are discussed in section 2.3.2 below.

#### 2.3.1.3 SMEs in Canada, the USA and Australia

The unique characteristics of small and medium enterprises (SMEs) will be contextualized in section 2.4. Here, a brief overview of the importance of SMEs to each geographical region is introduced for the geographical context.

Generally speaking, SMEs are critical to all of the economies within the geographical context of this study. SMEs are variously defined in different countries. SMEs (less than 500 employees) in the USA account for 99% of the US's economic activity, and SMEs make significant contributions in terms of employment, entrepreneurship, and US economic activity (International Trade Commission 2010). In Canada, SMEs (5-499 employees) account for 44% of the firms, and micro firms (1-4 employees) account for 55% of Canadian firms. Small business is significant in Canada: 30% of Canada's GDP is produced by firms with less than 100 employees (BDC 2013).

Similarly, the SME sector (0-200 employees) represents 97% of all Australian businesses, half of the nation's GDP (Vives 2010) and 50-60% of the nation's employment (Blackburn 2007). Over 3 million workers are employed by small private sector firms in Australia.

### 2.3.2 Industrial Context: The Fabric and Textile Industry

The North American and Australian context was previously discussed as it relates to ES culture, the FT industry and SMEs within this geographical context. Textiles and their environmental impacts are now explored in this section.

#### 2.3.2.1 Textiles

The textile industry includes natural fibres such as wool, silk, linen, cotton and hemp, as well as man-made polyamides, acrylics and other synthetic fibres made from petrochemicals. Worldwide textile exports amount to over $300 billion annually. China dominates production globally, and other major players include the European Union, the US, South Korea, and India (WTO n.d.). Fabric and textiles is a unique industry in that the production of goods can be made in both large and small businesses and in regional areas and metropolitan areas.

#### 2.3.2.2 Environmental Impacts of the Fabric and Textile Industry

The Fabric and Textile (FT) industry is an extremely environmentally toxic industry as a whole. The production of fashion and textiles requires high levels of water and energy consumption and often emits large quantities of environmental pollutants. The dyeing processes, waste water and wasted materials, chemicals and packaging, the impacts of shipping, and the general fashion industry's culture of throwaway and fast fashion all contribute to massive amounts of water and air pollution every day. On average, 1kg of textile requires 1kg of chemicals and auxiliaries to finish the product (Muthu 2014).

The product lifecycle of many textiles follow a specific and finite path from cradle to grave. Figure 2.1 shows the general manufacturing phases of a textile. At every phase there is an environmental impact and subsequently there is opportunity to mitigate this impact.

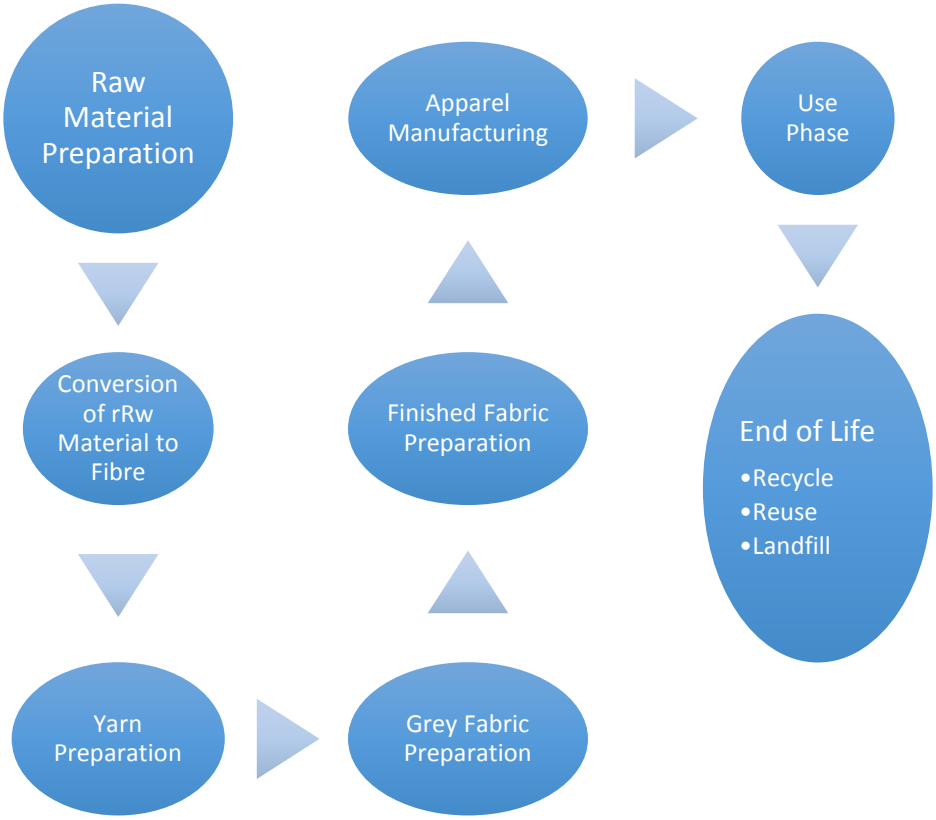


**Figure 2.1 Life Cycle of a Textile (Adapted from Muthu 2014)**

As an example, the impact of the production of a pair of jeans is discussed. The production of a pair of jeans impacts the environment at every stage of the production: the agricultural aspect of growth of cotton relies on heavy uses of pesticides and fresh water and the industrial agricultural practices used rely on fertilizers as well as fossil fuels to power the machines. One kilogram of cotton requires 1/3 of a kilogram of nitrogen fertilizer (Muthu 2014). In the production of the fibres, firstly much of it is shipped across the ocean to be milled, consuming fossil fuels and emitting greenhouse gasses in the process. It takes around one kilogram of raw cotton to make one pair of jeans (Report on Blue Jeans, sourced 2015). Then, thousands of liters of fresh water are used to dye and make the fabric. Further, excessive chemicals are used to fix the blue dyes and yellow threads. To cut and sew a pair of jeans, waste is produced and large quantities of the original fabric are simply thrown away. Then, to prepare the fabric for wear and shipping, “finishing” products containing carcinogens, mutagens, persistent toxins and bioaccumulative substances including endocrine disruptors are sprayed on the garments. Eight

thousand chemicals, known to be harmful to our health, are commonly used in the FT industry (McDonough & Braungart 2002b). Lastly, those jeans are shipped on coal burning boats and returned to the developed world to be purchased. It requires over 14kg of carbon dioxide emissions to make one pair of jeans and that is before they are worn, washed, and washed and dried again and again, a process also requiring large quantities of fossil fuels in most parts of the world (Luiken et al. 2013).

In general, the FT industry's biggest impact on the environment is related to primary water consumption and wastewater discharge (Tong et al. 2012). Following the grey fabric preparation phase referred to in Figure 2.1, there are often over 6 rinsing and washing stages to get the textile to the final stage, ready for apparel manufacturing (Muthu 2014). Reuse of wastewater represents an economic and ecological challenge for the textile sector. Cotton is responsible for 2.6 per cent of the global water use and not only is it heavily reliant on water for irrigation, it also has large land and chemical requirements. The greatest impact of cotton farming is water consumption, with an $83 billion annual natural capital cost (Jackson 2014). Making polyester also uses large amounts of water. The following lists some of the FT industry's greatest environmental perpetrators and the cause of their environmental impacts.

*Acrylics*

- Acrylic fibres are not easily recyclable or biodegradable in the environment (Muthu 2014).
- Production requires high amounts of energy (Muthu 2014).
- Manufacturing uses highly toxic substances harmful to human health (Muthu 2014).

*Viscose and Rayon*

- Fibres are made from wood pulp, which might seem more sustainable, but often old growth forest is cleared and/or subsistence farmers are displaced to make way for pulpwood plantations (GreenChoices 2015).
- Eucalyptus trees are often planted, which draw up exceptional amounts of water, causing problems in sensitive regions (GreenChoices 2015).
- In order to make rayon, the wood pulp is treated with hazardous chemicals such as caustic soda and sulphuric acid (GreenChoices 2015).
- Chemicals disposed in the factory effluents can also affect the ecosystem by polluting the water, decreasing plant growth and shortening animals' lives (Tong et al. 2012).

*Cotton*

- Responsible for 2.6 per cent of global water use (Jackson 2014)
- Has a significant natural capital dependency (Jackson 2014).
- Heavily reliant on water, expanses of land, and harmful chemicals which can result in pollution to land, water and air (Jackson 2014).
- Most material impact of cotton farming is water consumption, with $83 billion natural capital cost globally (Jackson 2014).
- Most pesticide intensive crop in the world – 16% of the world's insecticides are used on cotton (Muthu 2014).
- Herbicides, and chemical defoliants sometimes used to aid mechanical cotton harvesting, are damaging to the environment (GreenChoices 2015).

*Spandex*

- The process of making spandex takes raw materials, toxic chemicals, and a lot of energy.
- Spandex doesn't have a very long life forcing consumers to continue to keep buying new tights, leggings, bikinis, etc., which creates more waste (Wear Nothing New 2015).

*Polyester*

- Made from petrochemicals and therefore non-biodegradable (GreenChoices 2015)
- Uses large amounts of water for cooling, along with lubricants, which can become a source of contamination (GreenChoices 2015).
- Production process disposes toxins into the water and emits pollutants into the air (Muthu 2014).
- Requires excessive initial energy investment (Muthu 2014).

*Polyurethane*

- Made from fossil fuels, thus carbon dioxide is emitted during production (Koerner 2015).
- Producing 1 kilogram of polyurethane foam emits 3.7 kilograms of CO2 (Koerner 2015).

*Nylon*

- Made from petrochemicals and therefore not biodegradable (GreenChoices 2015).
- Manufacturing nylon creates nitrous oxide, a GHG 310 times more potent than carbon dioxide (GreenChoices 2015).
- Requires the highest amount of energy per kilograms of all fibres (Muthu 2014).

Raw manufacturing is the part of the supply chain that is by far the biggest polluter for clothing and goods (Ho & Choi 2012). According to a recent report, the clothing manufacturing industry in China produces more than 2.5 billion tons of wastewater and other pollutants each year while processing more than 40 million tons of fibre — over half of the world's total production (Jun et al. 2012). The China Pollution Map Database has over 6,000 records of textile factories violating environmental regulations, and in 2010 there were less than 200 prosecutions despite over 23,000 reported violations to the environment (IPE China Water Pollution Map, 2010).

Furthermore, the dyeing process in textiles processing produces huge amounts of toxic emissions, "especially for the wet processing of natural fabrics, the production processes are water-, energy-, and pollution-intensive" (Ren, 2000, p. 474). Much of the water used in producing a garment can be attributed to the dyeing process since unfixed dye often washes out of garments, colouring the rivers, as treatment plants fail to remove them from the water (Tong et al. 2012). Dye fixatives – often heavy metals – also end up in sewers and then rivers (GreenChoices 2015). Cloth is often bleached using dioxin-producing chlorine compounds (GreenChoices 2015). Virtually all polycotton (especially bed linen), plus all 'easy care' products (i.e. permanent press or crease resistant cotton) are treated with formaldehyde (also used for flame proofing nylon) (GreenChoices 2015). Not only are these chemicals toxic to humans (both end users and factory workers), but also the vast majority of these toxic chemicals are simply pumped out of the factories and into the streams and rivers below. One study found only 2 out of 300 fabric mills in Bangladesh (where the majority of textiles for the North American market are produced) had a wastewater treatment plant (and there are more than 300 mills in Bangladesh) (Hossain et al. 2006). The manufacturing process of textiles involves many chemicals, such as caustic soda, sulphuric acid, pesticides, and herbicides. These chemicals are often disposed of directly through waterways, polluting water and land and harming the ecosystems. Many of the chemicals remain on the clothing and are absorbed into our bodies when we wear them.

Aside from the environmental impacts of the raw materials themselves, the finishing process and the intense water requirements for all production, the FT industry further impacts the environment through supply chain inefficiencies. Today, raw materials, manufacturers and retailers are routinely located on opposite sides of the globe. The average t-shirt travels 13,000 miles from "dirt to shirt" (Henry 2014). This international shipping creates a large amount of carbon emissions, polluting the air and water.

Lastly, fashion culture is environmentally damaging. The throw away and seasonality of fashion lends itself to the products being used far less than is possible. Fashion is always changing and the world's resources cannot keep up with the increasing demand for throw-away fashion (Jackson 2014). Along with the excess waste caused from non-biodegradable items, the clothing industry in general creates excess waste from the 'newest' looks. In the US the average person discards 32kg of clothing annually. The Agency estimates 85% of these discarded clothes end up in landfills or incinerators each year, and that is in the USA alone (Jackson 2014). In 2010, 234 tons of textiles went into landfills in Hong Kong alone (Jackson 2014). In the UK alone, people have an estimated $46.7 billion worth of unworn clothes lingering in their closets (Jackson 2014). Over-consumption of clothing leads to more waste in landfills, more pollution from the chemicals used to create the clothing, and waste of natural resources to create the clothing. In essence, over-consumption, current societal norms, and fashion culture intensifies all of the impacts associated with the FT industry.

#### 2.3.2.3 Mitigation of Environmental Impacts in the FT Industry

PMP Research (2008) illustrated that over 67 percent of companies in the FT Industry are having environmental demands placed on them by partners and stakeholders. Due to these new regulations and in order to gain legitimacy from overseas buyers, the fashion and textile (FT) manufacturers in developing countries in particular are under strong pressure to adopt internationally recognised ES certifications, such as ISO 14000 (Christmann & Taylor 2001).

With the rising environmental concerns from both consumers and stakeholder groups, ES is becoming an important consideration for today's FT manufacturers. Even larger companies like H & M are making attempts at decreasing water usage and improving their environmental footprint. But much more needs to be done, both in large and small FT firms, and both at home and abroad, in order for less harm to come to the environment. The environmental impact of textiles occurs at all stages of the lifecycle: production, wear, and disposal. Many studies regarding mitigation of environmental impact in the FT Industry exist, whereas there is limited research on the wear and disposal aspects of the industry's impact.

Lu et al. (2012) showed that with biological treatment systems and membrane technology of wastewater reclamation, the average removal efficiencies of color and turbidity were about 93%, 94.5% and 92.9% respectively, and it only cost $0.25USD per litre, therefore, it was

concluded that water pollution can be reduced or eliminated through textile wastewater reclamation and reuse.

One way to help reduce the amount of pollution created by textiles can be by using recycled materials. One might think that recycled materials in fashion equate to less desirable merchandise but this is not the case. “Demand for high quality recycled polyester is now outstripping supply, thanks to growing use by diverse brands such as Armani, H&M, Patagonia and Esprit, which are using the material in an increasingly diverse range of applications” (Saad, 2015, n.d.). Other more ES choices for fabrics include organic cotton, hemp and flax, and wool-based yarns (Muthu 2014).

Environmental damage can be mitigated through the materials chosen. Materials that are recycled, naturally coloured, and/or organic consume less energy during production, and materials that require less care (ex: less ironing or less washing) reduce the use of energy in the utilisation stages. However some fabrics that use special finishing technologies, such as self-cleaning, quick-dry, and wrinkle-free materials are more damaging to the environment in the long run (Moon et al. 2013).

Not all textiles are environmentally damaging. Hemp, flax and wool as well as 100% certified organic cotton are all ‘greener’ alternatives. These items produced and consumed through processes in which resources are not depleted or permanently damaged (by using sustainable raw materials, reducing the use of chemicals and fossil fuels and decreasing the level of water use and waste), therefore they greatly minimise the impact on the environment (Manickam & Prasad 2005). For example, FT products can be made with 100% organic cotton, which is grown without using chemical fertilizers or pesticides. Switching to organic cotton production results in a 93% reduction in produced toxicity compared with conventional cotton production (Manickam & Prasad 2005).

Less waste and contamination will also reduce the harmful effects on ecosystems. In addition, as polyester recycling consists of using clear plastic water bottles, or PET as the raw material, this also eliminates more waste from the planet. Less plastic water bottles also then lead to less water and air pollution from the toxins the water bottles emit. In addition to recycled polyester, companies like Esprit also use recycled nylon and recycled cotton (Esprit n.d.).

Other eco-efficiency tactics such as the aforementioned cradle to cradle design, industrial ecology, environmental management systems can and should be used in this industry as

well as Total Quality Environmental Management, end-of-pipe solutions and design versus labeling are increasingly being used in manufacturing to help build on compliance and capture the benefits of environmental sustainability.

The way in which a garment is designed can mitigate its environmental impact. In particular a garment can be designed using simple designs: less coloring, fewer accessories, less cutting/stitching and/or fewer special effects. This design philosophy helps to reduce energy consumption during production phases of sewing, cutting, dyeing, and printing to name only a few (Moon et al. 2013). Moreover, developing classic styles contributes to the extension of a garment's usage life. Finally, as far as the life cycle of a garment, biodegradable fibres can reduce the load on landfills, durable fabrics can extend usage life, recyclable materials can facilitate reuse, and choosing materials capable of this all reduces the consumption of energy in the final disposal stage (Moon et al. 2013).

Another way to mitigate the environmental impact of textiles is at the manufacturing plant level. Major energy saving can be contributed by management and control of plant facilities such as air conditioning, lighting, and/or floor design and layout (Moon et al. 2013). For example, using energy-saving light bulbs or setting the light bulbs to automatically turn off if no movement is detected and at the optimal position (i.e., height and angle) can reduce the energy used. In green supply chain management, energy can be saved by increasing the efficiency of logistical operations. For example, local production for local markets and the use of maximum truckload and minimum route-length in moving products from one place to another can all contribute to saving energy. Furthermore, minimal or recycled or recyclable packaging and labelling also saves energy.

Further to all of this, certification, watchdogs, coalitions and self-reporting are additional ways in which the FT industry (and many other industries as well) has been regulated. Several certifications or eco-labels exist for the textiles industry. GOTS, the Global Organic Textile Standard, certified organic or certified fair trade and ISO 14000 are the main international standards that environmentally conscious companies can pay to have themselves certified by. Locally, GECA (Good Environmental Choice Australia) and GAC (Green America Certified) are also certifications used by “green” companies to reassure their customers they are operating above certain standards.

Global watchdogs for sustainability such as Greenpeace, Amnesty International and the World Wildlife Foundation have impacted both how consumers perceive the importance of how their products are made and what impact they have as well as how corporations perceive the importance of compliance. Corporations found by these watchdogs to fail to comply often suffer dire public defacing campaigns as in Green Peace's Detox Catwalk (greenpeace.org). Further to certifications and watchdogs, sustainability reporting tools are used often by larger firms such as Nike to mitigate risk and improve reputation and consumer perceptions. The Global Reporting Initiative (GRI) and the International Organisation for Standardization (ISO) are two commonly used and highly respected self-reporting tools.

Lastly, partnering with not for profits or becoming the member of green business clubs or coalitions helps to increase motivation, transparency and technical skills of companies involved (Benn et al. 2006). For example, the Sustainable Apparel Coalition (SAC) is a group of retailers, brands, government, and non-governmental organisations with the focus on the Higg Index. The Higg Index assesses both environmental and social impacts using a standardized set of measurement tools. These tools measure member's apparel and footwear products across the product lifecycle and throughout the value chain. The scope of SAC's desired outcomes include: improving water-use efficiency, minimising the volume and chemical constituents of water discharges and reducing the need for water use in garment care; minimising energy and carbon use; developing effective uses for textile waste and minimising waste in operations, supply chain, and end-of-life of apparel products; and reducing the use of chemicals.

It has been shown that value can be created further through environmental initiatives when research and development resources are committed to sustainable product development, when trends in the market are captured and acted upon and when the corporate reputation for sustainability is managed (Benn et al. 2006). Many of the ES champions interviewed for this research have their own, localised and personalised mitigation strategies as well, and these will be discussed further in Chapters 5 and 6.

#### 2.3.2.4 SMEs and the Fabric and Textile Industry

Although SMEs will be discussed in detail in the next section (2.3.3) the majority of textile manufacturers are SMEs (Ho & Choi 2012). The average textiles and fashion business in Australia has 4.1 workers (Fashion 2014).

### 2.3.3 The Size Context: Small and Medium Enterprises

SMEs employ over 300 million people worldwide. In developing countries, 95 percent of all businesses are SMEs and they employ 66 percent of the active population (Intel 2011). Their cumulative environmental impact is huge and they tend to have unique characteristics that impact their abilities to become environmentally sustainable. All of this will be discussed below. First, however, a brief definition and then review of the literature on the topic of SMEs is completed.

The Australian Bureau of Statistics classifies small and medium enterprises (SMEs) as enterprises that are small (20 employees or less) and medium (21–200 employees) (ABS 2011). Cameron and Massey's definitions of SMEs are where a micro firm employs 0–5 full-time-equivalent employees (FTEs); a small firm 6–49 FTEs; and a medium firm 50–99 FTEs (Cameron & Massey 1999). The original working definition for this study was 20-200 employees, but the final working definition of SMEs for this research initiative was firms employing between 5 and 99 full time workers, following Cameron and Massey's (1999) definition. This will be further explained in Chapter 4.

SMEs are critical both globally and locally. The Asia-Pacific Economic Cooperation recognised their importance and has made strides to strategically develop and strengthen SMEs due to their significant potential for future economic growth (Asia-Pacific Economic Cooperation 2015). Most countries, including those within this study, rely heavily on SMEs for their economic health and national employment. However, there remains a dearth of research on SMEs especially related to their environmental impact and ES change initiatives (McAdam & Armstrong 2001).

The vast majority of research on organisational change, human resources, and other aspects of an organisation, which would help it to thrive in an ever-changing market, is on large firms (Todnem & By 2005; Varma 2005; Kotter 2007; Pettigrew et al. 2001; Gant et al. 2002). Whereas among small and medium-sized enterprises, these topics are still largely underexplored (Wiesner & Poole 2009). Various researchers report a distinct lack of studies on SMEs in general (Garengo, Biazzo & Bititci 2005; Garengo & Bernardi 2007) and, more specifically, the challenges faced by SMEs in implementing change initiatives such as Total Quality Management (TQM) (Yusof & Aspinwall 2000), their ability to implement reengineering (McAdam 2000), their ability to innovate (Todtling & Kaufmann 2001), their effectiveness in new product development (Huang et al. 2002), how they handle the practice of strategic management (Woods & Joyce 2003) and the relationship in SMEs between quality and innovation (McAdam & Armstrong 2001). It is only

recently that there has been research on aspects of organisational change in SMEs (Bititci & Ates 2011; Wiesner & Poole 2009). Moreover, only very few studies have involved ES change management or ES initiatives in SMEs (Chadee et al. 2011; Del Brío & Junquera 2003).

Other than the relative paucity of research regarding SMEs, it is of particular importance at this time to research ES change in SMEs. This is largely due to the previously noted reality that SMEs, albeit small in and of themselves, form a large and vital part of the global economy and accumulatively have a large environmental impact. Moreover, SMEs differ greatly from their larger and more researched counterparts, since firm size greatly affects a company's abilities. These unique characteristics of SMEs will now be discussed and related to ES change.

#### 2.3.3.1 The Unique Characteristics of SMEs

Banham (2005) differentiates smaller enterprises from their larger counterparts through five characteristics: resources, market power, flexibility and uncertainty, leadership, and structure. In the discussion to follow, a sixth is added: strategy. These six characteristics are discussed in relation to how they impact a SME's success in general as well as in employing ES change. A further section will review the minimal literature on ES change in SMEs in Chapter 3.

##### 2.3.3.1.1 Resources

SMEs in general have more limited resources - human, material and financial, than do larger businesses (Huang et al. 2002). Less resources make it more difficult to direct efforts to organisational change initiatives (McAdam & Armstrong 2001). For example, a common barrier to innovation in SMEs is a shortage of capital (Freel 2005) which is an essential instrument for achieving change (Klewitz & Hansen 2014). With fewer resources, SMEs usually have less capacity to pursue innovations such as ES product and process change. Innovation and change do occur in SMEs; however, researchers argue that they occur in a more incremental and responsive way than in larger firms (Huang et al. 2002; Kaufmann & Tödtling 2002). MacDougall and Pike (2003) found that limited financial and human resources restricts the successful implementation of advanced manufacturing technology in SMEs. Furthermore, an organisation's competitive edge is developed and maintained through the unique combination of individuals employed within an organisation (Dijk 2008; Peteraf 1993; Barney 1991). However, less is known about how to apply

basic change principles in SMEs, where lower skill differentiation and lower administrative intensity are more common.

Organisational change initiatives require substantial human, material and financial resources (Banham 2005; McAdam 2000). However, as already mentioned, limited resources are a reality for the majority of SMEs. Due to this resource limitation, major restrictions are often placed on an SME's ability to direct appropriate resources towards innovation. Within this context, SMEs are often forced to direct resources to achieve shorter-term goals, which can exclude more proactive approaches to changing their organisation for growth and prosperity. This aspect of resource limitation is critical with respect to ES change and ES innovation. When an organisation is already struggling to stay ahead day to day, it is nearly impossible to implement a new product or process, especially one that may have initially high costs.

#### 2.3.3.1.2 Market Power

SMEs have less market power than large organisations and are thereby more subject to market changes (Todtling & Kaufmann 2001). Because SMEs generally rely on niche markets or only a few customers, international expansion offers an important way to access markets (Banham 2005). Further, business networks help to overcome the limited financial and human resources, and the limited international market knowledge that characterise SMEs (Chetty & Campbell-Hunt 2003).

The lack of market power in SMEs specifically affects ES SME champions through the inability to acquire the fabric that they want for a reasonable price. Unlike their larger counterparts, who can buy thousands of meters of organic cotton in one season and therefore negotiate on the price, SMEs must make smaller orders and thereby are forced to pay higher prices.

#### 2.3.3.1.3 Flexibility and Uncertainty

The ability to recognise a need to change when it can be considered a challenge and not a crisis and even more, the ability to respond to this need, is a key to long-run survival. SMEs often have more of a degree of flexibility in relation to this, which is frequently envied by their larger counterparts (Guo & Cao 2014). Flexibility arising from human resource capacities such as strong leadership and specialisation levels can assist SMEs in implementation of organisational change initiatives (McAdam & Armstrong 2001). Further, it is this flexibility that could give SMEs an

advantage in innovation. Therefore, flexibility of SMEs should give them an advantage in implementing ES change.

Uncertainty and flexibility go hand in hand in that they can both be a blessing and a curse to SMEs. Uncertainty regarding internal activities is lower for SMEs because it is easier to directly monitor the activities of most or all employees (Narula 2004; van de Vrande et al. 2009; Sawhney 2006); however, uncertainty regarding external activities is higher for small firms, largely due to their lack of power in the market as well as their lack of capital (Kaufmann & Tödtling 2002; Sawhney 2006). Furthermore, SMEs are often dependent on a particular and/or niche market, which increases uncertainty (Banham 2005). This dependency could have devastating effects on SMEs if customers are affected by economic or market changes.

On the other hand, both customer loyalty and their geographic proximity can work in favour of the SME, and as such, they may have an advantage in being able to read the signs of needing to change earlier (McAdam 2000). Further, it has been shown that smaller organisations can sometimes be more responsive and adapt to market changes as they occur (McAdam & Armstrong 2001).

Uncertainty arises immediately with SMEs when contemplating making a change toward a more ES product or process. Buy-in from all stakeholders and levels of the supply chain is required for a full movement toward sustainability and this requires many moving parts, all adding to the uncertainty of if or how the ES change may benefit the organisation.

#### 2.3.3.1.4 Leadership

Leadership in SMEs is frequently centralized (McAdam & Armstrong 2001) with the owner-manager closely intertwined with the firm's reputation and success (Banham 2005). The owner-manager's hands-on involvement in the business, along with their reputation in the community and personal investments, increase their likelihood to adapt to a required change in the business environment (Franco & Matos 2013). Moreover, the relationship between the business leader's personality and their organisation's strategy and structure is stronger in small firms than in larger firms (Wang & Poutziouris 2010).

The dominant role of the business owner in SMEs is not only due to the owner's personality and characteristics, but also to the lack of other stakeholders in the decision-making processes. In SMEs, the owner-manager's VABEs (values, attitudes, beliefs and ethics) largely determine the

corporate culture to a much greater extent than in large organisations. These VABEs potentially influence both the goals and strategies of the SME (Franco & Matos 2013). Moreover, the owner-managers' VABEs and goals shape the organisation's culture as well as the way in which the SME owner-manager communicates to their employees (Atkinson & Curtis 2009). SME owner-managers are usually much more involved in their business and they are able to manage it better because of this. In contrast with large organisations, the SME owner-manager has much greater control over the way in which resources are managed.

The way in which this applies to ES change and this research is that the SME owner-manager is able to communicate their attitudes and motivations readily to their staff and be actively involved in the change process, managing it in the way they see fit.

#### 2.3.3.1.5 Structure

SMEs tend to have flatter and less formal structures, which are often envied by their larger counterparts (Banham 2005). Flatter structures mean fewer levels of management, allowing for more efficient communication and diffusion of culture, thus this structural difference between SMEs and larger organisations should increase the opportunity of SMEs to implement change (Wiesner & Mcdonald 2001). However, some scholars have found the contrary: White et al. (1999) examined the implementation of ten management practices relevant to Just-in-Time (JIT) Manufacturing and found that large firms were more likely to adopt JIT practices. Structure is an important aspect of a SMEs ability to manage ES change as the flatter structure and smaller size allows for the change to occur through the organisation quicker and with generally less resistance.

#### 2.3.3.1.6 Strategy

Typically, larger firms strategically plan in a rational and deliberate way in order to achieve profit maximisation (Gowler & Legge 1983). Small firms, however, tend to differ substantially in their strategic planning. For example, strategy formulation in SMEs may be more of an emergent process than a deliberate one (Wiesner & Millett 2012). For SME ES champions, the strategy to be ES is often housed in the "DNA" of the owner-operator and in turn their staff. Strategies tend to be less formal and therefore more flexible and this allows for changes in market trends and access to new technology to be addressed immediately. Ultimately, the six unique

characteristics of SMEs are all inextricably linked. They can be both a benefit and a cost, and they all relate to ES change and management in some way.

### 2.3.4 The Champion Context

The geographical context, industrial context and size context of the study have all previously been discussed. The following sections will discuss the 'champion' context of the study. The term 'champion phenomenon' has been used in Australia to describe circumstances where a leader pushes for change and succeeds through a leadership process (Taylor et al. 2012). Equivalent terms in the academic literature are championship (Howell 2006) and championing (Anderson & Bateman 2000).

#### 2.3.4.1 The Champion Phenomenon

The champion phenomenon involves change driven by a leader with specific leadership attributes. These specific attributes include the desire to act as a change agent and these leaders primarily rely on personal forms of power (Howell 2006; Howell et al. 2005; Howell & Shea 2001). There is no academic definition for "champion"; however generally speaking they are emergent leaders (Howell et al. 2005; Anderson & Bateman 2000). Moreover, they are typically at the core of transformations within a company or industry, which may involve the adoption of a new philosophy or technology (Anderson & Bateman 2000; Howell et al. 2005; Howell & Shea 2001). Champions link their personal values with their work, so they emerge at any level in an organisation and are highly motivated (Taylor et al. 2011). Champions also tend to have high levels of confidence, enthusiasm and patience, and generally excel at exercising influence (Howell et al. 2005).

In 1963 Schon studied innovation within organisations and first documented the importance of champions as emergent leaders who drive change. Schon concluded that: "where radical innovation is concerned, the emergence of a champion is required. Given the underground resistance to change the new idea either finds a champion or dies" (Schon 1963, p. 84). Since then, literature on champions of innovation stress how champions can play a critical role in driving change in a diverse range of organisations (Howell et al. 2005).

#### 2.3.4.2 Environmental Sustainability Champions

For the purpose of this study, ES champions are ES leaders. They have taken on product or process changes, focused on reducing their environmental impact at levels beyond regulatory compliance, and often ES champions have achieved recognition for their businesses as being "green" compared with those of their competitors through awards, media attention, or certifications (Rungar et al. 2008). Although literature is cited on champions as individuals (Taylor 2009), because of the nature of SMEs, and particularly those in this study, a small jump is made to use this literature at the organizational level. As previously mentioned in the attributes of SMEs above, values of the owner-manager are identified as so important to the way in which the organization behaves that it is implied that SME ES champions are interchangeably the owner-manager and their firm.

In his study on water pollution in China, Naughton shows how "influencing firms have significant capacity to influence other businesses (target firms) to improve China's environmental situation" and offers key tools for influencing firms to encourage improved environmental management in target firms (Naughton 2008). Champions can and do influence others in their industries and beyond. Four key tools for influencing firms (champions) to promote ES change management and success were identified as: (1) Green Supply Chain Management (GSCM) measures; (2) Influencing through business groups; (3) Publishing ES performance reports; and (4) Forming alliances with environmental groups (Naughton, 2008).

ES champions by Benn et al.'s standards would be "sustaining corporations", those who fully incorporate both human and ecological sustainability principles into their operations and in turn support others to do the same, "the challenge is to learn from these early adventurers in sustainability and extend that learning to larger public corporations," (Benn & Dunphy 2014, p. 183).

There are many ways for an organisation to be an ES champion: reducing wastes and improving energy efficiency; developing environmentally safe products and reducing greenhouse gas emissions; or in advanced cases, pledging to become 'footprint neutral'. True, 'third wave' companies incorporate sustainability into their corporate strategies and believe sustainable measures to be a viable way to assess their success (Benn & Dunphy 2014). In third wave firms, the environment is considered as important as the economy – both need to be healthy for a corporation to exist into the future.

A good example of an ES champion in the FT Industry is Patagonia. Patagonia, for many years, has committed to using only recycled or organic materials for its entire sportswear line. It promotes transparency and corporate social responsibility through the supply chain, and it acts as an educator in the industry through materials and information offered to consumers on the website and in the stores where its products are sold. This ES strategy has been promoted without the necessity of government or consumer prompting.

Having discussed the geographical context of Australasia and North America, the industry of fabrics and textiles, and small and medium enterprises, plus the nature of ES champions, the next section outlines the theoretical underpinnings of the study.

## 2.4 Theoretical Underpinnings of the Study

The three theoretical underpinnings informing this study are based in the behavioural, motivational and change management disciplines. Behavioural theories attempt to explain individual and organisational behaviour based on a variety of different factors. Although there is a host of behavioural theories, the theory of planned behaviour (TPB), with its roots in the health industry, is deemed to be most applicable to the research herein. The TPB is useful in understanding behavioural change in SMEs when behavioural changes are required to successfully implement environmental sustainability (ES) change (Fielding et al. 2008; Chao 2012).

Motivational theories attempt to explain individual and organisational motivation to change. Self-determination theory and expectancy theory are deemed to be the two motivational theories most applicable to the research as they are best equipped to explore the motivations underpinning the processes that occur between a group or individuals acting with pro-environmental behaviour (Kollmuss & Agyeman 2010).

Change management theories and models that address the non-linear and complex process of the change management required for a SME to succeed through environmental sustainability change as well as the culture of continuous learning required include the Dunphy and Stace Contingency Model. These theories are reviewed and their specific relevance to ES change in SMEs are explored in this section.

The contexts of the study (ES, SMEs, the FT industry and geographical locations) will provide specific data for furthering the following theories. Each of the different contexts allow for further understanding of the implications of these theories, and as will be seen in further chapters,

the research is interpreted within each context and theoretical underpinning via the final theoretical framework (Figure 6.1). This adds depth to the theories as well as breadth to the current bodies of research on each context and theory.

### 2.4.1 Theory of Planned Behaviour

Prior to discussing Icek Ajzen's Theory of Reasoned Action and the Theory of Planned Behaviour a number of other theories are briefly outlined to serve as a backdrop to Ajzen's theories and the behavioural theories pertinent to this study.

CS Skinner first published academic research pertaining to models of behavioural change (Skinner 1938). Since then, Prochaska and DiClemente (1983) proposed the Stages of Change Model; Bandura (1991) developed Social Cognitive Theory; and Ajzen (1991; 2011) developed both the theory of reasoned action and the theory of planned behaviour. All of these behavioural theories are in use in management research today.

The Stages of Change Model suggests that behavioural change is a five-step process (Prochaska & DiClemente 1983). The five stages are precontemplation, contemplation, preparation for action, action, and maintenance. Individuals may oscillate between the five stages before achieving complete change, known as the maintenance stage and defined as the point in time when an individual consistently behaves in the new way for 6 months (Prochaska & DiClemente 1983). At first, (precontemplation) an individual is not aware of a problem or that change needs to occur. Once the individual becomes aware of the problematic behaviour, they enter the contemplation stage. The next stage, preparation, involves planning for change, and the action stage occurs when the individual consistently behaves in the newer (theoretically better) way.

Unlike the Stages of Change Model, which is simplistic, learning theories explain how complex behaviour is learned gradually through the modification of simpler behaviours and that by duplicating behaviours they observe in others, individuals learn. With learning theories, rewards are essential to ensuring the repetition of desirable behaviour at earlier stages and depending on the developmental abilities of the individual. In learning theories, complex behaviours develop through a process where at first each simple behaviour is established through imitation and subsequent reinforcement (Skinner 1938).

Social Cognitive Theory is a learning theory whereby behavioural change is determined by environmental, personal, and behavioural elements (Bandura 1991). For example, an individual's thoughts affect their behaviour and an individual's characteristics elicit certain responses from the social environment. An individual's personal characteristics and behaviour are affected by their environment, and an individual's behaviour may change their environment as well as the way the individual thinks or feels. All of these factors affect both behaviour and behavioural change. These theories provide the background for Ajzen's Theory of Reasoned Action and the Theory of Planned Behaviour (Ajzen 1991; 2011), developed from learning theories.

The Theory of Reasoned Action (TRA) assumes that individuals first consider a behaviour's consequences prior to performing the particular behaviour. For this reason, intention is an important factor in the TRA, both in determining or anticipating behaviour as well as understanding the behavioural change. According to Ajzen (1991), intentions develop from a combination of the way an individual's society perceives a behaviour and the individual's internal perception of a behaviour. Whether a behaviour is deemed as positive therefore is both interpreted through social pressures and internal, personal attitudes. These judgments then form individual intentions, which are essential to behaving in a certain way, and in turn changing behaviour.

Ajzen expanded upon the TRA and formulated the Theory of Planned Behaviour (TPB), which is a cognitive approach to explaining behaviour centering on individuals' attitudes and beliefs. The TPB is based on previous theories that present intention as the basis for behaviour, where intention is itself an outcome of a combination of attitudes towards a behaviour. Perceived behavioural control, which is the perceived difficulty or ease with which the individual will be able to carry out or perform a behaviour, adds to the set of factors affecting intention and behaviour (Munro et al. 2007).

The TPB has primarily been used in the health industry and is best known for its ability to predict behaviour as well as analyse behaviour in retrospect. Strong correlations have been found between both the attitudes towards the behaviour, the perceived behavioural control components and the ultimate behaviour. Therefore, it is a useful method for identifying particular influences on behaviour that could be targeted for change (Munro et al. 2007).

Swaim et al. (2014) address how the TBP can be used in ES change management, wherein the TPB directly assesses the concepts of individual attitudes (i.e., sustainability values), subjective norms (i.e., the influence of social referents like peers), and perceived behavioural control (i.e.,

belief that the new behaviour is possible), to predict individual intention and behaviour. The TPB can be used to help investigate the influence of perceived behavioural control, attitudes, and subjective norm on ES intention and behaviour (Swaim et al. 2014).

Behavioural aspects of ES contain challenges due primarily to the range of opinions regarding the legitimacy of environmental objectives. Several aspects of ES generate obstacles for organisations working toward ES change, including the newness of the issues and in turn associated uncertainty (Swaim et al. 2014). These obstacles may stop an individual from following corporate objectives related to ES (Swaim et al. 2014). Existing research provides limited support on how to best affect ES attitudes of individuals and SMEs while Thomas and Lamm (2012) as well as Burke (2008) accentuate the importance of individual attitudes and social norms on sustainability attitudes. However how such attitudes might impact specific sustainability plans (intention) and subsequent ES action in the workplace (behaviour) is not addressed in their research. This research gap challenges the ability of ES change agents to effectively bring about ES change in SMEs.

Subsequently, behaviour relates to the SME ES champion's action of driving environmental goals of the SME, ideally balancing environmental criteria with traditional business objectives, such as cost. It is important to more holistically understand the influences of SME champions' attitudes, subjective norms, and perceived behavioural control on ES in order to best assist other SMEs of varying opinions to incorporate sustainability into business decision-making. The intention to practice ES in turn affects actual ES behaviour in the workplace. Further, individuals' personal beliefs and intentions will ultimately influence their behaviour.

The theory of planned behaviour (TPB) is particularly applicable to the study herein because it is particularly useful in understanding the impacts upon intention and the changes required to successfully implement environmental sustainability (ES) change.

### 2.4.2 Motivational Theories

Motivation is an important factor that distinguishes whether an organisation will succeed or fail in implementing change. The initial models of pro-environmental behaviour (PEB) assumed that PEBs were caused by an increase in environmental knowledge, which increased awareness and concern, which then increased the instances of PEBs, etc. However, research has since shown

that in most cases, this linear view of increases in knowledge and awareness do not in fact lead to PEBs (Kollmuss & Agyeman 2010).

Furthermore, attitudes do not determine behaviour directly. Rather, they influence behavioural intentions, which in turn shape our actions. Kollmuss and Agyeman (2002) explored the theories underpinning the processes that occur between a group or individuals acting with pro-environmental behaviour and found that intentions are not only influenced by attitudes but also by social pressures.

Some of the most commonly employed organisational management theories (i.e., goal-setting theory and reinforcement theory) do not seem to be adequately applicable in understanding pro-environmental behaviour, since they require strong situations where specific goals exist and rewards can be clearly linked to performance. However, behavioural intent models (which include expectancy theory, explained below) are highly suitable for analysing employees' motivation to perform extra role prosocial behaviours (defined as behaviour at work aimed at improving the company, going beyond one's role, such as pro-environmental behaviours) because they can incorporate motivational drivers and apply them to behaviours performed in a variety of situations (Ramus & Killmer 2007). Lastly, corporate greening behaviours are best conceived of as a special type of prosocial organisational behaviour. Moreover, these connect behavioural intent models with Fishbein and Ajzen's theory of reasoned action, which is thought of as the most widely used behavioural model (Ramus & Killmer 2007).

Individuals may lack motivation for environmental protection for different reasons. One group of reasoning often corresponds to amotivation beliefs. Some amotivation beliefs related to PEBs include: the belief that one does not have the capacity to successfully execute the behaviour; the belief that the strategies are ineffective in producing the desired outcomes; the belief that one cannot sustain the effort and integrate the behaviour into one's life; and the belief that the environmental situation is helpless or too big of a problem (Pelletier et al. 1999). The general amotivation concept as it relates to environmental protection is *global helplessness belief*, where the deterioration of the environment is perceived to be an intractable problem and people who believe this are unable to foresee how their contribution could bring about favourable outcomes on a large scale. Therefore they deny any involvement in environmentally conscious actions (Pelletier et al. 1999). This helps to explain how despite people nowadays being both more aware and concerned about the environmental, still, a large number of people only adopt a few types of

PEBs, and many remain inactive with respect to environmental protection. (Pelletier et al. 1999).

Demographic factors (gender, education), external factors (culture, economics, institution) and internal factors (values, attitudes, beliefs, ethics, environmental knowledge) all shape pro-environmental behaviours. Although numerous theoretical frameworks have been developed to explain the gap between having environmental knowledge or awareness and displaying pro-environmental behaviour, there is still no consensus on a single model (Kollmuss & Agyeman 2002). However, some of the more common frameworks used for analysing PEBs are: early US linear progression models; altruism, empathy and prosocial behaviour models; and sociological models (Kollmuss & Agyeman 2002). Having considered a range of factors impacting upon pro-environmental behaviours, this study draws specifically on two motivational theories, self-determination theory and expectancy theory to examine the research questions. These theories are now discussed.

#### 2.4.2.1 Self-Determination Theory

The core principles that underlie long lasting motivation in both individuals and organisations are articulated by self-determination theory (SDT) which is rooted in a set of assumptions about human nature and motivation (Deci & Ryan 2008b). Unlike Skinner (1953) who assumed that behaviour is to be controlled mostly by external reward contingencies, proponents of SDT assume that people inherently want to work hard and contribute, that they are instinctively motivated to grow and achieve, and therefore will engage in tasks that may be boring or which generate no external reward if the value of the task is understood to contribute to a greater goal or improvement of the individual, organisation, or society. Self-determination theorists argue that unmotivated people learn this behaviour. For example, carrot and stick (CAST) approaches to motivation lead to an unnatural heightened focus on the tangible rewards of work rather than on the nature and importance of the work itself (Ryan & Deci 2000). Skinner's theories and subsequent externally-focused motivational techniques often do create short-term productivity increases by controlling people's behaviour. However, the resulting lack of intrinsic motivation can create negative long term consequences. Even advocates caution that CAST approaches can work too well - even encouraging cheating, fraud and deception (Baker et al. 1988). Further, it has been shown that an interest in work can be undermined by emphasising tangible rewards (Deci & Ryan 2008a).

According to SDT, humans have three core psychological needs: competence; relatedness; and autonomy, and by satisfying these needs, sustainable and enduring motivation is present (Ryan & Deci 2000). *Competence:* the belief that one has the ability to influence important outcomes; *relatedness:* the experiences involved in satisfying and supportive social relationships, and *autonomy:* acting with a sense of choice, preference, and therefore self-determination have been shown to in tandem increase happiness, productivity and creativity (Deci & Ryan 2008b).

Self-determination theory suggests that there is a gradual progression in the way in which an individual is motivated due to the time it takes for them to internalise the motivation. An individual may move from recycling cans because they get money for them or because they feel guilty otherwise, to believing in the necessity to save the planet and therefore recycling cans for this sole reason. As the level of self-motivation increases, so do pro-environmental behaviours (PEBs) that are less convenient; furthermore, PEBs are sustained for much longer periods when self-determined motivation is functioning at a higher level (Pelletier, 2002; Pelletier et al. 1998).

SDT is increasingly being used in modern work as productivity gains are being realised by managers supporting satisfaction of core needs by creating autonomous motivation, especially in complex, creative and investigative tasks (Gagné & Deci 2005). In the case of motivating people to act in an environmentally sustainable way at work, SDT is particularly applicable as it focuses on the contexts that promote or hinder the internalization of motivation and the subsequent integration of behaviour. For the most part people are aware of the ecological dangers cause by global climate change; they know that most of these threats are caused by human activities and that they can be reversed by human behaviour, yet most of these people spend and consume energy like never before regardless of this knowledge (Pelletier & Sharp 2008).

Motivating people to change the behaviours that are harmful to the environment therefore represents a challenging task, but this is a task required for a company to sustain a course of action once the owner/operator has decided to ‘go green’. Research has shown that various strategies used to motivate people can lead to PEBs; however, long-term maintenance of these behaviours has been a major challenge (Bamberg & Möser 2007). It seems as though people initially react favourably to the new strategies, but their PEB often declines over time. Further, PEBs have been shown to return to baseline if the source of motivation is withdrawn (Pelletier & Sharp 2008).

Based on SDT, motivation to act in an environmentally sustainable way can be improved by tailoring and framing messages as a function of the intrinsic benefits or costs of a behaviour and people can freely choose among different options. For example, according to SDT, internalization of PEB will likely occur when a good rationale for the environmentally conscious activities is provided, particularly when the context given points the way to being more effective in meeting challenges (Pelletier & Sharp 2008).

#### 2.4.2.2 Expectancy Theory

Vroom's Expectancy Theory (1964) predicts behaviour of individuals based on an individual's expectations regarding the outcomes of that behaviour (ex: going green will help the organisation to compete for critical market share) and on the attractiveness of that outcome to the individual (ex: market share is important to the future of my business) (Heneman & Schwab 1972). In broad terms, expectancy theory surmounts that when an individual is in a position to choose between a variety of alternatives, their motivation in selecting a specific behaviour or intervention or action is based on their evaluation of the future consequence of each alternative (Lawler & Hall 1970). The actions of an individual are driven by expected consequences. Therefore in deciding among behavioural options, an individual is likely to select an option with the most beneficial outcome based on that individual's motivations.

This process theory of work motivation calculates the intensity of an individual's motivation, wherein the motivational force (MF) is a function of E I and V, with E being the expectancy that changes in effort will result in changes in performance, I being the instrumentality of performance changes in order for the outcome to occur, and V being the valences of the outcomes, and is calculated as: MF = [E * I * V]

As the equation shows, expectancy is the probability that the individual's effort will result in their desired goals, based on information from other people, the individual's past experiences, feedback or communication (Gatewood et al. 2002). The person must believe that exerting a given amount of effort can result in the achievement of a particular level of performance (the effort– performance relationship).

Instrumentality (I) is the belief that if one meets performance expectations he or she will receive a greater reward than if one does not meet those expectations. For example, an individual starting an organic clothing manufacturing company may think along the lines of "If I start my

own green business, I will help to make the world a better place". In other words, starting one's own organic textiles company is the instrument to helping the world to be better (with the underlying assumption that this person would like to attain this).

Valence (V) is the value that an individual puts on this reward: "How important is making the world a better or safer place to me?'' The reward or outcome needs to be attractive to the individual in order for them to be motivated to attain it (valence). If the benefit associated with the outcome or reward is deemed to be not high enough, an individual would remain unmotivated (Gatewood et al. 2002). For example, an individual who chooses to start a business solely for the financial rewards may choose to run a sweatshop in Bangladesh as opposed to the individual who owns a local organic manufacturing plant depending on what that individual believes to be important.

Expectancy theory relates to turnover, productivity, training motivation, self-set goals, and goal commitment. It has been employed to predict intentions such as intent to apply for a job or intent to leave a job (Van Eerde & Thierry 1996) and has also been studied as a predictor of behaviours (Renko et al. 2012). Motivation at work, treated as a choice between either alternative levels of work performance or work effort, is asserted to be one such domain. A more applicable example to this research would be, given the choice to act in an environmentally sustainable way, an individual will look to the future of how that action (or inaction) may affect them and in turn chose to act (or not).

### 2.4.3 Change Management Theories and Models

Change requires courage. Many people and organisations today prefer to accept the status quo and opt out of leading the world to be better. However, if we want the world we require for survival to survive and even thrive, much change is required in business today.

Change intervention tools (including strategic interventions, human process interventions and structural interventions) allow organisations to adapt to change (Cummings & Worley 2008). Strategic interventions include: strategic planning; strategic partnerships and alliances; organisational relationships; and environmental relationships. Human process interventions include: human resource management interventions such as reward systems; goal setting; performance appraisals; and employee wellness. Structural interventions include: employee involvement and empowerment; changes to organisational structure to help increase flexibility;

and changes to work design to help improve employee productivity (Cummings & Worley 2008). The existence, therefore, in SMEs, of a strategic plan, organisational structure and human resource practices and processes as they transition through a change like ES change, should be tools used may help them successfully implement the required changes.

Change management models from the last sixty years all attempt to explain larger organisations' processes through change. Earlier models of organisational change, while they aim to understand stages of planning and implementation, are linear and simplistic. They involve the Burke-Litwin Model and the Eight Stage Process by Kotter, the Action Research (and Contemporary Action Research) Model, Lewin's Model, the General Model of Planned Change, and Gardner's Action Training and Research Model (Cummings & Worley 2008). Of note, Lewin's Change Model refers to stages of freezing then unfreezing and is a common theory found in undergraduate business textbooks and taught in university business courses. The general model for planned change was adapted from this, and involves 4 key phases: (1) Entering and Contracting; (2) Diagnosing; (3) Planning and Implementing Change; and (4) Evaluating and Institutionalizing Change (Cummings & Worley 2008).

However, change management models need to accommodate both how to change (the process) and what to change (the content) to more closely model the reality of organisational change. Thus, more recent models consider both size and culture of an organisation and incorporate deeper understanding of change management in which the freezing-refreezing phases of Lewin are debunked (Burke 2002). Instead, models including continuous change and the culture of continuous learning properly represent the non-linearity of organisational change (Banham 2005). The two theoretical models which reflect the complexity of change management and account for the unique characteristics of SMEs, especially those required for ES change, include the Dunphy-Stace Contingency Model. Change management models could be useful in enabling SMEs to successfully implement ES change; however, currently there are very few practical models or theories for SMEs to follow if they choose to implement ES change initiatives.

Having discussed the two motivational theories underpinning this study, the change models underlying the study are now discussed.

#### 2.4.3.1 Dunphy-Stace Contingency Model

The Dunphy-Stace Contingency Model is based on the premise that the most appropriate response to managing change relies on two critical dimensions: the scale or degree of change required; and the leadership required to achieve this depth of change (Dunphy & Stace 1993). Scales of change include, from largest to smallest: corporate transformation; modular transformation; incremental adjustments; and fine-tuning. While corporate transformation refers to strategic organisation change encompassing the entire firm, modular transformation includes organisational changes to parts or components of an organisation. Incremental change is when individual parts of an organisation deal increasingly and separately with one problem and one objective at a time, and fine tuning is where small modifications to improve or optimize the outcome are implemented in piece meal (Dunphy & Stace 1993).

Different leadership styles and abilities are the second dimension considered in Dunphy and Stace's organisational change model. These leadership styles identified by Dunphy and Stace (1993) include: collaborative; consultative; and directive or coercive. Organisations should attempt to match their needs with their change and their leadership styles. To be clear, collaborative, consultative, directive or coercive styles of change should be matched with an organisation's needs as well as the scale of change sought (fine-tuning, incremental adjustment, modular transformation, or corporate transformation). Dunphy and Stace (1993) propose a matrix, whereby the leadership styles and scales of change fit into four generic change programs: charismatic transformations; task-focused transitions; developmental transitions; and turnarounds.

Moving toward environmental sustainability (ES) often requires both attitudinal and cultural changes within a firm. Reinvention of organisational norms is often required for the transformative nature of ES change. This transformational change runs deep in an organisation. So deep that it can be risky and involve new ways of thinking and doing that may be irreversible (Benn et al. 2006). A challenge for management in this regard often involves a flexible yet pro-active leap of faith (Benn et al. 2006). Cultural change cannot be enforced, rather, it must evolve over time with leadership and communication being built upon trust and transparency (Benn et al. 2006).

According to Benn, Dunphy and Griffiths' (2014) guide on how to either incrementally or transformatively manage change, there are 6 phases for firms to progress through as they navigate their journey with ES management: (1) Rejection, (the sole responsibility of a corporation

is to make shareholder's profit); (2) Non-responsiveness, (business as usual, head in the sand); (3) Compliance (do the absolute minimum required so as not to get charged or in trouble); (4) Efficiency (an understanding of the business case for human and environmental sustainability, i.e. minimising electricity usage in order to reduce the electricity bill); (5) Strategic proactivity (sustainability becomes built into the business strategy and is pursued for a variety of its business advantages); and (6) The sustaining corporation (the values and culture of a sustainable world are embodied in almost all staff such that sustainability is actively promoted and improved through all members of the supply chain).

Rejection and non-responsiveness phases are considered first wave corporations, where owner-managers respond to ES with opposition and. Compliance, efficiency, and strategic proactivity are second wave, and are where the majority of businesses in the developed world are at. The sustaining corporation, third wave corporations, are very uncommon but the ES champion organisations chosen to be involved in this study are an example of such types of business.

Benn and Dunphy (2014) identify that first, a company or consultant must understand at which phase the company is in, then, meet them where they are. Following this, "The challenge is to turn dreams into corporate visions and visions into concrete, practical actions," (Benn & Dunphy 2014, p. 185). For corporations to go from first wave (non-responsive to environmental or social issues) to third wave (a fully sustaining corporation) they may choose either incremental or transformational paths (Benn & Dunphy 2014).

Leading up to the late 1980s and early 1990s, incremental change was the way in which the majority of organisations managed change (Benn & Dunphy 2014). With the advent of the Internet and globalization, organisations have found the need to change much faster than the incremental paths enable them to, and instead are using more transformational change methods (Benn & Dunphy 2014). As far as ES change is concerned, forward thinking and aware organisations (second wave) have been incrementally adjusting to more ES initiatives and products in an incremental way for over a decade. For those corporations who have refused to change until now, over the next decade they will likely have to either transform their businesses or they will have no place in the marketplace anymore. Most organisations today can take the route of 'ambidextrous' and manage their ES change both incrementally and transformatively, either sequentially or simultaneously (Benn & Dunphy 2014).

Incremental change is continuous improvement with a strategic path and objectives. People are often key drivers of incremental ES change and internal change agents are key, such that the skills and expertise and passion can be retained in-house for future changes. Incremental change should also be designed internally. It is more personal than large scale and fast transformative change. Once the strategy and plan has been developed, developing internal capabilities, making efficiency improvements, rearranging the structure and developing change and ES competencies within the organisation are all keys to success of incremental change for ES (Benn & Dunphy 2014).

On the other hand, transformative change is large scale, revolutionary change, including for example downsizing, spin-offs, or mergers and acquisitions. Fundamentally, transformative change for ES may require a paradigm shift in attitudes and values at all levels of an organisation to create new products or processes that address the ecological crisis at hand. Benn and Dunphy (2014) have developed a 10 step process for successful transformational change (although one might argue these steps are also somewhat incremental):

1. Know where you are now
2. Develop the vision – the dream organisation
3. Identify the gap
4. Assess the readiness for change
5. Set the scene for action
6. Secure basic compliance first
7. Move beyond compliance
8. Establish performance criteria for ‘compliance plus’
9. Launch and manage the transformational change programme
10. Maintain the rage

## 2.5 Summary

This chapter helped to identify the concepts of sustainability and environmental sustainability and set the stage for the remainder of the research by clarifying the contexts of geography, industry, firm size and ES values in the participant firms. The literature pertaining to the theoretical underpinnings of attitudes, motivations, behavioural theories and change

management theories were also explored. The following chapter details the relevant literature relating to each research question.

# CHAPTER 3 – LITERATURE REVIEW

## 3.1 Introduction

In Chapter 2 both a context for the study and the theoretical underpinnings of the research were identified and discussed. For this chapter, the available academic literature is critically discussed as it relates to each of the research questions examined in the study.

The factors that influence SMEs to be ES are first analysed through theoretical underpinnings of the Theory of Planned Behaviour (TPB) discussed in the previous chapter. Factors such as attitudes, subjective norms and perceived behavioural control have all been shown to influence SME ES change motivation and action. Moreover, SME owner-managers may be motivated not only by their attitudes, subjective norms and perceived behavioural control, but also by other internal and external factors, such as regulation, consumer demand, or an internal eco-champion. These motivational factors are discussed pertaining to the literature in this chapter. And although many SMEs may be motivated to change, many still do not. The barriers to ES change are explored in this chapter, as are change management strategies and initiatives that have been identified to help SMEs succeed in implementing ES change.

The observed positive and negative organisational outcomes after ES change has been implemented are explored in the chapter below. There is conflicting evidence as to whether ES change can help or hinder a firm and this debate is discussed before presenting the final research questions. Lastly, the theoretical framework linking all of the aforementioned factors is introduced at the end of this chapter, with a discussion on the linkages and their potential implications.

## 3.2 Factors that Influence SMEs Toward Environmental Sustainability

The scarcity of research into how SMEs engage with environmental issues is well documented (Schaper 2002; Klewitz & Hansen 2014; Battisti & Perry 2011). Of the still relatively limited literature addressing SME engagement with ES, even less has researched environmentally pro-active firms (i.e. champions) (Revell & Blackburn 2007). Yet, the views of managers of such firms are important since these leaders have been able to overcome some of the traditional business barriers to ES. Drawing on the Theory of Planned Behaviour, major factors that influence SMEs toward ES are attitudes, social norms, perceived behavioural control and in turn, intentions. These factors are now critically discussed.

### 3.2.1 Attitudes, ES Intentions and ES Behaviour

Environmental attitudes are initiators of ES intentions and thus are powerful predictors of ES actions (Kaiser et al. 1999; Schultz & Zelezny 1999). Environmental knowledge, environmental orientation, environmental sensitivity, future consequences, and environmental setting (the physical setting in which pro-environmental behaviours are influenced) are all involved in forming pro-environmental attitudes/environmental concern (Kirk 2010). An individual's environmental concern relates to both their notion of self and their sense of independence and interdependence: are they independent with other people, or interdependent with all living things (Schultz & Zelezny 1999)? Individual understanding and considerations such as these are important motivators for pro-environmental behaviours (PEBs) since an individual's attitude toward environmental concerns is usually rooted in their personal values and place in the world (Stern & Dietz 1994)

Environmental concern is a combined attitude towards facts (e.g. global warming exists and is being accelerated due to anthropomorphic actions), one's own behaviour (e.g. recycling and riding a bike to work to help mitigate this fact) and/or others' behaviour towards consequences for environment (e.g. all of my coworkers and friends also recycle and ride their bikes to work), and it refers to both a general attitude or value orientation or a specific attitude directly determining intentions (Fransson & Garling 1999).

Other factors such as age, social class, residence, political ideology and gender all influence environmental attitudes and concern (Van Liere & Dunlap 1980). For example, younger people, with a higher social class, living in cities and who are female tend to have the highest affinity toward pro-environmental attitudes (Fransson & Gorling 1999).

A person's environmental orientation/attitude/concern is determined by examining the beliefs and values they hold toward the environment, and this can be measured. Two of the scales used to measure pro-environmental orientation and attitudes include the Environmental Concern scale (EC) (Weigel & Weigel 1978) and the New Ecological Paradigm scale (NEP) (Dunlap et al. 2000). The EC scale assesses an individual's concern for both the environment and environmental issues through a 16-item Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) and the higher the score, the more concern held by an individual for the environment (Weigel & Weigel 1978). The NEP scale also measures pro-environmental beliefs through a Likert scale, by asking individuals their beliefs regarding people's capability to upset the balance of, and to rule over

nature as well as limit human growth. The tally of the answers to 15 questions describes the strength of an individual's pro-environmental orientation (Dunlap et al. 2000).

Due to their interrelationships, environmental orientation and environmental knowledge are often used in concert to describe a person's pro-environmental behaviours (Whitmarsh & O'Neill 2010; Jensen 2002; Iwata 1996). Both environmental literacy and environmental attitudes act as strong variables in influencing a person's ultimate ES actions. Environmental literacy has been proven as a factor influencing a person's pro-environmental behaviours (Krajhanzl 2010; Latif et al. 2013; Jensen 2002). For example, Kirk (2010) found a statistically significant correlation between environmental knowledge and pro-environmental behaviours for his research participants. A significant correlation was also discovered between pro-environmental orientation and pro-environmental intentions in Kirk's (2010) research. This statistically significant link between an individual's pro-environmental attitudes and their willingness to participate in pro-environmental behaviours confirms past research studies that established environmental attitudes as an indicator of pro-environmental intent (Kaiser et al. 1999).

Assessing an individual's pro-environmental attitudes or environmental concern is somewhat different compared to assessing a firm's environmental management intentions (EMIs). At a general level, EMIs can be defined as a firm's 'responsiveness' in addressing environmental issues. It can be a measure of a firm's efforts to minimise their environmental impacts (Klassen & McLaughlin 1996). A firm's EMIs can be expressed internally, as is the case when an environmental management system is implemented, or externally as is the case when a firm outsources its environmental management (Kirk 2010). Many studies use environmental management systems (EMSs) as an indicator of EMI and thus intended environmental behaviour (Kirk 2010). Kirk (2010) argues that firms that are populated by managers who care about the environment (on ethical, profits, or legal grounds) tend to have more developed EMS's than firms populated by managers who treat the environment either as a replenishable resource or as a low priority issue.

Environmental sustainability orientation (ESO) is similar to EMI. ESO looks at sustainable practices, knowledge of environmental issues, and commitment toward ES. Conceptually, ESO is a business orientation reflecting the ES philosophy of the firm. A firm develops and demonstrates its ESO through the integration of environmental concerns into all aspects of its business: decision-making; culture; and strategy and business operations (Zwetsloot & Van Marrewijk 2004;

Linnenluecke & Griffiths 2010; Roxas & Coetzer 2012). ESO adds a dimension to a business's goals by broadening their scope to include minimising negative natural environmental impacts (Branzei et al. 2000; Zwetsloot & Van Marrewijk 2004). It has been shown that managerial attitudes play an important role in institutionalising ESO (Roxas & Coetzer 2012).

SME characteristics have already been reviewed in Chapter 2, where the lack of tangible ES action within the SME sector as a whole was also discussed. This lack of action, however, does not always reflect the SME owner-manager's personal attitudes (Cassells & Lewis 2011). SME owner-managers who possess positive attitudes may also lack the tools to implement ES change, resulting in inaction (Wang et al. 2007). Similarly, SME owner-managers may not have required resources (time, methods, skills) to measure the impact of any ES changes that they make on business performance. Without proof that ES initiatives are having any impact, many SME owner-managers choose to ignore ES actions in favour of proven financial improvement strategies. Furthermore, even if the SME owner-manager combines a positive environmental attitude with their desires of financial benefit, the attitude in itself is shown to be insufficient to sustain ongoing ES engagement in a firm (Cassells & Lewis 2011). This helps explain a disconnect often exists between environmental attitudes and environmental actions in the SME context (Tilley 1999).

Owner/managers' VABEs (values, attitudes, beliefs and ethics) often also influence their strategic choices and thus the overall behaviour of the firm (Finkelstein & Hambrick 1996; Burke 2002). It has been shown that SME owner–managers are more likely to develop a positive ES attitude when they perceive their environment to be supportive of it. As such, owner–managers with strong pro environmental attitudes are more likely to adopt ES actions within their firms (Roxas & Coetzer 2012).

Attitude toward the natural environment (ANE) was studied as a whole by Roxas and Coetzer (2012), who found that ESO in SMEs in the Philippines has three requirements: 1) knowledge of ES issues; 2) practices aimed at ES; and 3) commitment to ES. From this research, Roxas and Coetzer determine that all three facets of ESO drive the firm's overall strategic stance towards ES in a synergistic way. Interestingly Roxas and Coetzer (2012) further found the regulatory dimension of a firm's environment to have the lowest impact on the ANE in their study. This finding contradicts findings of previous studies which suggest that a firm's top manager's pro ES attitudes and PEBs (pro-environmental behaviours) are primarily driven by government regulatory frameworks (Sarkar 2008; Özen & Küskü 2009).

The significant impact of ANE on the ESO of SMEs supports the view that in the SME context, the VABEs of the owner–managers largely shape the strategic orientation of their firms (Stern & Dietz 1994; Tilley 1999). Tilley (1999) suggests that ANE has no direct impact on firm behaviour; however, the findings of Roxas and Coetzer's (2012) study offers a more nuanced explanation by showing that although ANE may not directly impact actual ES behaviour, it does influence the overall strategic direction it may take regarding ES.

The majority of the manufacturing SMEs studied reported considering the environmental impact of their activities. Only 16% of the New Zealand-based owner-managers reported that they gave it no consideration at all. In Lewis and Cassells' (2011) study, in general, the majority (80%) of owner-managers were aware of the risk their business activities posed to the environment. Further, 87% agreed or strongly agreed that regulation alone will not protect the environment and two-thirds suggested that they would not wait until required by law to improve the environmental performance of their firm. However, these claims were not matched with awareness or knowledge. For example, 94% of respondents had never heard of ISO 14001, and only 6 firms either had certification or were working towards it. Therefore, a gap appears out of Lewis and Cessells' (2011) work between what SME owner-managers say is needed (action beyond regulation) and what they are actually doing (or are aware of being able to do).

In terms of the inter-relationship between attitude and action, results from Lewis and Cassells (2011) study show that a positive attitude on the part of the respondent did not translate into any greater likelihood that they would engage in environmental practices in their firm in the areas of waste management, operations, or design for the environment. However positive ANE did influence action in the area of environmental management, in that the owner-managers who responded positively to statements regarding the environment were more likely to have implemented environmental management practices. This demonstrates that a positive ANE can lead owner-managers to consider factors beyond cost or regulation, or at the very least, not to be motivated by those aspects alone.

Further literature supporting the claims that SME owner-manager's attitudes significantly impact their intentions and ES attitudes comes from Vazquez Brust and Liston-Heyes (2010) who present exploratory findings supporting the claim that a firm's environmental performance is influenced by the 'mindset' of the people who manage it. It shows that dominant environmental paradigms – i.e. the set of core values, assumptions and beliefs that individuals hold about nature,

impact upon the way a firm conceptualises and manages environmental issues. Lastly, based on survey data from 142 Greek companies, Papagiannakis and Lioukas (2012) found that top managers' personal values influence responses indirectly, through shaping their environmental attitudes, and indicated a significant role of managers' values, attitudes and perceptions in a firm's environmental response.

The attitude of the owner-manager of a SME has therefore consistently been found to play a key role in determining the nature of the firm's engagement with ES and the intensity of that commitment (Roxas & Coetzer 2012). The importance of the owner-manager is unsurprising given the typical characteristics of many small firms. It is logical then to conclude that the attitudes of the owner-manager of an SME will direct the firm's goals and orientation with respect to ES action. Further, behavioural intention is an indication of an individual's readiness to perform a given behaviour. It is assumed to be an immediate antecedent of behaviour (Ajzen 1991). The strength of behavioural intention further determines the likelihood of the behaviour. However, an issue consistently highlighted in the research and pointed our earlier, is that there is frequently a disconnect between the owner-managers' attitudes and the action they take with regard to ES action (Tilley 1999; Pelletier et al. 1999). This disconnect between positive ES attitudes and action is contradicting when an individual owner-manager expresses positive ES attitudes and values but fails to implement environmentally responsible practices at work (Gadenne et al. 2009; Kollmuss & Agyeman 2010). This disconnect is further discussed later in this chapter.

In view of the discussion above, and the lack of research on these issues within the SME FT industry focusing upon ES champions, the following research question was examined in this study:

*RQ1a: What and how do attitudes impact ES champions in the FT industry's intentions and ultimate actions in implementing ES initiatives?*

### 3.2.2 Subjective Norms, ES Intentions and ES behaviour

Although core values, assumptions, and beliefs are deeply ingrained in a managers' psyche, norms have shown to be a consistent influence on behaviours, specifically subjective norms, which are perceived social pressures that individuals or firms may feel to either engage or not in a particular action. In studies of environmental behaviours, subjective norms have been shown to impact PEBs (pro-environmental behaviours) (Cordano & Frieze 2000). Hence, ES intentions and actions within a firm is likely to be determined by the SME owner-manager's subjective and social

norms. Cordano and Frieze (2000) found a positive relationship between subjective norms about environmental regulation and environmental managers' preferences to implement ES activities.

Social norms (a subset of subjective norms) can also be very useful in understanding human behaviour as well as predicting the individual behaviour (Fishbein & Ajzen 1975; Berkowitz 2004). Studies further divide social norms into types, including: injunctive norms and personal norms. The injunctive norm is conceptually like the subjective norm found in the Theory of Reasoned Action (Fishbein & Ajzen 1975). The individual question, 'what do others think I should do?' motivates behaviour through imposing informal social sanctions (Minton & Rose 1997). For example, "I should recycle because by wife thinks it's really important". On the other hand, the personal norm is tied to the self-concept and is experienced as a feeling of moral obligation (Karp 1996; Schultz & Zelezny 1999). It refers to what "I feel morally obligated to do" and motivates behaviour by the desire to act in ways that are consistent with one's values (Minton & Rose 1997). For example, "I should recycle because otherwise this will all end up in a landfill and that is harmful to the earth and I don't wish to harm the earth".

Perceived social norms are likely to have a positive influence on both the attitudes toward PEBs and the perceived behavioural control in carrying them out, thus both the perceived behavioural control to undertake ES actions and the attitude toward this behaviour have a positive influence on the intention to implement ES actions (Sánchez-Medina et al. 2014). It is therefore likely that both the owner-manager and the people around him/her will positively assess the performance of ES action, thus increasing the manager's intention to carry out these actions when this is based in a society that is socially aware and considers the environment a priority. Therefore, by encouraging environmental awareness in society, owner-managers of SMEs can be pushed to engage in more proactive behaviour that can improve the company's environmental performance and make it more socially responsible.

Furthermore, the owner-managers' endorsement of 'policy values' (rules, norms and narratives) further impacts their ES intentions (Steg et al. 2011). These values are somewhat more malleable than core values and can be strategically manipulated by external agents including environmental policy-makers interested in facilitating implementation and compliance with environmental policies and/or best practice. Policy values fall into two separate categories and include: (1) principles of governance or internal evaluations of what constitutes a socially appropriate or acceptable way to manage public affairs (Sabatier & Jenkins-Smith 1988); and (2)

cognitive frames and locus of control which are internal assessments of how an individual thinks he can make a difference through possible actions/knowledge. Principles of governance are discussed in this section and the latter in the following section.

Principles of governance refer to structures of knowledge about the world, reflect power relations, and provide a common reference framework which allows individuals to assess the appropriateness of their acts (Adger et al. 2003). They encompass social and institutional norms and narratives (including those unrelated to the environment) that determine whether a type of behaviour is socially acceptable or not, and hence impact upon behavioural intentions. For instance, an individual may well have strong negative feelings about wasting food but would nonetheless find it unacceptable to ask guests at a dinner party to take only what they can eat.

Many researchers have used Ajzen's (1991) Theory of Planned Behaviour to examine the influence of owner-managers' attitudes and norms on their decision-making and concluded that attitudes and subjective norms, along with cost concerns, significantly influenced managers' decision intentions (Fielding et al. 2008; Sánchez-Medina et al. 2014; Cordano et al. 2004). More specifically to ES adoption, managers' intentions to implement source reduction activities were influenced significantly by attitudes about pollution prevention and subjective norms regarding environmental regulation (Cordano & Frieze 2000). However, these studies examined how the TPB influenced decisions and practices but did not consider whether ES actions were actually present. Another example in the literature is Papagiannakis and Lioukas (2012), who found subjective norms affect corporate environmental responsiveness (CER), with their effect in fact being stronger than that of attitudes. Lastly, Cordano et al. (2010) found that managers within the simple structures of SMEs in the US wine industry are responsive to attitudes, norms, and pressures from internal stakeholders.

In view of the discussion above, and the lack of research on these issues within the SME FT industry focusing upon ES champions, the following research question was examined in this study:

*RQ1b: What and how do subjective norms impact ES champions in the FT industry's intentions and ultimate actions in implementing ES initiatives?*

### 3.2.3 Perceived Behavioural Control, ES Intentions and ES Behaviour

When people experience more control over their own behaviour then they are more likely to behave in a specific way. This is a core tenet of Expectancy Theory, an underpinning theory within this research, also discussed further along in this chapter.

As has been discussed already, attitudes and values affect behaviour, but an additional factor involves the individual's 'locus of control'. Individuals may see some things as being within or beyond their control given context specific constraints (Kollmuss & Agyeman 2002; Howell & Shea 2001; Pavalache-Ilie & Unianu 2012). Behaviours are different between people who think that their own behaviour makes a difference (internal locus of control) and those who see change as somewhat random and/or provoked by more influential people (external locus of control) (Rotter 1966). It is now clear that individuals with an internal locus of control are more likely to implement ES initiatives (both consumers and managers) (Howell & Shea 2001; Cleveland et al. 2005; Fransson & Garling 1999; Kollmuss & Agyeman 2002).

In studying ES champions in Argentina, Brust and Liston-Heyes (2010) show how perceptions of financial constraints (a component of an individual's locus of control) limit the willingness or ability of firms to invest in the environment. Moreover, when an owner-manager has an internal locus of control and attitudes and values that make them more attentive to environmental issues, their company is likely to display pro-environmental intentions. Brust and Liston-Heyes (2010) conclude that firms that are managed by individuals who think that environmental deterioration is a costly but a solvable problem, are more likely to show pro-environmental intentions.

In view of the discussion above, and the lack of research on these issues within the SME FT industry focusing upon ES champions, the following research question was examined in this study:

*RQ1c: What and how does perceived behavioural control impact ES champions' intentions and ultimate actions in implementing ES initiatives?*

### 3.3 Motivating Factors in Environmentally Sustainable Behaviour

Attitudes, social norms and behavioural control and the ability of these issues to impact a firm's ES intentions and ES actions were discussed in the foregoing sections. This section now critically discusses the internal and external drivers that motivate SMEs to engage in ES initiatives. The Expectancy Theory, introduced in Chapter 2, will underpin how SMEs can be more or less

motivated to engage in ES. Amotivation as a possible barrier to implementing ES initiatives will also be reviewed.

The benefits of engaging in ES behaviour for SMEs are many, as are the motivations. Business objectives are a main motivator for going down the ES path. Economic benefits and drivers (motivations) often provide a strong basis for the business case for sustainability (Qinghua Zhu et al. 2007). Wiesner et al. (2010) showed that the majority of SME ES champions in Australia were driven to make ES changes in part due to marketing and green company image. Further dominant drivers identified by Wiesner et al. (2010) were: the desire to make a difference; the desire to do the right thing; and business opportunity. Some less common drivers identified in Wiesner et al.'s same report included: support from government; a desire to do things better; minimising environmental impact; environmental regulation; supply chain constraints; and stakeholders. The benefits derived from ES initiatives in SMEs also feed into the business case for ES. This business case is debated in the Outcomes section much later in this chapter.

Recent reviews of the literature have found that nowadays many SMEs engage in at least some ES activities (Kechiche & Soparnot 2012; Klewitz & Hansen 2014). As mentioned earlier, these activities are often referred to as pro-environmental behaviours (PEBs). Several types of motivators for pro-environmental engagement in business exist in general: compliance with legislation (Atkinson & Curtis 2009; Gadenne et al. 2009); economic opportunities arising from PEBs (Gonzáles et al. 2008; Braungart et al. 2002; Orth & Kohl 2013); stakeholder pressures (González-Benito & González-Benito 2010; Cordano et al. 2010); and ethical or ecological motivations (Bansal & Roth 2000).

The push to engage business to take on ES initiatives exists in many guises, including voluntary standards, industry-led strategies, government-funded initiatives and regulatory measures. Further, the personal motivations of key individuals within an organisation can also result in PEBs (Wang et al. 2007). Although some researchers (Windolph et al. 2013) have determined three different motivations (seeking corporate legitimacy, market success, and internal improvement), in this section the three different types of motivations are determined to be stakeholder pressures, business pressures, and personal motivations. This demarcation is supported by other researchers (Williams & Schaefer 2013) who found that their respondents' professed motivations for engaging with environmental and climate change issues to fall into the three

categories of motivations: the external business environment; the business case; and personal engagement/values.

### 3.3.1 Stakeholder Pressure

Consumers and other stakeholders play important roles in promoting ES strategies and initiatives in business. Governments and society exert pressures on companies, which forces them to gain and secure the right to operate. Moreover, the behaviour of consumers, investors, and competitors (by voting with their dollars) can create the motivation required to implement ES actions and in turn achieve more market success from these actions. Darnall et al. (2008) differentiates external drivers to be market pressures, regulatory pressures and social pressures. Epstein (Epstein & Buhovac 2010; Epstein & Yuthas 2012; Epstein & Roy 2003) describe some of the motivations for sustainability management as government regulations and stakeholder pressures. More specifically, Epstein (2008) describes companies' need to establish a 'license to operate' from governments, communities, and other stakeholders.

Compliance motives (e.g. to avoid penalties for not complying with regulatory measures) are substantial motivating factors in promoting ES in businesses (Winter & May 2001; Masurel 2007). Despite some perceived contradictions in government policy, SMEs place a high importance on the need to comply with external expectations from local and national government and from customers in the UK (Williams & Schaefer 2013). Further, Haddock-Fraser and Tourelle (2010) found that companies close to their end consumer were significantly influenced by their end-consumer and due to consumer awareness of environmental issues became more active on particular environmental measures than their counterparts.

Some more specific examples of stakeholder pressures that may be motivations for many SMEs to innovate ES initiatives include: permit requirements; government policies such as environmental taxes, legislation (air pollution or water quality regulations) and "greening" grants; partner requirement for tendering a contract; external support or advice, and pressures from or even the nature of a community in which the work is being done.

Interestingly, SMEs may not perceive stakeholder pressures in the same way as larger firms due to limited or lack of specialised expertise and therefore knowledge (Tilley 1999), even though some pressures, including regulatory scrutiny, may in fact be more forceful on SMEs (Kaufmann & Tödtling 2002). ES owner-managers are sensitive to pressures from internal and external

stakeholders, thus supply chain requirements can promote green intentions and firms with less direct or indirect pressures spend less time and effort investing in environmental protection equipment and management systems (Brust & Liston-Heyes 2010).

### 3.3.2 Business Pressure

The unique characteristics of SMEs may cause their PEBs to be different from that of large firms. Further, SMEs should not be considered one homogeneous group since the motivation for being in business can be quite different across a spectrum (Williams & Schaefer 2013). For example, some entrepreneurs are motivated by high growth/high profit. Some SME owner-managers are more interested in achieving a work–life balance while earning a living (Kuratko et al. 1997). The former are often thought to be largely uninterested in ethical considerations whereas the latter may be more motivated by ethical personal interests and values (Hannafey 2003). In the extreme cases of ES champions (or ecopreneurs, discussed below) SME owner-managers have such strong ethical and environmental convictions that their SME's may be pioneers of sustainability.

ES initiatives in SMEs may also be motivated by financial improvements (e.g. cost reductions) (Pelletier et al. 1998; Revell & Blackburn 2007; Schaltegger et al. 2012). Darnall (2008) emphasises the increase of sales and the reduction of costs, for example, through process improvements, as important business reasons for ES. Bansal and Roth (2000) describe legitimation and competitiveness as motivations for ecological responsiveness (in addition to ecological responsibility). Hence, economic opportunities are available through reducing environmental impacts while lowering costs and/or increasing revenues through selling the ES products and services. Other business case motivators for SMEs to implement ES change include creating advantages in recruiting good calibre staff, seeing it as a new business opportunity, or recognising a long term view on investment (i.e. understanding that resources are finite).

### 3.3.3 Personal Motives

Values as the motivation for PEBs can be from both egoistic and altruistic concerns (Batson 1987). Egoistic concerns are based on a person valuing himself or herself above both other people and other living things. Lower egoistic concerns lead to more PEBs. Altruistic concerns are divided into social-altruistic and biospheric concerns (Dietz et al. 2005). Social-altruistic values lead to

concern about environmental issues through judging environmental issues on the basis of costs or benefits to others (all of humanity, individuals, neighborhoods, countries, etc.). Biospheric concerns are a bigger picture view where value is placed on all living things (all animals and plants). Some researchers claim that it is difficult to distinguish biospheric concerns from social-altruistic concerns (Stern & Dietz 1994), and others argue that egoistic concerns are not the opposite of social-altruistic or biospheric concerns (Dietz 2015).

The values of the individual owner-manager are critical in a SME owner-manager's motivation to implement pro-environmental behaviours (PEBs) (Tzschentke et al. 2008; Loucks et al. 2010; Orth & Kohl 2013). However, it is this motivating factor that has proved the most complex to investigate, given its humanistic nature. In studies of larger organisations, researchers tend to refrain from analysing ethical or moral attitudes of individuals (ex: the top manager) (Windolph et al. 2013). However, unlike managers and leaders of large firms, owner-managers of SMEs often build firms that are in line with their personal aspirations and philosophies. Those with values related to the environment who therefore adopt environmentally responsible business practices are referred to as Ecopreneurs (Schaper 2002). These environmentally conscious owner-managers often create green businesses in order to radically transform the sector in which they operate or they aim to make a living while at the same time solving environmental problems (Isaak 2002).

While economic and other external pressures motivate ES in SMEs, the greatest motivation to engage with environmental issues is the owner-manager's personal values and beliefs (Williams & Schaefer 2013). As argued previously, the owner-managers of SMEs often have greater control over their business, and it is usually within their power to disseminate their own values through their firm's culture. Personal ethics and business ethics are often more closely aligned in SMEs than in larger firms (Jenkins 2006; Spence 1999). For these reasons, SMEs may be better positioned to adopt ES initiatives compared to larger corporations. In particular, in environmentally pro-active small firms, such as ecopreneurs or those that belong to a green business network, the personal values of owner-managers seem to play a much stronger part in motivating PEBs than in other SMEs (Williams & Schaefer 2013).

### 3.3.4 Expectancy

Although motivations are often complex and difficult to discern, ES owner-managers are often motivated by stakeholder pressures, business pressures and personal motives. As outlined in Chapter 2, Expectancy Theory can help to explain how motivations in SME owner-managers can impact their intentions and ultimate ES actions. Expectancy Theory can predict how an owner-operator will act based both on their belief that an expected outcome will occur if they act a certain way, and on their desire for this expected outcome.

For example, a woman has a passion for fashion as well as the environment. She wants to do work that matters and makes a difference in her community (personal motives). This woman has several job prospects but continues to fantasise about starting her own "green" fashion label. Her actions will be driven by her expected consequences. Therefore, in deciding among options she is likely to select the option with the most beneficial outcome based on her motivations, in this case, doing work that matters to her and making a difference. Motivation at work, treated as a choice between alternative levels of work output, is a factor in determining what actions someone may or may not take, and based on Expectancy Theory, is largely related to underlying motives.

### 3.3.5 Amotivation

All three categories of motivations play a role in managers' perceptions of what may encourage or discourage them from adopting PEBs. In some cases, business strategy and cost factors can be more of a discouragement than an encouragement due to contradictions in government policy and vested economic and political interests (Williams & Schaefer 2013). Further, many SME managers believe that their businesses have little to no significant impact on the environment, and moreover, that improving environmental practice will cost, rather than save them money (Hillary 2004; Revell & Blackburn 2007). The global helplessness belief, discussed briefly in Chapter 2, underpins how SMEs who choose to believe they have very little or no impact on the environment would then allow themselves to not act in ways to protect the environment. Even ecopreneurs can think that the business case for pro-environmental engagement is weak (Williams & Schaefer 2013).

While financial benefits often accompany ES actions, SMEs may not always realise them nor find it easy to convert environmental performance into competitive advantage (Gadenne et al. 2009; Gadenne & Sharma 2009). The possible financial benefits from certain ES actions such as resource efficiency savings may be quite small for SMEs (Fineman 2001) and may be more easily

realised through means other than environmental ones (Drake et al. 2004). Finally, barriers can cause demotivation. Common barriers perceived and experienced by SMEs relating to ES change are discussed in the following section on converting ES intentions into actions.

In view of the discussion above, and the lack of research within the SME FT industry focusing upon ES champions on issues regarding motivational aspects impacting upon ES behaviour, the following research question was examined in this study:

*RQ2: What motivates ES champions in the Canadian, the American and Australian FT industry to engage in environmental sustainability?*

### 3.4 Converting Intentions into Actions

SME owner-managers with positive attitudes to the environment as well as a motivation to improve their environmental practices do not always translate this attitude and motivation into action (Tilley 1999; Drake et al. 2004; Wang et al. 2007). One group of major factors that limit a SME's ability to convert their ES intentions into pro-environmental behaviours (PEBs) is barriers. A characteristic common in SMEs is resource poverty, which can be a major source of barriers for an SME to innovate ES initiatives. Sustainability initiatives require human resources, material and financial resources; however, the limitations of these resources in SMEs often places restrictions on the ability to direct resources to any ES initiatives (Wiesner et al. 2010). It can be more difficult for SMEs to come up with the required resources for ES implementation. However the potential improvements could be significant to the future success of business if or when they do (Jenkins 2006).

SMEs have some major disadvantages (e.g. resource constraints, lack of formalized planning, difficulty to attract finance) which may prevent them from engaging proactively in the ES innovation process (Del Brío & Junquera 2003). From this perspective – emphasised by most research – SMEs are considered to display 'reactive' behaviour toward environmental and social issues.

While there are many possible benefits to ES initiatives, discussed in the above section on motivation, the barriers to implementing ES hamper motivations and intentions at the implementation stage. Post and Altma (1994) outline two types of environmental change barriers in their Four Settings Model: 1) industry barriers (capital costs, stakeholder pressures, legislation, information and technical knowledge); and 2) organisational barriers (senior management, the

attitude of personnel, communication and the firm's history). In their study of environmental management evolution, Kolk and Mauser (2002) outlined a general model for sustainability and argued that environmental management models are not necessarily applicable to an organisation's actual behaviour. However this model is not specifically tailored to SMEs.

Some of the barriers to ES identified by Hillary (2004), such as underestimating resource requirements, a lack of assistance, and additional demands on existing staff which can lead to the detriment of the business, often stop implementation at the first stage of an SME's journey such that no proper attempt to implement ES is ever made. Williams and Schaefer studied barriers in their 2013 study on green SMEs in England. The following table is adapted from their theoretical framework. The same groupings used in the above section on motivation: stakeholder, business and personal motivations have been used here to distinguish the different possible sources of barriers.

**Table 3.1 Perceived Barriers in SMEs in Implementing ES Change**

| Stakeholders | Business | Personal |
|---|---|---|
| Inconsistent government policy | A decrease in energy prices decrease incentives | Not knowing how to access incentives |
| Cost of trade recycling | Long payback time | Risk averse |
| Complexity and time needed to access an incentive scheme | Competition not doing it and making more profit | Resistance to change |
| Government policies | High initial cost of new technology (such as renewable energy) | Internal politics |
| Government tax schemes | Limited HR resources | Amotivation – global helplessness belief |
| | Limited time resources | |

In Wiesner et al.'s (2010) report, one of the main barriers identified in Australian ES champion SMEs is the government. Issues such as: a lack of assistance and support from the government; the government favouring imports; a lack of understanding from the government regarding the needs of SMEs; major constraints placed on SMEs by government regarding laws and regulations and compliance issues; a lack of coordination in government departments; a lack of expertise regarding particular business issues; and difficulty in finding the right person to deal with in government, are all related to shortfalls of the Australian government to support ES change in SMEs. Additional barriers identified by Wiesner et al. (2010) include: a lack of involvement in ES by other major companies (which is perceived as unfair); the time consumption of compliance for compliance sake; a lack of funding sources; the cost of implementing ES initiatives; a lack of time to invest in ES or learn about grants or rebates; and differences regarding how individuals define sustainability.

Overcoming barriers is a critical step to turning intention into action. Successful implementation of ES initiatives, once attitudes, motivations and intentions are in place, requires that both psychology and reality are in sync. Intentions and behaviours are determined by both internal forces (individual values, assumptions, beliefs, interpretations of social/ethical norms, and

internal barriers) and external forces (organisational and social rules/policies, demographics, resources and barriers) (Tudor et al. 2007). Moreover, economic, demographic, political and social pressures determine behavioural intentions (Agbejule & Saarikoski 2006; Schaltegger et al. 2012).

Previous studies have used the Theory of Planned Behaviour (TPB), norm activation theory, and values-beliefs-norms theory to explain PEBs. One psychological theory identifies the presence of strong goal-intentions (e.g. "I intend to use less paper") as the core predictor of goal-directed behaviour (Ajzen 1991; Thomas & Lamm 2012). However, even though intentions are believed to be the best predictor of behaviour, they do not account for over half of the differences in behaviour (Webb & Sheeran 2006; Sheeran 2002). This frequently observed lack of synchronicity between intentions and behaviour is called the 'intention-behaviour gap' and has led researchers to acknowledge that although strong goal intentions is a requirement for goal-directed behaviour, it is often not sufficient (Gollwitzer & Sheeran 2006; Oettingen & Gollwitzer 2010). This is because implementation intentions (plans concerning where, when and how one will perform the intended behaviour) in addition to strong goal intentions, are also a prerequisite to action, and thus are required in order to overcome this intention-behaviour gap.

Use of social-cognitive theory can also explain PEBs (Homburg & Stolberg 2006). Unlike intentions that merely specify a desired end-state (e.g. I intend to achieve net zero environmental impact), implementation intentions specify the where, when, and how of goal-striving (e.g. If I am in situation X, then I will perform goal-directed behaviour Y) (Gollwitzer & Sheeran 2006). For example, an implementation intention to support the intention to reduce if not eliminate paper use in a company specifies a situation that represents a good opportunity for acting on this intention (e.g. Rather than printing this document, I will simply read it on my desktop and save it to the cloud) and then links this situation to a specific goal-directed action (e.g. using less paper) resulting in the following implementation intention: "If I read my documents on my desktop rather than printing them, then I will not need to print and use paper. Perhaps one day I may even eliminate the use of paper this way". Making specific action plans such as this promotes acting on one's intentions (Oettingen & Gollwitzer 2010; Sheeran 2002). Further, Williams and Shaefer (2013) found that the pro-environmental SMEs that they studied had personal values that seemed to go hand in hand with a sense of personal responsibility and an internal locus of control (cf. Pavalache-Ilie & Unianu 2012; Cleveland et al. 2005; Williams & Schaefer 2013, for links between internal locus of control and environmentalism and management behaviour).

SMEs may act in the same way as consumers, and their ability to bridge the intention-action gap may be similarly linked to consumer's social and psychological theories. More practically, common barriers faced by SMEs such as inadequate infrastructure and resources (economic, knowledge and skill) likely cause small firms to adopt new management processes in a gradual fashion (Tilley 1999). Additionally, gradual progress toward an environmental management program (EMP) was found to be a success factor in SMEs by adding ES initiatives just one or a few at a time (Wiesner & Millett 2012). Further, Wiesner et al. (2010) identified many practical ways for turning intention into action. These include but are not limited to: getting involved with a green business network; reconsidering what the business does; taking on outside suggestions and help to change behaviour; following-up on environmental grants; promoting better coordination between government and local councils; developing a 'one stop shop' for finding information about ES issues; using other business people and networks to help to overcome resource constraints (financial and human); and applying for ES awards.

SMEs could increase their success at bridging the intention-action gap by fostering industry-wide environmental management programs (EMP) to respond to environmental pressures instead of ad hoc efforts to implement practices to improve environmental performance (Cordano et al. 2010). Some EMP components may also be more important than others, for example, established goals and policies, budgeting and working with suppliers to reduce waste. Stakeholder involvement and support can influence the type of programs implemented by firms (Cordano et al. 2010) and SMEs can and should rely heavily on informal networks of industry peers (Cordano et al. 2010).

In view of the discussion above on the psychology and reality of internal and external barriers to the intention-action gap and the lack of research on these issues within the SME FT industry focusing upon ES champions, the following research question was examined in this study:

*RQ3: What factors play a role in converting the intentions of SME ES champions in the Canadian, the American and Australian FT industry into behaviour/action?*

## 3.5 ES Change Management and Behaviour in SMEs

This section first conducts a review of the literature on what research has been done on ES initiatives in SMEs. Barriers and success factors important to the implementation of ES change through aspects such as creating a culture and strategy for ES into firms are then discussed. Further to this, an account is provided of what ES change management behaviours are most likely to steer the SME through its ES change journey successfully. Lastly, these issues are discussed within the Fabric and Textile (FT) industry where academic literature is available. The discussions in this section draw on the change management theories identified in Chapter 2.

SMEs account for nearly 80% of all enterprise (Sustainable & Studies 2007) and produce almost 70% of the pollution globally (Hillary 2004). If SMEs began to engage in responsible environmental practices, their potential to contribute positively to 'global cleaning' is significant. However, there is little known regarding the change management practices or processes required for SMEs to 'go green'.

Albeit minimal, research has been undertaken to understand ES in SMEs, as explained in Chapter 2. Many papers identify a lack of research in their specific areas of interest, particularly relating to SMEs and an overarching understanding of ES initiatives. In 2010 a meeting of the Organisation for Economic Co-operative and Development (OECD) concluded that moving to a greener enterprise may be more difficult for SMEs than large firms due to a lack of both capability and willingness to adopt ES strategies or opportunities (OECD Working Party on SMESs and Entrepreneurship 2010). The OECD (2010) further recognised several other challenges for SMEs to move to ES, which included size-related resource constraints, skills deficits, and knowledge limitations. There are however other researchers who argue ES change in SMEs could be easier due to their smaller size (Chadee & Roxas 2013; Wiesner et al. 2010). According to these authors, SME qualities of greater adaptability and flexibility puts them in a better position to leverage their capacity for learning, innovation and change when it comes to implementing ES.

Organisational change strategies used successfully with larger organisations cannot be directly transferred onto SMEs (McAdam 2000), new product development and innovation management used successfully with larger organisation cannot be directly transferred onto SMEs (Huang et al. 2002), and nor can the implementation of quality initiatives and organisational learning (McAdam & Armstrong 2001). While both large and small companies can engage in ES initiatives, SMEs will innovate differently (Klewitz & Hansen 2014). SMEs are, in fact, attributed with innovation propensity for sustainability (Bos-Brouwers 2000). However, the classic SME

characteristic of resource-poverty (human, operational and financial) often limits the ability to direct resources to change initiatives (Banham 2005) such as ES change initiatives.

Most studies on ES in SMEs are descriptive and focus primarily on general ES challenges. But whether it be new government regulations, an internal eco-champion, consumer demand or other internal and external forces, many pressures are now requiring firms to become more environmentally sustainable. Therefore, a newer area of change management research identifies the challenges related to management with respect to changes required for ES. ES initiatives and ES change success factors in SMEs will now be discussed, followed by a brief overview of the paucity of research relating to these issues in the FT industry.

### 3.5.1 ES Initiatives in SMEs

The literature uses a diverse range of vocabulary to describe ES initiatives: greening initiatives (GIs) (Thi & Phan 2008); sustainability-oriented innovation (SOI) (Klewitz & Hansen 2014); and pro-environmental behaviours (PEBs) (Osbaldiston & Schott 2012). Further, management or strategic literature pertaining to ES initiatives is similarly multi-termed: environmental management systems (EMSs); innovation management; sustainable entrepreneurship; cleaner production and sustainability management are the more common ones found in the literature (Klewitz & Hansen 2014; Hillary 2004; Schaltegger & Wagner 2011). In this section we will use ES initiatives or ES actions to describe what SMEs are doing to "green" their business.

ES actions in SMEs develop products and services that incorporate environmental benefits (Jenkins 2006). Successful implementation of ES actions requires the deliberate management of economic, social, and ecological aspects of a business (Gerlach 2003; Oettingen & Gollwitzer 2010). In this way, new products, processes and organisational structures are integrated into the entire being of the organisation (Rennings 2000).

The act of implementing ES initiatives may be instigated by a wide array of motivating factors, which impact the actions taken. SME ES actions range from resistant, reactive, anticipatory and innovation-based, to sustainability-rooted (Klewitz & Hansen 2014). Most sustainable innovations in SMEs are directed at improving technological processes (eco-efficiency) and lowering the costs of production (Bos-Brouwers 2000).

More common methods being used worldwide, applicable to the FT industry include:

- waste reduction or prevention measures
- energy reduction projects
- reducing the use of packaging materials for products
- including recycled resources in the production process
- product life cycle analysis
- a switch to alternative resources (such as biopolymers or natural compounds)
- providing an intake system of used products from customers
- training
- conditions of employment and health and safety ex: volatile organic compound (VOC) emission reduction projects
- closed loop systems for water and/or purifying water effluents
- externally and internally communicated environmental policy
- green supply chain management

The above list could be further divided into product, process or organisational innovations. Although many of these ES initiatives are being applied in a variety of industries and in many SMEs worldwide, Bos-Brouwers (2010) found that emissions, transport and biodiversity remain under-addressed. Different aspects of ES initiatives were already discussed in Chapter 2, both in the context of ES and the context of the textile industry sections. For an exceptional strategic review of the variations of sustainability oriented initiatives, please see Klewitz & Hansen (2014).

The adoption of ES actions is meant to reduce a firm's environmental impact. However, there are many barriers faced by SMEs in their endeavors to become less unsustainable. These were discussed above. Although success factors related to implementing ES change in SMEs have been discussed relating to motivation in section 3.4, they are discussed here relating to ES change management.

### 3.5.2 Factors Important to the Successful Implementation of ES Change

Many of the characteristics discussed in Chapter 2 relating to SMEs impact their ability to successfully implement ES change. 'SME peculiarities' (Noci & Verganti 1999) imply that they will innovate differently for sustainability (Moore & Manring 2009). Literature suggests that SMEs have advantages in that they are often characterised by an entrepreneurial style with lean organisational structures (Bos-Brouwers 2000; Darnall & Gallagher 2000) dominated by their owner-managers (Jenkins 2006), and can hence also be strongly value-driven (Wang et al. 2007). Thus, smaller companies may be in a better position to innovate radically and compete successfully in niche markets with ES initiatives (Schaltegger & Wagner 2011).

The values, attitudes, beliefs and ethics of a SME's owner-manager and thus the SME as a whole are holistically integrated into the success or failure of implementing ES change. How this is done relating to converting motivations into pro-environmental behaviours (PEBs) or intentions into PEBs has already been discussed in the sections above. But it is important to again reiterate here that in order for a SME to succeed in implementing ES change, the VABEs (values, attitudes, beliefs and ethics) regarding care and concern for the environment must be in place, due largely to the influence of the owner-manager.

ES change management success has been connected with a variety of additional factors including multinationality, export-orientation, and size. Padma (2008) found that multinational firms, due to their exposure to international markets, perform better compared to national (local) organisations. Moreover, these export-oriented firms are more likely than domestic focused firms to adopt environmental management systems (EMS) since they face supply chain pressure from other multinational firms. It has also been found that firms with high use of technological advances and high collaboration were found to be the leaders in the adoption of environmental practices (Darnall et al. 2008). Interaction with external actors such as customers, authorities and research institutes can ultimately increase the innovative capacity of SMEs ES change (Klewitz & Hansen 2014).

In contrast, leadership style was determined to be less important than leadership strength by Dunphy and Stace (1993) who also endorse circumstantial organisational development initiatives, which are more congruent with their contingency approach discussed in Chapter 2.

Lastly, some researchers suggest that networks may aid SMEs in adopting sustainability practices (Lawrence et al. 2006; Chetty & Campbell-Hunt 2003; Narula 2004). Networks such as

environmental agencies, trade associations and local governments may help organisational learning and thus success in implementing ES initiatives in SMEs (Del Brío & Junquera 2003; Sustainable & Studies 2007). Further, networks can also help to maintain a SMEs' motivation to continue to participate in sustainability programs (Lawrence et al. 2006).

#### 3.5.2.1 Strategies

A strategic method of initiating and innovating ES change in SMEs could be a helpful and useful method for ES change management in SMEs. However, SMEs generally adopt reactive strategies, which focus on compliance rather than sustainability (Kehbila et al. 2009; Schaper 2002; Klewitz & Hansen 2014). Furthermore, SMEs tend to follow business instincts in order to reduce resource use and waste, but when faced with the potential of no immediate benefits they often decide ES is a non-priority expense (Esty & Winston 2006). As mentioned earlier, SMEs innovate differently than larger companies due to their characteristically flatter organisational structures and specialised capabilities (Klewitz & Hansen 2014). The larger a company is, the more strategic they tend to be with their ES management (Jenkins 2006). However, companies with sustainability integrated in their culture radically innovate new products and cooperate strategically with stakeholders (Bos-Brouwers 2010). The leadership style of these ES oriented companies is informal, committed, creative, and entrepreneurial (Nulkar 2014).

Several strategic approaches to ES change in SMEs include: differentiating products on the basis of green positioning; cutting costs through environmental improvement programs; helping to shape the industry's regulations; managing environmental risks; and redefining markets (Klewitz & Hansen 2014).

In addition, environmental technologies are a key instrument in successful and strategic ES change management by using technology to design and manufacture products with less cost and less ecological impact (Vachon & Klassen 2008; Rennings 2000). Klewitz and Hansen (2014) argue that the best way for SMEs to approach Green Strategic Management in their own firms is to prepare a Green Strategic Plan. A Green Strategic Plan lays out the companies vision and objectives, life-cycle plan for present products, new products that will be introduced, new markets to be accessed, and technologies that will be employed relating to ES change. A strategic approach to environmental management helps an SME to manage ES change. Some companies do this through external verification and certification such as through ISO 14001 accreditation or

environmental monitoring and assessment (EMAS) (Jenkins 2006). A final strategic approach that many ES champion SMEs find useful is to operate in niche markets to stay competitive.

### 3.5.3 ES Change Management in the Fabric and Textile Industry

Although there are some studies on ES change, initiatives and success in the manufacturing industry as a whole, the environmental issue in the FT industry has received only little attention from both academics and practitioners. In their study of SMEs in the manufacturing industry, Hofman et al. (2012) examined 294 SME manufacturers and determined that initial phases of ES change should focus on strategic capabilities and core competencies specifically related to technology. Moreover, Darnall (2008) suggested that having an innovative ability, adopting advanced technology, and collaborating with customers and suppliers improve a company's ability to confront environmental challenges in manufacturing. This may be especially important for SMEs, which have difficulties converting ES initiatives into competitive advantage (Nulkar 2014).

Corporate environmental strategies in SMEs in the manufacturing industry are driven by the organisation's natural environmental orientation, legislative requirements, stakeholder expectations, and the resource base and capabilities of the SME (Thi & Phan 2008). Moreover, Ti & Phan (2008) determined that the higher the external pressure (legislative requirements and stakeholder expectations) the more likely a SME in manufacturing will adopt quick-fix solutions. By contrast, when external pressures are not as intense, SMEs have the opportunities to explore options and utilise internal resource capabilities, allowing for a more long term approach to ES change.

Of the limited research available, most research on the FT industry to date is on environmental impacts of the industry. There is also some research on the consumer and business aspects of ES initiatives in the FT industry, however, there are very limited studies that investigate the environmental management aspects of manufacturing firms in the FT industry.

ES initiatives in the FT industry can bring benefits to all three aspects that define sustainability: economic, social and environmental. The most commonly studied aspect of the FT industry is the environmental damage due to it and specific potential mitigation strategies. Improvements to ES in the FT industry can be achieved through: recycling of textile wastes (CUC et al. 2015); novel dyeing processes to increase eco-efficiency (Parisi et al. 2015); emerging energy-efficiency, greenhouse gas (GHG), and pollution mitigation technologies (Hasanbeigi &

Price 2012); wastewater reuse programmes such as separating waste effluents based on their pollution level and then their separate treatment (Vajnhandl & Valh 2014); ecological footprint analysis (Butnariu & Avasilcai 2014); the adoption and implementation of environmental management systems (EMSs) including the adoption of ISO 14000 (Lo et al. 2012), and guidelines for the design and production of sustainable energy-saving fashion products (ESFPs) (Moon et al. 2013).

Competition in the FT industry is fierce. Environmental management is increasingly an important responsibility for today's FT manufacturers due to the rising environmental concerns from both consumers and stakeholder groups. As explained in Chapter 2, FT production often requires high levels of energy and water consumption, and emits large quantities of pollutants. The objectives of Environmental Management Systems (EMSs) are to reduce a firm's environmental impact through initiatives such as: eliminating redundant production procedures; reducing packaging; reducing raw materials needed; reducing energy and water consumption; and eliminating toxins being released into the environment. Firms who adopt EMSs are required to both monitor waste and pollution levels and take corrective actions when needed. Moreover, EMS adopting firms are required to re-design either their products or processes with the goal of optimising materials used (Russo & Fouts 1997). Therefore, firms in the FT industry who effectively implement an EMS enhance the utilisation of fabrics, water, and energy through straightforward and impactful initiatives. Moreover, FT industry EMS adopting manufacturers will acquire new technologies for textiles processing which will often lead to an increase in their competitive advantage (Russo & Fouts 1997). In Europe in particular, green practices are being forced by legislation in hopes of motivating textile factories to adopt ES. Due to these new regulations, in order to gain legitimacy from buyers in developed countries, the FT manufacturers in developing countries are under pressure to adopt internationally recognised ES certifications, such as GOTS (the Global Organic Textiles Standards) and ISO (Christmann & Taylor 2003).

Developing more sustainable products enables firms to achieve business excellence, promote pride and retention with staff and enhance corporate culture. Environmental initiatives that work to improve triple bottom line objectives and the consumer demand for these products are equally important in designing and implementing ES change in the FT industry. There has been little research related to consumers' concerns about fashion's impact on environmental problems and the influences that these concerns have on their desire for energy-saving fashion products

(ESFPs). Four clusters of consumers of ESFPs were found by Moon (2013) with different concerns about the harmful consequences of environmental problems. One of these included a group highly concerned about themselves as well as other people and other living creatures on this planet, and therefore supporters of ESFPs - the target customers for sustainable fashion and perhaps the leaders of the green movement. Kang et al. (2013) studied young consumers' attitudes, perceptions and behavioural intentions towards the consumption of ES textile and apparel products in the US, South Korea and China. They found that three aspects significantly affect young consumers' attitudes, subjective norms, and perceived behavioural control: 1) consumers' product knowledge; 2) perceived consumer effectiveness; and 3) perceived personal relevance. This understanding thereby affected purchase intentions for ES textiles and apparel in the countries studied.

It is clear that there is a paucity of research pertaining to managing ES in the FT industry, let alone within SMEs in the FT industry. In view of the discussion above, the following research question is explored in this study:

> *RQ4: How do SME ES champions in the Canadian, the American and Australian FT industry manage their ES change journeys?*

## 3.6 Business Outcomes

Business performance during and after ES change is an important area of research and currently there is no consensus as to whether ES change positively or negatively affects business performance and business outcomes. This section will define aspects relating to ES outcomes as triple bottom line outcomes: people (staff and community); planet (environmental impact); and profit. Notably, the majority of the current literature focuses primarily on the third aspect of business outcome. Then, the ambiguous literature relating to business performance and business outcomes in SMEs after ES change is discussed.

### 3.6.1 Business Performance Measures

Business outcomes and business performance indicators often relate predominantly to secondary and primary financial indicators. Financial indicators include: return on investment (Lo et al. 2012); profit margin, market share (Dam & Petkova 2014); and sales growth, and return-on-equity (Yang et al. 2011). However, performance of other outcomes related to social and environmental impacts can also be measured through secondary and primary operational indicators and are important indicators to the success of a firm (Venkatraman & Ramanujam 1986).

Operational or non-financial indicators include: employee retention or community involvement (Wilhelm 2013); quality improvement, waste reduction, and lead-time reduction for manufacturers (Melnyk 2003); and human resource sustainability outcomes (Chadee et al. 2011).

Outcomes and the measurement of positive or negative outcomes can be affected by not only the researcher's definition of "outcome" (or business performance) as discussed above, but also many other factors. For example, the time required for a company to make the changes, and the point at which the research is completed will affect the evidence concluding whether the ES change positively or negatively affected the firm (e.g. if a company has invested millions in wind turbines and then is asked one month later if this has cost or saved money, the answer is likely to be much different than if they are asked the same question three years later). The initial investment, internal or external resistance to the changes, depth of the change, method of change and even the industry will also affect how the business outcomes are perceived or measured. This is important to consider when seeking consensus in the literature as to whether ES change positively or negatively affects business performance/outcomes.

### 3.6.2 Environmental Sustainability and Organisational Outcomes

Adoption of ES or EMS is important for competitive, social and regulatory reasons, and it often impacts an organisation's business performance in several ways. The body of peer-reviewed research is in conflict with respect to whether environmental management or performance and business performance or outcomes go hand in hand. There is still no consensus on the relationship between environmental management in a firm and business performance (Qinghua Zhu et al. 2007). The following discussion has been kept primarily to the manufacturing industry only in order to keep the discussion as relevant to the research as possible.

One of the many benefits of becoming environmentally sustainable for a businesses is to gain competitive advantage, which is considered a primary business performance outcome. An organisation that pursues a strategy that is not being executed by their competition can generally gain a competitive advantage (O'Shannassy 2008). The findings of O'Shannassy (2008) assist firms in developing strategic management practices by taking into account their resources, risk tolerance, and organisational performance, and then considering when and where to allocate resources.

Moreover, a number of studies have found positive relationships between ES adoption and business performance. For example, Delmas (2009) found that EMS (environmental management system) certified firms attain better financial performance than non-certified firms. Melnyk (2003) revealed that EMS adoption for manufacturers leads to cost reduction, quality improvement, waste reduction and lead-time reduction. Over a three-year period as measured by return-on-assets (ROA) Lo et al. (2012) concluded that the adoption of ISO 14000 (a common EMS) improves manufacturers' profitability in the FT industry and found that EMS adoption positively impacts a firms' financial performance in the FT industry. After the adoption of ISO 14000, FT manufacturer's profitability over a three-year period, as measured by return-on-assets, (ROA) improved due largely to improvements in cost efficiency measured by return-on-sales (ROS). Specifically, Lo et al. (2012) found that certified firms improved up to 3.3% in ROS and 2.9% in ROA over the three-year period after the implementation of ISO 14001.

Organisations can often achieve positive economic and social outcomes as a result of ES implementation and success (Wiesner et al. 2010). Wiesner et al. (2010) showed that ES champions achieve economic benefits through increasing their market penetration and access as well as through re-positioning their business in the marketplace as a result of their ES initiatives. Further, Wiesner et al.'s (2010) results showed evidence of human resource sustainability outcomes from implementing ES change. This was most often done through training – expanding the knowledge and skill base of staff as a requirement through their ES change journey. Wiesner et al. (2010) also cited that entire communities are positively impacted where a champion organisation shares the ES message with schools, universities, and are publicly recognised for their efforts. By being involved in the community the ES champions educate consumers' choices to buy ES-friendly products, sponsor community events, and staff get involved in ES community activities such as tree planting activities, all of which have lasting positive impacts on a community. Lastly, ES champion organisations can have *global* social impacts through being a leader in their respective industries, thus promoting ES activities in other businesses in the industry (Wiesner, et al. 2010).

A further positive business outcome to ES change can be to staff. The impacts of the changes to human capital both during and after ES change implementation have been shown to significantly improve employee retention and satisfaction (Wilhelm 2013). Rowden (2002) studied human resource practices frequently used by successful small manufacturers and found that they allow

manufacturers to reap the benefits. The human resource practices discussed in Rowden (2002) include empowerment practices (information sharing and involvement in problem solving), investment in training and development, and compensation packages superior to the competition (and contingent on organisational performance). Further, these lead to benefits such as increased productivity, improved products and services quality and improved work ethic.

In contrast, Yao-Chun et al. (2008) found that after EMSs were adopted, return-on-equity, profit margin, sales growth, and earnings per share of Taiwan manufacturing firms were all negatively affected. Also, GSCM (green supply chain management) implementation in the automobile industry in China did not result in significant economic performance improvements (Q Zhu et al. 2007). Further, Dam and Petkova (2014) found average initial negative stock price dips in 66 instances after a firm's announcements of either environmental supply chain sustainability or carbon disclosure programs.

Due to the clear confusion as to whether ES change negatively or positively affects business performance, rather than focus on only one aspect of cleaner production, Zeng et al. (2010) compared various types of cleaner production activities and the impacts of the high and low cost cleaner production activities was compared to business performance in a unified framework. They found that the need to balance environmental protection and economic growth is on the rise, particularly in developing countries just new to CSR (or corporate environmental responsibility), but there is a particularly stark mixed message about how ES change affects business performance. Having said that, once their research was complete, Zeng et al. (2010) concluded a significant positive relationship between cleaner production and business performance was found in the case of the manufacturing industry in China.

While the relationship between ES and business performance remains a conundrum (Knudsen & Madsen 2001; Sarkis & Cordeiro 2001; Schaltegger & Figge 2000), companies are now being held responsible not only for their own performance but also for the performance of their suppliers, distributors and customers (Qinghua Zhu et al. 2007; Govindan et al. 2014; Zhu & Sarkis 2007). The pressures to adopt ES change initiatives while at the same time maintaining positive financial performance are so prevalent now that that many companies are being pushed to embrace ES actions, and in doing so, create competitive advantage (Delmas 2009; Rondinelli & Vastag 2000).

Some reasons why the literature may be in conflict as to whether ES initiatives and change create negative or positive outcomes for a business is both the definition the author is using for business outcomes and the depth of financial and other resource investment the firm has incurred as a result of the ES changes they are trying to make. According to Klassen and McLaughlin (1996), the cause for the 'green-initiative–organisational performance relationship' conundrum is that the "environmental management literature is prescriptive and anecdotal in nature with few linkages to existing management literature" (p. 1200). Russo and Fouts (1997) also provided additional explanations for the contradictory findings, including that much of the data is small, single industry samples and relies on self-reported data. Historically, many studies have failed to control predictors of profitability and fail to reason how social policies that are examined may or may not affect companies' financial outcomes (Russo & Fouts 1997). Further, the relationship between ES change and outcomes is beyond a simple calculus – for instance, higher implementation cost does not necessarily lead to lower profits (Pulver 2007).

In addition, in order to explore whether the findings could be contributed to methodological choice, Wagner et al. (2001) carried out a literature review by categorising studies (covering a wide range of industries) into two groups, those employing multiple regression analysis, and those using portfolio studies. Their results show that multiple regression analyses report mixed results whereas portfolio studies uncover a positive relationship between environmental and economic performance. Wagner et al. (2001) therefore concluded that "It seems not possible to assess to what degree the variability encountered in the results… is due to methodological artefacts" (p. 158). It may therefore be unproductive to continue to explore the causal effects that ES change initiatives have on organisational performance. More importantly, perhaps questions should be directed to examining how and why some ES changes could lead to beneficial outcomes, while others do not, and why do organisations opt for a particular approach over others when implementing ES changes. Further, questions about what the most important business performance indicators are to those companies who have opted to become more ES could also be asked.

In view of the discussion above and the lack of research on these issues within the SME FT industry focusing upon ES champions, the following research question was examined in this study:

*RQ5: What organisational outcomes do SME ES champions in the Canadian, the American and Australian FT industry achieve from their ES initiatives?*

## 3.7 The Conceptual Framework of the Components Examined in this Study

The previous sections critically discussed the theoretical issues as they relate to the research questions. In view of this discussion, the following conceptual framework (see Figure 3.1) depicts the different theoretical components of the study. In line with some other studies on determinants of environmental behaviour (Cordano & Frieze 2000; Ramus & Killmer 2007; Koe et al. 2014), the framework draws on Ajzen's Theory of Planned Behaviour (TPB) discussed in Chapter 2. The TPB argues that actions/behaviour are preceded by intentions, which are in turn determined by individual attitudes, subjective norms and locus of control.

Even though the TPB has been widely applied in business ethics research, including several ES applications, this is the first study to utilise the TPB as it relates to examining ES SME champions in the FT industry and across several countries. To increase understanding regarding how SMEs develop the intention to engage in actions that minimise their environmental impacts, it is necessary to analyse the factors influencing intentions. As discussed, a SMEs ability and desire to innovate is often the reflection of the owner-operator's attitudes and beliefs. This research constitutes one of the first steps toward better understanding the importance of the factors in Ajzen's TPB model in explaining SME managers' intentions to carry out ES actions.

Although there are niche markets where 'green' businesses flourish, participation of business practitioners with overall ES intentions and actions is still low. As such, understanding of the SME owner-manager's motivation, such as their intention towards ES, is crucial. Although, as previously discussed research shows that intention is likely to be a predictor of behaviour, intended environmental behaviour and environmental performance are two separate things, as intentions will not necessarily materialise into a given performance, but they do make it more likely (Blok et al. 2014; Nigbur et al. 2010; Kaiser et al. 1999; Gollwitzer & Sheeran 2006; Sheeran 2002). One theoretical assumption in this research is that intended behaviour is an aggregation of underlying activities that gives rise to observed (environmental) management actions. Barriers impact the leap from motivations and attitudes (intentions) into actions.

Actions such as ES initiatives within a company can be considered planned behaviour (Sánchez-Medina et al. 2014). As has already been stated, intentions have been shown to be the best predictor of behaviour, leading to the question of whether the factors that make up the intentions encourage ES actions. The intention begins the process of starting an action, therefore models that explain the process that leads managers to act, based on these intentions, are presented

(drawing on Expectancy Theory and Self-Determination Theory) in an attempt to understand the behaviour of ES champions in the FT industry.

The actual actions taken by SME ES champions in the FT industry are also studied in the context of factors that have helped them to succeed. Aspects of the Dunphy-Stace Contingency Model feeds into the behaviour of ES champions (Both are discussed in Chapter 2). Finally, the actual outcomes of ES actions implemented by champions in the FT industry in Canada, the USA (America) and Australia are studied. Therefore, as can be seen from the theoretical framework diagram (Figure 3.1) this research could provide valuable insights into how ES champions convert their intentions into actual behaviour, and subsequently achieve positive triple bottom line outcomes.

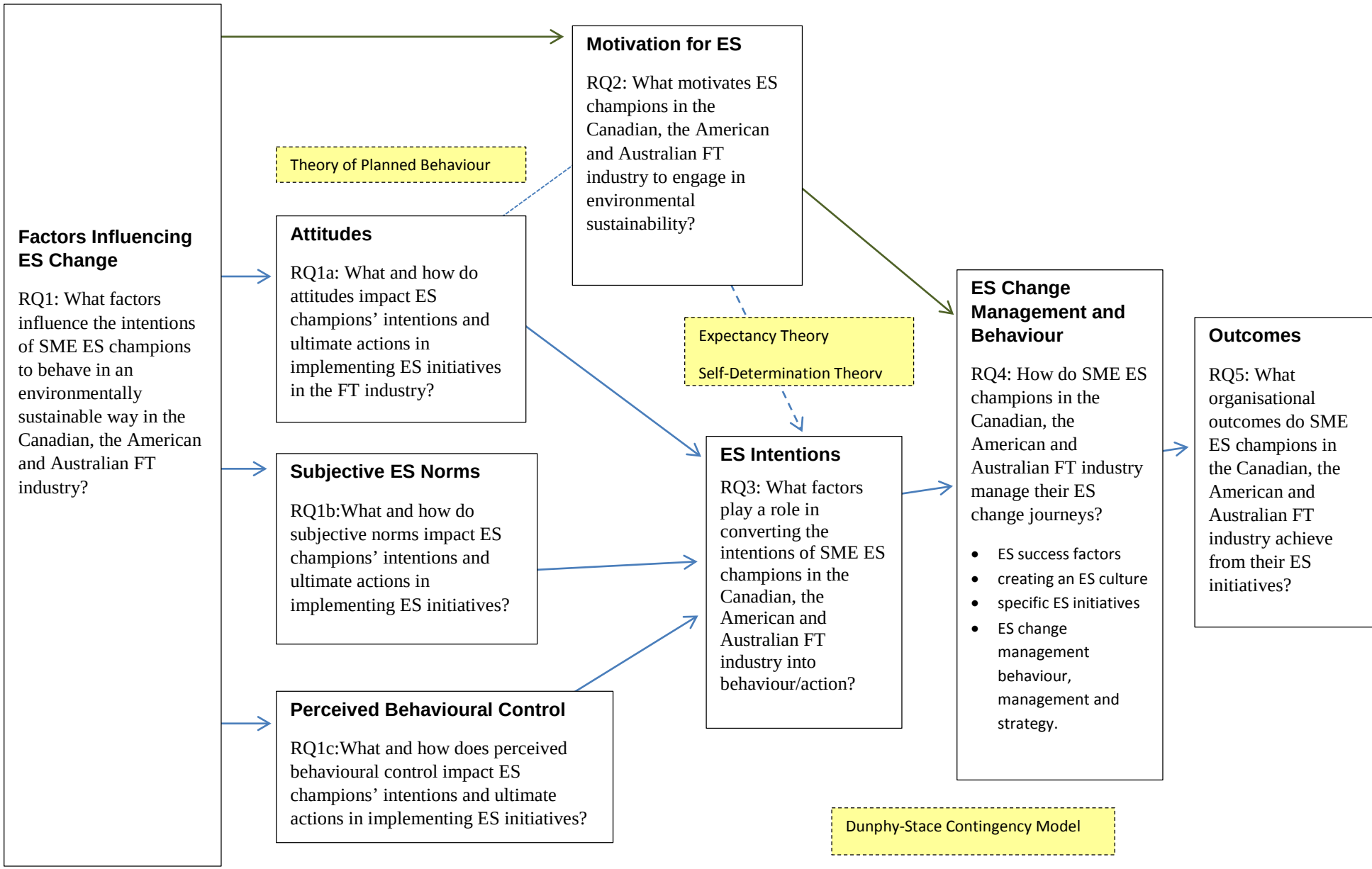


**Figure 3.1 The Conceptual Framework of the Components Examined in this Study**

## 3.8 Summary

The main objective of this research is to determine what factors impact upon the intentions of SME ES champions in the Canadian, American and Australian Fabric and Textile (FT) industry to behave in an environmentally sustainable (ES) way, and furthermore, how they manage their environmental sustainable change journeys. The following research questions and sub-questions informed this research objective:

RQ1: What factors influence the intentions of SME ES champions to behave in an environmentally sustainable way in the Canadian, the American and Australian FT industry?

RQ1a: What and how do attitudes impact ES champions in the FT industry's intentions and ultimate actions in implementing ES initiatives?

RQ1b: What and how do subjective norms impact ES champions in the FT industry's intentions and ultimate actions in implementing ES initiatives?

RQ1c: What and how does perceived behavioural control impact ES champions' intentions and ultimate actions in implementing ES initiatives?

RQ2: What motivates ES champions in the Canadian, the American and Australian FT industry to engage in environmental sustainability?

RQ3: What factors play a role in converting the intentions of SME ES champions in the Canadian, the American and Australian FT industry into behaviour/action?

RQ4: How do SME ES champions in the Canadian, the American and Australian FT industry manage their ES change journeys?

RQ5: What organisational outcomes do SME ES champions in the Canadian, the American and Australian FT industry achieve from their ES initiatives?

Within this chapter, literature pertaining to each research question was critically analysed. Through this analysis, gaps in the research were identified and justification for each research question herein was given.

The factors that influence SMEs to be ES, such as attitudes, subjective norms and perceived behavioural control were all discussed and related to RQ1. Motivational factors and theories were discussed as they relate to PEBs (pro-environmental behaviours) from

the literature and the reasons for RQ2 were made clear. Turning ES intentions into ES actions, and barriers and success factors to employing ES change initiatives were explored in this chapter and associated with RQ3. RQ4 backed through the analysis of literature surrounding change management studies relating to ES change. Finally, a discussion surrounding organisational outcomes/business performance after ES change implementation was given. Lastly, the theoretical framework linking all of the aforementioned factors was introduced, with a discussion on the linkages to theoretical underpinnings, the literature and the research questions.

The next chapter will describe the methodology that was followed to explore the research objective and research questions.

# CHAPTER 4 – RESEARCH METHODOLOGY

## 4.1 Introduction

The previous chapters have given a context to the study such as small and medium enterprises (SMEs) environmental sustainability (ES) issues and the Fabric and Textile (FT) industry, as well as examined the theoretical background of organisational change management, the motivational and behavioural theories relevant to the study, and provided a theoretical framework for the study. A lack of research relating to ES change and the management thereof in SMEs was articulated.

In order to understand the issues, this study assessed ES 'champions' through a method of qualitative analysis. This analysis involved in-depth interviews, which were transcribed and analysed in NVivo. The findings from which are tabulated in the following chapter (Chapter 5). The research went beyond behavioural ES change management factors to also examine what attitudes, subjective norms/social referents, and perceived behavioural controls impact ES champions' intentions and ultimate actions in implementing ES initiatives. In addition to the motivations, intentions, and objectives, behaviours (mitigation techniques and ES initiative) as well as outcomes of ES champions in the Fabric and Textile (FT) industry were also examined. By examining these factors in combination, the study aims to fill a theoretical gap, identified in Chapters 2 and 3. Moreover, this study fills a practical gap by providing SMEs in the FT industry with some good practice guidelines such that they will be better equipped to respond to government, competitive and environmental pressures, while at the same time conserving their resources.

This chapter outlines the research methodology used to examine the research objectives along with the underlying philosophical perspective that motivates the methodology. The justification for the methodology and a thorough description of the methodological approach are described in the follow sections. Theoretical background on the qualitative data collection and analysis methods is explained and the practical steps taken by the researcher to both collect and analyse the data are detailed. Lastly, validity, reliability, limitations and delimitations as well as the ethical considerations relating to the

research conclude this chapter. A review of the research objective and the research questions starts off the chapter.

## 4.2 Research Objective and Research Questions

The guiding research objective and subsequent research questions were reviewed in detail in Chapter 3 and are outlined again below.

### 4.2.1 Research Objective

The objective of the research is to determine what factors impact upon the intentions of SME ES champions in the Canadian, American and Australian FT industry to behave in an environmentally sustainable way, and furthermore, how they manage their ES change journeys and what outcomes they have observed.

### 4.2.2 Research Questions

The following research questions and sub-questions will inform this research objective:

RQ1: What factors influence the intentions of SME ES champions to behave in an environmentally sustainable way in the Canadian, the American and Australian FT industry?

RQ1a: What and how do attitudes impact ES champions in the FT industry's intentions and ultimate actions in implementing ES initiatives?

RQ1b: What and how do subjective norms impact ES champions in the FT industry's intentions and ultimate actions in implementing ES initiatives?

RQ1c: What and how does perceived behavioural control impact ES champions' intentions and ultimate actions in implementing ES initiatives?

RQ2: What motivates ES champions in the Canadian, the American and Australian FT industry to engage in environmental sustainability?

RQ3: What factors play a role in converting the intentions of SME ES champions in the Canadian, the American and Australian FT industry into behaviour/action?

RQ4: How do SME ES champions in the Canadian, the American and Australian FT industry manage their ES change journeys?

RQ5: What organisational outcomes do SME ES champions in the Canadian, the American and Australian FT industry achieve from their ES initiatives?

### 4.3 Research Methodology Justification

Keeping the research objectives and questions in mind, this section details the research paradigm and its applicability to the overall research objective and the research design, and describes the decision processes involved in the selection of the research methodology and their implementation through research methods.

The underlying research paradigm of this research is pragmatism. A research paradigm is simply the basic belief system or world view of the researcher, and the ontological component of pragmatism fits well with the researcher's view of reality (Guba & Lincoln 1994). Reality is taken to be external, and independently existing in pragmatic research. Furthermore, the importance that this researcher places on considerations concerning the best possible way to answer a particular research question dovetails nicely with pragmatism's view that one's research paradigm is determined by one's research questions (Saunders et al. 2009). Similarly, the ontology, epistemology, and axiology that make up the most appropriate paradigm for a given research objective depend on the nature of the question being asked. From the point of view of pragmatism, the most appropriate philosophical assumptions to guide a researcher to a research objective are those that are most effective at bringing about positive consequences for what interests and is of most value to the researcher.

The ontological aspect of a research paradigm has to do with assumptions relating to the nature of reality. The epistemological aspect has to do with assumptions concerning what can and cannot be known, and how knowledge is to be achieved. The axiological aspect has to do with the roles that our values play in our research choices. Each of these aspects will now be briefly discussed.

### 4.3.1 Research Paradigm

This study fits within a pragmatic paradigm, whereby the research is concerned with understanding human responses and behaviour from the participants' own frame of reference (Collis & Hussey 2014). As has just been discussed, pragmatism bases the entire research method on the research question and the epistemology, ontology and axiology adopted in the research questions that flow from this. The pragmatist views that it is perfectly possible to work with variations in your epistemology, ontology and axiology and that the philosophy be adopted as a continuum rather than a position (Saunders et al. 2009). The pragmatic view is that you should 'study what interests you and is of value to you, study in the different ways in which you deem appropriate, and use the results in ways that can bring about positive consequences within your value system' (Tashakkori & Teddlie 1998, p.30).

While this researcher considers reality to be external, the ontology suggested by the present research questions is a subjectivist one. The objective aspects of change management in ES champions is viewed to be less important than the way in which the champions themselves attach meaning and value to their role in business. Subjectivism suggests that social phenomena (such as being ES) are created from the perceptions and thus the actions of the people involved (such as ES actions will improve business and the world). In this regard, there is a continual process of changes and revisions through every social interaction where the social phenomena is in play. In this regard and in the case of the ES champions being studied, it is the researcher's role to seek to understand the subjective reality (attitudes) of the champions in order to understand their motivations, intentions and subsequent actions as they manage their ES change journeys.

Given that the ontology suggested by the research has elements of realism and subjectivism, the epistemological perspective that naturally suggests itself is that of critical (or indirect) realism. Critical realists see how our senses often deceive us and what we really see are sensations, which are representations of what is real. The two steps to experiencing the world as a critical realist are first, the sensation is felt, heard, seen, etc. Then, the mind processes those sensations for some time after the sensation itself is incurred. This perspective is important for the in depth interview (cases) aspect of the research method, which is discussed in the following pages.

Organisational change is a reality, but it is not simple and straightforward as has already been discussed throughout this paper. The complex processes embedded in the context, substance and politics involved in organisational change and the additional complexity of attitudes relating to ES also fit with the critical realist's position in that our knowledge of reality is a result of social conditioning (ex: we know that if we pollute the planet it could have long term consequences for our grandchildren) and cannot be understood independently of the social actors involved in the knowledge derivation process. Critical realism accommodates for the analysis of complex situations in reality, such as the one studied here, when people, relationships, time and events are all involved (Bhaskar 1998). Thus, critical realism is adopted as appropriate for this research.

Finally, the axiological aspect of the research paradigm, as we have seen, concerns the role that one's values play throughout the research process (Saunders et al. 2009). Although this researcher's values have already been discussed at various points in earlier chapters, a brief statement of this researcher's personal values in relation to the research questions is as follows: business' ethical duty to society is to operate in sustainable ways (people, profit, and planet) and those that do not operate this way should not have a license to operate. The role that the researcher's own values play in all stages of the research process is of great importance to be considered and accounted for in order for the research to be credible. Biases and limitations are made clear to all; biases are then set aside during the interview and data analysis steps of the research. The research design built from this pragmatic philosophy will now be discussed.

### 4.3.2 Research Design

Three types of research designs are generally discussed in the literature: 1) exploratory design attempts to classify the nature of problems and to develop hypotheses to be further studied; 2) descriptive research describes characteristics of a population by answering the who, what, where, when, and how questions; and 3) causal research seeks to discover the statistical causal effect that one variable has on another (Zikmund et al. 2010). Together with an inductive approach, both exploratory research design and descriptive research design in the form of in depth interviews (cases) was conducted. The use of an exploratory design is warranted primarily owing to the limited empirical evidence

available regarding ES champions, particularly those in the FT industry (Collis & Hussey 2014).

This type of approach is inductive in that the researcher attempts to make sense of the situation without imposing pre-existing assumptions on the phenomenon (Patton 2002b). In order to limit the impact of the researchers bias, all interviews were scripted and transcribed and the analysis of each interview was done using NVivo software to find themes. Qualitative research is predominantly focused on exploration, discovery and inductive logic, which is precisely what this research studied. The inductive approach used in this study relied on in-depth interviews to help the researcher get a feel for what was going on and thereby understand the nature of the phenomenon of ES champions. In inductive research the researcher then makes sense of the data and formulates a theory (Saunders et al. 2009). Research using an inductive approach is usually concerned with the context in which events take place; therefore, a small sample of data can be most appropriate for this type of study (Saunders et al. 2009).

Exploratory elements are examined in the in-depth interviews, investigating issues and exploring the applicability of the theoretical framework established from the literature review. This exploratory study aimed at understanding the human behaviour associated with ES champions. Ideas were built up and accumulated material from interviews with the participant organisations added to the depth of the researchers' knowledge and analysis (Ghauri & Kjell 2005).

The research design does not involve the manipulation of variables and instead attempts to describe the relevant aspects of ES change, therefore it is ex post facto rather than experimental (Ghauri & Kjell 2005). A qualitative research approach has been chosen to understand phenomena that are naturally occurring in the organisations.

With the aim of identifying and understanding the main themes evident from the ES journeys of SME environmental sustainability champions, the study utilised a multiple case design, whereby a combination of purposive sampling was employed to select appropriate champions (Higginbottom 2004). To identify champions, the researcher identified the criteria that would make a champion (discussed in Chapter 2) such as they had to work for an SME who produced environmentally sustainable textiles in Canada, the USA or Australia. This method of data collection allows for the examination of how and

why SME ES champions adopt a particular attitude and whether they have implemented similar strategies and how this has affected business outcomes. Given the dearth of research surrounding SMEs and in particular ES change in SMEs, the links between ES champions and their attitudes, motivations, actions and subsequent outcomes, the multiple case design is preferred to a single case study in this regard as it offers a richer base for inducting reliable propositions and delineating more precise constructs and relationships for theory building. Further, this design permits a cross-case analysis (an international comparison) and replication logic to engender a more inclusive view of issues in comparison to other methods (Yin 2009). The interview study design allows the novel, ill defined topic to be investigated in an open ended way (Rose et al. 2015).

## 4.4 Research Procedures

Broadly, the research process comprises three main stages: sample selection; data collection; and data analysis (Figure 4.1 below). Within this section, all three stages of the research process conducted by the researcher are explained, including how and why the interviewees were selected, and the development of the interview guide and how the interviews were conducted. A section regarding how the data was managed and analysed follows this, as does the limitations, reliability and validity of such data collection and analysis.

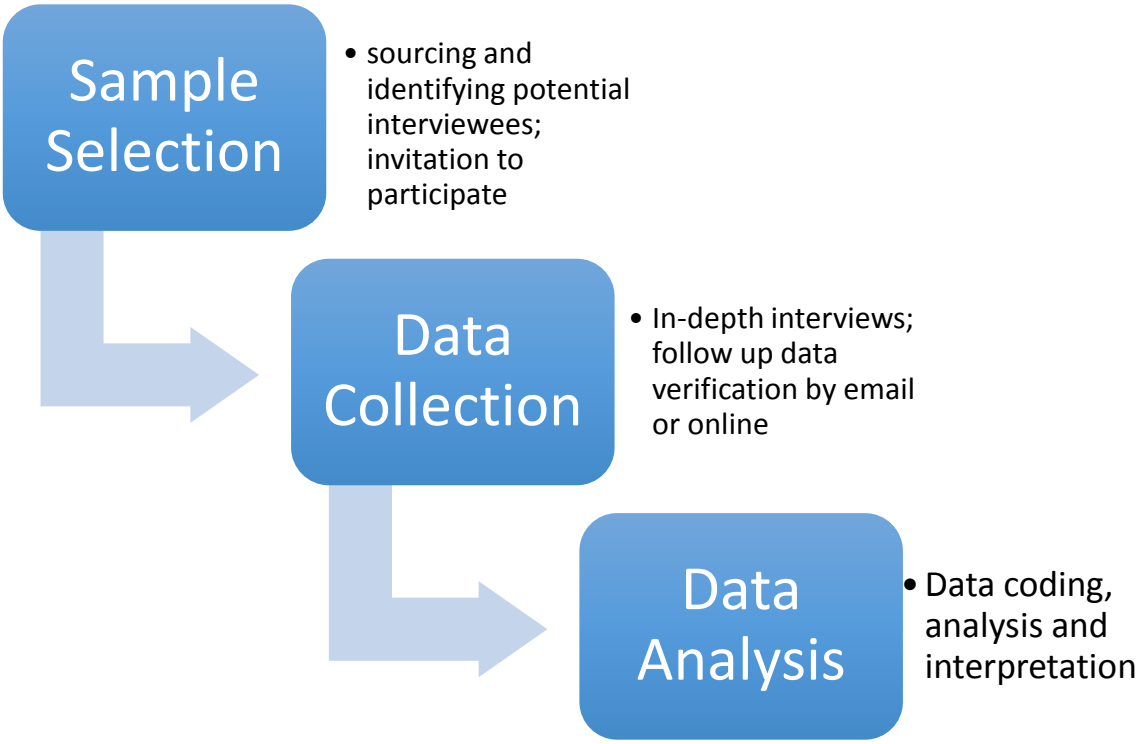


**Figure 4.1 Schematic View of the Research Process**

### 4.4.1 Sample Selection

This study focused on SMEs in the FT industry for several reasons: the researcher's connections within the industry and her previous experience of owning and operating a SME in the FT industry; the heavy pollution emitted by the industry; the new and growing trend for consumers to desire that their fabrics and textiles be organic, and better for the environment; and because of how simple actions can be taken in order for a SME in the FT industry to become more environmentally sustainable. Prime Marketing Publications Research (PMP 2008) illustrated that over 67 percent of companies in the FT industry are having environmental demands placed on them by partners and shareholders. Sustainability is the direction many businesses must go in order to survive in the coming times of consumer awareness, and those in the FT industry are no exception.

The unit of analysis was ES champions - leaders of pro-environmental behaviour who are also SMEs in the FT industry in Canada, the USA and Australia. ES champions are defined as a leader in a company or a company that is a leader in reducing their environmental impact at levels beyond regulatory compliance, and usually has received

recognition as being ‘green’ (Runhaar et al. 2008). In the case of this research, it was actual SMEs that were targeted as ES champions, and then the owner-manager of each SME was interviewed, who in most cases was an ES champion him/herself as well. As this research selected SMEs who have been publicly recognised for their ES efforts, or who go above and beyond the regulatory requirements to protect the environment, purposeful sampling was initially employed in this study. Purposive sampling is the process of selecting a small number of important cases. Although sampling in this way may not produce results that are broadly generalisable, it should allow for logical generalisations from the rich evidence produced when studying these few cases. Further, snowball sampling and additional purposeful sampling was used. Snowball sampling occurs when an existing study subject recruits future subjects from among their networks (Biernacki 1981). This will be explained further later in this section.

These methods of sample selection created information-rich cases from which the researcher was able to learn a great deal about issues of central importance to the purpose of this research (Patton 2002b). The sample selection process encompassed two specific tasks: sourcing and identification of possible participants; and screening of prospective case companies. The selection process was completed in this way to ensure that the cases selected for the study could provide the variety of evidence needed for replication purposes (Yin 2009).

During the initial stages of purposeful sampling, Google searches were conducted through google.com, google.ca and google.com.au. If a potential participant was identified, their website was critically examined to determine whether they were truly a champion for the purposes of the study (by the standards set out such as 5-99 employees, the majority of products are made locally and with organic or recycle fibres, many efforts are made to be green, production of the fabric is done by the champion not by someone else, etc.) prior to sending an initial email. When possible, the interviewer went into stores that carried the brands and asked questions. The following is a matrix of the Google searches conducted to identify potential champions to then be contacted. Every possible combination of either all three terms or term 1 with 3, 1 with 2 and 2 with 3 were conducted as Google searches.

**Table 4.1 Google Search Matrix: Searches Conducted to Identify Potential Champions**

| Term 1 | Term 2 | Term 3 |
|---|---|---|
| sustainable | fashion | Australia |
| eco | wool | Canada |
| natural | merino | New Zealand |
| green | textiles | US |
| sustainability | fibre | USA |
| local | manufacturing | NZ |
| organic | clothing | |
| | hemp | |
| | cotton | |

Participant selection for the purposes of this research was not exceedingly difficult, but turning the over 200 identified champions into actual interview participants proved to be very problematic. There were three main challenges in the participant selection process: 1) identifying manufacturers; 2) defining SMEs to fit the available participants; and 3) accessing participants from the geographical regions. New Zealand was originally involved but no participants came forward from New Zealand. This is discussed further below.

The first challenge for participant selection was finding ES Champions in the textile manufacturing process. There seemed to be many 'green' clothing companies online and in the market place, but it was very difficult in most cases to uncover their suppliers. Over 30 emails were sent in June/July of 2014 to source Canadian ES champions in the FT industry. By June of 2015 about 200 emails had been sent to North American firms, and only 2 interviews were set up. Most of the prospects who replied said that they were too small (smaller than 20 employees) or that they manufactured in China or India. Therefore, the second challenge was defining 'SME' to fit the available context.

Initially the working definition for SMEs was 20-200 employees, following

McDonald and Wiesner's (2001) definition with the context of change management in SMEs. They employed this definition because organisations with more than 20 employees were more likely to have a more formal management structures. Furthermore, the Australian Bureau of Statistics classifies small and medium enterprises (SMEs) as enterprises that are small (20 employees or less) and medium (21–200 employees) (ABS 2011). However, owing to the difficulties of finding a sufficient number of study participants in these size categories (greater than 20 employees), it was decided to rather use the parameters of 6-99 employees (Cameron & Massey 1999). Cameron and Massey's definitions of SMEs are where a micro firm employs 0–5 full-time-equivalent employees (FTEs); a small firm 6–49 FTEs; and a medium firm 50–99 FTEs. Once this new definition was implemented, all respondents who had previously replied saying that they were too small were again contacted and further searches were completed online. This allowed for an additional 10 participants to be interviewed.

Within the scope of this research, 'champions' were described as SMEs that have a high commitment to ES leadership and development in the FT industry. Initially, this meant the production of the textile used also occurred locally, as this is the 'greenest' method of textile production (limiting carbon emissions from transportation). However, as the research progressed, it became acutely obvious that some of the countries involved in the study simply do not have the support from government or consumers to produce textiles locally, and the 'greenest' form of textiles available at the moment had to be sourced abroad in some cases. This challenge was particularly acute in Australia, where the manufacturing of textiles is basically obsolete. The initial expectation of 'ES Champion' was where garments were manufactured from 'dirt to shirt' and 'farm to fashion' (in many cases the entire textile from a seed to a t-shirt is produced within 100 miles of itself by ES champions within North America). Unfortunately, this is not possible at the moment in Australia. Thus, parameters were again changed to incorporate at least companies who source their textiles from countries where there are environmental and social laws and controls in place (such as European countries). An assumption in gathering participants in this study was that at least in cases where fabrics are certified to an ethical and an environmental standard and produced where there are controls, one can be assured the fabric is as 'green' as possible.

Furthermore, another intention at the outset was to include 4 countries, two from North American (Canada and the USA) and two from Australasia (Australia and New Zealand). Further, in order to have sufficient theoretical and literal application, the researcher attempted to address the extreme difficulties associated with choosing the optimal number of cases. It is acceptable for qualitative research to rely on small sample sizes when the aim is to study the topic of inquiry in depth and detail (Patton 2001), and Baum (2000) suggests 12-20 respondents to achieve maximum variation and understanding. For this reason, the initial aim was to interview twenty firms (10 from North America and 10 from Australia and New Zealand). Table 4.2 below shows the great lengths that the researcher went to find and access suitable participants in New Zealand, but in the end there was not a single company willing or able to participate in the research. This was partially due to size constraints, as almost every ES champion in New Zealand has less than 5 employees, but also due to the challenges of the only manufactured textile in New Zealand being wool, and furthermore, in general the respondents seemed uninterested in participating in a study.

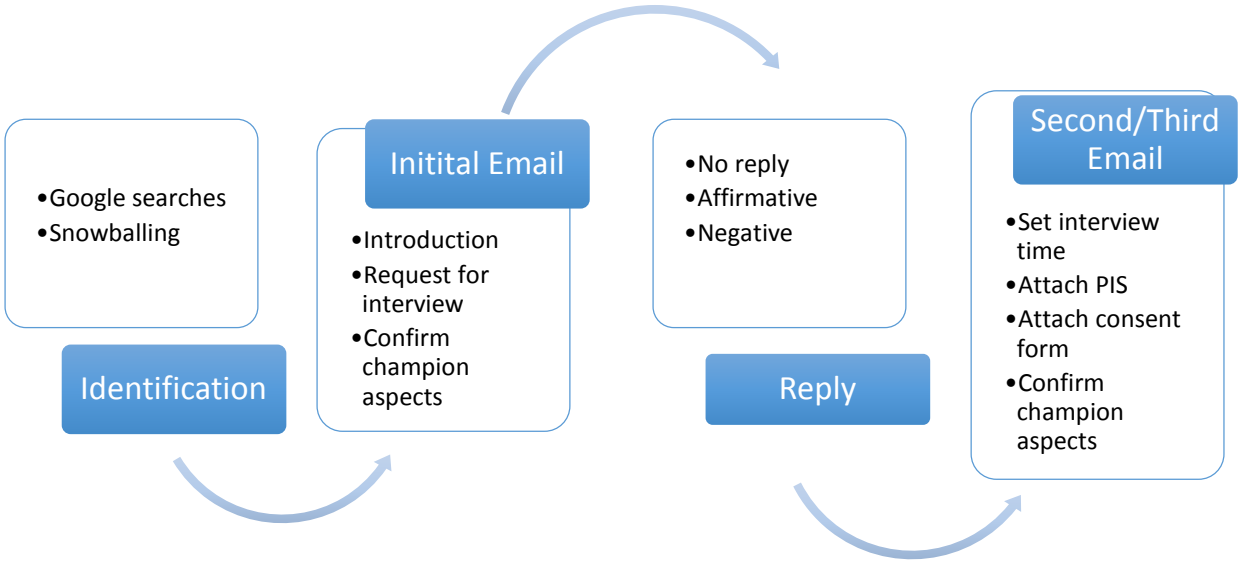


**Figure 4.2 Typical Route of Communication between the Researcher and ES Champions**

Figure 4.2 summarises the typical route for communication between the study participants and the researcher. An introductory email was initially sent to each identified

champion in Canada, the US and Australia (an example of which can be found in Appendix D). In this email the rationale for the interview was kept to a minimum in order to decrease the respondent's time commitment, a practice designed to encourage respondents to participate (Shaughnessy et al. 2000). Table 4.2 summarises the response rate per country. Due to the challenges of finding true 'champions' to participate, 3 Canadian, 6 American and 4 SME ES champions from Australia were interviewed, for a total of 13 cases. However, one case from the USA was determined to be inappropriate as once the interview had begun it became clear that the participant was not in fact an ES champion. As such, only 12 interviews are included in the data analysis, represented in tabular form in Chapter 5 and critically detailed in Chapter 6.

After the initial emails were sent, several potential participants replied. The most common occurrence was no reply at all, which occurred 73% of the time in the USA, 59% of the time in Canada, 66% of the time in Australia and 73% of potential participants did not reply from New Zealand. This is detailed in Table 4.2 below.

**Table 4.2 Identified Champions, Excuses, and Turnover Rate Per Country**

| | USA | Canada | Australia | NZ |
|---|---|---|---|---|
| **identified champions** | **74** | **32** | **56** | **26** |
| replies | 20 | 13 | 19 | 7 |
| no too small/big | 5 | 5 | 5 | 2 |
| no manufacture in china/india | 4 | 4 | 3 | 2 |
| no time | 2 | 1 | 1 | 2 |
| no other | 0 | 0 | 2 | 1 |
| yes but...no more replies | 2 | 0 | 2 | 0 |
| yes | 7 | 3 | 5 | 0 |
| **Interviewed** | **6** | **3** | **5** | **0** |
| response rate | 27% | 41% | 34% | 27% |
| turnover rate | 8% | 9% | 9% | 0% |

As explained earlier, some identified potential participants replied with further information such that they were not champions for the purposes of this study (ex: too small or they produced in China or India). Meanwhile, many of these potential participants who replied with size or location constraints also replied with names of additional potential champions, who were then emailed following the snowball technique (Biernacki 1981).

If a positive reply was returned, a second email was sent with further information and a request for an interview time (as per Figure 4.2). Sometimes, additional questions were asked to ensure the potential interviewee was in fact a champion, and a third email was necessary. Just under 10% of all potential interviewees contacted turned into interview participants in Canada, the US and Australia. None of the 27 identified champions in New Zealand agreed to participate in the study.

Assurances were given to these potential participants that the interviews were not to take more than 60 minutes. The researcher arranged convenient appointment times for the owner-operator or the ES champion's ES representative to participate in the interview either by phone or Skype. Confirmation emails were sent to each participant who agreed to be interviewed. Once an interview time was set, a final confirmation email was sent and the consent form and Participant Information for USQ Research Project Interview (PIS) and Consent Form (see Appendices A and B) were attached to this email. The final demographic details of the participant firms are tabulated in Chapter 5.

Although the participants were identified and selected using purposive and snowball sampling methods, the volunteering situation raises the issue of self-selection bias in that only those people who feel strongly about ES were the ones most likely to respond (Zikmund et al. 2010). Due to this response bias, extreme situations may be over-represented in the interviews. This limitation is discussed in the Limitations section of this chapter.

### 4.4.2 Data Collection

The purpose of undertaking the semi-structured in-depth interviews in this research was to gain insight into the attitudes, motivations, actions, management and subsequent outcomes of ES champions in the FT industry in Canada, the US and Australia. The interviews were conducted after the aforementioned communication route in Figure 4.2. An in-depth, semi-structured interview program was conducted with relevant managers responsible for ES leadership in each ES champion (firm). In all cases except for one, this interviewee was the owner-manager and in the one case where the ES manager was interviewed, she involved the founder/owner during relevant questions.

A draft of the semi-structured interview questions was developed by the researcher ensuring there was a match between the interview questions being asked and the research questions to be informed. The researcher ensured reliability and content validity issues were attended to (see reliability and validity sections below).

Each interview commenced by first reminding the interviewees that they were free to withdraw at any stage and by confirming their consent and asking if they had any last minute questions. Then, interviewees were asked to provide demographic information about their organisation, helping to relax and give them confidence because the questions were easy for them to answer (Shaughnessy et al. 2000). It also helped the interviewer establish rapport before more detailed questions were asked. The objective of the interviews was to explore the views of a selected group of SMEs regarding their ES practices and processes and the factors that guide their decision-making. Therefore, the interviews remained conversational and situational as recommended by Patton (2002). This relaxed approach matched the less formal business culture of the SMEs in Canada, the US and Australia.

An interview schedule (Appendix C) was used as a guide to ensure that each interview followed the same basic questions, yet could provide sufficient flexibility to explore relevant topics as they arose (Patton 2002b). The interview schedule consisted of open-ended questions, which allowed interviewees to expand and provide a rationale for their responses (Shaughnessy et al. 2000). It also allowed for the provision of rich data to account for individual differences and variations, strengthening the quality of the data collected. Reliance was placed on the richness of the interview data as well as the analytical capabilities of the researcher (Patton 2002a).

As a quality control measure, appointments for interviews were made with owner-managers in order to ensure the person was the most knowledgeable on the topic in their organisation. Thirteen interviews were conducted with these owner-managers and in one case the environmental manager was interviewed but the owner was also present and answered some questions when they primarily related to him. The interviews lasted between 35 and 60 minutes, depending largely on the time available to the interviewee.

Each of the thirteen interviews were conducted and recorded individually on a voice recorder with consent of interviewees and then transcribed by the interviewer. The reason

for recording each interview was to provide accurate data for transcription, thus strengthening the design of the research and the data collection. The voice recorder used was a tablet and an android phone was a backup. Therefore no tapes were required and data was immediately saved onto password protected media devices. At no time were the interviews stopped to flip a tape or interrupted for technical issues. Few cases occurred where the interviewee was pulled away from the interview temporarily. However these were all recorded as well and the interviewer was quickly able to jump back into the interview, thus, little interruption to the interviews occurred. A thank you letter was sent to each SME interviewee along with a summary of the data collected several months following the interviews.

Although by following an interview schedule, many identical questions were posed to all companies, at the same time, the interviewer and interviewees were free to digress. Nevertheless, an adaptive process was followed because questions were altered or dropped during the interview at times (i.e. questions were dropped if the interviewee had already answered a question within the answer of a previous one, making it irrelevant). Since much of communication is non-verbal, one limitation to the interviews was they were completed by Skype. Therefore, there was a heavy reliance on word tones and frequencies, pauses, repetition, etc. for additional meaning. This limitation is further discussed in the validity and reliability section of this chapter, below. Moreover, two of the three Canadian champions are French-Canadian (from the French speaking province of Quebec) and one of the Australian participants grew up in Germany. These variations in languages do not affect the quality of the data but cultural nuances may need to be considered.

### 4.4.3 Data Management and Analysis

The purpose of the data analysis is to understand what brought each ES champion to where they are now and what outcomes they have experienced within each case. Before discussing the process of data analysis, data management issues are first outlined. Throughout data management and analysis, first, interviews were transcribed, then transcriptions were coded for themes in the data in NVivo, and finally these themes were assessed and reassessed through additional software manipulation (queries) and tabulation, and then compared to secondary data sources and the literature.

The data management steps commenced by transcribing the interviews. In doing so, decisions were made to include nonlinguistic observations (facial expressions, body language, setting descriptions, etc.) as well as to transcribe verbatim in order to identify specific speech patterns, vernacular expressions, intonations, or emotions. Maxwell (2012) notes that with the researcher recording notes while transcribing, the transcription process itself is considered an important part of the initial analysis. These initial notes were used to formulate nodes and themes in NVivo, and prompted initial thinking about relationships between them.

The level of transcription ought to complement the level of the analysis (Drisko 1998). As with the research herein, if an analysis focuses on providing an in-depth description of the VABEs (values, attitudes, beliefs and ethics) or experiences of an individual/group, lengthier units of text or a greater number of notes may need to be included in the transcript (McLellan et al. 2003). Therefore, a highly detailed transcription was necessary. Furthermore, what is not said is just as important as what is said, hence, transcripts also included contextual information regarding silence or pauses in conversation (Poland & Pederson 1998).

While the interviews were being conducted some notes were taken into the body of a transcription file. Sometimes that same day, but most often within several days of the interview, the interview was listened to again and the detailed transcription was completed at this time. In some cases the interview recording was again referred to in order to ensure as much of the meaning was noted as possible. Each transcription file delineated the words of the interviewer with those of the interviewee by italicising all interviewer comments and questions and keeping interviewee answers in a regular font. The format template used was the interview protocol so that each transcript had an identical structure and appearance. Not all interview questions from the interview schedule (Appendix C) were asked to each interviewee, and if a question was not asked, it was simply deleted from the transcription file during transcription. Each file was named and stored on the researcher's password-protected computer. Guided by procedures recommended by Miles and Huberman (1984), the researcher then proceeded with the review of the interview transcripts as well as the secondary data collected such as details from websites, awards received, and articles.

The comparative case study involved analysing the way in which, and the circumstances under which, individual ES champions in the textile industry across the geographical context implemented and managed ES. Though somewhat complex, the research design offers a more insightful diagnosis of the dynamics surrounding the phenomena (i.e., selection and implementation of ES management processes and styles) due to a richer process of data review (Yin 2009). The second data management process involved managing and querying the transcriptions and accompanying demographic data in NVivo. The raw data collected in the interviews was organised for analysis purposes and then into a series of tables and matrices in NVivo and Microsoft Excel. This allowed the patterns and relationships both within and between the different SMEs to be more observable.

Nvivo is a qualitative data analysis software tool. NVivo is used to support data analysis through processes that make the analysis more transparent (Beekhuyzen 2010). Following Braun and Clarke (2006) a thematic analysis was conducted by first familiarising with the data (transcribe data, read and reread the data and note down initial ideas); initial codes were then generated; themes relating more to the research questions were then explored; themes and codes were reviewed; and themes were defined and named. Ongoing analysis continued during the process of tabulating results (Chapter 5) and in writing up the conclusions, vivid, compelling extracts were selected to be used in the final analysis of relating the data back to the research questions and literature (Chapter 6).

NVivo analysis involved the coding and categorisation of data, and first level sub-themes and second level sub-themes were then identified (Patton 2002b; Beekhuyzen 2010; Braun & Clarke 2006). Content analysis was undertaken using the two-step process: firstly, axial coding, which involved a first pass of the content to identify concepts and themes, listed in 4.4 below, was carried out, and secondly, selective coding, which compared and contrasted the data was completed using queries (Bazeley 2007). Analysing the material in this way provided a larger view of what attitudinal and motivational impacts were present for ES champions in the FT industry, and how the participant SMEs are coping with ES change and the effects of that change. The data enhancement role that is expected from qualitative research was therefore able to be met through NVivo analysis.

The coding aspect of NVivo analysis involves breaking up the data into manageable pieces (Beekhuyzen 2010). Coding makes links between data and ideas through the monitoring of occurrences in the data, and justifying the interpretation of themes and ideas (Braun & Clarke 2006). Once nodes (important themes and aspects of the research, listed in Table 4.3 below) were identified and programmed into NVivo, coding was completed systematically from the top to the bottom of each interview. Coding categorised each transcription, allowing for a visual display of each node.

**Table 4.3 Initial and Final Nodes Used to Query the Data in NVivo**

| Initial Nodes | Final Nodes |
|---|---|
| | |
| Demographics | Demographics |
| | age |
| | size |
| | location |
| | structure |
| ES definition/meaning | ES definition/meaning |
| Motivations | Motivations/Attitudes |
| | feelings vs economic |
| | expectations |
| | drivers |
| | control |
| Barriers | Barriers |
| Outcomes | Outcomes |
| | staff |
| | community |
| | financial |
| | personal |
| | environment |
| Journey | Journey |
| | NAFTA |
| | 2008 financial crisis |
| Advice | Advice |
| Cool Quotes | Cool Quotes |
| Change management | Change Management |
| | technical changes |
| | plan |
| | culture |
| | management style |
| Certification/documentation | Certifications/documentation |

By fracturing the data through coding in NVivo then rearranging it into categories in Excel, the comparison between key themes and important information was made clearer (Beekhuyzen 2010). The initial nodes in Table 4.3 are descriptive and the final nodes are substantive. Descriptive organisational categories are 'broad areas or issues that you establish prior to interviews and observations, or that could usually have been anticipated'

(Maxwell 2005, p.97). Substantive categories are primarily descriptive and 'provide some insight into what's going on' (Maxwell 2005, p.97). This level of coding contributes to the formation of theory (Beekhuyzen 2010).

Hence, Nvivo was used to code and then analyse and tease out themes through queries. Once the data was fractured such that each node adequately held all ideas about a concept, connecting analysis was completed. Connecting analysis reconstructs the data through relationships that connect statements with theory. Word queries, text queries, and matrices queries were completed and all added to the depth of results and conclusions presented in Chapters 5 and 6. After fracturing the data through coding, the data was then reconstructed to reflect back a view of reality, with the theories and concepts from Chapters 2 and 3 guiding the investigation.

For example, word queries were conducted to extrapolate the 20 most commonly used words and this was compared between Canadian, American and Australian companies. Excel spreadsheets collected tables for demographic data and all answers related to the research questions. The data tabulated is represented in Chapter 5. Memos were set up for additional nodes that were not necessarily information that answered the research question, but were still very valuable and insightful, such as 'Advice' and 'Cool quotes' and 'ES definition'. Further, classifications in NVivo added the ability to compare and contrast answers between countries, which added depth to the conclusions drawn in Chapter 6.

The last aspect of data management and analysis was to triangulate the data. The literature review provided a framework for comparative analysis between previous studies and the qualitative data (interviews). These connections will be discussed in Chapter 6 where the consistency of information gathered by the literature review is compared with the interview data. In-depth data analysis explanations and interpretations are found in Chapter 5 (Results) and Chapter 6 (Discussion). Further to the data analysis, additional theory-building was conducted through triangulation when possible, partly through online searches and website analysis of each participating firm, as well as expanding on and referring to the theories discussed in both Chapters 2 and 3.

Now that the research procedure has been detailed, the reliability, validity, limitations and ethical considerations of the method and methodology are outlined.

## 4.5 Reliability and Validity

In order for the research to be replicable and transparent, it must be reliable (Robson 2002). All four of Robson's (2002) possible threats to reliability were applicable to this research: subject or participant error, subject or participant bias, observer error, and observer bias.

Subject or participant error may have occurred as the interviews were conducted over the span of 3 months. Moreover, some participants were far busier than others at certain times. Some participants rushed the interview and others were very happy to continue talking once the interview had ended. The nature of the attitude and motivation questions may have been affected by how rushed the interviewee was to complete the interview. Subject or participant bias is likely to have occurred in almost all interviews because there were many potential SME ES champions but only very few made themselves available for interviews. These few could be considered 'fanatical' about the topic and thus bias the answer to their questions, particularly related to the attitudes, barriers and outcomes. Being fanatical may also put 'rose coloured glasses' onto the situation and more optimistic responses are likely. However, since purposeful sampling was used, with this group selected for their achievements in ES, this error was acknowledged by the researcher from the start.

Observer error is possible since the interviews were only semi-structured. Furthermore, observer bias could have been present since the researcher has her set of biases (as stated in Chapter 2) and the answers to questions may be interpreted through this lens. Problems relevant to reliability could be minimised through a number of strategies, most specifically one-to-one interviews with consistent use of questions appeared to have the highest reliability (Morse et al. 2002). In this study a structured interview protocol was carefully developed and where possible the same questions were asked to all interviewees. Further, when interviewers are trained in the interview process and are familiar with ways in which to avoid interview bias, reliability also tends to be higher (Morse et al. 2002). With regard to observer bias, it is suggested that a researcher should 'make explicit to readers what their personal perspective is, so that readers can make their own judgments about the extent to which it has influenced the text (a strategy sometimes referred to as 'reflexivity')' (Seale 1999, p.26). In this study, the researcher has

made this bias explicit, however she has been an academic for eight years and has participated in research interviews on several occasions. She has also participated in research methodology training pertaining to the use of interviews in qualitative methodology. Hence, despite the researcher's personal bias regarding the topic area, she is a professional who is acutely aware of being impartial in the process of interviewing and analysing the data.

Validity refers to how appropriate and meaningful the inferences are that a researcher can make based on their data (Fraenkel & Wallen 2005). Since this study is exploratory and descriptive in nature, and not correlational and predictive in nature, most validity types are not relevant to this qualitative research, however, content validity is particularly relevant in qualitative research. Content validity in qualitative research is the extent to which the questions within the interview schedule (Appendix C) are relevant and representative of the research constructs measured by the interview protocol (Haynes et al. 1995)

In this study the draft interview questions in the interview protocol were assessed by the academic supervisor and five other academics researching in the area of ES, prior to the first interview. The suitability and clarity of the interview protocol was also reviewed by five SME ES champions in Australia. These SMEs are part of the eco-efficiency program, ecoBiz, funded by the Queensland Government and are recognised ES champions. Furthermore the interview protocol was carefully developed by the researcher ensuring there is a match between the interview questions asked, the research questions to be informed, and the literature underpinning these questions.

## 4.6 Limitations and Delimitations

It has been identified that there are several limitations in qualitative research. Firstly, due to the subjective nature of this method, the skill level and ability of the interviewer is essential (Zikmund et al. 2010). Secondly, the interviewer must be an active listener (by confirming understanding and following up on areas of interest) while at the same time being cognitive not to import new ideas or judge answers to the questions. Thirdly, participants only tend to report their perceptions and therefore are subject to distortions due to personal bias. Finally, the interpretation and analysis of the results must be carefully

completed so that interpreter bias is negated (Zikmund et al. 2010; Patton 2002b; Morse et al. 2002).

To overcome these issues, an in-depth structured interview protocol as suggested by Patton (2002) was developed and utilised. Moreover, literature that has used this method of research was reviewed prior to the commencement of the interviews and the researcher attempted to implement appropriate strategies to overcome the above mentioned issues (Patton 1999; Maxwell 2012). Also, both the analysis and interpretation of the results was undertaken very carefully and professionally in order to ensure that any interpreter bias was negated. To ensure inclusion of all topics, systematic thematic content analysis of the transcribed, voice recorded interviews was undertaken in accordance with the guidance provided by Zikmund et al. (2010). Care was taken to be an active listener throughout the interviews by confirming understanding and following up on areas of interest, while at the same time not judging comments or introducing ideas.

Lastly, since much of communication is non-verbal, a major limitation to the interviews was they were completed by Skype. Therefore, there was a heavy reliance on word tones and frequencies, pauses, repetition, etc. for additional meaning. This limitation was mitigated by incorporating the pauses and inflections into the transcription notes, i.e. '(long pause)' or '...' for 'thinking'.

Further limitations include that interview data was essentially the only source of data. This was because of the difficulty with accessing champions in the first place and because how they were such small organisations and did not have additional data in the form of reports etc to add. Furthermore, due to the interviews being based on a small sample of SMEs in a limited industrial setting. Since the study only focused on the FT industry a delimitation of the study is the narrow focus of the study and as such results herein may not be applicable to other industries, moreover, the geographic delimitation of interviewing SMEs based in Canada, America and Australia only. This may mean that the results only reflect what is happening in those regions and it may be difficult to generalise the findings to apply to a larger context.

## 4.7 Ethical Considerations

The interview protocol for this research was approved by the Higher Research Ethics Committee (HREC) at the University of Southern Queensland (USQ) after the required forms were completed and approved and careful consideration given to the items contained therein. Some of the items were: informed consent, withdrawal issues, confidentiality concerns, recording of findings and preservation of data. These items are discussed in more detail in this section. The HREC number is H15REA099.

### 4.7.1 Informed Consent

Participation in the project was voluntary. Participants were first invited to participate in the project via email. Once a positive reply was received, a further email was sent with attachments of "McGrewPIS" (Appendix A) and "ConsentForm" (Appendix B) with directions on how to return the signed consent form. Therefore, consent was obtained for the semi-structured interviews in writing using the "ConsentForm" found in Appendix B. The concept of consent was provided in plain language in all documents and communication (refer to Appendices A, B and D).

### 4.7.2 Withdraw Abilities

Participants were free to withdraw from the process at any stage without any negative repercussion to them or their business. Participants were provided written advice to the effect that they were free to withdraw at any point. Further, when the interviews commenced participants were again verbally told that they were free to discontinue at any point in the process and there would be no adverse effects on participants if they withdrew their consent. None of them requested to do so, although some limited the interview to a bit less than an hour due to time commitment concerns.

### 4.7.3 Confidentiality

Confidentiality was preserved by the researcher in accordance with the ethical guidelines of USQ. The interviews took place in each firm in an office by phone or by Skype, where the researcher was in her private office and the participant in theirs. No other persons were present during the interviews aside from the interviewer and the interviewees and the doors to the offices were closed to ensure privacy.

### 4.7.4 Respect and Communication

If participants had any questions about the research project, they were free to ask the researcher before, during and after the interviews. Questions about the project were answered but with broad comments. Moreover, all identifying information of all participants was kept protected by never revealing details or examples or specifics about individuals or organisations, unless the participants gave explicit consent to do so.

### 4.7.5 Research Findings Reported to Participants

Following the data collection and analysis, a short summary report displaying the main findings of the study was prepared upon conclusion of the projects and offered to each participant. Once the data was analysed, a report summarising the data collected in the interviews was provided to each participant along with a thank you letter.

### 4.7.6 Data Security and Storage

The recordings from the interviews on storage devices were immediately downloaded to a password-protected computer and deleted from the recording device once the transcription took place. All transcription of interviews occurred on the password-protected computer. There was no hardcopy data to speak of and all computer files were password-protected on the interviewer's computer. During the study and for the requisite five years after its conclusion, any data will be stored on a password-protected computer belonging to the researcher.

### 4.7.7 Contact Details Provided

Contact details of the researcher were provided in the Participant Information Sheet (PIS) as shown in Appendix A, as well as the email body, in Appendix D.

### 4.7.8 Participant Access to Research Ethics Board

Participants in the interviews were provided with contact details for the Higher Research Ethics Committee (HREC) of the University of Southern Queensland by email in the form "McGerwPIS" found in Appendix A.

### 4.7.9 Psychological and Other Risks

There were no known psychological or physical or other potential risks to the participants in this research, moreover the research approach undertaken is considered by the guidelines of USQ as 'Low Risk' (USQ n.d.). Time imposition risk was the only identified risk and the risk of time imposition was minimal. The reading of emails and documents prior to the interview as well as the interview required between 60 and 90 minutes of the interviewee's time.

### 4.7.10 Risk Mitigation

The risk of time imposition was minimal, as participants were informed about the estimated time requirements for the interview when they were invited to participate, and were thus able to decide for themselves whether or not to participate. Interview times were set by the participant so as to further mitigate time imposition risk. Participants who initially agreed to participate but then found the time imposition too great were free to withdraw at any time as an additional mitigation measure.

## 4.8 Summary

This chapter highlighted the method and methodology of the research herein. Starting first with the research methodology, within which the research paradigm and justification to the research design were given, the chapter explained the researcher's pragmatic approach to the research. Following this, the research procedure was detailed, including how and why the interviewees/participants were selected, the development of the interview schedule, and how the interviews were conducted. The interview data analysis was then discussed. From the transcriptions of the interviews, key topical areas were identified and summarised according to subject areas. These were then matched with the research questions. After careful analysis of the in-depth interviews, a thematic content analysis of the interviews was conducted using NVivo.

After a discussion regarding the research procedure, including the many challenges overcome during the sample selection process, the reliability and validity of such data collection and analysis were explored along with the limitations of the methodology. The reliability and validity of the data and the limitations of the methodology were reviewed in this chapter and mitigations, steps and strategies used were detailed. The last item

reviewed within this chapter was the ethical considerations of the study. As with any research being completed on humans, the Human Research Ethics Committee at USQ first reviewed and then granted permission for the study to take place. A variety of ethical considerations involved were listed, including the risk and risk mitigation, as well as informed consent and confidentiality.

# CHAPTER 5 – RESULTS

## 5.1 Introduction

Chapter 3 (Literature Review) outlined each research question within the context of the current literature, and Chapter 4 (Research Methodology) described the methodology used to obtain a depth of knowledge in answer to the research questions (RQs). Within this chapter, the qualitative data collected through the method described in Chapter 4 is presented in the order of the research questions stated earlier. This chapter contains a summarisation of interview results in table format as well as brief explanations when required. The following chapter (Chapter 6), will critically discuss the results presented in this chapter in view of the literature.

The sample consists of 12 case studies split into three groups, which differ according to company location. As this study seeks to provide insight into different approaches adopted and reasons for the success of ES champions in the FT industry, this is deemed a sufficient sample size to provide adequate data when the purpose is mainly explorative (Eisenhardt 1989). The research has been drawn up through purposive sampling. Champions were selected based on their suitability to provide a representative sample of ES champions in the FT industry. North American champions include three (3) Canadian and five (5) US-based FT manufacturing companies, and an additional four (4) Australian firms were interviewed.

A semi-structured interview schedule was developed and the interviews were conducted, recorded and transcribed only by the researcher. After the data collection, data analysis was assisted through the use of NVivo. Nodes were established and each interview transcript was coded for content. Other queries were conducted to help develop a holistic understanding of the data. The results obtained through the NVivo-assisted analysis are detailed in this chapter both in tables containing all examples of thematic content, in quotations with identifiers, but also through matrices providing the quantifiable content data (such as how many participants identified a certain theme).

## 5.2 Participant Demographics

The following table describes the demographics of the interviewees. Although every participant agreed to have their names and company names referred to in reports, for ease and clarity, the company names have been marked with identifiers. For the location column, the first letters denote the province or state and the second set of letters are CAN for Canada, AUS for Australia and USA for America.

**Table 5.1 Demographic Details of Interview Participants**

| Identifier | Employees | Start-up date | Location |
|---|---|---|---|
| | | | |
| **AB** | 12 to 15 | 2002 | QC, CAN |
| | | | |
| **AC** | 40+ 30 contractors | 2000 | AL, USA |
| | | | |
| **FA** | 1 + 7 contractors | 1993 | NC, USA |
| | | | |
| **GE** | 1+ 5 contractors | 2014 | VIC, AUS |
| | | | |
| **HC** | 10 | 1999 | BC, CAN |
| | | | |
| **MZ** | 100+ over 4 firms | 1988 | NY, NC and TX, USA |
| | | | |
| **MJ** | 30 | 2013 (new owner) | QLD, AUS |
| | | | |
| **NM** | 6 | 2000 | VIC, AUS |
| | | | |
| **ND** | 50 | 1999 | VIC, AUS |
| | | | |
| **RE** | 10 | 2007 | QC, CAN |
| | | | |
| **SP** | 20 | 1990 | NC, USA |
| | | | |
| **TS** | 25 | 1977 | NC, USA |

As can be seen from Table 5.1, all of the participants are SMEs, yet there is variation within this broad definition. Although contractors and complex business models complicated this delineation, five of the participants have 10 or less employees; four participants have 11 to 49 employees; and three participants have 50 or greater employees.

Only one third of the participants started their companies within the last 15 years and the other two thirds have been operating for over 15 years (these include the two, AC and NM, who started in the year 2000). Of the 8 participants from North America, 5 are based in the US and 3 are based in Canada; while 4 participants are based in Australia. Two of the 3 Canadian champions are French-Canadian (from the French speaking province of Quebec, AB and RE). One of the Australian participants grew up in Germany (GE). These variations in languages do not affect the quality of the data but are noted here to prepare the reader for some English 'mistakes' within some of the quotes in the tables below. They are not editorial mistakes, rather they are direct transcriptions of the data. The reader may also sense a Southern American drawl in the participant's from North Carolina, specifically TS and SP.

The largest variation within the demographic data of the participants is their company structures. Table 5.2 below succinctly describes each company's corporate structure, largely using each participants own descriptions from their interviews. Part of being a sustainable company often involves very efficient and lean business models. In the case of FT manufacturing and the champions interviewed, many companies use contractors for sewing or outsource dyeing, etc.

**Table 5.2 Organisational Structure of Each Participant Firm**

| Identifier | Vertical integration/structure/actual business |
|---|---|
| AB | Produce and knit 70% of all natural fibres in house and sell in about 30-40 stores within Canada. |
| AC | A textile manufacturing and lifestyle company as well as a store and a restaurant within the building - also do workshops and have an educational arm of the company. |
| FA | Produce 100% organic yarn and thread made by hand and distribute throughout North America. |
| GE | Fashion Designer and producer: works with fibre – organic merino, also has own alpaca farm. Alpaca wool is used with ancient fibre making techniques. |

| | |
|---|---|
| HC | The main function is retail clothing and sales. Also have It's Only Natural (ION) clothing company. ION manufactures the Hemp and Company brand of clothing. |
| MZ | Four different companies with four different models (Portico Brands, Metawear, Under the Canopy, plus personal (MZ) brand) - all related to the manufacturing and promotion of eco-fashion in the US. |
| MJ | Produce 200,000 or so pure wool undergarments per year. Most of the fabric is manufactured by the in-house knitting mill. 'The only vertically integrated textile organisation left in Australia.' |
| NM | Both a certified manufacturer (make for other brands about 80% of time) and then 20% of the time is work on own products - produce clothing from recycled fabrics. |
| ND | Purchase the raw materials from credible suppliers in Europe and Japan, design internally then produce own products. Everything is done under one roof, "Almost a one stop shop". |
| RE | Sales, marketing and manufacturing of clothing, and currently sell to about 50 places around Canada and also online. But also still do contracts for other eco-friendly brands: Om, Message Factory, and also do corporate wear. |
| SP | Textiles, apparel and printing and everything is done within 120 miles of the Ashville (NC) headquarters. |
| TS | A custom wholesale printed t-shirt manufacturer and provider with a focus on sustainability. |

## 5.3 The Factors that Influence SMEs Toward ES

The results of the interviews and the data related to each research question are now covered in detail.

### 5.3.1 Attitudinal Factors and Intentions

The Research Question (RQ1a) querying attitudinal effects on intentions in SME ES champions in the FT industry was primarily explored through the interview question, 'How do you feel or think about the environmental sustainability changes you've made or things you do? For example, are you feeling emotional/passionate/angry about it?' This question was either paired with or followed up with, 'Do you see it as a social responsibility? Do you see economic value of it?' Responses to this question often involved an 'all of the above' type of answer. The following table highlights some of the themes (in order from most common to least common) represented by emotional responses as well as the more pragmatic answers including attitudes towards social responsibility and economic value.

**Table 5.3 Attitudinal Themes and Identified Quotes from the Interviews**

| Attitude Themes | Interview Results |
|---|---|
| Emotional | 'It is in our DNA so emotional for sure. Passionate absolutely. Angry, yes, we can be. It can be frustrating. At the same time it can be very rewarding. You get a gratified feeling when you know you've delivered something to someone who is looking to make a difference and to do good. Gratified is one thing but frustrated that more people aren't on board…that more people don't care'. HC<br><br>'First, emotional. Then angry that not enough people care. Then motivated to get people to know and to care about it.' AB<br><br>'First of all I'm passionate about it. I definitely do get angry about it when I turn on the TV and hear the climate change deniers. But I'm passionate about what we do because I think what most business is, is personal.' TS<br><br>'I feel that we are very lucky in so far as we are dealing with products that encapsulate all three points above (passion, social and environmental impacts). It's quite unique to be able to be a specialist in wool products, knowing very well that the raw fibre is biodegradable and clean.' MJ<br><br>'Proud. I feel it is necessary. I feel that the fashion world as we know it is totally unsustainable and there has to be alternatives.' RE<br><br>'I feel an emotional attachment too." SP<br><br>"For me it's inspiring and empowering to be at the forefront of what I know to be inevitable.' MZ |

| | |
|---|---|
| Social Responsibility | ‘Social responsibility.... I just think we’re responsible for leaving the world a better place than we found it.’ AC<br><br>‘I feel very comfortable and satisfied with the products that I put out in the world and it makes me more comfortable to use those products in my home. In my research and over the years I’ve found out what - what I call chemo fabrics, are actually doing to us. And the nasty stuff that’s in our chemicals that’s floating around in the air is just horrendous. And to be surrounded by good healthy things is much better. I don’t have a perfectly organic house. And I probably never will but I’m working on it. And to know that I’m making those healthy products available to other people in the world is very satisfying.’ FA<br><br>‘It’s a social responsibility. At the same time it is an environmental responsibility. it’s around people. Again I’ll bring it back around to people. Whether internal or external. It’s about how you are responsible for ensuring…looking after people. And as far as the product, are the people happy in dealing with the products? Will it give them any issues or will it actually help them to be happier? SO our product is chosen, and what we use accordingly.’ ND<br><br>‘There’s always a responsibility when you’re purchasing goods. There’s a responsibility as a business owner to say, “what I’m doing, is right or am I promoting pollution and unsustainability?”’ RE<br><br>‘I see both social and economic value. If there are no resources to utilise on the planet that we live then there is not going to be any economic value whatsoever. It’s just a smarter way of doing business. If you pay heed to the golden rule…you know, treat others the way…’ SP |
| Economic Value | ‘I definitely see economic value. I see this as the future and not the past. That business as usual is not sustainable. It can’t go on the way it is. So if you’re not a part of the solution you’re part of the problem.’ MZ<br><br>‘And economical for sure also because I’d say what brings people here to the store is more the local aspect instead of the natural fibres or hemp or bamboo. It’s really local. You know the major brands make research all the time and it would be easy for them to make eco stuff but they make research and by far everybody – like 95% of people, when they buy a piece of clothes they do so for the look at first. The heartstrings.’ AB<br><br>‘This is just personal and it’s about values. I don’t want to feel guilty about anything that I do. The economic side of things come at the end. But if you start with a clear conscience and you’re happy, then you’re making your team happy, and you’ll succeed in the long run.’ ND<br><br>‘But I do think that you know people say it’s either jobs or the planet; you can’t have both. And I think that they are so critically tied together can’t have one without the other. So it is both the economic and benefit…at our home, my wife and I have got our energy bill down to 100$ a month. And we’ve reduced our carbon footprint at the same time. And we’ve done the same thing with the business.’ TS<br><br>‘I see it on simple terms that it’s just a smarter way.’ SP<br><br>‘What I’m really interested is breaking this head space at the moment that says, if you do things ethically it will cost you more money. My argument is actually no if you do it properly and carefully it will cost you less and you can do it better and you don’t have to be looking over your shoulder all the time…it’s just easier. My principles as far as sustainability are that I want to make it a good, strong economic one. Because my belief is that I don’t really |

| | |
|---|---|
| | care why people join – if they do it because they think it's going to make them more money then that's just the same to me as whether they do it ideologically.' NM |

The three themes of attitude toward ES in business identified in interviews with participants are emotional, social, and economic - not dissimilar to the 3 P's (people, planet, profit) referred to in earlier chapters to define sustainability. The emotional theme is summarised using the example of one participant, 'It can be frustrating. At the same time it can be very rewarding. You get a gratified feeling when you know you've delivered something to someone who is looking to make a difference and to do good' (HC). The vast majority of the participants reported feeling very passionate about their work. This passion is directed at consumer awareness and doing good, which encompasses the second theme: social responsibility. One participant clearly stated that the firm mostly had a 'social responsibility.... I just think we're responsible for leaving the world a better place than we found it' (AC). The third theme of attitudes toward ES initiatives in participant firms was economic value, mainly in the sense of believing that this way of doing business (ES) is the way of the future, and getting on board now will save in the long run. For example, 'I definitely see economic value. I see this as the future and not the past. That business as usual is not sustainable. It can't go on the way it is. So if you're not a part of the solution you're part of the problem' (MZ).

To add to the attitudinal factors that influence these champions to be ES, the question, 'Environmental sustainability and especially *sustainability* are over-used words these days. How do you think of Environmental Sustainability?' elicited a rich database for the attitudes and value judgments each participant had regarding ES. Some answers were very specific to the FT industry and others were more traditional ('Brundtland'), and others still were holistic in their definition and outlook. The themes identified are placed in order of occurrence and a matrix follows to categorically count the amount of times each theme came up in an interview.

**Table 5.4 Participant Definitions of Environmental Sustainability and Interview Results**

| Definition Themes Identified | Interview Results |
|---|---|
| FT industry – production (i.e. fabric choice and location) | 'sustainability in the fashion industry would be using the best fabric possible and for sure doing it yourself locally. Local is part of sustainable I think. Using the best ecological fibre that is not rough on the soil, which is hemp….by far the best. Because it grows like in 100 days and it grown so close together that you can grow for 20 years on the same soil without harming the soil. And we started with hemp at first, first with Manila hemp and after that all the products at least had hemp with organic cotton or just 100% hemp.' AB<br><br>'We like to think of sustainability as more ways than just environmentally. We like to think of it as a holistic approach. Our goal is to work with 100% organic cotton jerseys and in the best case scenario we source this as locally or as regionally as possible.' AC<br><br>'I think of something that has a positive impact from the growth of the materials to the putting the materials back into the circle of life. And how I see that with my thread is that the cotton is grown organically. So it's not having any negative effects, in fact, it's having a positive effect on the soil and the environment around all of those fields and the health of the people and animals around those fields. All the way through the processing, same thing, there's no lingering environmental impact.' FA<br><br>'If I just look specifically at textiles it's obviously clothing heavily used but at the same time we don't want to kill the environment. I mean we need clothing but at the same time while we are dressing we don't want to kill environment. Production of textiles…from the production stage to after it's finished and completing its lifecycle is all harming the planet. The whole idea is creating a textile, during the creation is helping the environment and then after it is finished it has a positive impact on the earth. The creating of the textile from the cotton field (cotton requires a lot of pesticides) and on top of that we've got the ethics of the people who work in the cotton fields in third world countries. And then we look at the factories which are making the cotton fabric and again those factories are hard on the environment during the colouring, dying, all that sort of stuff and the people again working in those factories, the ethical side of it, the way they have been treated. And then the fabric goes to the garment factories which also have environmental and ethical issues there in the production of the garment….typical example is Bangladesh for you. Then we've got fast fashion. More more more more clothes....another one another one another. I mean how many pairs of pants can you wear in one week? But it's so cheap and then we wear them and thrown them away. Then we've got another problem. It goes on and on.' GE<br><br>'Closed loop. So that the waste product doesn't end up affecting the environment around it. I'm certainly not perfect but the idea of zero waste…. Very 1930s mentality is the key here. The tricky part is not adding to the environment and that means production.' NM |

| | |
|---|---|
| Holistic | 'Using 100% organic improves the health of my workers and the planet...in fact, it's having a positive effect on the soil and the environment around all of those fields and the health of the people and animals around those fields.' FA<br><br>'For me it's a focus on people planet profit passion purpose – the 5 Ps of business. And environmental sustainability on the specific planet part of that kind of spoke in the wheel is a focus on minimising impacts that range from energy, water, waste, climate change, social justice, which does have environmental ramifications – to chemical use. So I look at "how can we shift paradigms that recognise the symbiotic relationship between man and nature?" And build new business models that recognise the ecosystem as a whole.' MZ<br><br>'Sustainability is across the whole process. It's not just the product itself. The term sustainability is quite a broad term. To me, sustainability is culture, process, raw material… From the initial concept to the consumer and the way they use the product. And what I mean by that, is, how long can you sustain a product and what is the best process that still is viable to put it into market? At a consumer level, what our KPI is, is to ensure that our customer has a product that is long lasting because what that does is eliminates the amount of waste – they use it for a longer period of time so they're actually throwing away garments less.' ND |
| Brundtland | 'ES to me would be utilising the environment to satisfy your life's needs without impacting future generations. I always use the example of, we need to be conserving water for future generations but you can't just stop using water. You've got to find ways of maintaining your quality of life without impacting future generations.' TS<br><br>'Being able to fulfill clients' needs/consumer needs and being able to provide products that are sustainable, clean, and renewable.' MJ<br><br>'Achieving something that will not damage our living on this planet. We always say save the environment, save the environment. But what we want to save, really, is our living. The environment, if we all die because we are all poisoned, well the environment will still be there for hundreds of thousands of years but we will be gone. Sustainability would mean that we actually have a way of life that doesn't endanger human rights and all other living things that we know.' AB |
| Relationships | 'As part of being a sustainable company we believe you have to foster sustainable relationship with your suppliers and your vendors and your manufacturing facilities…so that we can ensure that our end product is as sustainable as it can be. We wouldn't be able to manufacture anything that we do without the environment. So if we are environmental stewards then we are able to keep working with the environment.' SP |
| Decisions | 'I would say that it's a question of decision making and sometimes it's difficult decision making but when you can make a decision has less impact in the environment rather than doing harm doing good through decisions we make, it's sometimes more costly but in our minds it's the right thing to do.' HC |
| Continuous Improvement | 'It's a journey around continuous improvement. That's why I said the word sustainability is quite a broad word. And you can interpret in so many ways. In regards to sustaining a business – whether it's financial, ethical or cultural, it's all about continually improving. My view around sustainability |

| | |
|---|---|
| | is how to engage, assess, analyse and put things into place to improve everything we do in the business.' MJ |

The vast majority of respondents talked about ES as it related to the FT industry such as fast fashion, green supply chain management (GCSM), waste reduction and fibre choice. The primary focus was the factor of fibre choice and producing in a way that doesn't cause harm, such as 'The whole idea is creating a textile, during the creation of which is helping the environment and then after it is finished it has a positive impact on the Earth' (GE). And others still answered with a holistic understanding of their environment, 'Using 100% organic improves the health of my workers and the planet...in fact, it's having a positive effect on the soil and the environment around all of those fields and the health of the people and animals around those fields' (FA). The Brundtland Report was referenced in Chapter 2 to introduce the context of ES. Some participants responded with a more traditional (Brundtland) definition, 'Utilising the environment to satisfy your life's needs without impacting future generations' (TS). These first three themes were by far the major ways used to described and define ES (see matrix below).

Additionally, sustainable relationships, sustainable decisions and continuous improvement came up as definitions to ES: 'As part of being a sustainable company we believe you have to foster sustainable relationships with your suppliers and your vendors and your manufacturing facilities…so that we can ensure that our end product is as sustainable as it can be' (SP). This definition describes GSCM in a way but with a more humanistic quality. Further, sustainable decisions are described by one participant as follows: 'It's a question of decision-making and sometimes it's difficult decision-making but when you can make a decision (that) has less impact in the environment rather than doing harm, doing good through decisions we make' (HC). And lastly, continuous improvement is part of sustainability for one participant: 'It's a journey around continuous improvement. That's why I said the word sustainability is quite a broad word. And you can interpret it in so many ways. In regards to sustaining a business – whether it's financial, ethical or cultural, it's all about continually improving. My view around sustainability is how to engage, assess, analyse and put things into place to improve everything we do in the business' (MJ).

A matrix is provided below on the frequency of each theme recorded by each participant in order to give a visual representation of the weight participants give to each theme overall. The inferences and conclusions to this data are in Chapter 6.

**Table 5.5 Matrix of ES Definition Themes and Their Frequency**

| ES Definition Theme | Occurrences |
|---|---|
| FT industry – production choices | 5 |
| Holistic | 3 |
| Bruntland | 3 |
| Relationships | 1 |
| Decisions | 1 |
| Continuous improvement | 1 |

### 5.3.2 Subjective and Social Norms and their Effects on Intentions

In order to understand ES champions' subjective and social norms as drivers to their intentions to be ES, the interview question: 'Have your motivations and intentions been the main driver for your ES initiatives or are there other drivers? i.e. What drove you to this? People? Books? Regulations?' Or 'Have any other entities/people etc. had an impact on why you've engaged in ES practices?' The answers to these questions are tabulated below. In some cases, if internal drivers also came up within the answers to these questions, these were positioned into Table 5.8 in section 5.4 on motivation and intent.

**Table 5.6 Subjective Norm Themes Identified and Interview Quotes Relating to Each Theme**

| Subjective and Social Norms Themes | Interview Results |
|---|---|
| External People/Books/Timing | 'I've been inspired by David Suzuki and Rudolf Schneider and I'm a romantic so romantic literature…it goes that far… The glorification and reverence for nature is really important to me. Rachel Carson's book was introduced to me when I was in grade 6. I think that there has been a sense for a long time – the entire time I've been an adult - that unless human beings pay attention to the environment we're going to be in big trouble. |

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|---|---|
| | And it's just always been there. And now it's 40 years later. And this year has been particularly difficult because we can see some of the results.' HC<br><br>'The two owners and founders (Daniel Sanders) were the very first people to manufacture an organic cotton t-shirt to the masses. And a lot of that was due to them both being very aware and cognisant that textiles and the apparel industry both create for the environment. So they began with a company back in the late 80s who only incorporated in the 90 called Ecosport and like I say they were the very first people to mass produce an organic t-shirt. They did a lot of work with Green Peace and they helped a lot of companies that are proud sponsors of environmental stewardship such as Patagonia. They helped developing with their programs back when they began doing.' SP<br><br>'I think growing up in the 60s and 70s was a big influence. Back then, Silence Spring came out, Organic Gardening magazine first started. My dad read that religiously. I grew up on a horse ranch. Horses are one of those animals that are very sensitive to the environment. And there aren't chemicals given to them for different things. So the whole rhythm of the natural world was very much a part of my life. And that's what I loved in life. I've been a city kid but I remember being 7 or 8 years old and driving through downtown Kansas City and seeing smoke stacks and such and just being sickened by the whole thing. …My dad raised all of our food organically while I was growing up. I have been an environmentalist since I was a little kid. So it made sense to me that whatever I did in life was going to be like that.' FA<br><br>'I'm driven by a number of practices. Fair work practices, that's something I was exposed to – really bad practices in Melbourne when I got to deliver machines all over Melbourne and I came across heavy exploitation of the Japanese workforce - real nasty, nasty practices, which were at the time (95-96) and I'm not willing to make a living off the back of someone else's exploitation. I need to be able to get up in the morning and feel good about what I'm going to do. I'm not someone who can ignore. The other thing is I've got sisters only. I'm interested in women's politics and the issues related around that. Fashion has a lot to do with it. Body consciousness is something that I'm heavily involved in. I like the fact that women are all very different. I think it's crazy to genericise what a woman should look like. A full figured woman and a smaller woman, they all have beauty points in their own right. My one sister had an eating disorder for many years growing up so I am also driven by that from a major ethical scope. When I talk about ethics it's all around these different elements.' NM<br><br>'The environmental…I kind of brought that to the table…and I can't really attribute that to anything in my life. there wasn't any particular thing…people ask me a lot "what got you interested in the environment" … What I contribute that to is, I've lived in the same community for all but three years that I have been on this planet. When I was growing up, for some reason I got interested in gardening. We lived inside the city. I had no immediate family that were in farming so I started basically having a small garden behind my house when I was a teenager… I remember when rhodeo XXX made a little magazine much like a reader's digest and I was a loyal subscriber then and that was also around about the time when 7 dust came around. Or my introduction to 7 dust. It's a white |

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|---|---|
| | powder that you put on your garden and it takes care of all the things you're always trying to find creative ways to get rid of. But it also kills everything. I just started to question, what's our impact? What are we doing to the planet here…Tones and tones of people. I'll never forget in the mid 90s, the big thinkers of that time were Paul Hawken, Henry Lovin, Ray Anderson. I went to hear this guy speak and got the book and know him personally and they were the first people that Sam turned me on to within the sustainable business model. And what I've come to find out is, you know there is a community of passionate people, and especially if they're on that same triple bottom line value set, that are very open to sharing. So it's kinda we help them and they help us. Like, we have chickens so I've got, who I call my chicken guru, this guy who is an international heritage chicken guy that I connected with a few years ago and he needed some help with some technology in his business and since then he's been our chicken person. Another couple does our beehives and what our deal with them is they manage the hives but they get half the honey. We constantly have mutually beneficial relationships with people in this arena, so we can get the expertise that we need, that we couldn't afford or wouldn't know where to go to otherwise.' TS<br><br>'I became a vegetarian when I was 15 years old because I read some books about the environmental impacts of meat and the industry and the chemical use and all the use of the way that animals were being treated and just the whole effects on human health of the meat and dairy industry. So I had a personal passion. I got a business degree and I was inspired by the founder of Aveda from a business standpoint, watching him revolutionise the personal care industry and through first appealing to people on a visceral level through an aesthetic approach - that you don't have to compromise on beauty or quality style and that ultimately you can create better quality, environmentally sustainable products, that demonstrated to me that style and quality are NOT mutually exclusive with social and environmental responsibility….My kids have been raised in a conscious environment about the choices we make and now they're the cool ones with their friends. Everyone's eating organic and people are vegan and gluten free and people think it's cool to buy organic products and yet to me this is a way of life that. It's always been a part of our DNA. So I'm excited. I see huge momentum in this movement and I see it as a one way street – it's only going to get bigger.' MZ |
| Cultural | 'Another part of it was that I lived in Europe for a good 10 years and there recycling was just part of the everyday life. It wasn't really thought of being anything abnormal or unusual to recycle in fact it was illegal not to recycle and so when I came back home and opened this company, you know, the textile industry can produce a lot of waste and we were in a rural location and having to manage that water so we were looking for ways to reduce that waste and then the first iteration of the business we were also working with recycled t-shirts. It is just a multi-pronged thing that happened.' AC<br><br>'You really need to hold your ground and continue chipping away. Because those values will progress into humans emotions because they'll understand what you're here to do. It's about the story. And then understanding what you're here to deliver. It's about making people feel good regardless of what the product is. It's a cultural driver. It's an emotional driver. People need to understand that everything we do is |

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|---|---|
| | around them. We're here to be real. And that's a challenge. Because you need to know how to tap into peoples' worlds. And explain to people in their language that makes sense to them. But once you do that they become very loyal customers. And they understand the values around the brand.' ND |
| Government | 'The epiphany or the wake-up call or the intersection in the road happened in Jan 1 1994. And that's when NAFTA became ratified. North American Free Trade Agreement. We knew it was going to have an impact on our business but we didn't realize how quick it would impact our business. We went from 100+ employees to 14 in 2 years. The brands could not get overseas quick enough. We knew that through NAFAT that there were going to be some negative consequences, but the negative consequences were far greater than anybody anticipated. So that was a wake-up call. The good thing for us and it was really a matter of luck. I look at sustainability by looking at your impact of the 3 Ps: People planet profit. After NAFTA we adopted that philosophy in order to run our business. But even prior to NAFTA we already had those components built into our business and again it was just more the luck of the draw, whatever.' TS<br><br>'Manufacturing had gone all overseas because it was getting so much cheaper to manufacture clothing in China. The clothing and textiles manufacturing in Quebec all went away. In the 80s 200,000 people were working in the textiles industry in Quebec and now it is like 16000 people or something.' RE<br><br>'But yeah it went down. North Carolina was a textile state. We were textiles, furniture making and tobacco. I think it was around 50% of all industry was textiles in the US and after NAFTA it went down to 2%. My family has been in textiles for generations and when that whole thing happened there were a lot of people out of work. You can't compete with someone who will take 10 cents an hour…or even less a lot of times.' SP |

Subjective norms refer to the belief about whether most people approve or disapprove of a behaviour, which relate to a person's beliefs about whether peers and people of importance to the person think he or she should engage in the behaviour (Ajzen 1991). Social norms refer to the customary codes of behaviour in a group of people or larger cultural context (Ajzen 1991). The themes (external – people/books/timing, cultural, and government) identified in Table 5.6 don't necessarily fit with only one or the other social vs subjective norms, but they identify motivational drivers, which based on the TPB (Theory of Planned Behaviour) will impact intention and in turn behaviour.

The theme of external books, people or timing impacting intentions involved often all three aspects in one answer and was by far the answer for the majority of respondents. For example, 'I think growing up in the 60s and 70s was a big influence. Back then, Silence Spring came out, Organic Gardening magazine first started. My dad read that religiously.

I grew up on a horse ranch. Horses are one of those animals that are very sensitive to the environment. And there aren't chemicals given to them for different things. So the whole rhythm of the natural world was very much a part of my life. And that's what I loved in life. I've been a city kid but I remember being 7 or 8 years old and driving through downtown Kansas City and seeing smoke stacks and such and just being sickened by the whole thing…My dad raised all of our food organically while I was growing up. I have been an environmentalist since I was a little kid. So it made sense to me that whatever I did in life was going to be like that' (FA). Because many of the answers incorporated several different external aspects (social and subjective norms) the theme was not broken down into sub-themes.

The other two themes identified, Cultural and Government, which could be argued are both social norms, are in fact both quite different themes. The cultural theme related more to the impacts that culture had on the individual's norms and thus intentions, such as 'Another part of it was that I lived in Europe for a good 10 years and there recycling was just part of the everyday life. It wasn't really thought of being anything abnormal or unusual to recycle in fact it was illegal not to recycle…' (AC). The Government affects our social norms and in the case of drivers and external factors leading to ES intentions, the government can certainly be a powerful one. Here, NAFTA (the North American Free Trade Agreement) had a major social and societal impact on some of the participants, leading to subjective norms changing within the US and Canada as well. As one participant put it, 'The epiphany or the wake-up call or the intersection in the road happened in Jan 1 1994. And that's when NAFTA became ratified. We knew it was going to have an impact on our business but we didn't realise how quick it would impact our business. We went from 100+ employees to 14 in 2 years. The brands could not get overseas quick enough. We knew that through NAFTA that there were going to be some negative consequences, but the negative consequences were far greater than anybody anticipated. So that was a wake-up call' (TS). Detrimental legislative changes in Australia had similar effects on Australian participants, but these are addressed in section 5.5 regarding barriers to converting ES intentions into ES actions.

### 5.3.3 Perceived Behavioural Control and Intentions

'Do you feel you have control over the ES initiatives, changes and policies surrounding your business?' was the interview question asked to determine if/what behavioural control attitudes impact ES intentions in SME ES champions in the FT industry. Over three quarters of the respondents answered with a resounding 'yes' to this question and the other quarter answered with a more practical outlook on the entire picture, admitting that there are things outside of their control as well. Further details are provided in Table 5.7.

**Table 5.7 Perceived Behavioural Control Themes Identified and Quotes From Interviews**

| Perceived Control Themes | Interview Results |
|---|---|
| Yes – all me<br>only me | 'There is no question, we drive this stuff. I always tell people, by the time government figures it out, it's way too late. I cannot think of anything that we've ever done that had to do with a policy. We've been doing this for 4 or 5 years before any credits came around. Yeah we got some credits for our solar panels but we had them up before the credits were in place…. We are driving this initiative.' TS<br><br>'That was strictly me. I decided how much I wanted to do and what I wanted to achieve and it was a matter of locating the materials to do what I wanted to do. That was before the textile standards were set…I pretty much have always lived by my own standards and let the world catch up. And thankfully the world is catching up but sure it's taken them a long time. I was ready for people to be organic and sustainability minded way back in the 70s and 80s and it just didn't happen.' FA<br><br>'That was our own control. There was no external …in those things. There probably should be some more legislation about the manufacturing and distribution of clothing because there are so many problems…Sometimes you just have to shrug and say look we just do the best we can when we can.' HC<br><br>'I think it's a part of working with this company. We have attracted many like-minded individuals. It's empowering us to feel like we like we do have control.' SP |
| External Factors<br>Also | 'Look, the consumers need to change. The global attitude towards fashion needs to change. Look at fashion magazines…they have to start changing. Companies like H and M and Zara, they are producing $5 skirts and everyone's like "this is fashion, this is a must have!" First it's cheap and second it's damaging.' GE<br><br>'Like a percentage higher than 50%. Because a lot of companies start eco and they finally they end up going with just regular clothing or they move abroad or they stop doing men's clothes and just do women's because this is the people who buy clothes most. So yeah for sure I think I can control but on the |

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| | other side I cannot control who buys and what the market is. Still 95% of people here in Quebec still have a lot of work to do.' AB<br><br>'To an extent, yes but there are challenges. To an extent that there is no infrastructure left in Australia, you find yourself having to work very hard in finding organisations that can take your waste and generate something good/green from it.' MJ<br><br>'Once upon a time you couldn't get free range eggs from a store. You had to go directly to the farm or to a market. They were difficult to find…But now it's the top selling egg that Safeway sells. In fact they're getting rid of their caged eggs completely this year. So the consumer has driven [it]. The market place changed. My thought is, if that can happen for eggs, it can happen for fashion. If you can make a good economic argument, they'll do it.' NM<br><br>'Definitely external drivers. If Texas has a drought then there is no cotton available. We live at the hand of mother nature with textiles made from crops. And there are definitely many external factors.' AC |

Four instances of 'Yes all me" were recorded in comparison to five instances of 'External Factors Also'. About half of the participants believe that they are in control of their ES initiatives. Comments like, 'There is no question, we drive this stuff' are indicative of the major sentiment of true control. On the other hand, some participants noted external factors out of their control, specifically the feeling that the consumer's attitudes and buying habits were out of their control, as is the weather (for agricultural crops), and infrastructure, leading into some of the barriers they experience, which are discussed later in this section. For example, 'Yeah for sure I think I can control but on the other side I cannot control who buys and what the market is'. Interestingly, every company who answered within the 'Yes all/only me' theme were American. This cultural implication will be discussed in Chapter 6.

## 5.4 Motivation and Behavioural Intentions

During the interview, 'What factors were important in the decision to introduce or encourage improved environmental sustainability practices?' in order to elicit the motivational factors that influence the given behaviour where the stronger the intention to perform the behaviour, the more likely the behaviour will be performed (Ajzen 1991). In some cases, if the participant went off track with their answer, this question was followed up by: 'What are the things that have motivated you do go down this path?' Moreover,

during the initial part of the interview where demographics were being sought and rapport built, the question, 'You've achieved some impressive things in your firm as far as ES is concerned. Tell me about your journey in becoming an ES champion' was asked. The answer to this question and the proceeding ones often elicited some deep internal motivational drivers, which lead the ES champion to either start a green company or turn their company into and ES champion. These are listed in the table below.

The overarching themes from the answers to these questions could be separated into personal motivations and business motivations. The personal motivations included the desire to educate and inspire others, to prove people wrong, and to follow through with personal values. The business motivations mainly involved a futuristic view of business accompanied by a belief that this was the future of business and therefore a smart business decision. In order to clarify drivers and motivations, the external drivers that came up in these themes have been positioned into Table 5.6 in section 5.3.2 regarding social and subjective norms, and the drivers and motivations that are internal/intrinsic are kept here under motivational intentions.

**Table 5.8 Motivational Intention Themes Identified and Interview Quotes**

| Motivation Themes Identified | Interview Results |
|---|---|
| Inspiration/ make change | 'To be the change that I wanted to see in the world. And again to my passion here I just think that it's something to live for. That people will have something left behind. And thinking smarter. Making the changes.' SP<br><br>'We're hoping to inspire more people to do what we've been doing. There is a really tiny demographic of people that have the freedom to choose. And that's why when I was doing the vision statement for our company I wanted a vision that was much greater than anything and our vision is " A world where we are ALL able to consider the impact of our purchases." So it's got to change so that socially we are not driving ourselves further and further down, we're raising everyone up at the same time. And all people are having a standard of living that is constantly improving rather than constantly degenerating. Obviously if we were in this for the money we wouldn't still be in it. Our intrinsic values are running this for us. And in a way we get a greater measure of happiness form intrinsic vs extrinsic values and that has been proven.' HC<br><br>'It's 100% home - inside motivation. My parents are consumers; mainly my mother. So it was personal motivation to make people aware or try to change their minds about that.' AB |

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| | 'I moved back to Alabama and saw that too many of the people that we work with had worked in the former textile industry here before the signing of NAFTA and felt disillusioned around the manufacturing industries around the States.' AC<br><br>'As an artist at the time I wanted to make art work. It's not just ornamental, designing the walls. I turned to textile art and I just noticed that …I was in Korea and I met fashion designers and in my life I have never seen more passionate, creative people. And then when I returned I just told myself "ok if these people can do it I can do it too. And I can do better." And I started thinking about turning my textiles into a wearable art form. Because you know as an artist I have a show and I wait for a long time and then people come to see it and ask me – this is not painting this is an art. So I just thought I will put my art in a gallery the whole world is going to see. What is my gallery? A runway. There is all this press at the end of the runway. So I can use the press to show my ideas to the whole world.' GE<br><br>'The approach to the environmental practice: a. I didn't want to be part of an industry in Australia as it sat. I couldn't do that emotionally. SO what I thought was, as arrogant as this may sound, I'll try and build my own industry as such. I knew the ethical side of things was coming up….What I'm really interested is breaking this head space at the moment that says, if you do things ethically it will cost you more money. My argument is actually no if you do it properly and carefully it will cost you less and you can do it better and you don't have to be looking over your shoulder all the time…it's just easier.' NM |
| Other Internal Values | 'I think I'm a natural greenie. I've definitely…I've always enjoyed the idea of reusing something as opposed to disposing straight away. So if there is an opportunity to reuse, reuse. If there is an opportunity to add value to a product and apply a different application to it. Gee, let's do it!' MJ<br><br>'So I was an early adopter from recycling to compost, to energy conservation and since those early days I've always been interested and concerned about our environmental impacts. And this wave and what we're talking about now with sustainability, with increasing population, demanding more resources from the planet, in the form of energy and water and so forth. So I was able to bring those things to the business.' TS<br><br>'My father had a tavern too. He had his own business and so I wanted to have my own business too. I studied that at school but never wanted to work in a bank with a tie and all and when I realized that the 5 biggest banks in Canada make $1 billion per quarter each every year, that got me mad and I was like, "I have to do something better," You know?' AB<br><br>'I have chickens and I raise my own eggs and my own food. I love having things come from the earth and putting my fabric scraps right into my compost bin. It just makes me feel like part of the natural world and I really like that….I was frustrated by not being able to find organic cotton house products for my own home, so I started making them. I got frustrated by not being able to find the fabrics that I wanted to make those products beautiful so I started dyeing fabrics. So that lead to a fabric line and same with the thread. If I want it, there must be other people who want it to, and I'm just tenacious enough to keep after it until I found someone who was willing to help me produce this.' FA |

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| | ‘People act differently to different things. But one aspect of how people react is with flattery. If people are patting you on your back and saying “you’re doing a great job” Because you understand how we are culturally here, working in this organisation. We’re all working for the business. We’re not really influenced about the bottom line or the glamorous world or anything like that. But once in a while you get a really flattering comment and you say “God, you guys are doing amazing! This is fantastic!” It just motivates you further and you’re on the right track. You’re measuring yourself as a business based on people’s feedback. It’s emotional. To us it’s all about emotions and about sensing human behaviour. To me it’s very psychological. It’s human behaviour. If people are happy…you’re only going to be happier with yourself in what you do with your business.’ ND<br><br>‘Look, I did go to business school, right? So for me who was just a little girl with a lemonade stand growing up I always had an entrepreneurial spirit but meeting the founder of Aveda and seeing a live example of a business that could be highly successful without compromising its values, but instead be a leader and a role model for the future, to me was very inspiring and the idea of, as a business leader, to me leadership is not just the company that makes the most money, it’s the company that is paving the way for a better tomorrow. I always say that as an entrepreneur I feel like a little kid in a candy store. I get to do what I love, make a lot of money (make a great living) and change the world at the same time. Check. Check. Check. Sign me up. It doesn’t get any better than that for me.’ MZ |
| Educate | ‘The journey is largely related to promoting awareness and doing everything that we have in our power to be the change that we’d like to see. It’s so easy to be removed from where things come from…. is it is just promoting awareness…creating and inspiring people to make the right choice. You can never force someone to do something but if you can inspire them, then they’ll do it on their own.’ SP<br><br>‘I am a big fan of knowledge. Of education. Being a lecturer for many years you care a lot of education.’ GE<br><br>‘Fast forward and I launched Under the Canopy, which was the first, pioneering lifestyle brand that gave people great fashion and apparel at home that was using all sustainable manufacturing and ethical manufacturing and sustainable materials. And using only organic cotton, never conventional cotton, and only sustainable fibres and textiles, and gave people a great product first. Our mission was always to give people what they love and seek in the way of style, quality, fit, comfort, …and then also a way to make a difference to help the environment, worker-farmer welfare and future generations. SO really it was a very focused, no-compromise mission, to break all the stigmas that you have to give up something but instead that you can get more.’ MZ |
| Business - Future | ‘It’s not about staying ahead any more it’s about being left behind. If you’re a business and you’re not thinking about this, you’re going to be out of the game, it’s just a matter of when.’ MZ<br><br>‘In 3-4 years time it will be a given: you should be environmentally conscious, you should be culturally conscious. This will just be the way all business is actually run. SO you need to ensure you’re leading the way and you’re part of that.’ ND |

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| | 'But we also had the economic perspective that we needed to do something to keep paying our shop and to not go bankrupt. And we needed to do something. I don't think there has been a book or a film or something that has provoked the idea. But I think it was there all along….Yes. Money.' RE |
| Environment | 'I'm particularly concerned about ocean health and I believe that the health of our oceans is affecting our climate right now. One of the things that keeps me going every day is that I know that every time a piece of hemp or organic cotton clothing is sold that means one less piece of polyester goes into the ocean.' HC<br><br>'I've been a city kid but I remember being 7 or 8 years old and driving through downtown Kansas City and seeing smoke stacks and such and just being sickened by the whole thing. That's in our air that's what we're breathing and just the smell when you drive through certain areas because of the things that were being put out. I just didn't think it was right. I knew that I wanted to do something that was healthy and morally right.' FA |
| Personal Health | 'I started doing natural fibre clothes because I am intolerant to polyester. It took me some time to realise it but when I wear it I become really hot and I sweat and I stink then I found out about hemp and all its wonders and everything you can do about it. This is how I started, so this is why I started.' AB<br><br>'There was a time, before I started the organic quilts, when I was a professional quilter. And I made and designed quilts. I have an industrial quilting machine that's hand-guided and I rose to the top in the design field and I traveled and taught at shows for several years. During that time that I was doing that I had 3 different doctors tell me that I needed to be wearing a respirator in my studio because of the noxious chemicals that were on conventional fabrics.' FA |
| Prove them Wrong | 'Now, I bought this company, Merino and Jumbuck, some 18 months ago, recognising that best practice was not available to it and this was my opportunity to make a difference….I was very upset, 2 or 3 years ago, when I heard that manufacturing is dead and there was no chance of manufacturing surviving in this country…the policy makers were really not doing the economy any service. And I think it was really a case of me wanting to prove everyone the opposite. To prove that manufacturing, if done properly, and if you are a specialist, you can be very successful.' MJ |

All participants talked passionately about their internal motivations. Although many of these themes could all be grouped into 'internal values', and by far the majority of answers related to internal values (inspire, educate, personal health, etc.), therefore the Other Internal Values theme includes personal values that don't fit into the other themes. For example, 'My father had a tavern too. He had his own business and so I wanted to have my own business too. I studied that at school but never wanted to work in a bank with a tie and all and when I realized that the 5 biggest banks in Canada make $1 billion per

quarter each every year, that got me mad and I was like, "I have to do something better," You know?' (AB). Both the Inspire and Other Internal Values Themes came out as majority themes, as can be seen in the matrix, Table 5.9 below.

The most common personal motivator was to inspire others and be the change. 'To be the change that I wanted to see in the world. And again to my passion here I just think that it's something to live for. That people will have something left behind. And thinking smarter. Making the changes' (SP). And another common personal motivation was an educational one - educating consumers as well as peers, and the motivation to inspire and educate consumers often went hand in hand. For example, 'It is just promoting awareness…creating and inspiring people to make the right choice' (SP). However, the educational piece was more related to consumers and the inspiration piece was more related to competitors/peers, as in, 'We're hoping to inspire more people to do what we've been doing,' (HC).

Some minor themes that came up in several interviews was that of a motivation to prove others wrong, like, 'And I think it was really a case of me wanting to prove everyone the opposite. To prove that manufacturing, if done properly, and if you are a specialist, you can be very successful' (MJ). The last internal, personal motivation was value driven. Many participants spoke about caring for the earth from early childhood and growing up in places that helped them to appreciate nature. The following quote summarises the overall influence of values as a motivation for many of the participants, 'Obviously if we were in this for the money we wouldn't still be in it. Our intrinsic values are running this for us. And in a way we get a greater measure of happiness from intrinsic vs extrinsic values and that has been proven' (HC).

The business motivation simply of 'money' was a motivator for only one participant (RE), and the belief that business is destined to be going in the direction of ES was a motivating factor for another. 'It's not about staying ahead any more it's about being left behind. If you're a business and you're not thinking about this, you're going to be out of the game, it's just a matter of when' (MZ).

**Table 5.9 Motivational Themes and Their Frequency**

| Motivational Theme | Frequency of Occurrence |
|---|---|

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|---|---|
| Inspire/Make Change | **6** |
| Other Internal Values | **6** |
| Educate | **3** |
| Business | **3** |
| Environment | **2** |
| Personal Health | **2** |
| Prove them Wrong | **1** |

## 5.5 Converting Intentions into Actions

Motivated SMEs with the right attitudes to turn this motivation and attitude into actual ES action can be affected by two factors that separately help and hinder their attitude-behaviour gap. These two factors are expectations and barriers, and exploring both of these factors help to answer RQ3: What factors play a role in converting the intentions of SME ES champions in the Canadian, the American and Australian FT industry into behaviour/action? This RQ was explored during the interview with two questions: 1) 'When you started out going down this path, what did you expect from this process?'; and 2) 'What do you see/have you experienced as barriers to ES behaviour?'

Although expectations could be part of motivational intention (discussed in the section above) according to Expectancy Theory discussed in Chapter 3, the expectations that an individual has regarding how a certain behaviour will or may create the consequences that individual seeks affects action implementation. Expectation themes identified are tabulated and discussed below in order of occurrence, and barriers follow this.

**Table 5.10 Expectation Themes Identified and Participant Quotations**

| **Expectation Themes Identified** | **Interview Results** |
|---|---|
| Make Change/Educate | 'I think we expected to -(typical)- change in the industry. It was something that we knew how to make a difference. It's not like we were just popping in and picking a random point of entry. We knew this industry a little bit and we thought we could use what we knew in our sensibility of eco-consciousness and meld them together and make a |

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| | difference. It was then really important to meet the right people. And to find other people who want to make that change.' SP<br><br>'What I have tried to do is two things: You are a classic example of it. It is now turning to a lot of young people's attention – sustainability. I have a lot of inquiries from the fashion school and they are looking at me: "Wow look what she is doing, let's do the same!". And it's because I was a teacher for 20 years, if I am able to change minds or show the right path to young designers, one me becomes thousands of me. And those people who carry the same passion will transfer that passion to others. Like, in Perth, when I started 2 years ago I did a presentation at the local university… I am a big fan of knowledge. Of education. Being a lecturer for many years you care a lot of education.' GE<br><br>'Even if RE doesn't become an alternative to big companies it might raise awareness and other companies also so that and maybe the big brands will switch to sustainable clothing.' RE<br><br>'My background, is marketing. Star Card, the fuel card, I created that product. Then I worked for BMW Australia so I was very much in that business mindset, of being able to sell or promote something of value to the consumer…I was very upset, 2 or 3 years ago, when I heard that manufacturing is dead and there was no chance of manufacturing surviving in this country…the policy makers were really not doing the economy any service. And I think it was really a case of me wanting to prove everyone the opposite. To prove that manufacturing, if done properly, and if you are a specialist, you can be very successful.' MJ |
| Job Satisfaction linking values with work | 'For me I wanted a sustainable job when it comes down to it. And I wanted to be able to use my creativity. I love the fact that fashion is egalitarian in its nature. Everyone makes a fashion decision – good and bad. That's what's driven me to do this. As far as myself, I want a career that I cannot retire from. I like what I'm doing, I get a buzz from it. I like the fact that I make this stuff.' NM<br><br>'I think I just knew in my gut that tying my professional and personal values into one and the same was not a choice but an imperative….I want my kids to eat healthy, well and then go work for a company that was poisoning and destroying and polluting. It just didn't make any sense to me on a very gut level. So for me, the idea of making the norm the alternative and the alternative the norm was always my mantra. And knowing intuitively that it was inevitable that was going to happen because that's the way we expand consciousness and continue to evolve as an intelligent being. To expand our intelligence is to expand our relationship with nature. If we destroy our home and we destroy the environment we depend on, it's not about saving the environment, it's about saving ourselves.' MZ<br><br>'It's continually improving. It doesn't stop. What did I expect? You expect barriers and road blocks. But it's the process of overcoming all of these with your team. It doesn't happen overnight. You will face challenges and the challenges are your project.' ND |
| Immediate buy-in | 'I thought it would go faster. But just the fashion industry in itself is something, you know? And fabrics is another thing. There are so many aspects of it and things to do that at first I thought it was tougher for the |

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| | business side. And competition and so many other people do it…to compete with China and low wages, it's something that hits. You don't want to believe it but it hits. You can find organic cotton at Walmart. Why would people come here if they don't have the consciousness?' AB<br><br>'We expected more people to be on board! It's a niche market let's put it that way. B: Yeah it's a niche market but as you're discussing it's growing. I'd liken it to organic vegetables. 15 years ago organic farmers and customers of organic farmers were paying a really high premium but now you can go into here in Victoria Thrifty's, Safeway, Overwaitea, whatever and find huge displays of organic produce, milk, etc. SO even though it's a niche, it's a growing niche and we're experiencing a similar attitude change.' HC<br><br>'I expected immediate buy-in. But even from my business partner, who eventually came on board, I got a lot of resistance. Because it was different. I was less efficient. It's more expensive. It's like anything in life: people don't like change, people like routine and systems. So I got a lot of resistance. Even from a customer standpoint, we had a customer base that was really focused on price…' TS |
| Financial Success | 'I expected a lot more financial success. That's the one thing I've not been able to achieve. That's because I am not a marketing person. I am not a salesman. I know there are a lot of people out there who would love to have organic thread and I'm not out there knocking on their door. I just thought it would be more lucrative. And that it would be easier than this. I never marketed because I'm the only one in the world. You go online and type in "organic sewing thread" and I'm the only thing out there. So that's not hard. I just through it would be more lucrative and that it was going to be easier than this. I have never marketed because I'm the only one in the world!' FA<br><br>'We expected to be profitable sooner. It's still hard to make it as big as we need to have full salaries out of only RE. And that's why we still take contracts and do a lot of different things. We don't pay ourselves really big salaries. We expected it to be successful right away. We had a lot of experience in manufacturing but we didn't have enough experience in sales and marketing and everything else. We learned as we go. We expected it to flourish sooner.' RE |
| Nothing | 'Nothing. I think it's the responsibility…. There's no expectation in it. Hopefully we make other people think about it and there is one big domino effect, where everybody starts to believe and joins the line. My choice is …I don't have any expectations.' AC<br><br>'I don't know if I expected anything.' MZ |

The majority of the respondents immediately responded with answers relating to educating consumers and making positive changes in the world, such as 'I think we expected to change in the industry. It was something that we knew how to make a difference. It's not like we were just popping in and picking a random point of entry. We

knew this industry a little bit and we thought we could use what we knew in our sensibility of eco-consciousness and meld them together and make a difference' (SP). And this expectation relates somewhat to the theme of Personal/Job Satisfaction/linking values with work, such that personal values of the owner-manager are linked largely to their expectations. For example, 'I think I just knew in my gut that tying my professional and personal values into one and the same was not a choice but an imperative' (MZ).

Other expectation themes, which expressed disappointment on the part of the participants, was more financial success, such as, 'I expected a lot more financial success. That's the one thing I've not been able to achieve' (FA), and immediate buy in from both consumers and friends, family and even business partners was the second most commonly identified expectation theme. As one participant put it, 'We expected more people to be on board! It's a niche market let's put it that way' (HC). Furthermore, two respondents mentioned (initially) that they expected nothing, 'Nothing. I think it's the responsibility….There's no expectation in it' (MZ).

**Table 5.11 Expectation Themes Identified and Their Frequency Cited**

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|---|---|
| Make Change/Educate | 4 |
| Job Satisfaction/linking values with work | 3 |
| Immediate Buy-in | 3 |
| Financial Success | 2 |
| Nothing | 2 |

These themes, particularly the last (expecting nothing), links internal values and motivational intention to ES actions. All of these themes, along with their ability to help answer the RQs, will be critically discussed in Chapter 6.

As already suggested, barriers are an important aspect of whether motivational intentions get turned into actions. By far the most commonly cited barriers (challenge) to being a successful ES champion was price, cost and consumer attitude toward price, cost and fashion. Much like how these first three most often cited barriers are linked, the next two most commonly referenced barriers are linked as well. An interesting issue brought up in all countries was the challenge of finding other local manufacturers due to free trade

agreements and government regulations put into place in the 90's causing the vast majority of manufacturing in all locations to go offshore around that time. Less common but still important barriers also include the environmental, 'hippy' stigmas, the personal energy, and integrity in the marketplace. The following table shows these barrier themes, ranked in order of most commonly referenced to least commonly referenced.

**Table 5.12 Barrier Themes Identified and Interview Quotes by Interview Participants**

| **Barrier Themes Identified** | **Interview Results** |
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| Price/Competition | 'The main barrier is economic. It's all about the finance and the cost. That's the biggest barrier, is the competition.' ND<br><br>'Barriers? Price. We live in a time where we're able to compete in a marketplace but not truly measure the total negative external costs. We spend so much of our time educating our customers. It's not that our product or service costs more, it's what you are using doesn't cost enough. That has been since NAFTA… that's been our constant challenge. Like our majority utility provider is big energy. And they say coal is cheaper than solar, well the way they measure the cost yeah the environmental degradation, the climate change, that is not factored in. I always tell people, if we could just find a system that measures this triple bottom line costs then we could compete evenly. But marketplace looks at price. Unless it's a customer that understands beyond price. So it's a constant battle in everything we do. Price price price. Because they're not rolling in the external negative costs of that price.' TS<br><br>'The price point here in Australia is very competitive. Everything here is made overseas.' NM<br><br>'Price is a barrier. You know, it's not as inexpensive as some of the other things that you find available. People make choices based on price and that's definitely a barrier and especially if you're making handmade clothes, it's a problem. But it is what it is so you have to commit to other things like price per wear and things like that.' AC<br><br>'And then you have to compete with cheap production. People buy cheap and they don't care. In Australia there is no way… People demand at least $20/hr but then they want jeans that are $7 from Kmart. Now, if you are not accepting anything less than $20, you could never make a pair of jeans in one hour…who is going to make it? So you have to pay whoever is making the pants $20 an hour and it will take her about 4 hours to make a really nice pair of jeans. NOBODY is going to pay you $100 for the jeans they will go get for $7.' GE<br><br>'The competitors…I wouldn't say they are necessarily 'competitors' but they are in the marketplace. For instance we have a large account with Whole Foods who tout themselves as organic and local and a one stop shop for your groceries. But we are still put side by side with Indian made and China made organic cotton shirts. And I'm not saying they're bad but they aren't local and there is no way for you to |

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| | actually ensure that these factories are doing what they say they do, as has been proven many times before by large brands like Gap and Nike. You know, they say one thing but you have to schedule a trip out there. So when you schedule a trip to go over an ocean it gives the factory enough time to clean their stuff up and you don't actually know what they say is being produced is actually being produced. So I would say that is a large barrier especially with profit margin. For instance our 100% cotton t-shirt grown in the US, manufactured in the US, sells for $28 retail. Well you go to Whole Foods and you see one made in India – pretty much the same shirt, and it's selling for $38.00. And we're like "wow". When you equate the wage standards, what they say they're paying their people, for a 50 hour work week it equates to $150/month. That is considered fair wages in India. SO when you do the cost of goods with freight included that shirt really only cost about $2.50 and so they're making like 1000% on a shirt. And then in my mind the majority of India doesn't have clean water, they don't have the freedom to work anywhere else because they are caught in economics…it's really sad, it hurts my heart so see the people here that are unemployed and want to work and want to learn skills and do something yet it all continuously gets sent over there. And you have these companies that are able to pay whatever they want to but they say what they want.' SP<br><br>'...therefore our retail price is higher, and then you get sticker shock from people.' HC |
| Consumers/Competition | 'The education to the consumer is far longer down the track there than here. We've only just recently had international brands start turning up here. But a lot of local companies were using that same model: all about trying to get it in fast and furious. The consumers have really been seduced into cheap and disposable…. I've been shopping at op shops [second hand stores] since I was able to get money. Once upon a time if you found a garment in an op shop that was 3 years old, that was a bit of a find. Now, most of the products in there are less than a year old, more like 3 months old. And that disposable level of consumption is clearly there. The products are in incredibly good condition because they've not been worn very much. That's just the nature of how our consumer has been seduced.' NM<br><br>'The other large barrier is around the perceived value of things. The value perceived in the last number of years has been the cheaper the better. And certainly Walmart is a significant part of that. So when people are comparing prices – in our industry is the t-shirt – we can't even make a shirt for what some of the souvenir shops sell them for just down the street, so that's a huge barrier for what we do. The other frustration is having to be compared constantly with socially irresponsibly produced products. We're not even in the same ball field as those people and yet the general public is just driven to seek the lowest price possible.' HC<br><br>'I thought at first that most people would be like "oh man hemp clothes, cool" but people are not like that, they're more mainstream and don't want to look at what's good for humanity. So after a couple of years we still have hemp but unfortunately we have some bamboo also now.' AB<br><br>'Ignorance has been the worst of it. People still, they know organic food by now. They are used to the word and they understand it. But why would you want organic thread or why would you want organic clothing. People that are into sustainability understand. But people off the street have no idea that their clothing is killing them. It's really sad that people think all this stuff is tested by somebody out there …somebody out there is watching out for us and it's all OK. They wouldn't put it on the shelf if it wasn't safe. Well, yeah right! That's my big hurdle…what people |

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| | are willing to risk or die of just to have something that's convenient. Well it's non wrinkly so I don't have to iron it. Well that non wrinkly stuff is going to give you cancer.' FA<br><br>'It's hard to compete. That's another reason why I am going to the UK to sell. Europe and especially Germany are more advanced. I'm so impressed with their knowledge of organics and GOTS, but when you tell the Aussies here they just look at my face like, "Organic?, yeah organic bread, OK, but how do you have an organic textile!?" So it's really difficult. Look, the consumers need to change. The global attitude towards fashion needs to change. Look at fashion magazines…they have to start changing. Companies like H&M and Zara, they are producing $5 skirts and everyone's like "this is fashion, this is a must have!" First it's cheap and second it's damaging. To be a sustainable consumer you have to have the passion. If everyone is a believer that Zara and H&M are hurting people and the planet (which they are) they will say, "Oh God you are wearing H&M, how horrible!" and then they will go out of business…or maybe they can start selling organic clothing and start promoting this.' GE |
| Costs | 'Of course the costs are higher so the end product that we have is going to cost more. First of all the fabrics cost more and then our manufacturing costs are higher.' AC<br><br>'A high price in fabric, which is understandable because it is better quality. So still even the people that do hemp make less margins than those who do polyester. But also the less choices in fabric. You cannot get prints, if you get prints it's more expensive. If you get stripes once again it's more expensive….cost…for sure. It would be much easier…when you start a clothing company it's hard because you make a lot of tests. Fabrics are expensive and sometimes you make a lot of mistakes. It happened where we made like 200 shorts and the fitting was not right, even if we made them before but something happened, so it's not like when we buy polyester for $1, this fabric is $10 per meter and you lose thousands. But when you want to do something sustainable you have to R and D everything because it doesn't exist. Then you have to – the thing that we come up against the most is the minimum quantity. It's understandable. We work with a company and they don't want to work on something that you'll only buy 100 of but when you're trying to create something you come up against a lot of minimum quantity issues. And you look at the numbers and it's going to cost $20,000 more for inventory which we may not be able to sustain.' AB<br><br>'The cost of production of organic textiles is higher. Organic farmers cannot do things conventional farmers do. So it's more expensive to produce organic fibre. Plus you have to be ethical you have to pay fair wages to your workers. And this is more expensive. That's why the first challenge of sustainable fashion is the high production cost. I can't even cover my costs honestly, because I am charging more than $100 for a dress but people say, 'But I can buy a t-shirt for $5 at Kmart or Target.' And I have to try to explain to people, 'Well, this is made in Australia, made in my local field, you are helping another woman to survive. You are not supporting sweatshops and you are not harming the environment.' GE |
| Lack of Infrastructure | 'To an extent that there is no infrastructure left in Australia, you find yourself having to work very hard in finding organisations that can take your waste and generate something good/green from it.' MJ<br><br>'Unfortunately BC doesn't let any dye facilities. Which is a really great thing because we wouldn't want any effluent going into our waters but the new dying processes are really effective and there is no effluent. Technology has made leaps and bounds. Back in the 1999 era there were quite a few sewing and dyeing |

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| | factories and the dyeing factories were shut down because of pollution. Jumping forward to 15 years, possibly they would let them re-open if they could prove they were not polluting but it's quite tragic really because if we lose Winnipeg it's the only western Canada outfit that is doing this. So originally we purchased our fabrics pre-dyed but who knows what was happening to the fabric overseas…A major one that is hitting us now is the manufacturing and the dying. The manufacturing was shutting down in the 1990s because so many clothing companies were moving overseas. So in Canada we started really losing infrastructure. Back in the 1950s 90% of the clothing that was purchased in Canada was made in Canada. Now I doubt you'd find even 2%. So that is a huge challenge because when you do try to do it then you're faced with the difficulties of finding manufacturers (sewers, pattern makers, people with the correct machinery, the dying, etc) and that has been a big barrier…. China stole most of that manufacturing but it is now becoming wealthier so there are wage demands going on there. So we're seeing bigger companies moving at least some of their manufacturing back to Canada but a lot of the barriers have to do around the manufacturing aspect.' HC<br><br>'That was the hardest part in finding a spinner for my thread. One of my original goals was to have everything done right here in North Carolina. Bring back the textile jobs right here in North Carolina. The spinners that had been put out of business by NAFTA and things like that were not willing to re-open their plant and spin their organic thread for me. They would have rathered kept their people laid off and their plant idle waiting for some big military contract or something like that, that would keep them going for a few years, rather than to try something new and respond to the market and get those people back to work. It was really sad.' FA |
| Free Trade Agreements (ie NAFTA) Government Regulations and Attitudes | 'But yeah it went down. North Carolina was a textile state. We were textiles, furniture making and tobacco. I think it was around 50% of all industry was textiles in the US and after NAFTA it went down to 2%. My family has been in textiles for generations and when that whole thing happened there were a lot of people out of work. You can't compete with someone who will take 10 cents an hour…or even less a lot of times.' SP<br><br>'What you'll find, certainly in Australia, is that there has been a demise of the industry in the last 10 years. Protectionism measures that governments had put on the industry did not work. The tariffs were removed but the organisations that were recipients of the grants were not really achieving the desired effect.' MJ<br><br>'Then I applied to the Australian Government for a grant and support. I was told forget it, this is not sustainable, it is not a good idea, why don't you just go to China to produce and make money?" I don't want to do that. I am actually standing up against what my own local government is supporting. Sometimes I wonder, what the hell am I doing? I feel like I am taking water from someplace and just putting it in another place in the middle of the ocean. Even my own government doesn't support me. They think sustainable fashion is "hippy stuff".' GE |
| Hippy Branding/Stigmas | 'Overcoming the stigmas. Misconceptions. And creating economic models that are scalable. But just like in any business model it takes time. Relatively speaking the organic and sustainable fashion industry is still in it's infancy. But we're growing and we're growing strong and working through a lot of the early years of kinks. But it's just like technology. The internet bubble burst in 2000 but that doesn't mean the internet was going to go away, it just needed to work through the initial learning curves and bumps in the road. That's just, you know, inherent to the process of building a new business or a new movement or a new industry. SO I |

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| | think breaking the stigmas that you have to give up performance or price or style or taste, I mean, the movement has come a long way, where it's not this or that (as I mentioned earlier) it's this AND that. You can have great tasting food that's also organic. You can have styling clothing and bedding that's also organic. And those worlds are not mutually exclusive.' MZ |
| Integrity/Transparency | 'I think the biggest challenge that we have TODAY, which we're still working towards always is maintaining the authenticity of the claims because unfortunately when there's a movement that starts to gain traction economically and people see an opportunity, which is clearly what is happening around organic and natural foods and beauty and now fashion, you get a lot of people jumping on the bandwagon who don't have the ethical integrity to do it right and they just want to leverage the marketing value of saying that they're going good or they're doing something environmentally sound even if they're not and unfortunately that can compromise other peoples' efforts. So I think that maintain the third party accredited certifications and authenticity is pretty paramount and is an opportunity that is also a challenge right now.' MZ |
| Environmental | 'If Texas has a drought then there is no cotton available. We live at the hand of mother nature with textiles made from crops. And there are definitely many external factors.' AC |
| Energy | 'To change the world, it takes energy and commitment. You can only go as long as you've got the energy and let's hope you've inspired some people along the way to carry this forward.' HC |

There is an important difference between price and cost as barriers to ES champions in the FT industry. The cost barrier relates to the participant's production costs, 'First of all the fabrics cost more and then our manufacturing costs are higher' (HC), whereas price relates to the consumer and what the consumer is willing to pay for or not, 'Price, price, price. Because they're not rolling in the external negative costs of that price' (TS). These are barriers both to the profit margin of a company and from the consumer's culture and understanding of fashion. These tie in the third identified theme of consumers, but the theme that the consumer barrier is more about the lack of education (or desire to do something about what they have learned) regarding the clothing they buy. For example, one participant said, 'The consumers have really been seduced into cheap and disposable' (NM).

Table 5.13 below shows that price and consumers were major themes, and costs, infrastructure and governments were also important. In fact, these three themes are all connected, since in many cases, government regulations have caused the issues of costs and lack of infrastructure. For example, 'I can't even cover my costs honestly, because I am charging more than $100 for a dress but people say, "But I can buy a t-shirt for $5 at

Kmart or Target", and I have to try to explain to people, well, this is made in Australia, made in my local field, you are helping another woman to survive. You are not supporting sweatshops and you are not harming the environment' (GE), and 'A major one that is hitting us now is the manufacturing and the dying. The manufacturing was shutting down in the 1990s because so many clothing companies were moving overseas. So in Canada we started really losing infrastructure. Back in the 1950s 90% of the clothing that was purchased in Canada was made in Canada. Now I doubt you'd find even 2%' (HC).

Some additional minor themes identified include branding, transparency, the environment and personal energy.

**Table 5.13 Barrier Themes Identified and Their Frequency Cited**

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| Price | 7 |
| Consumers | 6 |
| Costs | 3 |
| Lack of Infrastructure | 3 |
| Free Trade Agreements (ie NAFTA)<br>Government regulations and attitudes | 3 |
| Hippy Branding/Stigmas | 1 |
| Transparency/Integrity | 1 |
| Environment | 1 |
| Energy | 1 |

## 5.6 Managing the ES journey

One question asked to each participant in the interview was, 'You've achieved some impressive things in your firm as far as ES is concerned. Tell me about your journey in becoming an ES champion'. This question elicited a broad range of responses, some are incorporated into motivational aspects above and some are found in the change management data below. Further, aspects of the ES change journey, in line with Wiesner's work were explored when applicable, such as the type of ES change, planning for ES

change, integrating ES into the culture of the firm, and management style employed when managing ES change (Chadee et al. 2011; Wiesner et al. 2010; Wiesner & Poole 2009).

### 5.6.1 ES Initiatives

Approximately half of the participants had in fact started their companies as ES champions, but the other half had made changes to become ES in the course of their journey through consumer and government demands. Whether an original ES champion from the start or a converted proponent of ES, the best practices/ES initiatives and change management strategies used by all participants are a key aspect of the results of this section. The first table explores all of the themes related to ES initiatives taken on by the participants in order of the most common to the least common. Following tables show the results for additional and relevant change management issues such as planning and strategy, and management of change and corporate culture.

**Table 5.14 ES Initiatives Identified and Quotes from Interview Participants**

| Initiatives Themes Identified | Interview Results |
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| Fibre Choice | 'Using the best ecological fibre that is not rough on the soil, which is hemp….by far the best. Because it grows like in 100 days and it grows so close together that you can grow it for 20 years on the same soil without harming the soil.' RE<br><br>'We have two ways of working. On one hand we work with knitters in Montreal (we are not in Montreal we are 2.5 hours from Montreal) So we knit all of our fabrics here. And then we know we have all the certifications for that. And on the other way we work with fabric suppliers and we don't have control over where it comes from. Sometimes it's from China, Taiwan. Even if it's an eco-fibre that doesn't mean the dyeing has been "green". But when we knit here we know the dyeing and we know everything after and we have certifications for the harvesting and the transformation after that. But it's very hard to track in the clothing. We try to do it as much as we can. There are fibres that are greener than others. We try to work with these fibres as much as possible. Hemp would be the greenest fibre. Then you can have the tensil eucalyptus and then bamboo. Like we have a lot of bamboo but we try to go towards eucalyptus because the transformation in bamboo uses carbon bisulphate used to dissolve the pulp and that releases gasses into the atmosphere and that affects workers in these shops. SO we try to go towards tensile. But it's hard because everyone knows bamboo and everyone likes bamboo. And fewer people know about eucalyptus. But we really try to go more towards eucalyptus because the transformation process is much more ecofriendly. They use a solvent that is 100% biodegradable and they re-use that solvent up to 99% and they use less water in the process. But it's hard to get people to acknowledge that and to purchase the eucalyptus instead of the bamboo. But we really try to use eco-friendlier fibres and that's the main thing we do.' AB<br><br>'It was to utilise a fabric which was less harmful to the environment than any other. It's an agricultural product. It's not a non-natural oil-based plastic fabric and it doesn't have the agricultural chemical problems that is associated with cotton. I suspect as I mentioned when we switched to the organic cotton blended fabric that was certainly one.' HC |

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| | ‘Wool is 100% biodegradable. When you think about it, all it is is grass and water at the end of the day…. Making sure that all our fibres/yarns are made to international eco-tex standards.’ MJ<br><br>‘We primarily deal with organic cotton and recycled fibres and all of that is USA based.’ SP<br><br>‘I think of something that has a positive impact from the growth of the materials to the putting the materials back into the circle of life. And how I see that with my thread is that the cotton is grown organically. So it’s not having any negative effects, in fact, it’s having a positive effect on the soil and the environment around all of those fields and the health of the people and animals around those fields. All the way through the processing, same thing, there’s no lingering environmental impact. And then once my products are used and say they’re used to sew up garments, if you’re going to use organic thread you’re going to use organic fabric, so it’s pulling in sustainable and positive other materials. At the end of that material’s life it goes into the compost bin rather than the trash heap and it recycles back into the earth so it doesn’t leave a mark on the earth.’ FA<br><br>‘I work with fibre – organic merino, and I also have my own alpaca farm so I use alpaca wool and I use ancient fibre-making techniques. So I use felt and knitting and I create my own textiles for my fashion collections and I use that. On top of that I use 100% sustainable organic GOTS cotton as well as silk. Because again with animal welfare I try to use vegan silk… Everything is from the nature. Nothing artificial there. On top of that, for me, as an artist, my materials are part of my concern. My materials are what the earth gives us but I never take anything.’ GE<br><br>‘Our goal is to work with 100% organic cotton jerseys and in the best case scenario we source this as locally or as regionally as possible. Today that means our cotton is grown in Texas and processed in North Carolina. Some of the majority of our products are seed to shelf, made in the USA, of course we try to use the trimmings and stuff like that as well but that’s rather difficult.’ AC<br><br>‘We use recycled fabric. Which means we get fabric from end of line stock, dead stock, stuff that’s about to end up in landfills…then we re-print it, which is our point of difference (the printing side of things), and then we make it into a product that we sell.’ NM<br><br>‘…great fashion and apparel at home that was using all sustainable manufacturing and ethical manufacturing and sustainable materials. And using only organic cotton, never conventional cotton, and only sustainable fibres and textiles, and gave people a great product first.’ MZ |
| Recycling/Waste Management | ‘Totally revisiting our waste. At the moment the offcuts are about 15% of the total production. We are currently sitting on about 6.5 thousand kgs of offcuts that I refuse to take to the dump. And we’re trying to identify ways of reusing or recycling those offcuts for other products. The offcuts may be used as shredding to use as fillers in toys or to shred them and use them as filaments for pet beds.’ MJ<br><br>‘We’re not a net zero waste company but we try to be a no waste company. We compost all out food stuff, recycle ..we used to make bio diesel.’ TS<br><br>‘We’ve begun using all post-consumer recycled paper in our packaging. And we try to utilise our scraps from our fabrics in other fabrications of other garments. So for instance if we cut something out of French terry or fleece, there may be 3-4 inches of waste off the side of the entire bolt of fabric but we can make something like baby mittens or baby booties and stuff like that and repurpose the scraps that would otherwise go in the trash can into something that someone could use.’ SP |

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| | ‘We never make waste. We’ve put automated processes and systems in place.’ ND<br><br>‘But what we do internally is we try to use the scraps, recycle everything, little things like a piece of paper is reused. Little things like that that can make changes. Obviously we’ve always recycled and we always compost everything that we can. We do a lot of things that we don’t see anymore. There are a lot of basic things that we do really to improve.’ AB<br><br>‘We’ve got a new strategy that we’re instigating. And that is we are going to take the adult wear we haven’t sold and recut it into children’s wear. We have to design differently now so they can be picked apart more easily. So instead of designing garments with multiple small parts, we’re designing garments with larger panels so I can use and reuse the fabric. SO the design aspect is as important to any part of the procedure. Now I’ve been doing that anyways because in trying to reduce the costs of my pieces I have been using as simple of designs as possible. Reducing seems everywhere so I can put the garment together quickly. But now that helps in being able to take it, cut it up, add another print to it and make it something else. This means that a garments can have two lives.’ NM |
| Local Supply Chain | ‘All of our labels are made locally. The furthest we go is to Montreal. Button suppliers. It’s good that Montreal is close to us because in Canada it’s kind of the place. Maybe Toronto is good also but we lost a lot in the beginning of the 2000s but there are still some who stayed there, like manufacturers and Quebec designers.’ AB<br><br>‘We made a commitment to Texas cotton in 2007 (8 years ago) and it’s been ongoing work to make sure that supply chain remains intact and cohesive and functioning.’ AC<br><br>‘There is always more we can do but getting it done is another thing and an example is getting our dyer closer to our sewer, which in this business would make a huge difference to our carbon footprint. We’re working on that. Every time we have a decision to make we aim to make the environmentally sound choice.’ HC<br><br>‘All of the organic cotton comes from the Texas Organic Growers Co-op at which point it is shipped to our spinning facility here in NC and then like I say everything is done as far as the manufacturing goes, aside from the farming of the cotton, within 120 miles of the Ashville headquarters. And we pretty much delineated that to be the minimal carbon footprint and the impact on the environment that we can potentially (unless we lived right beside the mills…they all are pretty much using the minimal energy, they’re taking strides to be low impact facilities.) do.’ SP<br><br>‘I can’t give you specifics, but if you look at our t-shirt…I can get into a car and within 600 miles touch everyone in a supply chain…and that makes running a transparent model a lot easier.’ SP |
| Lean Manufacturing | ‘We’re constantly looking at ways to improve the product while improving the social and environmental impacts of what we do.’ TS<br><br>‘We’ve not made any big changes in the last 5 years but we work every single day on that. Every day you read, you inform yourself, you look to do something in a better way. It’s ongoing. It’s not like you flip the switch and the light goes on. You have to run the program. Yes, always you have to be proactive.’ AC<br><br>‘It’s a journey around continuous improvement. I’m a big advocate about Lean Continuous Manufacturing. It’s about continuous improvement in processes, but it goes even higher than that - and it’s culture and values.’ MJ<br><br>‘We work together with an external team to work on long-term projects every week we have continual improvement engagement within the business itself.’ ND |

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| Dyes and Printing | 'We use water-based inks and dyes in all of the dyes we use and the dyehouses use a closed loop system - they recycle the water since it is a very water-intensive process.' SP<br><br>'When we use whatever chemicals that we use, that they are environmentally neutral.' ND<br><br>'All the colours, if you wonder, I use raw silk, which has no dyes no nothing, raw colour. And paint it with organic frozen berries from the supermarket, pomegranate, turmeric, ivy leaf, and purple carrot.' GE<br><br>'Sam then came in with his chemistry background and we developed, which is the backbone of our business is a new printing process. Because the one thing we identified on this triple bottom line was - We print t-shirts – and the important sustainability questions came out "What are you printing with? What is this chemical? What is the environmental impact?" We found out it contained PVCs and other chemicals so we went on a 2 year joint venture with Burlington Chemical CO to develop a new printing process. And then in the late 90s right before Burlington Chemical was going to be bought out, Sam came to us and said we needed to buy the technology while we knew who our partners were. And so he was critical there.' TS |
| Alternative or Reduced Electricity | 'We've installed a 54kwh solar power generation system. We're generating all of our own electricity, obviously any surplus goes into the grid when we're not using. But at this stage of the game we're generating 90% renewables.' MJ<br><br>'We recently installed a 8.3 solar array on the roof to complement the 2.5 tracking array that we put in the mid-90s. … We've continued to upgrade our lighting from the standard fluorescents to LED bulbs. The coolest thing we did in our plant was that all of the lights were up in the rafters and we had 1 light switch that flipped the whole building. What we've done now is dropped all the lighting to about 8 feet and it is motion detected. So you move through the plant and certain things cut on and certain things cut off. Prior to that the entire building was just on.' TS<br><br>'As far as the lights go. That's a very simple one. We've installed LED lights and decreased our energy consumption by 50-60%. So that's just a very simple – we've installed LED lights and limited our energy consumption by about 50-60%' SP |
| Bricks and Mortar Locations | 'We work with a friend of ours down at NC State who ran a horticulture program and developed a master plan. We're on 4 acres of property. We're in a little industrial park. We're the fruitcakes that don't mow the grass. We got cited by the city because our grass was too long. Anyway we built a permaculture plan for the facility. Permaculture long-term: everything from how we landscape, trellises for shade and all that, continue to grow the garden; we've added chickens, we've added bees. When you go in the building….it's little things over a long period of time that have an impact. And one thing is we've taken one bathroom and completely renovated it from bath 1.0. When we build our building 24 years ago of course you're going to put a light switch on, flush the toilets…the bathrooms have a tremendous environmental impact. So we took our bathroom and put in waterless urinals. Then we put a sky light in so we don't use any lights. And then we actually put a grey water system in. We capture the water somewhere else in the plant. Other than washing your hands, there is very little environmental impact. So we've done that in the last 5 years.' TS<br><br>'We actually won the Retailer of the Year Award for 2014 from the Vancouver Island Green Business Awards for the Best Renovation because everything we did in there has the best environmental impact. Recycled flooring. Recycled lamps. Low wattage bulbs. Our heating and A/C is a heat exchange systems and so we had done so much that we had more points than anyone else in that category.' HC |

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| | 'The factory that we've relocated to.. We moved into a new building 2.5 thousand meters squared in the Northern Suburbs of Melbourne, Brunswick. That property has been converted to house the knitting mill, the whole operation, all of the administration, And we've installed a 54kwh solar power generation system. We're now 95% self-sufficient. That's probably incorrect, it's probably 100% (the building also houses other businesses) but 95% is a safe number, a fair figure.' MJ |
| Remote Work/Modality | 'We can also choose to work remotely from my house I can do that (and other tech people also have the option to dial in remotely)…it saves me a lot of gas money and keeps the carbon into the air because all I have to do is have an internet connection and a computer.' SP<br><br>'One cool thing we did in the last 5 years is that we had a spike in energy costs and we knew that we're a spread out community and it would impact our employees so we got a map out. See where everybody lived. First of all we looked to see if everyone could car pool and that wasn't going to work. No mass transit no sidewalk. I occasionally ride a bike but I wouldn't recommend it. And we had 5, 8 hour days so we changed the whole production schedule to 4, 10 hour days…helped us financially but also environmentally.' TS<br><br>'We're not requiring all the things that an office job would require either. There's no commuting, daycare, going out to lunch, etc. Everything is minimal. I don't have any overhead as far as rent or office electricity and all that sort of thing. We are using only what we would use in our own homes so the environmental impact is vastly decreased. A long time ago they called this a virtual company. I don't know if they still use that terminology but that was the original plan that I had.' FA |
| Design | 'We work out ways of how to get utilisation. Utilisation and a long lasting product." ND<br><br>"My designs are classics. They are not meant to go out of fashion. Your daughter, granddaughter, they can all wear it. It is artwork. It is valuable. And when it is done, compost it and it can go back to the earth.' GE<br><br>'That's a good thing about our brand and I think we've been able to achieve that so far. We've got consumers wearing our products year in and year out. We make them better. We're very careful in our production side of things. But also we've been designing with that in mind. But also we're pushing that a bit further now. Melbourne's weather is not Canada. It gets cold here but not nearly that much. So what I'm trying to do, particularly reaching into next season is I'm creating collections now that meld a little bit more. As far as sustainability it's coming from the design practice as well. Although I better keep a little bit of excitement so I'm making stock all the time, I don't make it in large numbers, and I make sure that the range blends into the next. So that you can buy a piece form last season and from this season. So I'm trying to give the products more longevity that way. I don't think about a "season" (the consumer here has been educated with – "when's the next season?" if I don't give them something new to see they get bored really quick. They're attention span continues to shorten. So I have to give them something new all the time.) but I'm not doing it in large whacks of collections, I'm doing it in small numbers. I produce at the moment normally about 20 per style.' NM |

The majority of participants cited 'Green' fibre choice to be the primary way in which the ES champions interviewed had mitigated their environmental impacts. 'Using the best ecological fibre' (RE) as one participant put it. Hemp, wool, and 100% cotton

(produced as locally and ES as possible) were the three used. Green Supply Chain Management (GSCM) and the use of local labels, buttons, fibres, consumers, etc. all help to decrease carbon emissions, for example, ‘‘All of our labels are made locally. The furthest we go is to Montreal. Button suppliers. It’s good that Montreal is close to us because in Canada it’s kind of the place. Maybe Toronto is good also but we lost a lot in the beginning of the 2000s but there are still some who stayed there, like manufacturers and Quebec designers.’ (AB). The third most commonly used mitigation strategy was limiting wastes (recycling) and promoting alternative energies on site, for example, ‘But what we do internally is we try to use the scraps, recycle everything, even little things like a piece of paper is reused’ (SP). Many of the participants have solar panels, vegetable gardens, recycle, compost, etc. on site, such as this participant, ‘We’ve installed a 54kwh solar power generation system. We’re generating all of our own electricity, obviously any surplus goes into the grid when we’re not using’ (MJ).

Although these are the most cited ES initiatives, there were many other ES initiatives mentioned. The below table shows the frequency of ES mitigation themes mentioned by the participants. Following this table is a discussion of the less common, but still important ES initiatives brought up by participants.

**Table 5.15 ES Initiative Themes Identified and Their Frequency Cited**

| ES Mitigation Theme Identified | Frequency |
|---|---|
| Fibre Choice | 9 |
| Recycling (in house, packaging, fabrics) | 8 |
| Fossil Fuel Use (local supply chain) | 8 |
| Dyes and Printing | 4 |
| Alternative or Reduced Electricity | 3 |
| Bricks and Mortar Locations | 3 |
| Design | 3 |
| Remote Work/Modality | 3 |

Table 5.15 shows the top three (3) mitigation strategies for the ES champions in this study (fibre choice, recycling and decreasing fossil fuel use through local supply chains)

but product design, use and methods of dyes and printing, management of bricks and mortar locations, and working remotely are also important ES initiatives mentioned by participants. The way a product is designed and then produced can have a large or small impact on the earth. For example, 'We've got consumers wearing our product year in and year out. We make them better. We're very careful in our production side of things. But also we've been designing with that in mind', and, 'We use water-based inks and dyes in all of the dyes we use and the dyehouses use a closed loop system - they recycle the water since it is a very water-intensive process'. Furthermore, the way the bricks and mortar locations are managed can be a great mitigation strategy, such as, 'We actually won the Retailer of the Year Award for 2014 from the Vancouver Island Green Business Awards for the Best Renovation because everything we did in there has the best environmental impact.' Lastly, allowing some employees to work remotely can decrease a firm's impact, as per this participant, who said, 'We can also choose to work remotely from my house, I can do that…it saves me a lot of gas money and keeps the carbon into the air because all I have to do is have an internet connection and a computer'.

### 5.6.2 Managing ES Change Journeys

Themes related to strategic planning for an ES vision, creating an ES corporate culture and management styles of the owner-manager are presented below. Many of these themes denote success factors in implementing ES change or initiatives in a firm. The question, 'How do you plan for environmental sustainability? For example do you have a strategic plan of which environmental sustainability forms an integral part? Is it a written plan? or is it informal?' was asked.

The table below describes the data using three columns. The first is the plan/strategic management theme. Two themes stand out in the participant answers: 1) no plan, just in our DNA/who we are/values; and 2) it's in the mission, it's written. The second column shows the age of the company, from oldest to youngest, the third column shows the size of the company, and the fourth is comments from the participants regarding strategic planning. Although this is not a quantitative study reliant on statistics, the literature on planning in SMEs generally argues that mature firms and larger firms are

more likely to do formal planning (Wiesner & Millett 2012). Table 5.9 summarises the results relevant to ES planning in participant firms.

**Table 5.16 Strategic Planning and ES in Participant SMEs**

| Planning Themes Identified | Age | Size | Comments |
|---|---|---|---|
| Written and DNA | 2 | 30 | 'It started as an informal approach. It was driven by me as part of my personality, my character. But nowadays we have a sustainability policy document.' MJ |
| DNA | 8 | 10 | 'We don't have anything written as far as a sustainability plan or sustainability expansion in the future. We kind of still are living in the moment with the company. Obviously individually we really have the values of sustainability.' RE |
| Written and DNA | 15 | 40+30 contractors | 'It's part of the DNA. It's written in our mission statement and it's part of our strategic plan.' AC |
| Written | 16 | 50 | 'It's also around the business planning strategy and we get everyone involved.' ND |
| Written and DNA | 16 | 10 | 'It's written and it's part of our culture. We say it's in our DNA.' HC |
| DNA | 22 | 1+7 contractors | 'It's gut level. I don't plan. Every time I make a plan it doesn't work out. So I do what I think is right from day to day. And my moral compass is my guide.' FA |
| Written | 25 | 20 | 'Our mission statement is to respect the earth and all its people through clothing and content. So it is written.' SP |
| DNA | 27 | 100+ | 'To me, this has been in my DNA from the beginning of every company that I've ever created. It's not something that I'm trying to be, it's something that I just am.' MZ |
| DNA | 38 | 25 | 'Built into our DNA we've been doing it so long. We have a saying at [TS]: 'Sustainability is a journey not a destination' and I would say that I'm the one that's constantly driving and pushing.' TS |

Although it could be argued that a company's mission statement is its DNA – its code, this is not what is meant here. DNA here are the values and ingrained beliefs in the

owner-manager and staff, which arguably would be the DNA of an SME. Interestingly, the term 'DNA' was never used by the interviewer and any reference to DNA by the participants reflects their own beliefs. This will be discussed further in Chapter 6, along with the relationship between company size, age and the way in which they plan for ES.

The question, 'How have you managed to make ES part of your culture?' elicited strong responses in favour of leading by example. For example, 'Actions speak louder than words. I'm able to walk the talk and that in itself gives me some credibility' (TS), and the other was giving credit to the employees, like in this firm, where 'All the people who work here for a reason could easily get a job at Gap or J. Crew or something but…and a lot of them have actually been there, like myself, saw all the waste, saw how little you were paid to make a shirt, and left' (SP). The results to this interview question are tabulated below.

**Table 5.17 Cultural Management Themes Identified and Quotes from the Interviews Related to Each Theme**

| Culture Management Themes | Interview Results |
|---|---|
| Lead by Example | 'Walk the talk. I'm the real deal. I'm sure I have the car with the most biodiesel at TS. My employees know that I either make the fuel or run the fuel. My employees know that I probably spend more time in the garden than they do. They've seen my house. They've helped me start a co-op grocery store. Actions speak louder than words. I'm able to walk the talk and that in itself gives me some credibility.' TS<br><br>'Keep going… I keep doing it. Keep offering sustainable clothes. With the store here we try to have other brands that are eco or made in Quebec or made out of hemp. With the employees we have we tell them and often they realize what it is and they talk to other people. I think just by keeping going and not making much money and working hard.' AB<br><br>'I don't try to convince anyone of anything. If they ask me I'll tell them. And I will really tell them exactly the truth with facts and not emotions. I don't like politics. I don't get out there and picket or anything else like that. I'm not trying to make anyone else stop anything. I lead by example. This is what you can do. You just have to do it. In doing that, I've gotten noticed. I don't know how many magazine articles have been written about me and my business model. I mean, what a joke…business model? I'm just doing what I think is right!' FA |
| Employees | 'It's really just one of those things. It lends itself to becoming a part of the corporate culture because of the people who exchange their energy and resources. All the people who work here for a reason could easily get a job at Gap or JCrew or something but…and a lot of them have actually been there, like myself, saw all the waste, saw how little you were paid to make a shirt, and left, "made in Bangladesh? $68? Are you kidding me?" But it's |

| | |
|---|---|
| | written, therefore it becomes a part of the corporate culture, but I think that the culture itself created the corporate culture if that makes sense.' SP<br><br>'By informing employees. We have a pretty deep educational programming. The employees who work here really believe in what we do and are committed to the process and to all of our – they have the same wants, desires and commitments. You know, we live by leading I guess. And you have to be able to have set programs in place that aid the employees in doing that so you built in the infrastructure into the inventory to be able to order your pieces in advance and we commit to a certain amount of cotton each year because we want to secure that supply chain. And there are all kinds of ways that the employees have access to that at all times. Whether it is them having to go to the farmer's market, like this morning, that a farmer didn't deliver or our accountant who has to find enough money to purchase 20,000 yards of fabric at a time.' AC |
| Communication | 'It even goes back to marketing. Marketing is a very important factor in all this. If your customers become aware of what is driving the company – Merino and Jumbuck in this instance - Knowing that it is an Australian company, that it is going against all odds, and it is selling into Asia, the good old Australian merino wool – best in the world – and at the same time doing all the right things, to ensure sustainability and environmental protection, how can you not be successful.' MJ<br><br>'I will say that everything is transparent. Everyone knows that there's nothing to hide. If there are any issues that are brought up, we address them together as a team.' ND |

Lastly, management styles as a component of success factors in SME ES champions' journeys was explored in the research. In answer to the question, 'How would you describe your style in terms of managing this change?' A vast number of owner-managers explained themselves as on the ground, leading by example and working in the trenches to create a team in their organisations. Although the questions were different for these last two aspects of change management (culture and leadership) the themes identified are similar.

**Table 5.18 Leadership and Management Themes Identified and Quotes from Interviews Related to Each Theme**

| Leadership<br><br>Management Themes | Interview Results |
|---|---|
| Engage a Team<br><br>Hands off Approach | 'We engage a team. We work together with an external team to work on long-term projects. Every week we have continual improvement engagement within the business itself. We work as a team and we say, "OK what can we do? What are the options? What are the capabilities?" And it's actually creating a team by setting goals. We know where we want to be. It's all about employment and growth. And what do we all need to do to make sure we can all deliver that? It's also around the business planning strategy and we get everyone involved.' ND<br><br>'Even if I went to school in business I'm really erratic in my management. But it's who I am, it's in me. I always wanted to be my own boss. People who are here with us also….One of our tailor men makes prints on bags and makes his own bags. A lot of artists work here. And I create an environment where people like that are welcome.' AB<br><br>'Marketing is a very important factor in all this. If your customers become aware of what is driving the company – MJ in this instance - Knowing that it is an Australian company, that it is going against all odds, and it is selling into Asia, the good old Australian merino wool – best in the world – and at the same time doing all the right things, to ensure sustainability and environmental protection, how can you not be successful.' MJ<br><br>'I'm … I would consider myself very laid back. Big picture. I'm not a micromanager. I always tell people when I hire them: I'll give you an opportunity to see what you can do and do it. I'm not going to manage you nor do I have time to manage you. …We try to run our business .. we get together as a group, everyone gets together once a week. Then I have a bunch of…meet with different groups…sales, marketing, finance, …my best asset to the company is what I'm doing today – going out and seeing people. Connecting with the customer. I've got great staff, they don't need me day-to-day. I'm available if they need my help, I've got the tools to help…profit-loss, I've got all these tools, …which has worked out very well. And they understand if I'm out there I'm creating those relationships with current and new customers and that means more business for them…they call me the company cheerleader spokesperson. I'm out of the plant over 60% of the time. I'm more beneficial to the company being out.' TS |
| Lead by Example | 'I lead by example. This is what you can do. You just have to do it. In doing that, I've gotten noticed. I don't know how many magazine articles have been written about me and my business model. I mean, what a joke…business model? I'm just doing what I think is right!' FA<br><br>'Sustainability is a journey not a destination. And I would say that I'm the one that's constantly driving and pushing. I want to leave this planet in a better place then I came and I want to continue with that desire to go on. I tell people, too, to be successful like we are, it's got to start at the top. If it was only coming from the bottom and upper management only saw it as price it wouldn't really go anywhere. But I'm just so committed to and passionate about the triple bottom line, that I'm willing to drive this.' TS<br><br>'I don't compromise. If something doesn't feel right to me I don't do it.' MZ |
| Hands on Approach | 'I'm on the floor all the time. I don't sit in an office. I'm constantly engaging with people.' ND |

Engaging a team was the most common answer. It seemed to coincide with a hands on approach but an understanding that the owner-manager is better as a group than alone. It is a collaborative approach. These companies act with synergy. For example, 'I'm on the floor all the time. I don't sit in an office' (ND) said one participant, and another said, 'I lead by example. This is what you can do. You just have to do it' (FA). Many of the owner-managers mentioned the word 'team', such as 'We engage a team. We work together with an external team to work on long-term projects. Every week we have continual improvement engagement within the business itself' (ND).

These three aspects of change management (strategy, culture and leadership) will be further explored and discussed in Chapter 6.

### 5.6.3 Advice

The last question of the interview was to ask the participant to give other SMEs in the FT industry advice on how to start or manage an ES firm. The resounding advice was twofold: start slowly, and follow your heart. This is advice regarding how to succeed as an SME ES champion in the FT industry. Each participant's advice is below, in no particular order:

- 'Do it slowly. Do it properly. Understand what's required.' ND
- 'Start slow. Unless you have the cash flow but still…Don't buy too much fabric at first. Don't expect too much. Slow fashion. It's more slow fashion than fast fashion.' AB
- 'You have to have buy-in across your categories and you do that through education and conversations. Number 1. Number 2. In some cases you just bite off what you can chew. It's a really big picture and sometimes it's very overwhelming to look at the whole picture. So you just look at the piece where you can effect change and you change that. And then you take the next piece. People who write about this they say it all has to happen at the same time but for some businesses like ours you don't have the finances to implement those changes in broad sweeping strokes so you just implement what you can when you can. Diligence is another thing. Getting up every day and not resting on your laurels and thinking that this little piece can

be better and that little piece can be better and always …we always say onward and upward.' AC

- 'The world is changing. The advances in technology allow us to create successful small businesses. You don't need distributors anymore. You don't need reps anymore. You can go over the old distribution system with the Internet. You have to work harder than you would have. But the reward of knowing you're doing something good is worth it.' RE
- 'They have to keep it in the front of their minds all the time that every decision they make, they make with that in mind. As we've said before they may not be able to fulfill each term but at least they can keep it in mind during every decision. L: It's really important to stay connected to everyone that you can who is doing something similar. B: This is actually very important what you're doing because it might pull some of us together. L: one of the greatest periods in our business was when we had the green collective. Because we had a group of like-minded businesses that we met with all the time and that was awesome.' HC
- 'If you're doing this you're obviously doing this for reasons of your heart and never stop listening to that. You're gonna get knocked down but you can't let that deter you. You also can't compare yourself to others. Because you are unique in everything that you do. Even though you perceive people as a competitor, even though they do what you do, you can't view it in that light. Because you are, while you have a similar motive and structure, you make a completely unique product. That goes back to one of my favourite economic theories. Mash and the game theory: There is an equal and equitable outcome for all no matter what the variable. I think that holds true within the game of sustainability. There is enough here for everybody and everybody can win. And you just have to realize that.' SP
- 'You have to be small and nimble enough to take the changes in the market, and the education you get in sustainability…maybe what you thought was great they find causes cancer… then who knows what's going to affect you. And you have to be able to respond to those things. And stay true to your values. Your core values are your business plan. Other than that you have to be willing to move and change….Minimalist philosophy is going to help you across the board. People go

at business with everything at once. They make a business plan with all kinds of lofty goals. AND they borrow a huge amount of money and build this big thing. And then they find out if it's viable. If you start out minimally. Don't borrow money, don't make a plan, just get a few of your initial pieces of your product in the market…start small. Work your way up. Don't take big steps. Baby steps. Finance it as you go along. If you don't need it, don't have it. I don't have a printer. … (explains why). If you think minimally all the time, you'll run your business way better. And you'll be sustainable automatically. You're not wasting.' FA

- 'The personal satisfaction of the business you run is the life you live. Being in business to 30+ years I realize that there is more to business than the bottom line. And if you're always striving to maximise your bottom line, I think long term you may do well in business but you'll fail as an individual. Satisfaction of feeling very good about the path that we're on gives you a more holistic feel of your small part to the community and to the planet by doing this stuff. If I did this for money/income I would have quit a long time ago.' TS
- '(long pause) Well I recognise that every industry has got its own issues but when it comes to sustainability it's a responsibility, it's not just a choice. And everybody needs to, through their industry bodies, actively participate in finding long term solutions to what the environment deserves.' MJ
- 'That even if something does cost you more in the short term it usually will come back around and benefit you more in the medium to long term. So do the right thing and it will pay for itself. Sometimes you have to be willing to step back to step forward but just trust your gut and follow your truth and it all will work out. At the end of the day, this is where the world is going and it's not a question of if, it's when.' MZ

## 5.7 ES Outcomes

The question 'What have you found were the outcomes of being ES or the ES change? For example, on your staff, community, or the environment?' was asked. Additionally, 'Has this cost you a lot of money or have you saved a lot of money?' was often a follow-up question if required. These interview questions were asked in order to answer the research question: What organisational outcomes do SME ES champions in the Canadian, the American and Australian FT industry achieve from their ES initiatives? The results from the interviews relating to this aspect of the research are tabulated below, from the most oft cited outcome to the least oft cited outcome. A matrix tabulating exactly how often each outcome was brought up concludes this section.

**Table 5.19 Outcome Themes Identified and Participant Quotes**

| Themes Identified | Interview Results |
|---|---|
| Staff | |
| Happier | 'I think we've had some long term committed and happy employees.' HC<br><br>'It has a tremendous impact on the work environment here. It's the best work environment I've been in. People are closer. They're - I wouldn't say happier but I feel that way.' SP<br><br>'We keep our values internal. So what outcomes? Internally, it's a happier place. Happy employees, happy environment. That's what I've found: people are working together, there is more engagement, and we're problem solving together.' RE |
| Work harder/retention | 'We have employees who have been with us 8-9 years and noone has ever left because they are not happy here. Our wages are not high but nobody calls in sick unless they really are.' AB<br><br>'I think when people feel they are a part of something good, they look forward to working, and they want to be part of a shared vision. I think deep down all human beings want to do good in the world. I think that if we can engage more people around social purpose and environmental sustainability, where they are in resonance with their own personal values about protecting our own species and our own home I think everybody would chose that.' MZ |
| Physical/financial health | 'the quality of life our employees are afforded because of the wages we pay.' SP<br><br>'The benefits of sustainability go on from my own personal business bottom line to all my workers. Having the community garden for them is a huge food production for these people. And they're feeding their kids and it's for free. And it doesn't cost me anything.' FA |

| | |
|---|---|
| Education | 'No question it's impacted our staff. Up until recently…we tried stop smoking campaigns in the past…but I think …everybody…quit smoking. Basically it's the environment that we work in. By connecting with eating from the garden and have a day where we all gather stuff from the garden and all cook together. Being in this environment has changed those people. …now we've got some new hires that are smokers but I'm going to work on them.' TS<br><br>'With my seamstresses, helping them to understand what organic is and what's healthy and what's not… I've seen it follow through to other parts of their lives now too. Even their children.' FA |
| Financial<br><br>Cost savings | 'The sustainability factor itself has saved me a lot of money. That's in overhead. My electric bill for my office, home and everything is $130/month and I have 2200ft$^2$. I talk to other people with tons of other electric stuff going on in their buildings and they're paying $1000s a month in electricity. Surprisingly the big downturn in 2008 was when everything changed. All these big companies were shutting down and laying off and I had to triple my space. Because money somehow started to mean something to people. They wanted their money to be steering environmental or social work. And that's exactly what my stuff was, triple bottom line.' FA<br><br>'but it's unfortunate that a lot of people are still paying heed to the profit margin when really it's not that much more to make sure that your people are being paid fair wages and that you're doing everything possible to foster a sustainable relationship. In the long run it's definitely going to save. While upfront organic cotton is definitely at a premium right now. Back to the plasma tv example. So especially if you were to look at it apples to apples and compare us to Gap or JCrew, yes we've definitely spent more money. But in the long run when they come up with a true cost of environmental pollution I think that we've saved tremendously.' SP<br><br>'I think it's actually saved us money. Because through that process quality has improved. What is there not to believe? Taking your waste and turning it into something good…Even if you weren't a believer in current environmental impacts, negative impacts, even if you didn't believe in that, believe in waste. Why would you throw something away that can be used for something good? Why wouldn't you turn that into something useful? Even from an economic point of view that is increasing your bottom line, isn't it?' MJ<br><br>'As far as our brand, our product is concerned, we're directional but we're trying to make a product that's accessible. I'm not interested in being a high-end brand. We're more about having more of the product out there than less of it. So we're very careful about price point. The price point here in Australia is very competitive. Everything here is made overseas. But we still can be competitive because we use recycled fabric. Which means we get fabric from end of line stock, dead stock, stuff that's is about to end up in landfills…then we re-print it, which is our point of difference (the printing side of things), and then we make it into a product that we sell. That gives us an opportunity to cut about 60% of our costs. Form the word "go". Because "60% is the average material costs for apparently and the rest is labour costs.' NM<br><br>'2008 was the best year we had in the history of the company. It didn't really affect us as dramatically as others. We just kind of carried on and had the same sort of growth that we had seen before. I think because of the WAY we do business…we are sort of…immune is the wrong word, but…you know we're just a different kind of business model that isn't so attached to the economic fortunes.' AC |

| | |
|---|---|
| Losses | 'It's cost us a lot of money. I'm pretty sure that if we had done manufacturing overseas and didn't care about stuff maybe we would be wealthier but it's hard to know.' HC<br><br>'It costs more. When you have a fabric that you pay $13/meter instead of $2.50/meter it has an impact on the inventory and debt that you create. it's a harder sell. It's more work to say that you want this to be sustainable because you work sometimes against the current. For example if we were to work with a fabric supplier that sells polyester we can buy like 10 meters and we don't care about …We buy the fabric that we need and then we just sell it and we don't have to have any fabric inventory.' AB |
| Community<br><br>Local economies | 'I said to someone recently, 'you know, the dress maker who made that shirt will go to a restaurant here with the money I pay her and will go to a convenience store…' Everything is re-invested here compared to if you buy something at Walmart.' AB |
| Employment | 'We impact about 500 jobs in the state, which if we were buying an overseas product it would impact less than 20 jobs. The local vs global has all kinds of impacts.' TS<br><br>'I do think that people/our customers come to us in part because of those commitments. Because those customers come we're able to have a deeper employee chain and more jobs are created and so the outcome until now has been a positive one on our community.' AC |
| Awareness/ education | 'Creating an awareness in our own community and allowing that awareness trickle down and be spread throughout the entirety of NC and even further. We sell a lot of our textiles to a lot of other designers and individuals who are also becoming a part of this consciousness and want to be the change that they'd like to see.' SP<br><br>'That's the largest outcome in itself is just creating the desire for change to do things correctly and to do things in a better way than they were done before. In my mind that is the largest thing I've gotten from working with this organisation is the awareness and promoting the awareness. Definitely just getting people to think about clothing in the way they are starting to think about food. …Empowering everybody to make the change and be the change outside of working. SO picking up a plastic bottle off the side of the street and putting it in the recycling bin or being the squeaky wheel with your friends who may not be recycling. Or composting or what have you. Ashville is a hippydippy type of place so a lot of people think that way already anyways but it's empowering people here to do simple things like turning a light off when they leave a room or just thinking about these small things that end up adding up.' SP<br><br>'The business community that knows us [here] recognises who we are and they may not do it themselves but we hope that we are helping them to change their ways as well.' HC |
| Competitive strategy | '…And I think that element of transparency has changed the game. It's not about staying ahead anymore it's about being left behind. If you're a business and you're not thinking about this, you're going to be out of the game, it's just a matter of when. It's set our brand apart. It's given us a point of differentiation and it's created opportunities for us. That we have been able to add value to some of our retail partners and I think it's set us apart from the pack because we are through and through authentic brands. And I think that's really imperative, that if you're going to tell a story you have to be willing to be fully transparent about that story.' MZ |

| | |
|---|---|
| | 'It's definitely more costly to run a business this way. You just run a business where profits and social responsibility and ecological responsibility are all equal partners. So it's not just about the money it's about good finance, good stewardship, good work.' AC<br><br>'In 5 years time, what is the global expectation? Going green is going to be common in 5 years time. If you don't adapt to the new way of thinking you'll be falling behind.' ND<br><br>'It's a lot easier of a discussion today, why we do the things we do, and our customers…I just left this guy from New York, he came all the way down from NY! And I was reminded that we've got to deliver a high quality product on time, but the asset that we bring in regards to where our product's made and how our product's made – there's a growing community that understands the value proposition and looks beyond just the price. Environmental sustainability along with social sustainability has kept us in the game. If we had not taken that path, and were only focused on price, … we wouldn't be in business. Because the business that we left…is a commodity, globally driven, business based on price and we'd be out of business. There's no way we would be able to do what we do and stay in this country.' TS |
| Environmental<br><br>Water<br><br>Carbon emissions | 'And consequently on the environment because maybe it makes people change their minds on the fashion industry and fabrics in general.' AB<br><br>'Everything is very connected, everything is tied together in one way or another. Even though these toxic chemicals are getting dumped in India, well, water is all connected, it evaporates into the atmosphere and rains here and we get sprayed with the same chemicals - but we dumped it in their water in the first place.' SP<br><br>'600 miles in a marketplace that normally does it in 13000 miles? We have an impact. The products we produce…we produce a t-shirt, "dirt to shirt" in 600miles.' TS<br><br>'If I had all my numbers in front of me I could tell you how many CFCs were kept out of the environment for us doing everything within 120 miles.' SP |
| Personal<br><br>Pride<br><br>Health/ struggles | 'It's nice to be known as a green business.' HC<br><br>'Being healthy is a big positive in all this. But one of the impacts on my life that I never expected was loneliness. I wanted this virtual company and I wanted everybody to be able to work out of their homes but I battle loneliness all the time. I get up I come downstairs and I'm at work. And that's wonderful. I love that I'm not sitting in traffic, but I constantly have to think of my personal wellbeing and getting out and socializing.' FA<br><br>'My friends and some staff all think I am wasting my money. They all think I am in the ocean like rowing in a direction but there is no land. They think 'oh great, but…' at the end of the day I am exhausted. I am tired. I have no money. I have no support from any one.' GE |

‘The benefits of sustainability go on from my own personal business bottom line to all my workers’ (FA) said one participant. Happier, more dedicated, harder working, better educated and aware staff were key positive impacts identified by the ES champion. Not only did the participants indicate their staff were happier and more dedicated, but they (owner-manager) felt happier and more dedicated too, ‘Internally, it’s a happier place’ (RE) said one participant. Improved employee retention and engagement is summed up in this participant’s quote: ‘We have employees who have been with us 8-9 years and no one has ever left because they are not happy here’ (AB). Moreover, the beneficial outcomes are to employees directly (which come around to benefit the company in the long run) such as improved health due to using organics or having access to vegetable gardens on site and improved awareness and education, like ‘With my seamstresses, helping them to understand what organic is and what’s healthy and what’s not… I’ve seen it follow through to other parts of their lives now too’ (FA).

Participants believe they create positive community outcomes as well, such as: stronger local economies, ‘Everything is re-invested here compared to if you buy something at Walmart”; local employment, ‘We impact about 500 jobs in the state, which if we were buying an overseas product it would impact less than 20 jobs’; and a more educated and aware community, ‘Creating an awareness in our own community and allowing that awareness trickle down and be spread throughout the entirety of NC and even further’.

Considering the previously mentioned barriers of costs and price, it is noteworthy that while some participants recognise the cost of doing business in a sustainable way may be financial in some ways, ‘It’s cost us a lot of money. I’m pretty sure that if we had done manufacturing overseas and didn’t care about stuff maybe we would be wealthier but it’s hard to know’ (HC), the majority of participants also see positive financial outcomes to being an ES champion. This is due both to decreases in costs when less utilities are used, ‘The sustainability factor itself has saved me a lot of money - that’s in overhead’, as well as a competitive advantage leading to more financial success, ‘It’s set our brand apart. It’s given us a point of differentiation and it’s created opportunities for us’.

Of course, as ES champions, outcomes of ES initiatives have positive outcomes on the environment. The two cited environmental outcomes were water, for example, ‘Even

though these toxic chemicals are getting dumped in India, well, water is all connected, it evaporates into the atmosphere and rains here and we get sprayed with the same chemicals - but we dumped it in their water in the first place', and carbon emissions, for example, '600 miles in a marketplace that normally does it in 13000 miles? We have an impact. The products we produce…we produce a t-shirt, "dirt to shirt" in 600 miles'.

The final outcome theme identified is personal. The pride felt is nicely identified through one participant's simple statement that, 'It's nice to be known as a green business' (HC), and personal health, too, like 'Being healthy is a big positive in all this' (FA). However, some participants did identify personal costs. The frustration felt is made clear in this participant's quote, 'My friends and some staff all think I am wasting my money. They all think I am in the ocean like rowing in a direction but there is no land. They think "Oh great, but…" at the end of the day I am exhausted. I am tired. I have no money. I have no support from any one' (GE).

The matrix below shows the commonality of each theme. As can be seen, positive outcomes to staff was the most commonly identified theme. Financial costs and losses as well as positive impacts to community were the second most commonly mentioned themes. This frequency of specific outcomes mentioned may be due to the way in which the questions were asked, however it remains clear that the participants interviewed see a plethora of positive outcomes, both within and beyond their businesses from being ES.

**Table 5.20 Matrix of Frequency of Outcome Themes Mentioned in Interviews**

| Outcome Theme Identified | Frequency |
|---|---|
| Staff | 9 |
| Cost Savings/Losses | 7 |
| Community | 6 |
| Competitive Strategy | 4 |
| Environment | 4 |
| Personal | 3 |

## 5.8 Summary

Throughout this chapter, themes identified in the participant interviews have been tabulated and discussed as they related specifically to each research question. Each section tabulates and discusses the data briefly relating to each research question. Attitudes and the definition of ES, social and subjective norms, and perceived behavioural control themes all help to answer RQ1. Motivation and drivers that were identified in the interviews are then discussed to answer RQ2. RQ3 asks about how intentions turn into actions, and data related to barriers and expectations are tabulated within this section. Then, the change management journey is discussed for RQ4, bringing in data related to mitigation strategies, culture, leadership and overall advice. Lastly, business outcomes observed by the participants are tabulated to help answer RQ5. Now, all of this data along with comparisons to the literature from Chapters 2 and 3 will be discussed to conclude the dissertation.

# CHAPTER 6 – DISCUSSION, IMPLICATIONS AND CONCLUSIONS

## 6.1 Introduction

Chapter 2 set the tone for this dissertation by providing a context for the study. The contexts of environmental sustainability (ES), small and medium enterprise (SME), change management, and the geographical and industrial limitations were discussed followed by theoretical underpinnings. Chapter 3 provided context to the study by outlining the research questions, current research relating to those questions, and identifying research gaps in the literature. Once this basis was established, the results of the study were revealed in tables and brief explanations within Chapter 5.

In this chapter, the new and the old pieces fit to make the whole picture clear. The results are first compared to the literature, one research questions at a time. Then an international comparison is conducted on the data. Following the outlining of results compared to previously identified literature, a host of implications are identified: implications for theory, practice, policy, and further research. Lastly, the chapter ends with a final conclusion of the entire study.

## 6.2 Discussion

The main objective of the research was to determine what factors impact upon the intentions of small and medium enterprise (SME) environmental sustainability (ES) champions in the Canadian, the American and Australian Fabric and Textile (FT) industry to behave in an environmentally sustainable way, and furthermore, how they manage their environmental sustainable change journeys and what their outcomes have been. What the interviews aimed to unearth were the contextual issues underpinning ES champion attitudes, motivations, actions and subsequent outcomes that have not been fully explored in previous studies. The contextual factors discussed in Chapter 2 and the literature review in Chapter 3 both provide the conceptual base on which to extend existing explanations to simplify, reconnect, and redirect theory. Drawing on the information from these chapters and leaning heavily on the data from Chapter 5, each research question is discussed in this section.

### 6.2.1 The Factors Influencing the Intentions of SME ES Champions to Behave in an ES way in the Canadian, the American and Australian FT Industry

Previous studies have used the Theory of Planned Behaviour (TPB) to explain intentions leading to pro-environmental behaviours (PEBs). However, even though intentions are believed to be the best predictor of behaviour (Ajzen 1991; Armitage & Conner 2001) they do not account for over half of the differences in behaviour, known as the 'intention–behaviour gap' (Sheeran 2002; Webb & Sheeran 2006). Moreover, use of social-cognitive theory can also explain PEBs (Sawitri et al. 2015). Drawing on both the cognitive and social theories of behaviour as well as previous studies exploring how TPB can be used to explain both intention and PEBs in SMEs as discussed in Chapter 3, this study aims to answer **RQ1:** What factors influence the intentions of SME ES champions to behave in an environmentally sustainable way in the Canadian, American and Australian FT industry? This question is answered both through the TPB and its three co-requisites (attitudes, subjective norms and perceived behavioural control) as well as both motivation and Expectancy Theory (ET). To help answer RQ1 this first section will discuss the links between the literature and the data collected for this study as it relates to the TPB and the sub-questions:

> RQ1a: What and how do attitudes impact ES champions in the FT industry's intentions and ultimate actions in implementing ES initiatives?
>
> RQ1b: What and how do subjective norms impact ES champions in the FT industry's intentions and ultimate actions in implementing ES initiatives?
>
> RQ1c: What and how does perceived behavioural control impact ES champions' intentions and ultimate actions in implementing ES initiatives?

The key component to the model of TPB is behavioural intent, which is what RQ1 and the sub-questions aimed to uncover within the context of SME ES champions in the FT industry. Within the TPB, behavioural intentions are influenced by the attitude about the behaviour as well as the evaluation of the risks and benefits of the perceived outcome. According to Ajzen (1991) attitude refers to the degree to which a person has a

favourable or unfavourable evaluation toward a particular behaviour. The possible outcomes of performing the behaviour are also considered in both the TPB and ET.

The results reflecting ES champions in the FT industry's attitudes indicate three attitudinal themes, including: emotional, social, and economic. Participant attitudes toward operating a business in an ES way more often spanned all three themes, but logically most of the participants recognised their actions were attributed to more than just anger or passion (anger toward the degradation of the earth and a passion to do something about it), or more than just environmental or social responsibility. Instead, their attitudes recognised a larger picture of social and economic benefit as well.

The definitions of ES given by each participant in the interviews also added to an understanding of their attitudes toward ES. Many of them explained ES as it related to the FT industry (fabric choice, local production, dyes and printing, etc.) but many also identified more holistic (bigger picture) aspects of ES, with relationships, decision-making, and continuous improvement promoting an organisation's ability to do less harm to the environment while at the same time remain financially healthy. None of these attitudes or definitions are particularly surprising. The important aspect to the attitudes of ES champions is how they have been incorporated into other aspects of decision-making and then turned into intentions and actions, as per the TPB.

With regard to what and how attitudes impact ES champions in the FT industry's intentions and ultimate actions in implementing ES initiatives, positive attitudes regarding social and environmental responsibility was evident as well as the economic benefit to ES initiatives in their businesses. Participants' attitudes were all positively focused on taking their emotions (passion) and doing good (social and economic impact). These results are in line with other literature (Roxas & Coetzer 2012; Kaiser et al. 1999; Cordano et al. 2004; Aoyagi-Usui et al. 2003; Tilley 1999) suggesting that pro-environmental attitudes of an SME's owner-manager play a large role in impacting pro environmental behaviours of the firm.

Moreover, there are other factors at play with respect to both the TPB and behavioural intentions, which brings in the second aspect of TPB, subjective norms. Subjective norms refer to the belief about whether most people approve or disapprove of a behaviour, which relate to a person's beliefs about whether peers and people of

importance to the person think he or she should engage in the behaviour (Ajzen 1991). These 'people' can be in the form of books, movies, news, parents, partners, staff, etc. Social norms are also referred to here since they are customary codes of behaviour in a group of people or larger cultural context and are often grouped under subjective norms (Ajzen 1991).

The most commonly referred to subjective norms (external driver/motivator) identified by the participants was either books, people, or timing, and often an answer would incorporate all three of these external drivers. Many examples of this were evident and are listed in Table 5.6. Where someone grew up, when and with whom were their mentors, and the media they consumed all affect their attitudes and intentions toward a particular behavior. Further, cultural and government themes were identified as social norms impacting the participants, particularly government. Government, attitudes and control measures were addressed as external drivers of some of the participants, but largely in the case of NAFTA in North America, which essentially decimated textile manufacturing in both the US and Canada in the 90s. Detrimental legislative changes in Australia had similar effects on Australian participants, but these are found later on in the 'barriers to converting ES intentions into ES actions' section.

With regard to RQ1b: What and how do subjective norms impact ES champions in the FT industry's intentions and ultimate actions in implementing ES initiatives? Based on the TPB and previous studies such as Cordano and Frieze (2000) indicating a positive relationship between subjective norms about environmental regulation and an environmental managers' preference to implement ES activities, and Sánchez-Medina et al. (2014) who found that both the perceived behavioural control to undertake ES actions and the attitude toward this behaviour have a positive influence on the intention to implement ES actions, it was assumed that perceived social norms would have a positive influences on both the attitudes toward PEBs and the perceived behavioural control in carrying them out.

A further example in the literature is Papagiannakis and Lioukas (2012), who found subjective norms affect corporate environmental responsiveness (CER), with their effect in fact being stronger than that of attitudes. However, the impact of subjective norms seemed far lesser than that of attitudes within the context of this study. In general the

participants did not seem to take the aspect of subjective norms very seriously. Their tone and desire to expand on the topic of subjective norms indicated admission of the factor but not an interest or passion for the role subjective norms have played for the most part. Further, the ES champions' answers to subjective and social drivers seem to implicate very few external drivers. Instead, participant answers incorporate more intrinsic motivation (more on internal motivators in the following section on motivation). The feel is that yes of course they were affected by culture, family, books, where or when they grew up, but plenty of other people also grow up with exposure to the same things and choose not to go down a path of being ES at all (let alone an ES champion). This is why attitudes in RQ1a above and perceived behavioural control in RQ1c below also lend to identifying the whole answer to RQ1. Motivational and intrinsic drivers and Expectancy Theory are also brought into the mix of the theoretical framework in RQ2 and will loop back to help answer RQ1 once they have been discussed.

Perceived behavioural control is the third and final factor for behavioural intentions within the TPB. Williams and Shaefer (2013) found that the pro-environmental SMEs in their study had personal values that seemed to go hand in hand with a sense of personal responsibility and an internal locus of control. In the TPB literature, an intention or subsequent action will not occur unless some element of behavioural control is perceived by the individual. Two themes were evident regarding perceptions of control: 'Yes all me', and 'External Factors Also' (see Table 5.7). Not one participant indicated that she/he had no or little control, and those who indicated there were other externalities were being pragmatic. For example, 'Yeah for sure I think I can control it but on the other side I cannot control who buys and what the market is' (AB).

The theoretical underpinning of the importance of perceived behavioural control on behaviour harkens back to the TPB as per previous discussions. Further, previous studies by Howell and Shea (2001), Cleveland et al. (2005), Fransson and Garling (1999) and Kollmuss and Agyeman (2002) suggest that that individuals (both consumers and managers) with an internal locus of control are more likely to implement ES initiatives. Further, in studying ES champions in Argentina, Brust and Liston-Heyes (2010) show that when an owner-manager has an internal locus of control and attitudes and values that make them more attentive to environmental issues, their company is likely to display pro-

environmental intentions. Brust and Liston-Heyes (2010) conclude that firms that are managed by individuals who think that environmental deterioration is a costly but a solvable problem, are more likely to show pro-environmental intentions and the results of this work echoes that of the results herein.

Regarding RQ1c: What and how does perceived behavioural control impact ES champions' intentions and ultimate actions in implementing ES initiatives? Perceived behavioural control appears to be a critical component toward the attitudes, intentions and subsequent behaviour of ES champions. All participants indicated they perceive some control, and half of the participants suggested it was in fact 'All Me'. Moreover, every individual who answered within the 'Yes all me' theme was American. This is discussed in section 6.3 International Comparison.

Motivation will now be explored as an additional factor influencing the intentions of SME ES champions to behave in an ES way. The motivational aspects, along with barriers and expectations in the following sections all have additional impacts on converting the intentions into actions.

### 6.2.2 The Factors that Motivate SMEs Toward ES

This section connects both the literature and the interview data to help answer **RQ2:** What motivates ES champions in the Canadian, the American and Australian FT industry to engage in environmental sustainability? In doing so, again the TPB will be used since the TPB states that behavioural achievement depends on both motivation (intention) and ability (behavioural control) and it is more likely that the behaviour will be performed when the motivational factors that influence a given behaviour are stronger, causing the intention to perform the behaviour to also strengthen (Ajzen 1991). Based on additional literature, the values and attitudes of the individual owner-manager are critical in a SMEs motivation to implement pro-environmental behaviours (PEBs) (Tzschentke et al. 2008; Haddock-Fraser & Tourelle 2010; Windolph et al. 2013). However, it is this motivating factor that has proved the most complex to investigate, given its humanistic nature.

Economic benefits and drivers (motivations) often provide a strong basis for the business case for sustainability (Schaltegger et al. 2012; Braungart et al. 2002). Wiesner et al. (2010) showed that the majority of SME ES champions in Australia were driven to

make ES changes in part due to marketing and green company image. Further dominant drivers identified by Wiesner et al. (2010) were the desire to make a difference, the desire to do the right thing, and business opportunity. Some less common drivers identified in Wiesner et al.'s same report included support from government, a desire to do things better, minimising environmental impact, environmental regulation, supply chain constraints and stakeholders. The results of this research found very similar motivational drivers, and all of these are discussed below.

Some of the possible external drivers (motivators) were discussed in section 6.2.1 under social and subjective norms. Stakeholders could be considered social norms, however in the case of the literature the main stakeholder pressures come from consumers and this is often interplayed between additional government and societal pressure. Ultimately these three stakeholders are often impacted by one another (society and consumers put pressure on governments to increase environmental regulations, and increased environmental regulations or a change in government can change the societal norms and consumer expectations, etc.). However, largely due to the fact that the participants are ES champions and not just compliant businesses, *compliance* motives (ex: to avoid penalties for not complying with regulatory measures) are not present in promoting ES in these businesses, unlike most others (Winter & May 2001; Prakash 2001). Therefore, the government, societal and even consumer pressures that are often major drivers for ES initiatives in SMEs did not come up in the case of assessing motivational drivers in ES champions in the FT industry.

On the other hand, the two other motivational drivers/pressures previously mentioned in Chapter 3, business pressure and personal motives, were both identified in the interview data. Haddock-Fraser and Tourelle (2010) found that ES initiatives in SMEs may be motivated by financial improvements (e.g. cost reductions) and this was echoed by many of the participants of this study. Although this was not a major motivator to the participants, instead it was seen more as a bonus to doing business in their way. Darnall (2003) emphasises the increase of sales and the reduction of costs as a motivator to be ES, and again in this study, this motivator was recorded, but not as a driver per se. Further, Bansal and Roth (2000) describe legitimation and competitiveness as motivations for ecological responsiveness (in addition to ecological responsibility). Some participants of

this study recognised the connection with increasing their competitive edge through ES actions, but this was a very minor theme identified in motivational drivers. Other business case motivators for SMEs to innovate ES change include creating advantages in recruiting good calibre staff, seeing it as a new business opportunity, or recognising a long term view on investment (i.e. understanding that resources are finite). Still again, many of these motivators did not come up directly in the interviews; however, the outcomes of better staff, new business opportunities, and long term investment were identified during the business outcomes aspect of the interviews.

While economic arguments and external pressure play a role in motivating ES initiatives, Williams and Schaefer (2013) found that the most notable motivation for managers to engage with environmental issues were personal values and beliefs. In particular, in environmentally pro-active small firms, ecopreneurs or those who belong to a green business network, the personal values of owner-managers seem to play a much stronger part in motivating PEBs than in other SMEs (Lawrence et al. 2006). This was certainly seen in the results of this study.

The results herein further show major internal motivators (see Table 5.8). These include the desire to inspire others to act in more ES ways or the desire to make changes within the industry and society. Further internal value motivators recorded included the desire to be an entrepreneur, being a ‘natural greenie’, being an ‘early adopter’ as well as a desire to educate consumers and others, the internal values regarding the environment, personal health and a desire to prove others (naysayers) wrong. In fact, only 3 of the 23 recorded motivators included business/economic motivators, and even 2 of these 3 were more rationales for the ES behaviour and not necessarily motivational aspects.

ES champions are anomalies in a way. They seem much more intrinsically motivated than even the literature indicates. With a lengthy list of intrinsic motivations dominated by the wish to inspire, educate and make positive changes, it could be said that these ES champions are inherently idealistic. At the very least they are acting on their values and ideals.

Certainly attitudes, subjective norms and perceived behavioural control discussed above largely contribute to answering RQ1, but these aspects coupled with the strong

intrinsic motivators recorded in this study make for a tsunami of intentions, breaking down both the perceived and real barriers discussed in the following section.

Although the aspect of amotivation discussed in Chapter 3 is not relevant in ES champions, since they already behave in pro-environmental ways, barriers are strong demotivators, even in the most motivated of individuals or firms. Common barriers perceived and experienced by SMEs relating to ES change are discussed in the following section on converting ES intentions into actions.

### 6.2.3 Converting Intentions into Actions

It was evident from the literature review that SME owner-managers with positive attitudes to the environment (RQ1) and a motivation to improve their environmental practices (RQ2) do not always translate this worldview into action (Tilley 1999; Wang et al. 2007; Drake et al. 2004). One group of major factors that limit a SME's ability to convert their ES intentions into pro-environmental behaviours (PEBs) is barriers, which were in the interview in order to help answer **RQ3:** What factors play a role in converting the intentions of SME ES champions in the Canadian, the American and Australian FT industry into behaviour/action?

Expectations are first explored here because Expectancy Theory (ET) can help to explain how motivations in SME owner-managers can impact their intentions and ultimate ES actions. ET can predict how an owner-operator will act based both on their belief that an expected outcome will occur if they act in a certain way, and on their desire for this expected outcome. Therefore, ES champions' expectations help to connect ES intentions with ES actions.

ES champions' expectations regarding the future results of their ES actions segway nicely into barriers because many of the expectations cited by participants reflect their frustrations and the barriers they work to overcome on a daily basis. The most common expectation the interview participants had was to make change and educate consumers (See Table 5.10 and Table 5.11). This was a common motivation as discussed in the section above, and therefore it is unsurprisingly a common expectation based on the strong perceived behavioural control identified in RQ1c. Other participants further connected their intrinsic values and motivation with expectations of job satisfaction. Frustrations

were detected when participants discussed their impatience with consumers, largely relating to the three themes of educating, immediate buy-in, and financial success. Because although the participants expected these things, they argue they have not accomplished these things.

Further, an interesting answer recorded in two of the interviews was an initial answer of expecting 'nothing'. These participants argued that this is just the way to do business, that they simply would not do it at all if they had to do it any other way (i.e. not in an ES way). This shows the strength of intrinsic values to behaviours in the participants, as well as their tenacity and stubbornness to operate their businesses in an ES way. Thanks to this strong value set and tenacity, the participants do not let their frustrations nor other identified barriers (discussed now) get in the way of their impressive PEBs.

Barriers identified (see Table 5.12) by interview participants show themes of costs, price, consumers, lack of infrastructure, government regulations and trade agreements, branding, integrity and environmental. The matrix of barrier themes (see Table 5.13) indicated costs, price, consumers, infrastructure and government as most prevalent, but price and cost are by far the largest barriers to the participants.

With regard to converting intentions into action, a characteristic common of SMEs is resource poverty, which can be a major barrier for an SME in innovating ES initiatives (Wiesner et al. 2010). SMEs can find it more difficult to come up with the required investment for ES implementation; however when they do, the potential improvements could be significant to the future success of business (Masurel 2007). This was represented clearly in the results of this study, particularly in that cost and price barriers were identified as the top 2 themes of barriers for ES champions in the FT industry. Cost and price are two different barriers, as explained in Chapter 5. Cost being the cost of manufacturing ES textiles (i.e. organics are more costly than non-organics) and price is the price to the consumer, sometimes causing the champions to price themselves out of a market.

Barriers identified by Wiesner et al. (2010) in ES champions in Australia further included: government control and regulation; a lack of involvement in ES by other major companies (which is perceived as unfair); the time consumption of compliance for compliance sake; a lack of funding sources; a lack of time to invest in ES or learn about grants or rebates; differences regarding how individuals think about sustainability; and a

lack of interest from landlords owing to the cost of ES initiatives which may impact on them. Similar to Wiesner et al.'s (2010) barriers, government control and regulations were certainly identified as barriers within the themes of this study. However, the additional barriers identified by Wiesner et al. (2010) were not identified in this particular study. This may be due to the homogeneity of the sample, being all in the FT manufacturing sector (whereas Wiesner et al.'s 2010 study was completed across a large variety of industries) and the small sample size in general.

Moreover, Post and Altma (1994) outline two types of environmental change barriers in their Four Settings Model: (i) industry barriers such as capital costs, community concern, regulatory constraints, information and technical knowledge; and (ii) organisational barriers such as attitude of personnel, senior management, quality of communication and past practice. The first type of barrier, industry barriers, was identified in this study, with all themes identified (see Table 5.12) having some relationship to industry barriers as set out by Post and Altma (1994). However, organisational barriers were not identified in this particular study. This could be due to the fact that only SMEs were interviewed and only the owner-manager of the SME represented the view of the SME. Perhaps in smaller organisations as well as looking at the organisation from the top, organisational barriers are not as apparent to this group of participants.

Williams and Schaefer studied barriers in their 2013 study on green SMEs in England and created 3 barrier types: stakeholder, business, and personal. Some of the barriers identified by Williams and Schaefer (2013) were anticipated in the end, such as limited HR or time resources, but very few were identified themes in this study. The only themes identified in this study that were also identified by Williams and Schaefer (2013) are found in the theme of Stakeholders, such as government policies and government tax schemes. Moreover, some of the barriers identified by Hillary (2004), such as lack of assistance, underestimating resource requirements and additional demands on existing staff were not particularly apparent in this study either.

The barriers identified in this study relate largely to money. The lack of resources characteristic common in SMEs coupled with the lack of consumer awareness, the size and support for the organic textile industry locally, and the subsequent increases in costs due to all of these factors, add major barriers to the ability of the participant SMEs to

operate financially successful businesses. Government regulations/deregulations and attitudes as well as consumer attitudes relating to the 'hippy' assumptions of 'green' fashion add further challenges. Only one participant recognised personal energy as a barrier during the interviews.

With regard to RQ3: What factors play a role in converting the intentions of SME ES champions in the Canadian, the American and Australian FT industry into behaviour/action? Expectations that intrinsic and strong values will be met by taking the actions seem to be a major factor in converting ES intentions into ES actions and this was also identified in RQ1. Overcoming the barriers identified is another factor. The barrier aspect of this study is particularly important in being able to take this information and help other SMEs to become more ES. Not all SMEs will have the strong attitudes, values and expectations that ES champions in this study do, therefore they will inherently be more influenced by barriers. Many of the barriers to ES implementation identified in previous literature were absent from the themes identified in this study. Again, this could be due to the homogeneity of the sample and/or the difference between the FT industry challenges and barriers and other industry barriers. Either way, overcoming barriers is a critical step to turning intention into action.

The act of implementing ES initiatives may be instigated by a wide array of motivating factors, which impact the actions taken. SME ES actions range from resistant, reactive, anticipatory and innovation-based, to sustainability-rooted (Klewitz & Hansen 2014) and all of these roots to the mitigation strategies and ES initiatives were observed in the interviews. The mitigation strategies are discussed in the following section. The literature and the data from this study relating to success factors or best practices of how to implement ES initiatives will also be discussed as part of the following section.

### 6.2.4 Managing the ES Journey

Section 3.6.1 and section 3.6.3 discuss the literature relating to **RQ4:** How do SME ES champions in the Canadian, the American and Australian FT industry manage their ES

change journeys? This includes ES initiatives and ES management issues (such as planning, culture, management style and advice) and are discussed separately in this section.

#### 6.2.4.1 ES Initiatives in SME ES Champions in the FT Industry

Recent studies have found that currently many SMEs engage in at least some ES activities (Cassells & Lewis 2011; Revell & Blackburn 2007). As mentioned earlier, these activities are often referred to as pro-environmental behaviours (PEBs) and throughout this section will also be referred to as 'mitigation strategies'. A valuable contribution of the research herein is a stock-taking of the various PEBs (ES initiatives/mitigation strategies) that SME ES champions in the FT industry across several geographic regions utilise with success.

The mitigation strategy aspect of the ES journey is an important one and themes form the interviews include: fibre choice, recycling, decreased fossil fuel use through both localised supply chains and alternative energy sources, design, dyes and printing, bricks and mortar locations and remote work/modality (see Table 5.14). The most common mitigation themes were: fibre choice, recycling, and decreased fossil fuel use.

ES mitigation strategies in SMEs promote the development of products and services that incorporated environmental benefits (Jenkins 2006). Successful implementation of ES actions requires the deliberate management of economic, social, and ecological aspects of a business (Kehbila et al. 2009; Perez-Sanchez et al. 2003). In this way, new products, processes, and organisational structures are integrated into the entire being of the organisation (Rennings 2000) and this was very apparent in all participant firms of this study. Most sustainable innovations in SMEs are directed at improving technological processes (eco-efficiency) and lowering the costs of production (Bos-Brouwers 2010) which were both observed themes in this study but are not necessarily major themes. Fibre choice and recycling neither promote eco-efficiencies in production nor do they lower the cost of production. They do, however, promote eco-effectiveness, which is a primary goal in ES.

The most common PEBs in the FT industry are identified in the literature as: recycling of textile wastes (Cuc et al. 2015); novel dyeing processes to increase eco-

efficiency (Parisi, Fatarella, Spinelli & Pogni 2015); emerging energy-efficiency, greenhouse gas (GHG) and pollution mitigation technologies (Hasanbeigi & Price 2015); and wastewater reuse programmes such as separating waste effluents based on their pollution level and then their separate treatment (Vajnhandl & Valh 2014). All of these mitigation strategies from the literature were also identified as themes in this study, though again, the main theme identified is not present in the list. Although the 'Fibre Choice' mitigation theme identified as the strongest theme in this study was not reflected in the literature review. This could be explained by the smaller size of the sample as well as the fact that they are 'champions', thus leading the way with the newest and best green practices in the industry, some of which may not be reasonable or feasible to many other SMEs in the industry and may also not be worth the extra cost to larger firms or more established brands.

However, the literature further identifies ecological footprint analysis (Butnariu & Avasilcai 2014), the adoption and implementation of environmental management systems (EMSs) (Lo et al. 2012), and guidelines for the design and production of sustainable energy saving fashion products (ESFPs) (Moon et al. 2013) as potentially powerful mitigation strategies in the FT industry. Unfortunately, none of these mitigation strategies were identified in this study at all by any participant of the study. This is again likely due to the smaller size of the companies and therefore the lack of resources and expertise characteristic as EMSs and even footprint analysis can be expensive and skill-intensive programs to implement.

Other actions to mitigate environmental damage and become ES as well as to succeed (i.e. overcome barriers and see positive outcomes) are identified in the literature. These promote: a focus on strategic capabilities and core competencies, specifically related to technology (Hoffmann et al. 2003); being part of networks such as environmental agencies, trade associations and local governments (Williams 2014; Chetty & Campbell-Hunt 2003; Narula 2004); and fostering industry-wide environmental management programs (EMP) (Cordano et al. 2010). Moreover, SMEs can rely heavily on informal networks of industry peers (Howell & Shea 2001; Jenkins 2006). Further, stakeholder involvement and support can influence the type of programs implemented by firms (Delmas 2009). However, none of these strategies were identified in this study. Perhaps

this is due to the time commitment and complexity of these tasks, when again with the often resource-poor SMEs, ES initiatives tend to be ad hoc and less structured.

Lastly, Bos-Brouwers (2010) found that emissions, transport and biodiversity remain under-addressed by SMEs in their mitigations (pro environmental behaviours). These mitigation strategies were in fact identified in this study through the themes of fossil fuel use mitigation and localised green supply chain management. It is clear by the data from this study that ES champions in the FT industry manage their ES journeys through well thought out mitigation strategies. Exactly how this is done vis a vis corporate culture, leadership style and strategic methods will now be discussed.

#### 6.2.4.2 ES Management

By specifically focusing on SMEs in Australia after an ES change, both Wiesner et. al. (2010) and Chadee et. al.'s (2011) research show how characteristics of champion organisations manage change as they become ES champions. Clear steps and stages in implementing ES change in SMEs were concluded to be: (a) design; (b) internalisation; (c) implementation; and (d) evaluation. Contrary to other change management models developed within the ES context, which argue for a step-wise process of change, Wiesner et al. (2010) found that the ES change process in SMEs does not occur in a linear fashion. Certainly neither linear nor organised methods were observed in the participant organisations of this study, which makes sense, since it is known that SMEs generally adopt reactive strategies (Wang et al. 2007), and SMEs tend to follow business instincts in order to reduce resource use and waste (Esty & Winston 2006), whereas the larger a company is the more strategic it tends to be with ES management (Jenkins 2006).

Factors important to the successful implementation of ES change have been identified in the literature as: 1) having a strategic plan; 2) incorporating ES into the corporate culture; and 3) management style. In the participant organisations, about half had changed to be ES and the others had simply started their companies as ES champions. Since not all firms participating in the study had undergone major ES change, not all were asked the change management interview questions, however, the identified themes regarding strategic planning, corporate culture and management style are still useful (see Table 5.16, 5.17 and 5.18).

Several strategic approaches to ES change in SMEs are identified in the literature. They include: differentiating products on the basis of green positioning, cutting costs through environmental improvement programs, helping to shape the industry's regulations, managing environmental risks, and redefining markets (Klewitz & Hansen 2014). A strategic approach to environmental management helps an SME to manage ES change. A question such as 'What has been your ES strategy?' was not directly asked in this study. This will be a suggestion in the section on Implications for Further Research discussed later in this chapter. Instead, the question 'How do you plan for ES change?' was asked.

Data was collected on whether the participants planned or had a written plan for their ES initiatives. Klewitz and Hansen (2014) argue that the best way for SMEs to approach 'green strategic management' is to prepare a 'green strategic plan'. However the majority of the research already referred to indicates very few SMEs actually do this, therefore it is no surprise that many of the participant firms neither planned nor even wrote down their ES goals and strategies. Most of them, rather, said it was just 'part of [their] DNA'. In this study, 'DNA' denotes the values and ingrained beliefs in the owner-manager and staff, which arguably would be the DNA of an SME. Interestingly, the term 'DNA' was never used by the interviewer and any reference to DNA by the participants is their own wording.

An initial hypothesis was that a strategic plan would be written in more cases of older companies. However, there is no pattern relating the age of a firm to their tendency to have a written plan in the results (see Table 5.16). Moreover, prior to completing Table 5.16, the results were ordered by size of the firm to see if there were any patterns related to whether the size affected propensity to strategically plan for ES; however no patterns relating to the size or age and way in which a participant organisation planned for ES was observed in this study.

'DNA' was identified when answering questions related to planning, but it could also be included as part of a company's culture. Companies with sustainability integrated in their culture radically innovate new products and cooperate strategically with stakeholders (Bos-Brouwers 2010). But there is very little research regarding how this is done in SMEs, and particularly in SMEs during and after ES change management. What

is known, however, is that in SMEs, the owner-manager's VABEs (values, attitudes, beliefs and ethics) largely determine the corporate culture, and these VABEs potentially influence both the goals and strategies of the SME (Franco & Matos 2013). The results of this study (see Table 5.17) indicated that the majority of participants managed culture by being who they are and leading the green movement in their business by personally setting an example for their employees. In turn, some of the other participants gave the credit to managing an ES culture to their great employees. However it is likely both the owner-managers and the employees attracted one another based on similar values.

Prominent literature on change management for ES suggests that moving toward environmental sustainability (ES) often requires both attitudinal and cultural changes within a firm. Reinvention of organisational norms is often required for the transformative nature of ES change. This transformational change runs deep in an organisation. So deep that it can be risky and involve new ways of thinking and doing that may be irreversible (Benn et al. 2006). Cultural change cannot be enforced, rather, it must evolve over time with leadership and communication being built upon trust and transparency (Benn et al. 2006). The participants in this study did not indicate that culture or cultural management were particularly important aspects of their change management or ES management implementation, suggesting this aspect of change management came easily to them in their ES change journeys.

Leadership style could also be reflective of organisational culture and DNA. An SME owner-manager's VABEs and goals are likely to shape the organisation's culture as well as the way in which the SME owner-manager communicates to their employees (Atkinson & Curtis 2009). The literature regarding leadership in SMEs suggests that the leadership style of these ES oriented companies is informal, committed, creative, and entrepreneurial (Nulkar 2014). SME owner-managers are usually much more involved in their business and they are able to manage it better because of this. The way in which this applies to ES change and this research is that the SME owner-manager is able to communicate their attitudes and motivations readily to their staff and be actively involved in the change process, managing it in the way they see fit.

The results in Table 5.18 show that most ES champions interviewed described themselves as very hands off, with a preference to engage a team as opposed to micro

manage. Leadership style was determined to be less important than leadership strength by Dunphy and Stace (1993). And although leadership strength was not measured in this study, the passion and ownership that each participant brings to their business indicates strong leadership qualities.

It is lastly noteworthy that Wiesner et al. (2010) identified many practical ways for turning intention into action for SMEs managing ES change. These include but are not limited to: getting involved with a green business network; reconsidering what the business does; taking on outside suggestions and help to change behaviour; following-up on environmental grants; promoting better coordination between government and local councils; developing a 'one stop shop' for finding information about ES issues; finding other business people and networks to help to overcome financial barriers; getting involved with ES award systems after successfully employing ES initiatives; and building in-house skills.

The participants of this study helped to create a similar list through their advice given to other SMEs wanting to go down this path of running an ES SME. The last question of the interview asked the participant to give other SMEs in the FT industry advice on how to start or manage an ES firm. Each participant's advice was listed in Chapter 5. Themes from the advice given include: going slowly and listening to your heart; doing the right thing because it will always come back around to benefit you in the end; and keep on this (ES) path because the rest of the world is going to catch up sooner or later.

In summary, the answer to how ES journeys are managed by ES champions in the FT industry in Canada, America and Australia, is a complex one. Based on the results from this study, planning and strategising take a back seat to the actual actions undertaken. Management style appears to have little impact as does the corporate culture aspect of managing ES change, since many of these owner-managers just are who they are, do what they do, and let others catch up.

### 6.2.5 ES Outcomes

A challenge in determining positive or negative outcomes is the definition of 'outcome'. Here they are grouped into financial outcomes and non-financial outcomes. Financial indicators include return on investment (Lo et al. 2012), profit margin, market

share and sales growth (Dam & Petkova 2014). However, more and more companies are looking at non-financial outcomes as indicators of success. These non-financial indicators include employee retention or community involvement (Wilhelm 2013), quality improvement, waste reduction in design and equipment selection, lead-time reduction for manufacturers (Melnyk 2003), and human resource sustainability outcomes (Wiesner & Mcdonald 2001).

Chapter 3 (section 3.7) explored the conflicting evidence in the literature regarding ES change and organisational outcomes. A large body of research argues that there are plenty of positive organisational outcomes to 'going green', including financial, staff engagement, community impacts, and (the obvious) environmental impacts (Delmas 2009; Rowden 2002; Melnyk 2003; Zeng et al. 2010; Chadee et al. 2011; Lo et al. 2012; Wilhelm 2013). However, other researchers have shown in manufacturing industries in general, that ES change can have negative consequences to a business, particularly to the bottom line (Qinghua Zhu et al. 2007; Dam & Petkova 2014).

Some of the identified themes in this study include those also found in the literature, such as gaining competitive advantage (O'Shannassy 2008). A major positive outcome identified in the literature and in this study was how the impacts of the changes to human capital have been shown to significantly improve employee retention and satisfaction (Wilhelm 2013). Rowden (2002) found that the creation of a working environment that fulfills individual human, social and psychological needs (as in the case of ES champions) allows organisations to reap the benefits of increased productivity, improved products and services quality. This was clearly apparent in the outcomes of the ES champions in this study and positive outcomes to staff were the most identified theme in this study.

Furthermore, the interview results highlighted more personal and qualitative outcomes not identified in the literature. These include personal pride of being a green business and the positive outcome of educating their communities (re ES and impacts of textiles). These outcomes can in and of themselves influence the success of a business on many levels, including financial ones.

Outcomes and the measurement of positive or negative outcomes can be affected by not only the definition of 'outcome' as discussed earlier, but also many other factors, such as the time frame of the study. The initial investment, internal or external resistance to the

changes, depth of the change, method of change, and even the industry will also affect how the business outcomes are perceived or measured. This is important to consider when seeking consensus in the literature as to whether ES change positively or negatively affects business performance. It is important to note in the case of measurable outcomes that the shortest time frame of any of the ES champions interviewed in this study was 18 months. This is relevant in that many ES initiatives are costly and complex and often the full extent of the outcomes cannot be observed for months if not years. This helps to argue the point that ES change overall, over time, positively impacts a firm, the communities in which they operate, and the earth. Many of the researchers who attest that ES change has negative consequences on the bottom line talk about 'immediate dips' in stock prices (Qinghua Zhu et al. 2007), or only talk about the poor financial outcomes but do not speak in terms of non-financial outcomes.

The results (see Table 5.19) demonstrate the plethora of positive outcomes (both measured and observed) identified by participant ES champions in the FT industry. Hence regarding **RQ5:** What organisational outcomes do SME ES champions in the Canadian, the American and Australian FT industry achieve from their ES initiatives? The following themes relevant to outcomes were evident: staff (happier, work harder, retention, physical health, education); community (local economies, employment, awareness/education); financial (cost savings, competitive strategy); environmental (water, carbon emissions); and personal (pride). Furthermore, the most prevalent outcome theme to business were cost savings/losses and competitive strategy. In fact all participants identified these outcomes in some capacity. Following this, in order of most addressed, outcomes to staff (majority of participants), community (half the participants), the environment (one third), and personal (one third) outcomes were also identified.

Although there is still no consensus on the relationship between environmental management or performance and business performance (Zhu et al. 2007) the results of this study adds to the body of research that clearly shows positive outcomes on many levels in firms that 'go green'. Further, firms that 'live green', (i.e. their owner-manager is a true believer in sustainability and incorporates it throughout their lives) also enjoy long term benefits such as happier staff, retention and community engagement.

## 6.3 International Comparisons

Throughout the interviews, the transcription and the data analysis tasks of this research, the participant countries were constantly being compared to one another and the researcher took many notes throughout of both the similarities and differences between the main two different groups (North American vs Australian). Some of the themes identified with regard to differences (or similarities) within geographic regions of the study are now discussed, again in relation to the study's research questions.

Prior to building data tables and comparing the data this way, word queries were conducted in NVivo to get a sense of the themes per country throughout the interviews.

From these word queries, participants from all countries commonly used words like 'people', 'things', 'make', 'environmental' and 'think'. In contrasting the two regions, however, words that came up with great frequency in the Australian interviews were 'product', 'change' and 'fashion', whereas these were hardly detected in North American participants. Furthermore, 'business' and 'work' were the more commonly used words in the North American interviews in comparison to Australian participants. Expectations were thus set to anticipate similar differences in responses, especially related to aspects of both motivation (RQ2) and outcomes (RQ5), and in some cases this was true.

The attitude themes pertaining to RQ1a were spread out proportionally for the most part within all major themes. This indicates that both the attitudes and definitions of ES across countries are similar in ES champions and thus perhaps this data could be used across additional geographic regions. RQ1b studied subjective norms of the participants, and all of those who recognised government as subjective norms were North American (one Canadian and two American). Over two decades ago, NAFTA had major effects on the entire industry, on the social fabric of North America, on the way consumers perceive how things can and should be made there, and on the Made in USA agenda. North American participants spoke of NAFTA decimating the manufacturing industries, including furniture, electronics and textiles. Lastly, RQ1c explored perceived behavioural control and every company who answered within the 'Yes all me' theme were American. Culturally, it seems that Americans tend to be more independent and egoistic. Additionally, out of the three Canadian participants, only one was from English speaking Canada, which is culturally much more similar to America than French speaking Canada (many would argue that French-speaking Canadians are more similar to their European

ancestors). It is this English-speaking participant (HC) who also perceived their behavioural control to be very high.

Within the realm of motivational factors (RQ2), intrinsic motivators such as doing good for the environment and the participant's own personal health were only identified in American participants. Within the 'other intrinsic values' theme, the two participants who identified wanting to be entrepreneurs as part of their motivation were also North American (one form Canada and one form the US). But this is starkly similar to the geographical differences/similarities in outcomes (RQ5). In comparing geographical regions for outcomes, it was found that all staff outcomes were identified only by North American participants. Happier staff, staff retention, education of staff and more financially and physically healthy staff were only identified by North American participants, whereas not a single Australian participant recognised outcomes to staff.

Also, community/local economies/employment/awareness/education outcomes were all identified by American participants, and environmental (water/carbon emissions) were all North American.

There seems to be a clear connection between participant motivators and their perceived outcome. This will be identified below in Implications for Further Research. Lastly, as far as outcomes, Australian participants seem to put more emphasis on the traditional business outcomes (financial) and economic impacts and the country as a whole. This in indicative of where Australia is at compared to North America, in consumer awareness and societal/government support, or at the very least, they seem to be several years behind.

The answers to RQ3 discussed both the initial expectations and experienced barriers of the participants. The expectations of immediate buy in, financial success and 'nothing' were all expressed by North American participants. Australian expectations were more about linking their jobs with their internal values and expecting to make changes in their industry and educate consumers. This may very well be a cultural caveat and cultural management and the differences found in leadership across countries in this study will all be discussed further along in this section and again in Implications for Future Research.

In Wiesner et al.'s (2010) report, one of the main barriers identified in Australian ES champion SMEs was the government. Issues such as a lack of assistance and support from

the government, the cost of doing business domestically, the government favouring imports, a lack of understanding from government regarding the needs of SMEs, major constraints placed on SMEs by government regarding laws and regulations and compliance issues, a lack of coordination in government departments, a lack of expertise regarding particular business issues, and difficulty in finding the right person to deal with are all related to government. Many of these issues came up in interviews with Australian participants in this study but not with North American participants. The barriers identified by North American participants with relation to their governments stemmed only from NAFTA. The remainder of the barrier themes identified in this study were equally shared across geographic locations. It is important to note then that these ES champions on the other side of the world from one another identify similar barriers to cost, price, consumers, and infrastructure and this will be discussed in Implications for Policy and Practice.

The final international comparison to discuss in this section is the ES journey (RQ4). As far as mitigation and strategy are concerned, ES initiatives identified (Table 5.14) show an even spread through the major themes, but some of the more minor themes such as design and modality were location specific. Designing garments in ways that decrease consumption was a theme only addressed by Australian participants. Modality such as working remotely or limiting driving to work in other ways (4 day weeks vs 5, and promoting walking or biking to work) was only addressed by American participants.

There was no connection detected between the strategic planning aspects of written plans with goals in comparing countries and SMEs. References to ‘it’s in our DNA’ were also heard across all countries, which is discussed again in Implications for Policy and Practice as well as Implications for Further Research.

Understandably, some of the more obvious geographical differences observed occurred in the questions regarding managing corporate culture and managing people. Cultural differences are apparent in the way corporate culture is managed during ES change in all three themes identified (see Table 5.17). All ‘lead by example’ are North American. All manage the culture through ‘employees’ are American. All manage culture through ‘communication’ are Australian. Interestingly, in the leadership management section, the ‘lead by example’ theme identified, were all American participants.

Having critically discussed the results of this study in view of the literature, the following sections discuss the implications of the research, and how the results contribute to theory, methodology, policy and practice, and bring forward some implications for further research.

## 6.4 Implications for Theory

The theoretical underpinnings related to this study included the Theory of Planned Behaviour (TPB) for RQ1 (1a, 1b and 1c), along with Expectation Theory (ET) and Self-Determination Theory (SDT) for RQ2 and RQ3. Then, the Dunphy-Stace Contingency Model underpinned RQ4. However, it was only the TPB, ET and Dunphy-Stace's Contingency Model applied to ES change by Benn et al. (2014) which became the most applicable theories over the course of data analysis and were thus the theories primarily used in discussing the results of this study. This study adds depth to the potential use of these three theories in that it applies them to a special group - ES champions in the FT industry.

The TPB was used in order to assess attitudes, subjective norms and perceived behavioural controls as factors that influence ES champions in the FT industry. Furthermore, one of the key components to the TPB is behavioural intent, and this is influenced by the attitude regarding the likelihood that the behaviour will have the expected outcome, as well as the subjective evaluation of the risks and benefits of that outcome, which incorporates both motivations from RQ2 and barriers from RQ3. Figure 6.1 The Conceptual Framework Conclusions from the Study follows the theoretical framework originally proposed in Chapter 3, and summarises the identified themes from the interview results. It is discussed now as well as in the Conclusions.

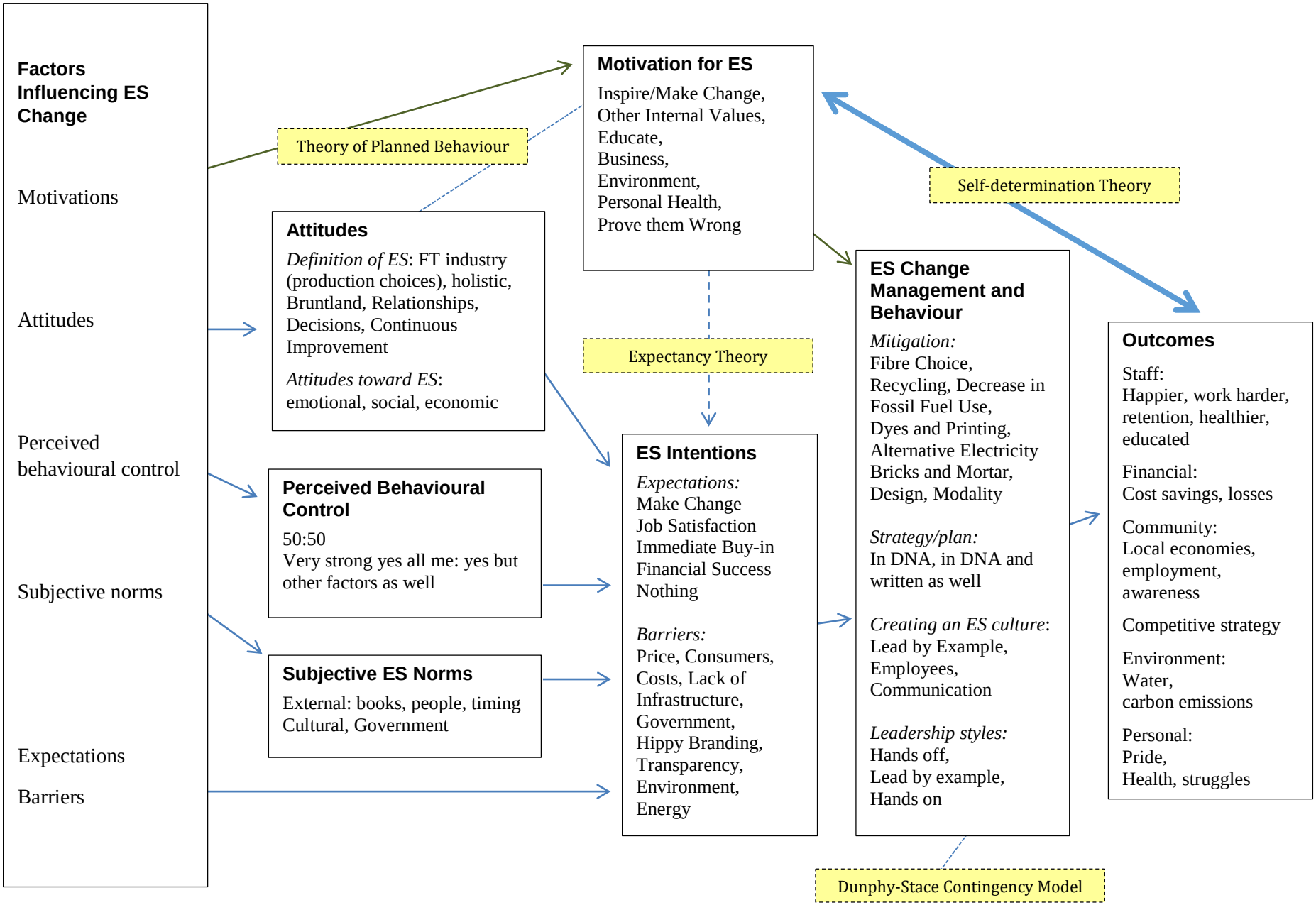


**Figure 6.1 The Conceptual Framework Conclusions from the Study**

Due to the qualitative nature of the study, weight is not placed on the relationship of each theme or relationships between variables (i.e. attitude, subjective norm, motivation etc.). Having said that, throughout the interviews and within the discussions in this chapter, a qualitative understanding of the strength of the variables was perceived overall in the participants. Participants spoke of their attitudes, expectation and motivations at length and with great passion. In contrast, they followed up questions regarding subjective norms and behavioural control with short, succinct, detached and more 'business' type of language. Therefore it is argued here that attitudes, expectations and motivations are much stronger drivers within the theoretical framework for the participants than subjective norms and perceived behavioural control. This is discussed again in Implications for Further Research

The influence/strength of each factor could be a useful contribution of this research to theory-building with respect to ES change management as well. With strong attitudes, expectations and motivations as well as some perceived behavioural control and some subjective norms, participants were poised to overcome even the strongest and most frustrating barriers in their ES journeys.

The change management (ES journey) aspect of this study relied less on theoretical underpinnings and more on exploration. However, based on previous work by Dunphy, Stace and Benn (Benn et al. 2004; Benn et al. 2006; Benn & Dunphy 2014), as well as Wiesner and Chadee (Chadee et al. 2011; Wiesner et al. 2010) it was expected that strategic, cultural, and management aspects would all be important factors of both incorporating and maintaining ES change within participant organisations. The conclusions of this part of the study were congruent with the literature in that the SME owner-managers tended to create a corporate culture through leading by example and considered themselves 'hands off' leaders who simply lead by example as their style. One interesting aspect not mentioned in the change management theory that was identified in this study was the impact of 'DNA' on the ES champions' perception of the strategy and planning that takes place in their firm. The majority of participants perceived planning and strategy of ES to simply be in their DNA and thus harkens their ES actions back to the strong attitudes and motivations identified earlier in the process.

Lastly, many impressive mitigation strategies (PEBs/ES actions) were identified in this study, as were many positive outcomes to being ES. The connection made after analysing the data between motivations and outcomes (participant motivations were directly linked to the outcomes they identified) was not anticipated, therefore there were no previously identified theoretical

underpinnings related to this relationship. Upon further research it was identified that this is in fact an aspect of Self-Determination Theory, where strong intrinsic motivation will determine the outcomes of a behaviour. This was observed directly in this study, however, no research was found in the literature relating to this theory and the application of anticipating particular outcomes based on particular motivations to SMEs' behaviour or ES behaviour in business.

## 6.5 Implications for Policy and Practice

As with any pragmatic ontology, it is important that the study has a breadth of applications. One of the major goals of this study was to provide practical implications and applications to both private sector managers as well as public sector managers. Implications of this study will now be discussed first for SME managers and then for policy makers in the following two subsections.

### 6.5.1 Implications for SME Managers

Beyond the practical advice given by the participants to SMEs considering the ES path, this study's results, as indicated by the discussions above, form a wealth of guidance to SME owner-managers at any stage of their ES journey. Figure 6.1 in fact could be used to help SMEs determine where they are at, and where their strengths and weaknesses lay in relation to ES change. SME managers could also use this figure and the data to help choose some of the many mitigation strategies identified. Alternatively, perhaps the plethora of positive outcomes identified could help in creating a case to go green among any stakeholder.

Because this study focused on successful ES SMEs in the FT industry, other SMEs in the same industry who want to become ES can use them as examples. Based on Figure 6.1, at every stage of the process the values and attitudes of the owner-manager are critical in pursuing and implementing ES change. SME managers wanting to move their company into an ES leadership role need to also "walk the talk" and live ES values in their personal lives. Moreover, the framework of Figure 6.1 gives owner-managers ideas about what potential barriers they may encounter and how to overcome them through motivations and change management. This is then a best-practice guideline for the owner-managers to observe how ES change has been done successfully (all motivations, attitudes, PEBs etc in Figure 6.1) and how they may benefit from it (Outcomes).

For example, SMEs can observe that the champions in this study used specific mitigation tactics (PEBs) such as: Fibre Choice, Recycling, Decrease in Fossil Fuel Use, Dyes and Printing, Alternative Electricity, Bricks and Mortar, Design, and Modality; thus, SMEs wanting to go ES especially in the FT industry could try these mitigation strategies first. Furthermore, the SME ES champions in this study identified how their strategy or plan of attack for ES change was more than anything simply in their DNA. In this regard, SMEs wanting to go ES would benefit from a cultural change first (if needed) before making the actual process and product changes required to be ES. This cultural change can be made again using the champions in this study as an example, where it was identified that owner-managers created an ES culture through Leading by Example, Employees, and Communication. These owner-managers may also benefit from studying the leadership styles identified in these champions and laid out in Figure 6.1: Hands off, Lead by example, and Hands on.

In view of the results, there are several practical implications and recommendations for managers wishing to pursue ES. Firstly, SME owner-managers ought to understand and admit that intrinsic attitudes and motivations as well as their personal lifestyle choices are keys to successful implementation of ES within their businesses. They ought to walk the talk and believe in it, or it will fail. Based on the TPB and the data collected, the manager-owner first needs to make a confident and strong choice to balance social, economic and environmental needs in their firm. It is less important that an owner-manager experience subjective norms as a driver to implement the change, but they must believe they have the power to make the change (perceived behavioural control) and based on ET, they should be mindful of their intentions and the long and short term expectations of working towards ES.

Secondly, being aware of and willing to overcome the barriers identified would be considered a critical next step for these owner-managers. Not all SME owner-managers will have the strong attitudes, values and expectations that the ES champions in this study do, therefore they will inherently be more influenced by the barriers identified as well as their own personal barriers. Since the ES champions on the other side of the world from one another identified similar barriers to cost, price, consumers, and infrastructure, these are likely barriers for the vast majority of SMEs who want to ‘go green’ in manufacturing in particular.

Once motivations and barriers are identified, managers should ensure external support is harnessed and thoroughly utilised. Managers could contact universities engaged in ES work as

well as government departments running ES programs, and consider joining environmental or industry associations that specifically support ES. Managers could also communicate with the organisation's suppliers about their attitude towards ES and ask them how they can better support the organisation's ES efforts. This is further discussed when relating the outcomes to stakeholders below.

A valuable contribution of this research is a stock-taking of the various PEBs (ES initiatives/mitigation strategies) that SME ES champions in the FT industry across several geographic regions utilise. Once the strong attitudes and motivations are in place, PEBs/ES actions can be implemented through the majority of mitigation strategies mentioned by the participants. Based on the information provided by the participants in this study, it appears that it is much more important to believe in what you're doing (in this case, believe in ES) than to do it in a strategic or planned way. It may very well be that it must first be ingrained in the DNA of a manager-owner before it can be implemented throughout their organisation – at the very least this is a requirement for ES champions.

Lastly, regarding outcomes, managers may frequently underline the personal benefits to staff, and staff can enjoy a personal return on their effort. For example, a portion of the financial savings of ES may be channeled into staff events. Additionally, the identification of how positive outcomes of ES could be used to give back to the community, could enhance a sense of corporate responsibility in the organisation. This could include consideration of how newly acquired knowledge about ES, and skill-base expansion of staff in the organisation, further results in human potential development. Further, the organisation's ES achievements could be leveraged to share the ES message with schools, universities, customers and clients through the publication of newsletters, sharing of ES achievements, involvement through tree planting activities, sponsoring of community ES practices etc.

Through embracing these practical implications, individuals driving the SME ES agenda have the potential to become significant change agents. In addition, by embracing the practical guidelines, the ES champion(s) (whomever that may be within the organisation) could place him/herself in the position of being an impactful driver of change.

This study could also be used by SME owner-managers to influence not only their own attitudes, but also other stakeholders' as proof that a variety of extremely useful and important outcomes can and will be generated by ES initiatives within the firm. For example, implementing

ES change can be challenging when naysayers from all corners, like employees or supply chain partners, underestimate the value of ES change and ES implementation. Providing them with concrete examples, such as those in this study, may be beneficial. Other stakeholders include one's community and government, which will now be discussed in Implications for Policy.

### 6.5.2 Implications for Policy

Government was identified as a barrier rather than an ally throughout this study and across all countries. It is clear based on the literature that SMEs require more governmental support through programs and grants and they are pivotal in many countries' economies. However, it appears from the data that the attitudes of government are far behind those of SMEs wanting to be ES. This creates a scenario whereby some of the participants were even going against the advice of their local governments after being told that ES fashion is 'just hippy stuff' (GE).

Government workers and policy makers clearly need better training and education regarding the strength and positive outcomes of supporting green initiatives in SMEs. Moreover, SMEs need programs in place to help promote their desire to 'go green' through overcoming barriers. The continuous change of government within these democratic countries who participated adds a challenge of developing and maintaining a course of action related to programming and funding, therefore green business networks and NGOs could additionally act as support for this endeavour.

## 6.6 Limitations

Limitations and delimitations of the methodology were previously outlined in Chapter 4. These were a deliberate part of the research (for example, industry boundaries to the research problem); however, during the progress of the research, other limitations became apparent, and are discussed here.

As was just mentioned in the Implications for Methodology above, a sample size of 12 cases in a homogenous sample is considered at the low end of sufficient (Yin 2009). However in order to properly compare across countries this seems to be perhaps too small of a sample. Further, since only half of the participants had in fact managed the process of ES change within their organisations (whereas the other half simply started off ES) the sections pertaining to the ES journey (RQ4) technically only had a sample size of 6-8. While Beekhuyzen (2010) argues that

this is a sufficient sample size for qualitative studies, the results do not seem as strong as they could be if the sample size were slightly larger. It was more difficult to recognise major and minor themes throughout this section with such a small sample size in comparison to identifying themes for the other RQs. Lastly, as far as the outcome data is concerned, participant organisations were ES champions as well as busy businesses professionals willing to spend time outside of their core business to take part in a study, therefore they may be one sided in their beliefs, thus the outcomes (RQ5) may not be fully reflective of the actual situation for the majority of ES champions (the hundreds of identified ES champions who were not willing/able to participate in the study).

Although both the previously mentioned limitations in Chapter 4 and limitations discussed here are cause for pause, they do not detract from the significance of the findings. Indeed, this study provides conclusive evidence for theory building as well as a solid basis for policy and practical implications, as previously discussed. Further, the strengths of the study remain in spite of these limitations, and these limitations merely provide platforms for future research, now discussed below.

## 6.7 Implications for Further Research

This study added depth to the understanding of ES management and change in SMEs, particularly those few champions within the FT industry. Due to this research topic being in the early stages, there are many implications for further research and they have been broken into two sections: further research regarding the methodology and theory; and further research regarding the study's research questions.

### 6.7.1 Further Research Regarding the Methodology and Theory

Since this research was based on multiple case study methodology but was primarily in depth interviews, future research could involve positivist survey research to generalise the findings. Furthermore, similar research could be done in different countries, different industries, with different size constraints and among different levels of people within the firms. Also, because only champions were studied, the reverse (environmentally harmful) companies could be studied under the same contexts.

The theoretical implications of this study could be augmented greatly by attempting a more quantitatively based study in order to be able to place weight onto the factors as well as the themes identified at every stage of the process. The references to lessons learnt by SME ES champions

and what other SMEs can take from these are a result of analytical inference, not statistical inference. Consequently, the findings from this study need to be tested further on a broader sample to enhance potential generalisability across different jurisdictions. It will be interesting to investigate how the institutional environment in which organisations operate shape their ES change management processes. A useful approach in future studies would be to undertake a large scale study of the ES change management processes of SMEs and compare these with the change management processes of large organisations in order to validate the present conceptual model further. Ideally, the large scale study should include organisations of different sizes and sectors of the economy. It will be valuable to compare whether organisations of different sizes from different sectors of the economy follow different ES change management processes.

The ES champion phenomenon needs a much greater breadth of study. The focus upon organisations that have successfully excelled in environmental achievements facilitates a better understanding of how this type of change could be managed in a productive manner. However, in order to extend the value of this research, an instrument to test and validate the model ought to be developed. This should also include measuring the impact of the change management intervention points upon triple bottom line outcomes when implemented in a wider range of SMEs. It is clear that when SMEs move through their respective journeys of ES, valuable opportunities are likely to be discovered when environmental questions are adequately intermeshed into their strategy. Making ES a strategic priority affords SMEs the opportunity to differentiate themselves from the competition.

### 6.7.2 Further Research Regarding the Research Questions

Aside from the changes to methodology, which would allow for many other research questions and problems to be answered related to all aspects of this research, the expectations, ES journey, and outcomes research questions within this study all stimulate further research. The connection made between how participant motivations were directly linked to the outcomes they identified opens doors to a plethora of research questions and potential, including theoretical implication of the Self-Determination Theory. Linking RQ2's motivations and RQ5's outcomes would be an interesting aspect of further research. Further research could help to identify the direct links between specific motivators and outcomes in ES change in SMEs. For instance, are outcomes perceived based on the motivations or do motivations directly determine outcomes in SME ES

champions?

The answers to RQ3 discussed both the initial expectations and experienced barriers of the participants. The expectations of immediate buy in, financial success and 'nothing' were all expressed by North American participants. Australian expectations were more about linking their jobs with their internal values and expecting to make changes in their industry and educate consumers. This may very well be a cultural caveat and cultural management and the differences found in leadership across countries in this study and further research could work on identifying how and why cultural aspects of North American vs Australian business owners identify with specific cultural norms and then how this parlays into ES change and ES management and should be researched further.

Within RQ4, there was no connection detected between the strategic planning aspects of written plans with goals or DNA in comparing countries; SMEs references to 'It's in our DNA' were also heard across all countries. This is another aspect of culture, perhaps, or possibly more within a champion phenomenon and should be researched further. Moreover, the leadership styles identified by Dunphy and Stace (1993) include: collaborative, consultative, and directive or coercive. Organisations should attempt to match their needs with their change and their leadership styles, i.e. collaborative, consultative, directive or coercive styles of change should be matched with an organisations needs as well as the scale of change sought (fine-tuning, incremental adjustment, modular transformation, or corporate transformation). This delineation and vocabulary was not used in the interviews of this study. Instead, participants were simply asked about their leadership styles. Future research could focus more on the leadership styles of the owner-managers of SME ES champions in a more structured way.

Regarding RQ5, according to Klassen and McLaughlin (1996), the reason behind the inconclusive result surrounding the 'green-initiative-organisational-performance' relationship is because the 'environmental management literature is prescriptive and anecdotal in nature with few linkages to existing management literature' (p. 1200). Russo and Fouts (1997) also provide additional explanations for the contradictory findings, including that much of the data is small, single industry samples, and relies on self-reported data, as in the case with the study herein. Additionally, many studies fail to control predictors of profitability and fail to reason how social policies that are examined may or may not affect companies' financial outcomes (Russo & Fouts 1997). Further, the relationship between ES change and outcomes is beyond a simple calculus –

for instance, higher implementation cost does not necessarily lead to lower profits (Pulver 2007).

Therefore, Wagner and Wehrmeyer (2002) concluded that, "It seems not possible to assess to what degree the variability encountered in the results… is due to methodological artefacts.' (p. 158). It may, therefore, be unproductive to continue to explore the causal effects that ES change initiatives have on organisational performance. More importantly, perhaps, questions should be directed to examining how and why some ES changes could lead to beneficial outcomes, while others do not, and why do organisations opt for a particular approach over others when implementing ES changes. Further, questions about what the most important business performance indicators are to those companies who have opted to become more ES could also be asked.

Lastly, as far as outcomes, Australian participants put more emphasis on the traditional business outcomes (financial) and economic impacts and the country as a whole. This in indicative of where Australia is at compared to North America – in consumer awareness and societal/government support, or at the very least, they seem to be several years behind. A longitudinal study or a study following this, identifying progress in the varying countries would add to the body of research regarding stages at which these cultures and countries are at with respect to ES awareness, management and culture in business.

## 6.8 Conclusions

This study draws from the experience of a sample of ES champions to provide greater insights into how SME ES champions manage ES change by identifying the critical influences of turning intentions into actions in ES champions in the FT industry, how they managed their ES change journeys, and what the outcomes of implementing ES initiatives have been. The final data summary presented in Figure 6.1 (above) helps to simplify the answers to each RQ and provides valuable insight to other SMEs and their stakeholders regarding what change intervention points need to be considered in embarking on an ES journey.

The main objective of the research was to determine what factors impact upon the intentions of SME ES champions in the Canadian, the American and Australian FT industry to behave in an environmentally sustainable way, and furthermore, how they manage their environmental sustainable change journeys and what outcomes were perceived. These factors, the success factors to ES journeys and the outcomes are summarised both in Figure 6.1 and here.

Factors that influence ES change include attitudes (seeing social, economic and emotional

value in ES), perceived behavioural control (believing they have control for the most part to make the change), subjective norms (books, people, timing, culture, government), and motivations (inspire and promote change, internal values, educate others, business success, environmental impact, personal health, and to prove 'them' wrong). These answered both **RQ1:** 'What factors influence the intentions of SME ES champions to behave in an environmentally sustainable way in the Canadian, the American and Australian FT industry?' and **RQ2:** 'What motivates ES champions in the Canadian, the American and Australian FT industry to engage in environmental sustainability?' These were underpinned by the Theory of Planned Behaviour.

The answer to **RQ3:** 'What factors play a role in converting the intentions of SME ES champions in the Canadian, the American and Australian FT industry into behaviour/action?' was underpinned by Expectancy Theory, and includes expectations (make change, job satisfaction, buy-in, financial success and nothing), and barriers (primarily price, consumers, cost, infrastructure and government).

'How do SME ES champions in the Canadian, the American and Australian FT industry manage their ES change journeys?' was **RQ4.** The ES actual actions of mitigation (fibre choice, recycling, decrease in fossil fuel use, dyes and printing choices, alternative energy, design and modality) were determined to be much more important than having a strategic or written plan (primarily in the DNA of the owner-manager), creating an ES culture (through leading by example or communicating well), or leadership styles (either hands off or hands on).

The answer to **RQ5:** 'What organisational outcomes do SME ES champions in the Canadian, the American and Australian FT industry achieve from their ES initiatives?' provides a lengthy list of positive organisational outcomes, including happier and harder working staff, cost savings, helping communities through local economies, employment and awareness, adapting a competitive strategy, helping the environment, and personal pride.

The value of the results of this research can be seen through the implications to theory, policy and practice identified earlier.

## 6.9 Summary

The discussions and implications explored in this chapter underline the importance of this study. The research questions were all answered in this chapter and implications for policy, practice, methodology and future research were all discussed. The final section concluded the

paper by clearly providing an answer for the overarching purpose of the research.

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# APPENDICES

**Appendix A – PIS**

University of Southern Queensland

**Participant Information for USQ Research Project Interview**

**Project Details**

Title of Project: Managing change for environmental sustainability in the textile industry: and international comparison

Human Research Ethics Approval Number: H15REA099

**Research Team Contact Details**


**Principal Investigator Details**

Linda McGrew
Email: Linda.McGrew@usq.edu.au
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**Supervisor Details**

Dr. Retha Wiesner
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**Description**

This project is being undertaken as part of a Doctoral program.

The purpose of this project is to ascertain whether "champion" (companies who have successfully implemented ES change) small and medium enterprises in the textiles industry manage environmental sustainability (ES) change in similar ways, and how the ES change journey has affected their triple bottom line. It is expected that this study will add to the business case for sustainability.

The research team requests your assistance because you have been identified as a champion in your industry relating to ES change through awards or peer recognition.

**Participation**

Your participation will involve participation in an interview that will take approximately 60 to 90 minutes of your time.

The interview will take place at your convenience, in the month of June or July, either at your office in person or at your office (or other preferred location) via Skype teleconference or telephone.

Each interview will consist of a variety of in-depth questions, but specifically participants will be asked, "can you tell us how you went about designing and implementing ES in your organisation and what role did different people play in this process?" as well as, "what steps were crucial to the successful implementation of ES change in your organisation?"

All interviews will be audio recorded and then transcribed.

Your participation in this project is entirely voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. You may also request that any data collected about you be destroyed. If you do wish to withdraw from this project or withdraw data collected about you, please contact the Research Team (contact details at the top of this form).

Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with the University of Southern Queensland.

**Expected Benefits**

It is expected that this project will directly benefit you by providing you with a summary of the findings once all data collection is complete.

**Risks**

The anticipated risks to participants include minimal time imposition. This risk will be minimised as you are invited to participate at your convenience and interview times will be set by you. If you initially agree to participate but you find the time imposition too great, you will be free to withdrawal at any time. There are no anticipated risks beyond normal day-to-day living associated with your participation in this project.

## Privacy and Confidentiality

All comments and responses will be treated confidentially unless required by law. Any data collected as a part of this project will be stored securely as per University of Southern Queensland's Research Data Management policy. The recordings and transcriptions will be kept of the principle investigator's personal password protected computer for 5 years and neither the recordings nor the transcriptions will be used for any purposes outside of the principle investigator's research. It is not possible to participate without being recorded.

## Consent to Participate

We would like to ask you to sign a written consent form (enclosed) to confirm your agreement to participate in this project. Please return your signed consent form to a member of the Research Team prior to participating in your interview.

## Questions or Further Information about the Project

Please refer to the Research Team Contact Details at the top of the form to have any questions answered or to request further information about this project.

## Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints about the ethical conduct of the project you may contact the University of Southern Queensland Ethics Coordinator on (07) 4631 2690 or email ethics@usq.edu.au. The Ethics Coordinator is not connected with the research project and can facilitate a resolution to your concern in an unbiased manner.

**Thank you for taking the time to help with this research project. Please keep this sheet for your information.**


## Consent Form for USQ Research Project Questionnaire

### Project Details

Human Research Ethics Approval Number: **H15REA099**

### Research Team Contact Details

**Principal Investigator Details**
Linda McGrew
Email: lilimcg@telus.net

**Other Investigator/Supervisor Details**
Dr. Retha Wiesner
Email: Retha.Wiesner@usq.edu.au

### Statement of Consent

**By signing below, you are indicating that you:**

- Have read and understood the information document regarding this project.
- Have had any questions answered to your satisfaction.
- Understand that if you have any additional questions you can contact the research team.
- Understand that you are free to withdraw at any time, without comment or penalty.
- Understand that you can contact the University of Southern Queensland Ethics Coordinator on (07) 4631 2690 or email ethics@usq.edu.au if you do have any concern or complaint about the ethical conduct of this project.
- Are over 18 years of age.

- Agree to participate in the project.

| | |
|---|---|
| Participant Name | |
| Participant Signature | |
| Date | |

**Please return this sheet to Linda McGrew via email prior to undertaking the questionnaire.**

**Appendix C – Interview Schedule**

## Interview Schedule

*(1) Some background to the project.*

*I am inviting a small number of sustainability champions to be interviewed with the aim to learn about what got them there in the first place (such as motivation and need) and then what they do in terms of how they manage sustainability, for example how they plan for it, engage staff in the process, etc. The aim is to come up with some best practice guidelines for the management of environmental sustainability which could be shared with other SMEs and encourage them to go down the path of environmental sustainability.*

*You will receive a copy of all publications which flow from this project….and a summary will be completed in the next 6-8 months.*

*Would you have a problem with your firm being identified as a case study organisation in publications flowing from this interview?*

*I have the waiver you've signed here and assume then you had a chance to read the PIS? Do you have any questions before we get started?*

*(2) Demographic information*

*Please tell me a bit more about your firm (for example how many employees the firm has, the main type of business, where you are located, etc)*

(3) *ES and especially sustainability is an over used word these days. How do you think of "Environmental Sustainability"?*

*You've achieved some impressive things in your firm as far as ES is concerned. Tell me about your journey in becoming an ES champion.*

*DO you have any documentation that you can provide me with that shows what you've done? Press release? Certifications? What have you measured?*

*(4) Intentions and Attitudes (RQ1)*

*How do you feel or think about the environmental sustainability changes you've made or things you do? For example, are you feeling emotional/passionate/angry about it?*

*Do you see it as a social responsibility? Do you see economic value of it?*

*When you started out going down this path, what did you expect from this process?*

*(5) ES Motivation (RQ 2)*

*What factors were important in the decision to introduce/encourage improved environmental sustainability practices? (external drivers and internal drivers).*

*Have any other entities/people etc had an impact on why you've engaged in ES practices?*

*What are the things that have motivated you do go down this path?*

*(6) Intentions into Action (RQ3)*

*What changes have you implemented over the last 5 years in order to improve your firm's environmental performance?*

*Do you feel you have control over the ES initiatives, changes and policies surrounding your business?*

*Have your motivations and intentions been the main driver for your ES initiatives or are there other drivers? Ie what drove you to this?*

*What do you see as barriers to ES behavior?*

*(7) ES Change Journey (RQ 4)*

*Tell me about the ES change…was it incremental or radical?*

*How do you plan for the environmental sustainability? For example do you have a strategic plan of which environmental sustainability forms an integral part? Is it a written plan? or is it informal? How do you go about planning for environmental sustainability?*

*How have you managed to make ES part of your culture?*

*How would you describe your style in terms of managing this change? Ex Participatory or driving from the top?*

*(8) ES Outcomes (RQ5)*

*What have you found were the outcomes of being ES or the ES change?*

*Staff?*

*Community?*

*Environment?*

*Has this cost you a lot of money or have you saved a lot of money?*

(9) *Big Picture*

*Finally, if you could give some words of wisdom to other SME managers about how to effectively manage environmental sustainability, what would that be? For example what are some of the important lessons you have learnt or the things you think are crucially important when going down the road of environmental sustainability?*

*That is the end of my questions. Thank you so much for giving me the opportunity to learn from you.*

*Would it be OK if I contact you again if I am missing any data after I've been thought this interview?*

**Appendix D – Initial Email**

Dear X:

I am a DBA student researching environmentally sustainable business. My focus is "champions" in the fabric and textile industry. I hope to find 20 champions and to interview each one for 1 hour and then come up with an over arching model for green business in this industry. I am also focusing only on manufacturers/producers in North America and Australasia.

"Champions" for my purposes are fabric or textile manufacturers who do so in a green and sustainable way. They have between 15 and 200 employees and operate in the aforementioned locations.

Are you a “champion”? Do you know of others?
Any help would be greatly appreciated!
Sincerely,

Linda McGrew