Sustainability, Fashion Design, and Consumerism: Undergraduate Entry Level Fashion Students’ Knowledge, Attitudes, and Habits

Anna Romanovska, B.A.A.

Department of Graduate and Undergraduate Studies in Education

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Faculty of Education, Brock University
St. Catharines, Ontario

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Abstract

This qualitative inquiry explored 7 undergraduate students' attitudes, habits, and knowledge of consumerism, fashion design, and sustainability. The postmodern study employed crystallization as its methodological framework to gain insight into how participants' knowledge is manifested in their daily habits, and used 4 methods of data gathering: semistructured interviews, visual exercises, journal entries, and the researcher's own reflections. Four major themes emerged: Knowledge—Concepts Linked and Fragmented; Dissonance Between Knowledge Versus Attitudes and Consumer Habits; Surrendering to the Unsustainable Structures; Design Process and Caring Attitude. Findings indicate that participants possessed some knowledge of sustainability but lacked a well-rounded understanding of environmental and humanitarian implications of Western consumer society. Findings also reveal a dissonance between participants' knowledge and attitudes—affecting how their knowledge influences their behaviour—and how reflection, creative thinking, and drawing initiate change in participants' underlying attitudes. Recommendations are made to merge a variety of theoretical frameworks into the educational system in order to create curricula that offer a holistic overview and unique insights into sustainability challenges, particularly in specialized areas of the fashion industry.
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CHAPTER ONE: INTRODUCTION TO THE STUDY

This study examined entry-level fashion design students’ knowledge, attitudes, and habits relating to fashion design, consumerism, and sustainability. The study sought to reveal the degree of agreement and discord between the students’ knowledge, attitudes, and habits concerning sustainability, consumerism, and fashion design by using crystallization as a methodological framework to merge findings from visual data, interviews, and journals. The results of this study offer valuable insights into future fashion designers’ knowledge, attitudes, and habits regarding fashion design, consumerism, and sustainability. These insights would be useful for fashion educators teaching at educational institutions that provide fashion education at postsecondary levels.

Background of the Problem

The planet is in an environmental crisis caused by the irresponsible actions of human beings (Beattie, 2010; Belk, 2004; Chapman, 2006; Clover, 1999; Fletcher, 2008; Jucker, 2002; O’Sullivan, 1999). In this sense, irresponsible actions can be defined as unsustainable attitudes and habits. Unsustainable attitudes and habits encompass any human activity that directly or indirectly jeopardises the ecological balance of the environment in a way that may endanger terrestrial life (Lyotard, 2001; O’Sullivan, 1999). Human irresponsibility has taken a harmful toll on our planet, which could become inhospitable for humans and threaten our continued existence on the earth. As Chapman (2006) writes:

The planet doesn’t actually need saving—just saving from us perhaps? So, we just need to find ways that enable us to continue as a species, but in [more]
sustainable ways that places as little pressure on the biosphere as [humanly] possible. (p. 4)

The fashion industry in the developed countries of the West has long been held as an example of unsustainable human activity (Dunn, 2008; Fletcher, 2008; Parker & Dickson, 2009). Indeed, its reliance on new clothes each season, disposability, and overseas production has been a significant factor in the spread of globalization and environmental degradation. There are systems and phenomena, such as fast fashion, consumerism, and media, that support the fashion industry and this support contributes to environmental degradation (Bauman, 2007; Fletcher, 2008; Parker & Dickson, 2009).

The fashion industry relies on designers to provide new designs for every season. A designer, therefore, plays a significant role in supporting the endless cycle of creation, production, and sale of apparel to generate profit, which, in turn, supports the profit-driven economy. At the same time, every step in the design and production process of apparel (e.g., looking for inspiration for a fashion collection, sourcing for fabrics, hiring contractors to produce garments, and deciding where to sell them) can have damaging effects on both the global environment and local communities (Dunn, 2008; Fletcher, 2008; Parker & Dickson, 2009). Designers often hold the power to influence such decisions (Chapman, 2006).

A sound knowledge about and understanding of the controversies that the design students will face in the fashion industry is necessary if they are to live sustainable lifestyles and not put undue pressure on the biosphere (Bauman, 2007; Jucker, 2002; Max-Neef, 1992; McNeal, 2007). In addition, the students need to hold authentically caring attitudes for all people, communities, and ecosystems that share this planet
(Chapman, 2006; Max-Neef, 1992; O’Sullivan, 1999), and their knowledge should be in agreement with their own attitudes and daily habits (Beattie, 2010; Jucker, 2002).

**Statement of the Problem Context**

According to Jucker (2002), “in the so-called highly industrialized countries, primarily responsible for the bulk of environmental destruction on Earth, we consistently find in surveys that there is a high environmental awareness, yet not matching sustainable behaviour” (p. 261). In other words, people living in well-off countries, including the young people who will become our fashion designers, often do not practise what they have learned (Hume, 2010; Jucker, 2002); this means that family, the school system, and society might be failing to provide learning environments that encourage students to apply their knowledge and live ecologically conscious, sustainable lives. In order for environmental education to work, it is important to understand what kind of environmental knowledge the students have gained, how they perceive sustainability, what their attitudes are, and how their knowledge manifests itself in their daily habits and behaviour. It is important to understand cultural and societal factors that influence students’ beliefs and actions; as such, an understanding could inform educators’ decisions when creating learning experiences for students.

Before entering postsecondary education, Canadian students usually receive some environmental education in the public and private school systems (Clover, 1999; Kola-Olusanya, 2008). In addition, family, workshops, community centres, nongovernmental organizations, and the Internet can provide alternate sources of environmental education (Kola-Olusanya, 2008). It is unknown, however, how design students entering postsecondary fashion schools make use of their acquired knowledge of sustainability,
and if students apply their knowledge practically to live sustainable lives. Part of the problem is a lack of data demonstrating youths'—and, more specifically, undergraduate fashion students'—depth of existing knowledge, attitudes, and habits relating to fashion design, consumerism, and sustainability (Kola-Olusanya, 2008; Rickinson, 2001).

**Purpose of the Study**

The purpose of this study was to examine entry-level fashion design students’ knowledge, attitudes, and habits relating to fashion design, consumerism, and sustainability. Seven undergraduate fashion students were engaged in this inquiry to explore connections between their knowledge and attitudes concerning sustainability, consumerism, and fashion design.

This study sought to address several research questions:

1. What do my participants know about and associate with sustainability as it relates to the fashion industry?

2. In the participants’ understanding of sustainability, is there evidence of linking concepts such as consumerism, sustainability, and the fashion industry?

3. Do participants’ knowledge and attitudes regarding sustainability manifest in their daily lives?

**Rationale**

The primary rationale for this study came from a very personal perspective. Reflecting on my life in Canada over the past 2 decades, I have become critically aware of my own wasteful ways of living, which are in stark contrast to how I lived in the former Soviet Union (Latvia). For example, after coming to Canada in 1990, I was shocked to discover that, as a refugee, I could furnish my entire living space with
furniture left out on the street after the owners had become bored with well-functioning but outdated items (Chapman, 2006). Another example is the use and disposal of copious amounts of plastic bags while shopping, which was an unheard-of custom to me. An interesting revelation for me, however, came when I found myself gradually adopting this lifestyle without even realizing it. I observed my children growing up and adapting to this unsustainable lifestyle, while at the same time being introduced to environmental education in the public school system. This study grew out of a desire to examine whether the same incongruity between knowledge about the environment and lifestyle exists in postsecondary fashion design students.

This study stemmed from a belief that there is a significant gap in the learning experiences offered to students in educational programs that teach about the fashion industry. In fact, of all the postsecondary institutions in Ontario that have fashion design programs, not one offers introductory-level courses that focus entirely on design, production, and sustainability as they relate to the fashion industry.¹

I hope that this study will benefit the students who participate in the research. My intention was for the interviews, visual exercises, and journal writing to provide for my research participants and myself a meaningful, creative, and transformative experience. No matter where the students stood in regard to their knowledge and attitudes about fashion design and sustainability before participating in the study, I hope that taking part in this research allowed them to critically assess their perceptions and reflect on their beliefs.

¹As evidenced by my review of course descriptions available on the institutions’ websites in 2010.
Theoretical Framework

Sustainability involves changing attitudes, habits, lifestyles, infrastructures, economic systems, and political structures on a fundamental global level (Dieleman, 2008; Jucker, 2002). It would be very challenging to remove oneself from society and culture to live a purely sustainable lifestyle. Education for sustainability cannot be removed from the complex reality of human societies’ unsustainable behaviour. For example, my own environmental beliefs and behaviour are affected by my material aspirations, financial insecurities, cultural contexts, and societal pressures. At the same time, it is crucial to understand that our daily actions have an influence far beyond what we could imagine. For example, to save money, if I purchase a cheap garment in a store that specializes in selling mass-produced apparel, I might be unintentionally contributing to pollution of a river in India where the fabric for that particular garment was dyed. I might be environmentally conscientious, and, at the same time, a single, underemployed mother who is unable to purchase clothing that is designed and produced by a local artist.

In the context of sustainability, if a fundamental change is to happen, the current world system should change, and people are instrumental in making that happen. During such transformations, societies will change individuals, and at the same time individuals will promote change in society through the daily actions of their personal lives. Society’s patterns of consumption have the potential to gradually and over time become sustainable, but only through constant examination, learning, practice, monitoring, and reflection. Such a process may affect all fundamental structures and systems, create new ones, and, as a result, change the society and culture.
From a personal perspective, my outlook on life is postmodern. Growing up in the former Soviet Union, embracing the uncertain and transformative life of an emigrant, and attending so-called countercultural Burning Man event for many years, combined with the inspiration of various artistic works across all disciplines, have shaped me into a postmodern thinker. For example, some of the lessons I have learned is that there is never one truth: the existential reality that I experience does not match with existential reality that various different individuals might be experiencing, and many social constructs and structures that I encounter in daily life are arbitrary and will disappear as soon as circumstances and perspectives change. In addition, I have learned that almost anything that happens in life—any phenomena—could possibly be reframed based on given circumstances, personal attitudes, and outlook on life.

Since I could not remove myself from this inquiry that I was conducting, I explain how my outlook resonated in my research. Postmodernism (Anderson, 1995; Baudrillard, 1981; Bauman, 2007; Slattery, 1995) allows for an unconventional interpretation of the world; it creates “a sceptical disposition toward reason and science” and allows for “a belief in the mysterious, wondrous and ultimately unknowable nature of man [sic] and the universe” (Drolet, 2004, p. 5) where “all our stories and the truth about what’s out there—all our scientific facts, our religious teachings, our society’s beliefs, even our perceptions are the products of a highly creative interaction between human minds and the cosmos” (Anderson, 1995, p. 8). As an educator and researcher, I strived to replace the “inspectional clinical model” of research methodology with “autobiographical ... and metaphorical reflection that utilizes multi- and extrasensory perceptions simultaneously” (Slattery, 1995, p. 211).
To search for findings in this study, I conducted qualitative research using crystallization (Ellingson, 2009; Richardson, 2000) as a methodological framework to deepen my understanding of how participants' and my own conscious and unconscious perceptions of sustainability might influence our lifestyle choices. Crystallization was developed into a methodological framework by Ellingson. It is an approach that combines multiple forms of analysis and multiple genres of representation into a coherent text. In postmodern mixed-genre texts, crystallization replaces triangulation to validate data. Crystallization allowed me to merge findings from visual research (Machin, 2007; Rose, 2007), semistructured interviews (Charmaz, 2006; Kvale, 1996), and reflective journal-writing (Deaver & McAuliffe, 2009; Gulwadi, 2009) to provide a greater understanding of the topic. I analysed the interviews and journals in the spirit of grounded theory (Corbin & Strauss, 2008).

To interpret the visual data, I analysed the images using the methodological framework developed by Rose (2007), in which each image can be looked at from the point of three different sites. All three sites have set aspects, called modalities, which allowed me to describe and analyse visual data. To interpret the images, I also used multimodal analysis, which Machin (2007) describes as a social semiotic analysis—in other words, visual grammar. This type of analysis examines design elements of the artwork (e.g., colour, layout, background, balance, proportion) with a focus on their relations to each other. I chose to use these methodological frameworks for data analysis because they allow for a very structured breakdown of a piece of art. In this way, a researcher can go beyond musings about the research participants' creativity, more easily explain the elusive nature of personal emotions expressed through the artwork, and
interpret the meaning in a structured, prearranged form. Following this framework also makes it possible to replicate the experiment. I further explain this methodological framework for visual data analysis in Chapter Three.

**Scope and Limitations of the Study**

This research study was not all-encompassing. I, therefore, list here some of the limitations that must be considered when looking at the research findings.

Because of the limited scope of this study, when discussing research findings, I focused more on unsustainable phenomena affecting environments, people, and communities at a micro level, such as excessive consumérism (Bauman, 2007; Slater, 1997), rather than phenomena at a macro level, such as the military and industrial systems that exert influence on a global level (Jucker, 2002). This did not allow me to present a fully holistic overview of the subject matter, but allowed me to focus on exploring attitudes and knowledge of an individual.

As I interviewed only 7 participants, the sample size was small. A larger-scale quantitative survey would have provided informative data that would have complemented the interviews and added breadth and further depth to the study. In addition, I interviewed participants who were studying at a single postsecondary educational institution in southern Ontario, where I had been teaching for a number of years. There are quite a few postsecondary schools in Ontario and many more schools across Canada where students are learning to become fashion industry professionals. Inviting those students to participate in the study would have allowed access to a more diverse group of participants. A larger and less homogeneous sample would have provided greater insight
into students' knowledge, attitudes, and habits relating to fashion design, consumerism, and sustainability.

At the time of the study, I was an instructor, teaching first-year students. To avoid potential conflict of interest issues, I did not interview students enrolled in classes that I taught. My status as an insider could also have brought preconceived notions related to the milieu and people I chose to study. Using crystallization as a methodological framework allowed me to include myself in the study.

It would also be beneficial to conduct a longitudinal study to document changes in students' knowledge and behaviour over the course of a 4-year program at a postsecondary fashion school. Such a long-term focus, however, is beyond the scope of this study.

**Outline of Remainder of the Document**

Chapter Two of this thesis reviews the literature that informs my study, starting with a brief explanation of postmodernism. I then discuss the difference between fashion, clothing, and the fashion industry. Next, I discuss excessive consumption as one of the reasons for environmental degradation, and the development of contemporary consumers. Then, I review literature offering insights into young adults’ knowledge and attitudes in the context of this study. The final section includes a discussion on the creative process and visual journaling as possible agents for change in underlying attitudes related to sustainability.

Chapter Three outlines the research methodology and design of the study. I indicate that the research is conducted with a postmodern perspective and explain the visual methodologies (Machin, 2007; Rose, 2007) that I use to gather and examine the
data for this research. I also discuss employing semistructured interviews (Kvale, 1996) and reflective journal writing (Gulwadi, 2009) to gather data, and the use of a grounded theory approach (Corbin & Strauss, 2008) to analyse the interviews. Chapter Three also includes methodological assumptions and limitations of this study.

Chapter Four presents the results of the interviews, visual exercises, and journals completed by each participant. The participants' knowledge, attitudes, and habits are explored and compared with the visual data that emerged from the drawings. The findings reveal four major themes that are discussed in this chapter.

In Chapter Five, I provide an overview of the first four chapters and summarize the five themes. I discuss how each theme relates to the existing literature and outline recommendations for theory, practice, and further research. I conclude the chapter with final thoughts.
CHAPTER TWO: REVIEW OF RELATED LITERATURE

The purpose of this study was to explore entry-level fashion design students' knowledge, attitudes, and habits relating to fashion design, consumerism, and sustainability. The review of related literature will discuss concepts that provide the background for this study. First, I provide a brief discussion of postmodernism as the theoretical framework for my study. Second, I discuss fashion and sustainability, followed by a review of literature examining consumption and consumers in current times. Then, I offer insights into young adults' knowledge in the context of this study. The final section includes a short discussion on the creative process and visual journaling as possible agents for change, followed by a summary of the chapter.

A Short Discussion of Postmodernism

The literature on postmodernism is extensive, and the term “postmodern” has become widespread, to the point where it has become accepted in almost all spheres of research. According to many authors, it is difficult to define postmodernism because one of its tenets is the absence of a single truth, which at its essence defies forming a widely accepted definition (Bauman, 1992; Drolet, 2004).

For the advocates of postmodernism, its strength lies in liberating the human spirit from intellectual and cultural restraints; it questions reason and science, it allows for belief in mysteries, and it embraces the unknowable nature of man and the universe (Drolet, 2004; Lyotard, 2001). Most importantly, postmodernism defies metanarratives and illuminates many truths that co-exist at each given moment (Anderson, 1995; Bauman, 1992). Bauman (1992) proposes that postmodernity is really a state of mind,
one in which individuals constantly reflect upon themselves, question themselves, and create new content and structures—but do not create new truth.

Slattery (1995) discusses education in postmodern times and advocates change in how learning and teaching are perceived, and in the power structures between students and educators, as well as those of educational institutions. Slattery emphasises the need to develop autobiographical, aesthetic, and intuitive experiences for students and teachers, and stresses the importance of an understanding of the individual in relation to knowledge, other learners, the world, and the self. An individual in the postmodern world embraces diverse communities, networks, and discourses; she or he welcomes messages that reflect different—and possibly even conflicting—norms, worldviews, ideals, and images of the world (Anderson, 1995).

There exists a link between postmodernism and sustainability in that both are concerned with abandoning old truths and questioning metanarratives that have lost their original meanings. Furthermore, postmodernism and sustainability both represent and emphasize the process, rather than the final goal (Dieleman, 2008). According to Dieleman, sustainability is a process whereby old structures are reexamined; emotions, desires, and fears are reflected upon; and lifestyles and identities are redefined. Postmodernism and sustainability involve reflections on the self, the other, communities, systems, the planet, and even the universe at large (O’Sullivan, 1999). Postmodernism, therefore, can offer a philosophical framework for a study, such as mine, that investigates elusive phenomena and structures as consciousness, attitudes, emotions, and knowledge regarding sustainability, fashion, and consumerism.
Fashion and Sustainability

In this section, I attempt to define and discuss fashion versus clothing, as well as the fashion industry under the heading Fashion. After this, I review sustainability and fashion as they relate to the fashion industry.

Fashion

To examine and appreciate fashion, it is important to distinguish between fashion and clothing. Fashion is not a material object, but rather a socially and culturally invented phenomenon, one that cannot exist without material objects. Fashion is a fully institutionalised cultural and social belief system that is manifested through a variety of objects, such as clothing (Kawamura, 2005). Fashion is an intangible concept, though there exists a very complex and tangible system that supports it; this system encompasses every stage of production, such as farming cotton, weaving textiles, sewing garments, transporting the finished product, and even the marketing campaigns that promote brand awareness (Kawamura, 2005). In this study, I use the umbrella term “the fashion industry” to refer to this supporting system and the term “fashion” to refer to the belief system underlying it.

Kawamura (2005) proposes the term fashion-ology to describe the investigation of fashion as social and cultural phenomenon. She emphasises the importance of understanding the difference between how fashion and clothing are created and consumed. Fashion, she argues, is a collective activity in its creation and distribution, and a designer plays a single but important role in the creation of this symbolic, ambiguous product. According to Kawamura and to Fletcher (2008), fashion can be a form of art. Like art, fashion is a social process and cannot be interpreted apart from its
social context. While art is appreciated through observing and participating, fashion is appreciated, projected, and communicated through clothing and other material objects. Evidence of fashion being acknowledged as art can be seen in the emergence of exhibitions featuring garments of recognized fashion designers in major art museums. For example, the Museum of Modern Art in New York recently featured Alexander McQueen's memorial exhibition in the spring of 2011, and in the summer of 2011, the Montreal Museum of Fine Arts featured Jean-Paul Gaultier's fashion designs. Kawamura also points out that fashion could be studied from different perspectives, such as psychology, sociology, and anthropology.

An important characteristic of fashion is its impermanence. Fashion is a result of socially accepted visual and cultural standards that can rapidly change. This impermanence of fashion is supported by the fashion industry because ever-changing fashion trends generate profit, though this is also one of the reasons why fashion is at odds with sustainability (Fletcher, 2008).

While fashion can sometimes be considered a form of art, the terms "fast fashion" and "fad" refer to the system of producing relatively inexpensive, fashionable outfits at an accelerated speed and volume to satisfy and encourage consumers’ desire to appear fashionable. In other words, fast fashion is a term for fashionable apparel produced cheaply soon after the seasonal presentations of fashion collections; fad refers to a short-lived style represented by garments or other products that are desired by fashion-forward consumers, but are not necessarily designed with timeless appeal or practical use in mind (Fletcher, 2008). One such example from autumn 2009 is the extremely tall, narrow boots that became popular for their ability to create a silhouette with broader shoulders.
and a slim lower part of the body (Style.com, 2009). The boots are supposed to be worn over leggings, rise above the knees, and complement the 80s look that came back in fashion in 2009. They are meant to appear tight and thin, and are often made of suede. As soon as leggings become unfashionable, the tall boots will lose their aesthetic appeal.

Consider what would happen if a flared shape for pants became fashionable: It would be uncomfortable to wear such boots with the pant leg tucked in. Translated into production terms, to satisfy the demand for the latest fad, a fashion company would quickly produce a large volume of new, relatively inexpensive boots for middle-income consumers. To keep the price of these new boots affordable for such consumers, the boots would have to be manufactured overseas (Parker & Dickson, 2009). This could mean increased pollution while transporting the merchandise, the use of a factory with unregulated labour conditions, and an absence of equipment for environmentally safe disposal of production waste (Fletcher, 2008).

It might be difficult to ignore, prohibit, or denounce fashion, and perhaps it would be easier to divorce it from “rampant material consumption” (Fletcher, 2008, p. 120). Fletcher suggests that practicing “slow fashion” might be a way to reduce the impact of the fashion industry on the environment. The concept slow fashion was inspired by the “slow food movement” started by Carlo Petrini in 1989 in Italy (Fletcher, 2008).

According to Fletcher, slow fashion entails a different approach to design and production of garments where designers do not cater to rapid change of fashion trends; where quality and craftsmanship of the garment is valued more than fast production and speedy delivery to a retail store; where respecting slow, regenerating cycles of nature is more important than gaining profit; and where relationships between designers, manufacturers,
farmers, retailers, and consumers are developed as long lasting, sustainable relationships. Clothing produced with the principles of slow fashion would be more expensive because high quality usually increases the cost of the product. This could, in turn, lead to slowing of consumption of fashion related consumer products.

**Sustainability and Fashion Versus the Fashion Industry**

It is difficult to single out the most precise definition of sustainability. To me, the term *sustainable* refers to a situation and process that can continue infinitely. Fletcher (2008) defines sustainability as full integration of human well-being and natural integrity. Sustainable fashion and the fashion industry, then, entail caring for the environment and well-being of the people who create fashion, realize the design concept, and consume the fashion product (Dunn, 2008; Fletcher, 2008; Parker & Dickson, 2009).

The fashion industry has long been held as an example of unsustainable human activity (Dunn, 2008; Fletcher, 2008; Parker & Dickson, 2009). Its disposability and overseas production have been a significant contributor to the spread of humanitarian and environmental degradation. It should be pointed out that when discussing sustainability and fashion, it is difficult to pinpoint discrete causes of unsustainable behaviour and analyse single aspects of it. For example, if I was to claim that excessive consumerism (supported by changing trends in fashion) is unsustainable, I could not simply blame consumers for excessive shopping habits; excessive consumerism often results from consumers’ desire to follow the latest fashion trends and is supported and encouraged because it drives the economy.

Fletcher (2008) suggests a way to make the fashion industry more sustainable. She proposes that the mass production and homogenization of fashion could be rejected
in favour of individualized designs. This would allow independent designers and small companies with flexible production systems to cater to individualized needs. The production of small, diversified collections would mean that products are sourced and made locally, as it would not be feasible to set up a production line overseas for producing short-run, diverse collections. Instead, the designer would build close relationships with the producer, the consumer, and the community. Fashion could be manifested by creating clothes in a circle of friends or recreating old clothes. According to Fletcher, fashion could be a form of art manifested through the garment, invoking a sense of meaning and requiring the user to “finish” it with skill, imagination, and flair. Sustainable fashion is about designing “confidence- and capability-inducing pieces that encourage versatility, inventiveness, personalization and individual participation” (Fletcher, 2008, p. 125). In this way, according to Fletcher, fashion can become more than just a fulfillment of instant gratification or a shallow satisfier of never-ending desires. Sustainably designed fashion could connect to the human soul in a unique way as a timeless, sophisticated, yet functional art piece. As Fletcher observes, there is something deeply personal, even intimate, in the social construct of fashion that creates long-lasting psychological satisfaction.

**Consumption and Consumers in Current Times**

According to Dunn (2008), consumerism has transformed consumption into a way for individuals to create an identity, and, at its most extreme, shopping could be used to bring comfort, to relieve stress, and to give an instant boost of temporary happiness.

Regardless of circumstances such as varying levels of personal happiness and satisfaction of basic needs, it is human nature to consume. We consume food to fuel our
bodies, oxygen to exert energy, and clothes to protect our bodies. While consumption in and of itself is not “wrong,” consumption in excess is one of the major causes of pollution (Chapman, 2006; Fletcher, 2008; Jucker, 2002; Leonard, 2009; O’Sullivan, 1999). In this part of the literature review, I attempt to define consumption and examine the phenomenon of excessive consumption, as well as its negative impact. Lastly, I provide an overview of the development of a consumer.

**Definitions of Consumption**

Clarke, Doel, and Housiaux (2003) look at the Latin root of the word *consumption* and point out that there are two opposing meanings to the word: “to use up entirely” and “to sum up” (p. 1). They propose that “this semantic ambivalence might be extrapolated to suggest that the English-language word ‘consumption’ entails both an act of *destruction* and an act of *creation*” (p. 1). This suggests a kind of duplicity and paradox. Clarke et al. also make a connection between consumption and capitalism when they write, “like the capitalist system of which it has become a fundamental part, consumption should be thought of as a form of ‘creative destruction’” (p. 1). The authors’ understanding of consumption reveals its complexity, suggesting that it reflects a desire for much more than mere subsistence. Such “creative destruction” serves many purposes: it satisfies deeply rooted desires, makes life more enjoyable, expresses individuality, allows for competition, facilitates the transfer of power, and integrates social groups.

According to Dunn (2008), “[excessive] consumption ... needs to be considered as a complex, multivalent phenomenon, a manifestation of economic, social, cultural, historical, and psychological processes” (p. 4). Excessive consumption fuels the fashion
industry, which itself promotes excessive consumption in a self-sustaining cycle. While there is nothing wrong with designing fashionable products to satisfy human needs for subsistence, protection, creation, and identity (Max-Neef, 1992), forcing excessive consumption to generate growth and profit will inevitably result in increased pollution of the planet (Chapman, 2006; Fletcher, 2008; Jucker, 2002; O’Sullivan, 1999).

**Excessive Consumption**

According to Clarke et al. (2003), it can be difficult to make a distinction between needs, wants, and desires. Those who have tried to formulate a universal distinction between basic needs and luxuries invariably encounter insurmountable difficulties. Capitalist society’s true economic cycle, according to Bauman (2007), is supported by consumers who “buy it, enjoy it, [and] chuck it out” (p. 398). The media, retailers, and product designers all encourage consumers to see goods and services as means of expressing one’s ever-evolving identity. They also strive to constantly construct new needs that consumers did not even know they had (Stearns, 2001). New products and services are continuously created that claim to bring happiness, never-ending youthful appearance, and health. Such products promise to reform one’s identity, fight fear, or help attain fulfillment (Bauman 2007; Dunn, 2008). Consumers are manipulated to such an extent that differentiating between acceptable and excessive consumption becomes increasingly difficult (Clarke et al., 2003).

Every individual, whether in a tribe, local community, or society at large, consumes according to the cultural norms of a particular group. What is considered luxurious and excessive by one group might be considered a basic need by another (Clarke et al., 2003). For example, as a fashion instructor, I am expected to dress in a
fashionable outfit when I teach. Moreover, I must wear a different outfit every day of the week to be considered professional. This cultural tradition is not sustainable because it encourages me to purchase more outfits than I need; it is a fitting example of manipulated, excessive consumption of apparel.

In modern Western culture, a consumer’s competition for status can result in continuous, excessive consumption of new, updated consumer goods that serve as signifiers of one’s status (Slater, 1997). In other words, yesterday’s fashionable luxury items are already devalued today. Consumers of the 21st century satisfy artificially constructed needs by consuming the use-value, sign-value, and symbolic value of objects (Baudrillard, 1981). For example, the use-value of a car is to drive from point A to point B. The make of the car, in addition to communicating the material wealth and status of the driver, constitutes the sign-value of the car. A car’s symbolic value communicates the assumed identity of the driver. Consider the driver of a Porsche and the driver of a beat up, rusty old car. Both cars bring their drivers from point A to point B; however, a high-profile downtown lawyer is highly unlikely to drive a car that does not suggest his or her status. Another example of use-value, sign-value, and symbolic value is a black leather jacket. Even though it is an inanimate object meant to keep the owner of the jacket warm (use-value), the jacket communicates the income level of the wearer together with the assumed identity. The jacket can be sexy, restrained, conservative, aggressive, polished, or ragged; it can be the kind made for wearing on a bike to ride around the countryside, the kind found in dubious urban alleyways, or the kind one would wear commuting to work in a luxury car. The experience provided by a product or a service, consumer identity, and the social environment constantly overlap with one another. As
members of society, we consume to communicate our status, as well as our cultural and aesthetic preferences, and it is through our patterns of consumption that we form identities that help us find our place in communities.

It is difficult to determine where the divide exists between an individual’s culturally accepted needs and wants, but this divide provides us with a working definition of unsustainable consumption: As soon as an individual consumes goods and services at a cost that exceeds his or her income, that individual is consuming excessively. Another definition could define overconsumption as the point at which sustaining one’s desired ways of life begins to damage the environment and other people’s ways of life. For example, if I purchase inexpensive garments from a major retailer of low cost mass produced garments such as H&M, I might be contributing to a mode of production that relies on production workers who must work 12 hours a day to satisfy his or her need for subsistence (Max-Neef, 1992).

Determining unsustainable consumption could also involve looking at an individual’s surplus wealth and the use of this wealth during his or her lifetime. For example, a consumer might use his or her disposable income to clean up the carbon footprint he or she has left after a lifetime of excessive consumption and replenish resources used during his or her lifetime.

Another perspective on the elusive concept of overconsumption comes from the observation that our emotional needs are satisfied by both internal and external means, “yet in our society most satisfiers come from sources outside of ourselves (like products), with very little attention placed on internal means such as personal growth” (Max-Neef,
Therefore, one could assess excessive consumption in terms of the amount of external means, such as products, used to satisfy internal needs.

From an environmentalist’s point of view, the concept of consumption is easily defined: “In the case of consumption, the issue is the use of resources beyond the reasonable limits set by nature through regeneration” (Rogers, Jalal, & Boyd, 2008, p. 65). This statement could be considered all-encompassing, as a considerable amount of human actions, ranging from consumption of goods at micro-level to warfare at a macro-level, lead to destruction of nature.

In conclusion, though it is notoriously difficult to define overconsumption, many of us surely recognize it when we see it. At times, we see it in ourselves, our friends, organizations, communities, and nations. Overconsumption is a cultural construct, and what might be considered excessive by one, such as the use of disposable plastic bags or driving Hummers in a city, seems perfectly reasonable to another. In whatever way it is defined, overconsumption relates to wants, not needs, and also to leaving a negative impact on people and the environment, both directly and indirectly.

I choose to define overconsumption as an activity that is meant, but ultimately fails, to satisfy an individual’s never-ending sense of want or lack. Even though overconsumption is an extroverted act that affects the planet and its people by generating hardship, pollution, and waste, it has an intimate and introverted dimension to it because the desire to consume originates in our minds.

Negative Impacts of Overconsumption

In examining the role of overconsumption in consumer society, it is important to note that while overconsumption is far more prominent in well-developed parts of the
world than in less-developed areas, most humans never get to experience overconsumption and instead suffer in poverty (Fletcher, 2008); however, its impact is both significant and global.

Constant pressure by profit- and market-driven systems to purchase new goods results in the never-ending supply and disposal of consumer goods, which contributes to pollution, waste, and the depletion of natural resources that is currently plaguing our environment (Fletcher, 2008, p. 117). According to Rogers et al. (2008), globally, the “unsustainable production of consumer goods is characterized by gross inefficiencies and mismanagement in the use of water, energy, and minerals” (p. 65). Overconsumption has a serious negative impact on local communities, as well. Local communities and small businesses in well-developed countries suffer because for large corporations, it is cheaper to mass-produce goods overseas. Often, working conditions in factories overseas are not regulated and workers have to produce goods in unsafe environments (Fletcher, 2008; Parker & Dickson, 2009).

On a personal level, a never-ending search for identity and continuous disappointments with one’s self-image lead to overconsumption of goods (Bauman, 2007). Many individuals continuously consume to satisfy their desires, but not all desires can be satisfied externally. In turn, these individuals consume more and more in an attempt to better satisfy their ever-growing desires. The culmination of this process could ultimately render the planet inhospitable.

Development of a Consumer

Today, the consumer culture of both adults and children embraces consumption as a way to define identity, express oneself, and instantly gratify desires (Schudson, 1984).

In On Becoming a Consumer: Development of Consumer Behavior Patterns in
Childhood, McNeal (2007) presents in-depth research, spanning over 40 years, on the stages of the consumer development process from birth onwards. In his research, he observes children becoming consumers and argues that cultural setting, parents, and environment all contribute to the development of consumer behaviour from a very early age.

McNeal’s (2007) theory is concerned with the role of parents in the development of excessive consumerism. McNeal argues that “humans are inherently motivated to pass on their consumer skills and knowledge to their offspring” (p. 342). For example, before a baby arrives, many middle- and upper-middle-class parents in consumer societies have already created and arranged a bedroom for the baby, filled with consumer products. Furthermore, as a child grows, he or she is introduced to a marketplace and trained to recognize brands, respond to brand-name products, and interact with salespeople. As McNeal states, “It is the nature of people of all ages in a developed society; that is, each has a consumer character that is passed on from generation to generation” (p. 343). McNeal further explains that the skills related to consuming goods and services in a consumer-based society are more important than those related to actually producing goods. In Western societies, therefore, “the market-culture of childhood represents a monumental accomplishment of twentieth-century capitalism” (Cook, 2004, p. 2), which has turned many individuals into permanently unsustainable consumers.

According to Jacobson (2008), the years between 1890 and 1940 constituted a revolution in mass marketing to children on numerous fronts: the mechanization of factories resulted in mass production exceeding consumer demand, which led to a search for new consumer markets; the growing popularity of department stores, perhaps thought
of the “palaces of consumption”; the democratization of urban middle-class families; and most important, the changing attitudes toward childhood and children. During the postwar years, the growing influence of television and the adoption of demographically targeted research techniques by marketers further fortified children’s consumer culture. Such factors were compounded by the growth of the middle class and a more permissive approach to childrearing. By the late 20th century, the loss of government control over children’s programs and their connection to advertisers, the advent of the Internet, and the use of highly sophisticated ethnographic research techniques had allowed marketers of goods and services to further manipulate young consumers.

Based on McNeal’s (2007), Cook’s (2004), and Jacobson’s (2008) findings, I conclude that unless we grew up in a country where consumer society has not been developed, we all become sophisticated consumers at an early age. If Leonard (2009) is correct in her belief that excessive consumption is one of the main reasons for this planet’s current environmental crisis, then we all have to examine our habits of consumption to prevent irreparable further damage to the environment.

**Young Adults’ Knowledge in the Context of This Study**

While young adults’ understanding of concepts and structures influencing sustainable or unsustainable lifestyle choices has been studied before (Clover, 2001; Hume, 2010; Kola-Olusanya, 2008), I have not come across a study that specifically investigates sustainability and design in relation to the fashion industry in Canada. In my literature review, I have come across rich contributions made by many scholars with respect to sustainability, but their areas of specialization tend to be K-12 or postsecondary education, or else they are focused on engineering, architecture, geography, geology, and
urban studies. While such research offers some insights that are transferable to the realm of fashion, my review to date has not revealed any Canadian texts that report on design students’ knowledge of sustainability, young designers’ practices in the fashion industry, or document the effect of environmental education on fashion students’ attitudes regarding design.

In addition to limited research concerning design students’ environmental knowledge, relatively few studies have looked closely at the agreement between young people’s knowledge, attitudes, and habits as they relate to sustainability (Beattie, 2010; Clover, 2001; Jucker, 2002; Kola-Olusanya, 2008). Ultimately, the conclusions reached in such research are contradictory. Some researchers are optimistic (e.g., Clover, 2001; Kola-Olusanya, 2008) and state that young people are inspired to make positive changes regarding sustainability and aspire to live a sustainable lifestyle; others are pessimistic, noting that people living in well-developed countries, including young people, are environmentally aware but have difficulty expressing their knowledge through sustainable lifestyles (Beattie, 2010; Hume, 2010; Jucker, 2002; McNeal, 2007). Below, I review literature on young adults’ environmental knowledge and the gap between their environmental knowledge and behaviour.

Environmental Knowledge

There has been extensive research conducted on environmental learning but very little on actual knowledge that students possess or the effects of such knowledge on behaviour (Rickinson, 2001). The research focus has been on teaching sustainability and developing environmental programs in educational systems; in other words, the research has been largely teacher-oriented (Kola-Olusanya, 2008). Kola-Olusanya’s inquiry is the
first large-scale research effort into understanding environmental knowledge, behaviour, learning experiences, and interrelated ways of knowing. Kola-Olusanya’s study investigates young adults’ environmental learning, knowledge, and intended actions, which together constitute a sustainable lifestyle. Even though Kola-Olusanya’s research aims to discover how young adults’ learning and experiences influence their decision to live sustainably, his study focuses more on young adults’ learning, knowledge, and methods of acquiring environmental education. Kola-Olusanya admits that the results of his study, similar to mine, cannot be generalized because the research findings were derived from interviews with just 18 postsecondary students attending universities in Southern Ontario. His research, however, acts as a useful background for my inquiry, as he provides answers to questions very similar to those that I ask my research participants: What do students know about environmental degradation and how does their knowledge manifest in their daily lives? One of the differences between my inquiry and Kola-Olusanya’s research is that I focus exclusively on entry-level fashion design students, whereas he studied postsecondary students without any specific field or educational level in mind. As a result, the students who participated in Kola-Olusanya’s research came from the fields of natural sciences, social sciences, and engineering.

Another difference between our inquiries is that, in my inquiry, by asking the participants to design outfits, I hoped to catch a glimpse of the students’ unconscious attitudes (Oster & Gould, 1987) and critical thinking in action. My goal was to see and hear stories about the design students’ knowledge, attitudes, and daily habits. Kola-Olusanya (2008), however, asked participants to talk about factors that facilitate environmental learning and factors that support adoption of a sustainable lifestyle, as well
as reflect on their knowledge of the environment. In other words, even though he asked participants to reflect on their actions, Kola-Olusanya did not inquire into the participants' daily habits and compare and contrast their actions with their beliefs and acquired environmental knowledge. One final difference is that Kola-Olusanya takes great care in summarizing all possible formal and informal sources of environmental education identified by the participants, such as television, Internet, family, and school, whereas I do not focus on inquiring into students' sources for environmental education.

Overall, Kola-Olusanya’s (2008) inquiry provides mostly optimistic findings. His research participants show a solid understanding of environmental concepts; indicate that their learning took place in personal, sociocultural, and physical learning contexts; and express willingness to live sustainable lifestyles and protect the environment. His findings support assumptions that young people possess a significant amount of environmental knowledge and are eager to make change for a sustainable future. Kola-Olusanya’s contribution to the field of education for sustainability is significant because his findings indicate that young people “are a generation who hold the key to the future of a sustainable planet, environmentally and socially” and with this in mind, “it is imperative that we consult with young adults not as consumers of educational programs but as stakeholders in the educational and non-educational sectors” (p. 233). Such a statement implies that based on the relatively extensive environmental awareness of young people, major changes to the educational system should be made in order to create radically new pedagogical approaches to education for sustainability.

I could be less optimistic and point out that Kola-Olusanya (2008) interviewed only 18 participants, and based on his description of the participants, they all already had
a keen interest in environmental issues and sustainability. Furthermore, the students who declined Kola-Olusanya’s invitation to participate in his study stated that lack of knowledge about environmental issues and sustainability, in addition to lack of time, were the main reasons for their refusal to participate. With respect to the participants in my study, I always wonder what kind of narrative I could discover from an engagement with a participant who states that he or she lacks any understanding of the environment or sustainability. For this reason, I emphasised in my invitation to participate that no prior environmental knowledge is required.

**Gap Between Environmental Knowledge and Behaviour**

According to Jucker (2002), people living in well-off countries, including young people who will become our fashion designers, typically do not practise what they preach regarding sustainability and environmental awareness. Such a disparity between attitudes and behaviour is common and unsurprising, as it is, indeed, challenging to alter the habit-forming belief systems and perceptions that have been part of one’s upbringing and identity since childhood (Jucker, 2002; McNeal, 2007).

These findings resonate with Kola-Olusanya’s (2008) inquiry. In addition to largely optimistic conclusions about environmentally aware youth, Kola-Olusanya’s research shows that there is a gap between students’ knowledge and behaviour. The discussions with the participants under the heading “Consumerism and a Sustainable Future” (Kola-Olusanya, 2008, pp. 203-212) reveal that young adults are, in fact, aware of the gap between their own environmental awareness and at times unsustainable behaviour when consuming products. For example, Aya, one of his research participants, states, “I’m still definitely part of consumerism; so it’s difficult to attack that because I
think [young people] . . . especially myself . . . want everything” (Kola-Olusanya, 2008, p. 205). Contemplations about excessive consumption of goods and the desire to have everything are discernible in several of the quotations that the author presents in this section. When discussing excessive consumerism and the desire to create self-identity and obtain happiness by acquiring luxury items, the participants often speak for other young adults. They readily blame advertising and media for manipulating young people to purchase more stuff. The discussions clearly show that the participants strongly believe that their excessive consumerism is a direct threat to the environment; however, they have difficulty imagining the trend reversed, or even slowed. Their suggestions for dealing with consumerism include promoting environmentally friendly products, making environmentally friendly products look cool, eco-labelling, and consumer education. In other words, if consumerism is unavoidable, consumers could at least be educated to consume more responsibly. Such an approach could encourage forming pseudo-sustainable lifestyles. In his research, Kola-Olusanya acknowledges this gap in understanding but does not elaborate on it. After carefully reading Kola-Olusanya’s comprehensive study, I agree that his research participants showed a full understanding of the challenges regarding sustainability, though I could identify a gap between their environmental knowledge and everyday behaviour.

Hume (2010) completed another study that focused on investigating the gap between environmental knowledge and attitudes, and explored young consumers’ understanding of sustainability and consumer behaviour. The author evaluated the perspectives of 22 young consumers born between 1978 and 1994. Her findings further extended those of Kola-Olusanya (2008) in regards to the gap between knowledge and
habits. While Kola-Olusanya invited young people who are interested in environmental issues to participate in his study, he did not focus on studying the gap between their knowledge and behaviours; Hume first interviewed focus groups formed from young consumers, and then she selected 22 participants who were interviewed. Her questions inquired into broad areas of the participants’ life, among them shopping for food, means and frequency of transportation use, generation of waste, the amount of consumer items that the participants own, along with their use of renewable energy sources, debt, and shopping habits. In comparison to my study, Hume looked at the participants’ knowledge and behaviours from a much broader perspective, and she derived data from a generic group of young consumers, whereas I explored the knowledge and attitudes of fashion design students, and my questions were focused on fashion, consumerism, and the fashion industry.

In her study, Hume (2010) pointed out that young consumers have grown up in times of booming economies, modern technologies, and open trade and, as a result, over time this group of consumers have developed unsustainable behaviours. Hume emphasised that her findings showed evidence that the humanistic approach to defining sustainability that the young people talked about during the interviews was not manifested in their daily lives. For example, these consumers (a) would update their technological gadgets as soon as a new model was released with little thought given to proper disposal of the older unit, (b) would consider flying as a necessary and essential means of transportation, (c) would not recycle, and (d) would not consider using renewable sources of energy. Hume’s study created many questions about how and why such discrepancies between knowledge and behaviours could develop. Hume also points
out that solving the problem of this disagreement is a generational challenge because these young people are future parents of the next generation.

According to McNeal (2007), our beliefs, attitudes, and habits start forming early in childhood. Consequently, it takes a substantial effort on the part of the individual to instigate fundamental changes in attitudes and habits later in life. Sometimes, even if young people are environmentally well educated, they may not be fully aware of deep-seated attitudes, assumptions, and expectations that guide some of their unsustainable habits.

**Cognitive Dissonance**

In this section, I provide a brief overview of cognitive dissonance and how it has been used in research that investigates why there might be gaps between knowledge, attitudes, and habits. I then discuss the creative process and critical self-reflection as possible agents for change in regard to forming more caring attitudes towards people and the environment.

The theory of cognitive dissonance was defined and formalized by Festinger (1957/1985) in the 1950s and has been used in psychological research ever since. The premise of cognitive dissonance is that people are not comfortable when they experience inconsistencies between their cognitions, such as acquired knowledge, underlying attitudes, expectations, hopes, aspirations, desires, cognition of reality, and even cognition of action (Cooper, 2007). To reduce such dissonance, an individual would have to alter one of the cognitions in order to achieve a consonant state of mind; in other words, the individual would seek new information, change attitudes, or adjust behaviour. Cognitive dissonance, therefore, might affect how people behave in different situations.
and what choices they make (Beattie, 2010). For example, I care for women who are homeless and believe that they would benefit from financial support, but when I encounter a woman on the street who asks me for some change while I rush to work, I pass by her without giving her any change. In this case, two of my cognitions are dissonant: on the one hand, I believe that I should give money to a woman who is homeless, but on the other hand, my action or behaviour manifested the diametrically opposite belief that a woman who is homeless does not need money. This state of mind will make me feel uncomfortable and I would either have to adjust my behaviour and next time offer some money to the individual, or else adjust my beliefs and accept that giving money to individuals who are homeless is unnecessary (Cooper, 2007).

In the context of sustainability and fashion, if a consumer is aware that fast fashion promotes unsustainable production of cheap garments, would like to buy a new fashionable dress, but could not afford to pay for a dress that is made using organic cotton, this consumer may experience cognitive dissonance. Her environmental knowledge would be in conflict with her financial situation and the desire to acquire a new trendy dress. Another example of cognitive dissonance could occur if an environmentally conscientious academic was asked to fly from Toronto to Melbourne to present her findings in a conference addressing sustainability issues. Unless the organisers of the conference offer virtual presentation, the academic would have to choose between staying at home and using an unsustainable method of transportation to present her paper (Beattie, 2010). In these two examples, individuals' environmental attitudes are in conflict with presented reality, and both individuals are presented with
choices that might aggravate the resulting dissonance. According to Festinger (1957/1985), this state of mind is very uncomfortable and people are driven to eliminate it.

According to Festinger (1957/1985) and Cooper (2007), people experience millions of cognitions, some of which are consonant with other and some of which are dissonant. It is important to note that cognitive dissonance can have a constructive influence on our choices—after all, without the experience of cognitive dissonance, we might not be motivated to make any changes in our lives.

Beattie (2010), among other theorists, uses the theory of cognitive dissonance to investigate why some people do not manifest a sustainable lifestyle even though they have environmental knowledge. His research interests involve examining and measuring attitudes related to a variety of environmentally friendly or damaging factors and actions, among them shopping, carbon labelling of products, and knowledge about the environmental state of the planet. Beattie’s findings suggest that researchers should not base their conclusions regarding individuals’ attitude towards and knowledge about the environment solely on auditory data such as interviews. He suggests that the individuals might exhibit excellent understanding of environmental challenges, but their underlying, unconscious attitudes, sometimes through no fault of their own, do not match with their knowledge, and, as a result, do not manifest in their behaviour.

Beattie (2010) then goes on to suggest that triggering strong emotional feelings could influence underlying, unconscious attitudes. Strong emotions, then, could be used to bring about more caring attitudes towards the planet and its ecosystems. Sincerely caring attitudes, in turn, might make his or her daily behaviour more sustainable, and thereby reduce cognitive dissonance.
The Creative Process and Visual Journaling as Agents for Change

The process of thinking about what to draw, how to draw, and the act of drawing—in other words, the creative process—can uncover the unconscious, enhance empathetic feelings, and allow the perception of reality from different perspectives (Weber, 2008). This process can enhance the ability to reflect, express fears and fantasies, and facilitate communication skills (Oster & Gouid, 1987). In the context of education for sustainability and the gap between environmental knowledge and attitudes that some young adults possess, I comment on the existing literature on how the creative process, art-making, and visual journaling could affect emotions and attitudes.

For many decades, mental health practitioners have been interested in the aesthetic experience as a means to explore the human psychological condition (Oster & Gould, 1987). Through making art, art therapists facilitate patients’ learning of themselves, balance their hidden identities with the outer realities, and improve their communication skills. In the educational environment, art has been used as reflexive practice to “enhance understanding of the human condition” (Cole & Knowles, 2008, p. 59). According to Hickman (2007), drawing facilitates thinking and can help individuals focus their thoughts and enhance perception. Through visually explaining a social phenomenon, an individual’s perceptions and understanding of the phenomenon could change by observing his or her own drawing and keeping a journal of the experience. Deaver and McAuliffe (2009) suggest that in addition to art-making, reflective journaling helps enhance critical self-reflection because the drawings can reveal the feelings, whereas words could be used to further the understanding of the drawing process.
Findings in research projects (Clover, 2011; Deaver & McAuliffe, 2009; Hickman, 2007; Smeijsters, Kil, Kurstjens, Welten, & Willemars, 2010) support the claim that the creative process and reflection can affect emotions and attitudes. For example, Clover (2011), together with two other researchers, developed a participatory arts-based project that allowed women who were homeless to create art in a safe environment. One of the goals of the project was to empower the women, engage the general public in the issue of homelessness, and build trust and a sense of community among the women. The findings indicated that the women, through the process of making art, began to open up, communicate, share, and feel empathy (Clover, 2011). Smeijsters et al.’s research (2010) involved exploring how young offenders would experience and react to art, drama, poetry, and music therapies. The researchers wanted to find out if art therapies would address the main problem areas, such as lack of emotional expression, empathy, high emotional tension, and aggression in youth. The findings revealed that working with artistic materials helped the young people to express their feelings without naming them and to experience and define their emotions during the drawing process, as if the art helped them to get a grip on their emotions (Smeijsters et al., 2010). Both Hickman (2007) and Deaver and McAuliffe (2009) conducted somewhat similar research projects, in which they asked interning students, who were to become art teachers and art therapists, respectively, to document their experiences of their internship using reflective visual journaling. The findings revealed that all of the participants gained new perspectives, were better able to reflect on their emotions and knowledge, and the artwork often became a catalyst for in-depth discussions (Deaver & McAuliffe, 2009).
Dieleman (2008) puts forth the idea that artists, reflexivity, and art could become agents for change in sustainability, which he portrays as a process that defies rationality. According to Dieleman, transformation for sustainability involves emotions, desires, fears, lifestyles, identities, visions, and expectations. Dieleman points out that art and the creative process are about all of those emotions and reflections, which means that sustainability and art are closely related. Both art and sustainability involve creative thinking, creating new ways of living, developing different types of products, changing structures, and learning to see the world from a new perspective. In the context of education for sustainability, the creative process, art, critical self-reflection, and visual journaling could influence emotions and underlying attitudes. By doing so, such processes would facilitate the transformative process towards pro-environmental behaviour and habits, which would, in turn, reduce the cognitive dissonance between individuals’ knowledge and attitudes.

**Summary of the Literature**

This chapter starts with a brief explanation of postmodernism. I contemplate that it is impossible to define postmodernism because one of its tenets is the absence of a single truth, which at its essence defies forming a definition (Bauman, 1992; Drolet, 2004). Slattery (1995) discusses education in postmodern times and advocates for changes in how learning and teaching are perceived. Postmodernism and sustainability involve reflections on the self, the other, communities, systems, the planet, and the universe (O’Sullivan, 1999). Postmodernism, therefore, offers a useful philosophical framework for studies involving such elusive phenomena and structures as...
It is important to identify the difference between fashion, clothing, and the fashion industry. While fashion can be defined as a socially constructed belief system, clothing is one of the mediums used to manifest fashion (Kawamura, 2005). The fashion industry is the support system that fuels the development and change of fashion. The concepts fast fashion and slow fashion are contradictory in that the former is an extremely unsustainable manifestation of fashion, while the latter could be one of the solutions in manifesting more sustainable fashion design and production (Fletcher, 2008).

Sustainability and fashion are at odds with each other because the fashion industry damages the environment. It may, however, be possible to create more sustainable ways of producing fashion-related products. One possibility is the rise of independent designers and small-scale businesses that cater to individuals’ personal needs. Producing a small-scale garment collection overseas would not be feasible with such a business model, which would lead to sourcing locally and employing local communities (Fletcher, 2008).

Consumerism, as it currently exists, evolved over time (Stearns, 2001) to become one of the pillars of the capitalist economy (Clover, 2001). It is not easy to define overconsumption, though when we see an example of overconsumption, it is possible to recognize it, although “we” might strongly disagree about what we recognize as overconsumption. According to some research participants in Kola-Olusanya’s (2008) study, it would be virtually impossible to stop or reverse overconsumption. The
development of a consumer starts from an early age and by the time a child grows up, he or she has become a confident consumer of fashion-related products.

Even though young adults have considerable environmental knowledge (Clover, 2001; Hume, 2010; Jucker, 2002; Kola-Olusanya, 2008), there is a gap between their knowledge about the environment, attitudes, and corresponding behaviour. Recent research indicates that young adults are often fully aware of this gap and contemplate adjusting their lifestyle (Kola-Olusanya, 2008).

The gap between knowledge and the underlying attitudes could be attributed to cognitive dissonance (Beattie, 2010; Festinger, 1957/1985). It might be possible to trigger change in individuals’ underlying attitudes by using the creative process, such as making artwork, designing a product, and reflective journal-writing. There is evidence that visual journaling and art-making affect emotions, facilitate empathetic feelings, and allow for reflection that could change an individual’s perspectives. The chapter then concludes that the creative process and art-making could be used as the agents for change in the education for sustainability.
CHAPTER THREE: METHODOLOGY AND PROCEDURES

In this qualitative study, I used crystallization (Ellingson, 2009; Richardson, 2000) as a methodological framework to gain an understanding of entry-level postsecondary fashion students' knowledge, attitudes, and habits relating to fashion design, consumerism, and sustainability. This chapter begins by outlining the philosophical stance that guided the inquiry. Different aspects of the methodological framework are then discussed, such as selection and description of participants, data collection, methods of analysis, limitations, ethical considerations, and credibility of the study.

Research Methodology and Design

This postmodern qualitative research explores knowledge, attitudes, and behaviour. According to Flick (2009), qualitative research "demonstrates the variety of perspectives . . . on the object and starts from the subjective and social meanings related to it"; furthermore, "qualitative methods take the researcher's communication with the field and its members as an explicit part of knowledge instead of deeming it an intervening variable" (p. 16). With the framework of qualitative research, a postmodern approach to my study allowed me to use multiple methodological frameworks that "enlarge the focus on the phenomenon under study . . . by reconstructing the participants' [and my own] viewpoints and then analysing afterwards the development of shared situations in interactions" (Flick, 2009, p. 65). Postmodernism maintains that there is no meta-narrative defining the order of the world, and that no structures can comprehensively explain how the world and individuals exist and interact; in other words, there is no way to be completely sure of anyone's claims. At the same time, just
because postmodernism questions absolute truth and indubitable knowledge, it does not deny knowledge and action per se. As Anderson (1995) claims:

for all practical purposes . . . gravity still makes water run downhill . . . (and) it's equally possible to move from seeing a religion as timeless truth to seeing it as a product of a certain culture—and still happily worship at your church or temple.

(p. 2)

In the postmodern world, then, knowledge can be conditional and truth is created based on personal beliefs and each individual’s interpretation of knowledge.

The postmodern approach to my research let me look at the world, society, and individuals from contrasting perspectives (Flick, 2009), and allowed me to explore the subject matter of my research without claiming a definite conclusion. I employed crystallization as my research methodology to deepen my understanding of participants’ and my own conscious and unconscious perceptions of consumerism, identity, sustainability, and fashion (Ellingson, 2009).

Crystallization as a term was coined by Richardson (2000) and further developed into a methodological framework by Ellingson (2009). It is an approach that combines varied influences and expressions into a cohesive and holistic methodological perspective, one that reflects personal reflections together with social forces and biases:

[Crystallization] combines multiple forms of analysis and multiple genres of representation into a coherent text . . . building a rich and openly partial account of a phenomenon that problematizes its own construction, highlights researchers’ vulnerabilities and positionality, makes claims about socially constructed
meanings, and reveals the indeterminacy of knowledge claims even as it makes them. (Ellingson, 2009, p. 4)

In postmodern mixed-genre texts, crystallization replaces triangulation to validate data; however, instead of using the two-dimensional triangle as a symbol for data validation, “the central imaginary is the crystal, which combines symmetry and substance with an infinite variety of shapes, substances, multidimensionalities, and angles of approach. . . . Crystallization provides us with a deepened, complex, thoroughly partial understanding of the topic” (Richardson, 2000, p. 934). According to Ellingson, “triangulation seeks a more definite truth, [whereas] crystallization problematizes the multiple truths that it presents. Unlike triangulation, crystallization is informed by postmodernism, meaning that no truth exists ‘out there’ to discover” (p. 22). Crystallization accommodates the blending of long-standing dichotomies like art/science and qualitative/quantitative, allows one to use seemingly infinite potential methodologies, and excludes the arbitrariness of triangulation. Finally, as Ellingson observes, crystallization focuses on illuminating the essence of contrasting genres in the creation of knowledge, resulting in deep, intricately rendered interpretations of data.

Ellingson (2009) discusses five principles that can be identified in crystallized research:

1. Deep and complex interpretation of data, by incorporating differing forms of analysis, such as visual data analysis and phenomenological analysis of an interview.

2. Juxtaposition of two or more contrasting ways of knowing, such as the social constructivist paradigm and the artistic interpretive paradigm.
3. Utilization of more than one genre of writing to represent research findings, such as autoethnographic analysis and grounded theory analysis of inductive interviews.

4. Considerable inclusion of authorial reflexivity to demonstrate the researcher's consciousness during the inquiry.

5. Acknowledgment of the impossibility of finding truth and objectivity, and celebrating the "inherent limitations of all knowledge" while creating meaningful accounts of the topic.

When effectively integrated and used, these five principles grant the opportunity to employ sound, alternative research methods, and, at the same time, provide considerable freedom when presenting findings.

Crystallization allowed me to use systematic research methods, such as the grounded theory approach, to analyse interviews (Charmaz, 2000) and visual research methods to look at students' designs (Machin, 2007; Rose, 2007). In addition, it facilitated discussion of the student journals that documented the design and thought process throughout their progression (Deaver & McAuliffe, 2009; Gulwadi, 2009; Hickman, 2007).

According to Ellingson (2009), "with crystallization, we embrace a holistic view of knowledge production as always a mind/body/spirit enterprise" (p. 35). I, therefore, further crystallized my inquiry by including my own reflections and artwork as a reflexive practice during data analysis, thus, recognizing and including myself as an artist and designer, as well as a researcher, within this process of academic inquiry. Including myself as a participant in this study illuminated my own biases, assumptions,
predispositions, beliefs, and habits. I am a possible agent of change in the system; I am a link between the past and the present, and my perceptions, knowledge, and actions have an effect on my students. At the same time, I consider myself part of the problem because I, too, have been immersed in the overabundance of today's consumer society.

**Selection of Site and Participants**

Participants were invited to choose a location for the interview where they were most comfortable to converse with me. If the participants did not indicate a preference for the site, I booked a conference room at the school to ensure uninterrupted conversation. The personal reflections and visual exercises were completed in private by the participants at their own chosen site.

After receiving clearance to commence the study from the appropriate ethics review boards, I invited first-year students who were at the time enrolled in a postsecondary fashion school to participate in my study. At the time of my research, I was a part-time faculty member at the school. To avoid conflict of interest, I clearly stated in my invitation that students enrolled in my class were excluded from participation in my research. I posted the invitation to participate in my study on Blackboard, which is an online communications site for students and faculty. I also visited students in class, where the instructor introduced me and allocated 15 minutes for me to talk to the students about my research.

The scope of this inquiry allowed me to collaborate with no more than 10 students. For a month, nobody responded to my invitation. I decided then to approach the second-year students to participate in my research. My initial preference had been to study first-year students' knowledge, attitudes, and habits related to fashion design and
sustainability; I had assumed that first-year students’ minds would be less affected by commerce-driven lessons about selling and marketing strategies, and that their perceptions and knowledge regarding sustainability and design would not yet have been influenced by the prescribed curriculum of the school. I hoped to catch a glimpse of the students’ knowledge, perceptions, and habits before they had embraced the teachings of the fashion industry. There were, however, inadvertent benefits to including second-year students in my research. For example, I was able to reach out to more students and also avoid conflict of interest issues, since I do not teach second-year students. Recruitment was still slow. It took approximately 2 months for 10 first- and second-year students to respond. I arranged the first interview as soon as it was convenient for each participant. I verbally discussed the research project with the participants, reminded them that they were welcome to drop out of the study without any consequences, and, after they signed a consent form, I proceeded with the first interview.

After the first interview, 3 participants dropped out of the study for personal reasons, and I destroyed their interview recordings and excluded their responses from my analyses. I did not want to include the data from these initial three interviews because I would not have the visual data and the data from the follow-up interviews to gain insights into the participants’ knowledge and attitudes. The remaining 7 participants completed the visual exercises, wrote comments and reflections in journals, and participated in the second interview.

The age of the participants in my study ranged from 17 to 25. Based on my 15 years of involvement in the fashion industry as an educator, illustrator, and designer, I can safely generalize that there is a very high female-to-male ratio in the industry. It was
acceptable to me, therefore, for my group of research participants to consist of 1 male and 6 female students.

All participants grew up during the last decade of the 20th century and the first decade of the 21st, and all identified that they had experienced the comforts of North American consumer society; none of the participants had ever experienced extreme poverty, though during the interviews some did self-identify as poor when explaining how they shop for fashion related products. None of the participants was first- or even second-generation immigrant, making it likely they felt like a part of North American society and culture. Having grown up in the 1990s in Canada, to my knowledge the participants were never “barred from schools because of race or from sports because of gender ... [and never had to] duck and cover during nuclear war drills at school. They never knew devastating recessions ... (or) political assassinations” (Howe & Strauss, 2000, p. 47). In other words, the participants’ basic needs for subsistence, protection, participation, creation, identity, and freedom (Max-Neef, 1992) had been met as they grew up in a Western consumer society.

All students entering the fashion school are expected to be familiar with the basic concepts of the fashion industry, possess rudimentary knowledge of garment construction, and be able to express their design ideas visually. To strengthen this knowledge and further develop these skills, learning techniques of visual communication, such as fashion illustration, are mandatory during all 4 years of study. Since students are so extensively trained to communicate their ideas visually, drawing illustrations of three outfits to provide visual data for my study was a familiar endeavour for my research participants.
Instrumentation

This study employed four methods of data gathering. The main research question in this inquiry concerned students' knowledge, attitudes, and habits as they related to fashion design, consumerism, and sustainability. The study used two semistructured interviews, visual exercises, journal entries, and my own reflections and designs to analyse data and reveal the research findings.

Interviews

To determine the depth and scope of participants' knowledge of sustainability, attitudes and behaviour, I conducted an initial semistructured interview (Appendix A). The focus of the initial interview was identifying the participants' knowledge and attitudes as they related to design, production, and consumerism. For example, I asked the participants to tell me about their motivation to become fashion designers, name sources of inspiration for their designs, and convey their perceptions of sustainability, happiness, and consumerism.

The follow-up interview was meant to engage the participants in a discussion about their thought processes and allow them to explain and clarify to me how they approached the design challenge. The follow-up interview allowed me to determine whether, during this inquiry, the participants' knowledge and attitudes had been affected. I also asked the participants to comment on drawings and notes from their journals (Appendix B). I constructed open-ended questions for the follow-up interview based on derived conclusions and unanswered questions from the initial interview. For example, I asked a participant to compare his or her thought process when designing an outfit for an ordinary consumer with that of designing an outfit for an individual who is homeless.
created the protocol for the follow-up interview after carefully analysing, in the spirit of grounded theory, the drawings (Appendix C), the journals, and the initial interview.

The interviews with the participants were created with a postmodern constructivist perspective (Kvale, 1996) to facilitate a conversational approach in which both the interviewer and interviewee engage in a dialogue and knowledge is accumulated based on an emerging story. In this way, understanding is “differentiated and unfolded through the interpretations; the tales are remoulded into new narratives, which are convincing in their aesthetic form and are validated through their impact upon the listeners” (p. 4). An intensive interview, according to Charmaz (2006), “permits an in-depth exploration of a particular topic or experience with a person . . . [that] fosters eliciting each participant’s interpretation of his or her experience” (p. 25). For example, during the interview I encouraged participants to elaborate their narrative on topics concerning contentment, happiness, and life in general, and how all these phenomena relate to sustainability and fashion design; while this may have sidetracked conversation, it gave participants the opportunity to reflect on and communicate their attitudes. I also encouraged the participants to ask me any questions related to the research.

Using grounded theory approach during the interview analysis, allowed me to build rather than test theory, as well as identify, develop and relate concepts that became the building blocks for my findings (Charmaz, 2006). After each interview I immediately reflected on the conversation, analysed the interviews, modified interview questions for the subsequent interviews, and looked at the data flexibly at any time during my study. Using coding as the initial step for interview analysis and thematic analysis as the next step, which entailed segregating data by codes into data clumps for further analysis,
helped me identify emerging themes and create subcategories within those themes
(Charmaz, 2006). I analysed each individual interview, and I discovered as many truths
and stories as there were research participants in my study. The second set of interview
questions was carefully designed to illuminate meaning and engage the participants in
contemplation of the subject.

One of the principles of crystallization is that the researcher must employ
contrasting ways of knowing or methods of constructing data (Ellingson, 2009). I
consider the grounded theory approach to interview analysis to be inductive, and I find
that it allows for deriving knowledge from data in a very systematic way. Crystallization
allowed me to combine this rigorous method with the more ambiguous and subjective
visual analysis, and also to include the report of my personal reflections on the inquiry, to
construct knowledge.

Visual Exercises

To further assess participants’ thought processes, I gathered visual data in the
form of directed design exercises (Appendix D). To assist in the completion of visual
exercises and to create a replicable model of the research experiment for subsequent
investigation, identical sets of templates of human figures, detailed instructions, and art
supplies were given to the participants after the initial interview (Appendix E). I
provided participants with good quality pencil crayons, sketchbooks, notebooks, and
watercolour paper. My intention was to provide the participants with enough supplies so
that they would not have to seek art materials elsewhere, though I emphasised that the
participants were welcome to use other art materials in addition to those I had supplied. I
decided to give the participants pencil crayons because they offer a great deal of control
for drawing and for developing finer detail. Water-based mediums, such as watercolours or acrylic paints, allow for less control and require a more advanced skill level than pencil crayons when it comes to rendering an artwork, whereas oil-based mediums take a long time to dry. The participants were encouraged to keep the leftover art materials for their personal use.

The saying “a picture is worth a thousand words” suggests, in a metaphorical way, that visual methodologies greatly enhance and benefit qualitative research; in line with this view, I gathered and merged visual data with the interviews to learn more about the thought processes of participants when solving complex and unfamiliar design problems. Visual methodology successfully complemented my research because a visual representation of the world has always been “central to postmodernity” (Rose, 2007, p. 4).

The three outfits (exercise 1, exercise 2, and exercise 3) that I asked each participant to design were intended to satisfy three different imagined individuals: an ordinary consumer favouring the participant’s favourite brand (exercise 1), an animate being or natural inanimate object incarnated as a human (exercise 2), and a homeless person (exercise 3; see Appendix D). To successfully design the three outfits, the participants had to conduct market and brand research, as well as contemplate the specific needs and wants of the imagined individuals. This research process, together with creative contemplation, was meant to potentially generate a feeling or connection within the participant, towards the incarnated being and the individual who is homeless. For example, when designing the outfit for the homeless person, participants were instructed to consider the emotional needs of this person. Over the course of this exercise, participants had to exercise their creativity, as well as their technological knowledge, to
design an outfit that would satisfy a homeless individual’s need for subsistence, identity, and freedom (Max-Neef, 1992). I wanted to observe if participants’ attitudes towards the individuals would change during the design process. The ability to display a caring attitude towards others, or a lack thereof, was taken to demonstrate to what extent participants could conceptualize and address the needs and wants of a human being, whether well-off or severely disadvantaged.

When asking the participants to draw the three designs, I wanted to discover how they would approach such a design challenge and whether the process would trigger any particular emotions. I thought such a process might facilitate attitude change and encourage psychological connections with the individuals they were designing for, connections that otherwise might not have surfaced during the interviews. In agreement with Higgs (2008), who describes artistic expression as “at the leading edge of change, defining a reality unseen by the language and objectivity” (p. 551), I wanted to see if designing an outfit—a form of artistic expression—could trigger any change in the participants’ feelings, which, in turn, could affect their attitudes towards the design process. According to psychologists Oster and Gould (1987), “drawing or other art creation is a very personal statement with elements expressing both conscious and unconscious meaning” (p. 5). My assumption, therefore, was that the process of drawing and designing could act as a communicator of attitudes or feelings that are less than conscious in the participants’ minds.

Concerning the analysis of visual data, Rose (2007) offers a theoretical framework that divides and categorizes images into three sites: “the site of production,” “the site of the image,” and “the site of audiencing” (pp. 13-27). Each of the sites has
three different aspects, which Rose calls modalities, that contribute context and help construct the meaning of the images. The three modalities are *technological*, *compositional*, and *social*, and there are varying degrees of importance for the modalities in each site. For example, "the site of the image" (p. 13), namely the visual image itself, has technological modality that informs and allows us to interpret the execution of the image; compositionality that communicates the design layout, elements, and principles, as well as semiotic, metaphorical, and symbolic meaning; and social modality that positions the image in a social and cultural context. Clearly, compositionality of the image would be more important for some researchers than the technological modality, but the site of production informs more of the technological than the compositional modality. I focus on the social modality when discussing the site of the production of the images, the compositional and technological modalities when discussing the site of the image, and the social modality once more when discussing the audience.

To further scrutinize the drawings, I used multimodal analysis, which Machin (2007) describes as a social semiotic analysis—in other words, visual grammar. This type of analysis examines design elements of the artwork (e.g., colour, layout, background, balance, proportion) with a focus on their relations to each other. For example, it is a common perception that the colour green has positive associations with the environmental movement; however, green can also evoke feelings of nausea, and pale green can bring to mind toxic mould. Multimodal analysis allows exploring the context, relativity, and simultaneous contrast of each visual sign in the artwork. According to Machin,
In this [multimodal] approach we don’t simply think about visual elements as connoting particular meanings but look for their communicative uses—the way that, like language, they can create moods and attitudes, convey ideas, create flow across the composition, in the same way there are linguistic devices for doing the same in texts. (p. xi)

Multimodal analysis allowed me to interpret unintentional emotional messages that the participants unconsciously communicated in their illustrations. I deconstructed the illustrations by first breaking down the visuals into their component parts, rendering style, and design process, and then contemplating their interrelations. I paid special attention to possible symbolic and metaphorical translations to help discern and interpret meaning.

I chose to interpret the illustrations using Rose’s (2007) visual methodology of sites and modalities and the social semiotic approach described by Machin (2007) because these approaches resonated with me when I was searching for potential visual methodologies that I could apply in my study. Because of my theatre costume design background, I am trained to create a visual character in a theatre production or a film by deconstructing a literary character and re-building it in a visual form as a person on the stage. These methods, therefore, felt familiar because I was essentially doing the same analysis but from the other end: I was deconstructing the images that the participants created and then translating them into the text. There were, undoubtedly, moments during analysis where my roles as an instructor of fashion and as an artist were inextricably tied into my interpretations of the drawings.
The Journal

The participants were asked to keep a journal and document their thought processes during the creation of three designs. To facilitate deeper reflection and assist the participants in constructing the rationale for their designs, I created generic prompts for the journal entries (Appendix B).

According to Gulwadi (2009), “if incorporated, writing can be an important component to graphic and verbal techniques in exploring the essence, complexity and particulars of the design” (p. 97). Deaver and McAuliffe (2009) suggest that reflective writing complements the critical self-reflection involved in the drawing process because drawing can reveal feelings, and words can be used to further the understanding of the drawing process. Documenting the design process and describing ideas allowed the participants to be more aware of their thought processes and enable critical thinking (Gulwadi, 2009). The journals provided me with an additional set of data and helped me construct a meaningful guide for the follow-up interviews.

The Researcher as a Participant

As a postmodern, qualitative researcher, I could not remove myself from this inquiry. As I prepared to interact with my research participants, I learned much about the environment, the fashion industry, and, most importantly, I scrutinized my own attitudes and behaviour related to sustainability. The more knowledge I gained, the deeper I reflected on my own beliefs, perceptions, and habits regarding these concepts. It felt like I was completely immersed in a tidal wave of contemplations, from which there was no escape. To let go of the overwhelming feelings surrounding this inquiry, as well as to organize my thoughts, it seemed appropriate to write a journal. Keeping a journal
allowed me to become a reflexive researcher, implicating my body "as [an] essential component ... of research design, data collection and analysis, and the creation of representations" (Ellingson, 2009, p. 36). While thinking about the visual exercises for the participants, I could not stop thinking about my own designs. I answered every question that I asked my participants. I thought of who I would like to become in my "next life" if I had the chance to reincarnate as an animate being. I drew the designs and analysed them alongside my participants' designs. According to Ellingson, "crystallization necessitates a deep degree of reflexivity because it invokes the researcher's self on so many different levels as it constructs and deconstructs the meaning" (p. 177). I knew that my research could only be authentic if I critically reflected on all the questions that I asked and scrutinized my own behaviour in the context of sustainability and fashion.

**Methodological Assumptions**

Although this research is inspired by grounded theory, in which theory stems out of emerging data, I recognize that my initial research questions were inspired by certain assumptions. I assumed that entry-level fashion students had received education concerning the environment and that they had some knowledge and understanding of the fashion industry. I expected the participants to be able to reflect on their experiences by writing in a journal, and that they would know how to draw a human figure and garments. I also assumed that the participants would be creative and that they would have vivid imaginations, based on my perception of the fashion industry being a very creative industry. I assumed that the participants were financially comfortable enough to belong to Western consumer society and that they were consumers of fashion-related items. I
made this assumption based on the literature that I reviewed in Chapter Two. Finally, the previous assumptions led me to assume that the environmental knowledge that the participants had might not be fully consonant with the attitudes and habits related to constructing their visual identities and lifestyles. This last assumption led to the beginning of this research.

**Limitations**

My inquiry was purely qualitative and, therefore, cannot be generalized to other populations. A larger-scale quantitative survey would have provided informative data that would have complemented the interviews and added breadth and further depth to the study.

Not only was my sample size small, but the 7 were studying at a single postsecondary educational institution in Southern Ontario, where I had been teaching for a number of years. There are quite a few postsecondary schools in Ontario and many more schools across Canada where students are learning to become fashion industry professionals. Inviting students from a number of these other institutions to participate in the study would have allowed access to a more diverse group of participants. A larger and less homogeneous sample would have provided greater insight into students’ knowledge, perceptions, and habits relating to ethical design, consumerism, and sustainability. Practical considerations did not permit me to take any steps to reduce this limitation of the research findings.

At the time of the study, I was an instructor teaching first-year students. For this reason, I attempted to avoid potential conflict of interest issues by excluding from my research students whom I was teaching at the time. My status as an insider may have
brought preconceived notions related to the milieu and people I was studying. In addition, when it came to analysing visual data, it was at times challenging for me to be a truly objective researcher because I am an artist and an art educator. I often caught myself looking at the participants’ drawings through the lens of an artist and educator, rather than that of a researcher.

To mitigate the possible subjective interpretation of data, I used crystallization by combining visual methods, in-depth interviews, and critically reflective journals to gather data for this study. After each interview was transcribed, I provided the participants with the text document of the transcription to member check their first and second interviews for accuracy and permission to proceed with data analysis.

Crystallization allowed me to study broadly and deeply despite the narrow scope of interviewing only 7 participants from one university only. I attempted to reduce this limitation by reviewing literature that added further insights and breadth to the research findings.

I asked the participants to design the outfits during the winter term, but I believe that if I had approached the participants during their holidays, the drawings might have turned out quite different. The time frame for creating the designs was rushed, which meant less time for meaningful reflection and the creative process; however, this very same lack of planning may have allowed for more spontaneous, expressive thought to rush out on to the paper.

Another limitation that I discovered during the research process was my lack of knowledge of homelessness. I was well aware that by raising the issue of homelessness, I was touching on something that was beyond my field of expertise. Nevertheless, I
wanted to discover whether my participants were able to empathise during the design process, which, I believe, is important when approaching any design challenge. During the data gathering process, to gain deeper understanding of the issue, I read relevant literature (Clover, 2011; Daly, 1996; Karabanow, Carson, & Clement, 2010) to educate myself about homelessness. For example, I searched for appropriate ways on how to address an individual who is homeless and learned that the authors would use the terms “a homeless individual,” “homeless youth,” or “a homeless person” when addressing a person who is homeless. Clover (2011) used the term “homeless/street-involved” in her study to address the women who participated in her research. She pointed out that these two terms were used by the women who were homeless or had “modest under-housing” to describe themselves. In my study, therefore, I use these terms interchangeably when I address an individual who is homeless.

I attempted to immerse myself in the same thought pattern of my participants and undertook the same design process to create an outfit for a homeless person. First, I tried to define what it means to be homeless, and the more I thought about that, the more I realized that from the perspective of visual identity, a person who is homeless in North America might not necessarily look any different than an ordinary tenant or a homeowner. I realized that trying to characterize homelessness or designing special clothing for a homeless person was an error in my methodology. It was a mistake to conceptualize the homeless as a homogenized, clearly defined group of people; it would be comparable to asking my participants to design an outfit for “a homeowner” or “a tenant.” By asking the participants to design an outfit for a person who is homeless, it is
possible that I perhaps reinforced the stereotype of the homeless as an amorphous mass (Clover, 2011; Daly, 1996), albeit unknowingly and unintentionally.

Having considered these limitations, the process of identifying exceptions and exemptions in my research has also afforded me the opportunity to identify pertinent points for future research. And while there are limitations to this research, I also have utilized several methodologies to ensure credibility.

**Establishing Credibility**

To establish credibility for the results of this study, I used crystallization as my methodological framework. In contrast to triangulation—often used to establish credibility based on the assumption that there is “one truth,” crystallization allows for a multidimensional approach to elucidate “multiple truths” (Ellingson, 2009). Guided by crystallization, my research collected data from the interviews, visual exercises, journals, and my reflections.

The interviews themselves were digitally recorded and transcribed verbatim. The participants were provided with the transcripts of both interviews to conduct member checks for the accuracy of data and to add, delete, or clarify points. Participants emailed me feedback and only 1 participant made a clarification on her response to one of the questions. The content of the visual exercises was also discussed with the participants during the second interview. In addition, the participants kept notes about the design and drawing process.

Further, throughout the process of designing, conducting, analysing, and writing about the research, I consulted with my thesis advisory committee. By including myself as a research participant, completing all three visual exercises, I experienced any possible
challenges that my research participants may have had while drawing the directed visual exercises. It was during this experience that I discovered the methodological fault in my research design noted above, namely, that I was homogenizing members of the "homeless" population.

**Ethical Considerations**

As I conducted research with human participants, I received clearance from the Brock University Research Ethics Board (Appendix F). In addition, I received clearance from the Ethics Review Board from the postsecondary educational institution where I conducted the research.

I adhered to all ethical guidelines to ensure that participants’ rights were protected. There were no anticipated physical, psychological, or social risks greater than those that the participants might otherwise experience in their daily lives. Participants could refuse to answer any questions, drop out of the study at any time, and edit the transcripts of their interviews. None of the participants were my students at the time of data collection and analysis.

Participants willingly volunteered to participate, and all signed a consent form. All data were treated confidentially. The interviews were transcribed by a professional transcriber, who signed the confidentiality agreement. My thesis supervisor and I had access to the data. The participants chose pseudonyms and their names were not recorded on the transcripts, digitally, or in any written documents pertaining to the study.

**Restatement of the Problem and Chapter Summary**

This research examined 7 entry-level students’ knowledge, attitudes, and habits in regards to fashion design, consumerism, and sustainability. This postmodern research
was conducted using crystallization—a methodology that does not claim to elucidate one truth, but lends depth and credibility to a research project through the use of multiple modes of data collection and analyses (Ellingson, 2009). I further positioned myself as an inextricable part of my research, including myself as a reflexive researcher partaking in, as well as reflecting on, all methods of data collection and analyses—interviews, visual exercises, and journal writing—alongside the participants. I have recognized my study’s limitations, though I have also established credibility for my study through the use of crystallization, reflexive participation, member checks, and external readers. My research also met strict ethical guidelines, and it would seem that, overall, the experience proved to be a positive one for participants.

Significant themes and results that emerged from my research are explored and discussed in Chapter Four. While the research has limitations, I suggest that the results represent an important elucidation of knowledge, attitudes, and habits of entry-level fashion students regarding consumerism, fashion, and sustainability.
CHAPTER FOUR: PRESENTATION OF RESULTS

The purpose of this study was to explore 7 first- and second-year postsecondary fashion students' knowledge, attitudes, and habits concerning sustainability as it relates to the fashion industry. To acquire insights, I collected visual, auditory, and written data. To gain deeper understanding about the findings derived from the participants' interviews and illustrations, I completed the visual exercises, kept reflective journal, and notes (Appendix G).

At the onset of the research, I wanted to explore my participants' knowledge and association with sustainability as it relates to the fashion industry, and if the participants' understanding of sustainability linked concepts such as consumerism, sustainability, and the fashion industry. I was also interested to find out if the participants' knowledge and attitudes regarding sustainability manifest in their day-to-day habits. I further wondered if the process of designing outfits for abstract individuals (Appendix C) would affect the participants' attitudes towards the individuals, and how they would approach the design challenge when asked to contemplate their specific needs and wants. I also completed the same exercises to see where I stood in regards to the same questions and how my knowledge, attitudes, and habits would compare to those of my participants.

Using crystallization as a methodological framework allowed me to look at the findings drawn from the interviews, visual data, and journals. This framework also allowed me to merge the discoveries derived from the participants' and my reflections and drawings. I analysed the interviews in the spirit of the grounded theory method which illuminated two themes that I did not anticipate at the onset of this study.
As I was exploring the participants' knowledge and attitudes in regards to sustainability, consumerism, and the fashion industry, four themes emerged from the data and allowed for a consistent insight across the participants and myself. These four themes emerged as a framework that helped illuminate findings from the auditory, written, and visual data. I discuss these themes under the following headings:

1. Knowledge—Concepts Linked and Fragmented,
2. Dissonance Between Knowledge Versus Attitudes and Consumer Habits,
3. Surrendering to the Unsustainable Structures,

Knowledge—Concepts Linked and Fragmented

The interviews revealed that all of the participants have specialized knowledge regarding sustainability issues as they relate to production priorities and sustainability, and also that this knowledge is inconsistent. The participants seemed to selectively apply this knowledge in their own lives as evidenced in their description of consumption habits. I discuss the first theme, participants' knowledge, under the subheadings: Production Priorities, Sustainability, and Self-Evaluation of Acquired Knowledge.

Production Priorities

Asking the participants about their production priorities revealed their present knowledge about how to produce a garment collection. Fashion designers usually create fashion illustrations or technical sketches of the garments, select fabrics, and then (if working as independent designers) they might contract a sample maker and decide where to manufacture the garments depending on the size of the orders they receive from various buyers or retailers (Fletcher, 2008). In a real-life situation, the steps involved in
the production of a collection could be more complex or simple depending on many variables; however, I was assuming the scenario described by Fletcher when asking the participants about their production priorities. When asked about the production decisions for their future collections, most of the participants stated that their main priority would be to make sure that all of the people involved in the creation of their product line would be treated fairly. For example, Roxanna had this to say:

If I could produce [the collection] sustainably and ethically, definitely [I would] because I know how much, how big of a controversy and how big of a problem in the fashion industry that kind of unethical production is, and like, it’s just such a sad thing—those people in the third-world countries—the sweatshops, all of that, it goes basically unnoticed and I think as a designer if you can produce your designs ethically, it will definitely benefit you and definitely the world, in the future.

The above quotation demonstrates Roxanna’s awareness of the unfair treatment of citizens in the third-world countries and the need for fair trade; however, she divided human beings into “us” and “those people,” as if one group of humans (“us”) would like, but cannot quite do much, to help the other group of humans (“those people”). Frederic stated that it would be important for the production process to be fair to everyone involved, but also acknowledged the necessity of offshore production: “I think a big priority would be to treat people fairly. Um, I think in a perfect world it would be great to have it done offshore if it was cheaper, but still as long as the people were treated fairly.” Frederic did not divide humans into us and others, but he was conscious of the manufacturing costs and did not exclude the prospect of his product line being manufactured offshore. Juliann explained her production priorities as:
I wouldn’t want 6-year-olds sewing my garments, for sure. I don’t. I don’t really wanna be associated with that. I hope I don’t have to be but it’s hard to get around when you’re competing with the market, I guess. And, um, so I guess wherever I’m sewing I’d like to take a trip and just see, see what their factory is actually like, if possible.

Juliann’s statement demonstrates her awareness that it is wrong to exploit children in factories, but that market competition makes it difficult to avoid using child labour. Juliann accepted the fact that 6-year-olds would be exploited, as long as her name was not associated with such activity. Maureen stated that considering costs, analysing her customers, and trying to minimize waste would be her priorities when deciding how to produce her product line:

Um, well, obviously after analysing cost and market and what’s feasible in terms [of] what techniques can be eliminated, I would assume that waste would be the next factor in production, um, cutting waste ... so I imagine you would want to design something that would eliminate as much waste as possible. Um, I don’t know. I haven’t, I haven’t done much in terms of production yet. We, we don’t really take any courses in that, so I’m pretty much a beginner in knowing about production.

These excerpts are representative of participants’ main focus when discussing production, and show that when the participants were considering manufacturing of the garments, they did not contemplate other factors that would affect the environment, such as fuel resource use, transportation, the product lifecycle, and the farming of textile
fibres. Some of the participants, however, would mention these factors when discussing fashion and consumerism.

**Sustainability**

When asked to explain sustainability, the participants once again showed a range of understanding of the concept. The participants were able to single out aspects of sustainability and each participant, including me, contemplated the meaning of sustainability in different ways.

Elise was able to summarize the term in a short statement, though it was evident in the interview that she was not confident in her knowledge. Elise mentioned learning about sustainability during the first year of her studies and tried to recall doing so:

I guess I heard about it when I was in first year. A professor talked about it in my class, about, um, how the fashion industry isn’t really sustainable. So, I guess, what is it? It’s just, it’s the ability to be maintained without damaging the surroundings; [it] is a sustainable action.

Madori is the only participant who mentioned the concept of carbon footprint when asked to explain sustainability. She acknowledged at first that for “a really long time,” she was not interested in sustainability at all, but a recent research project “opened [her] eyes to how much more there is and in how many different ways you can be sustainable.” She went on to explain sustainability as “Really, truly, just buying local and making stuff and recycling.” Her explanation continued:

Like, you shouldn’t—I think that there should just be like no more making of clothing, really. Or anything, actually. There’s way too much stuff in the world, like on all levels. And it’s kind of alarming, actually. And the thing is, too, with
this sustainability fashion, it's all about a marketing ploy—trying to get you to buy new sustainable fashions, and that's just pointless because you don't need to buy more stuff, really. And I'm guilty of it, like I buy stuff not all the time, but I still buy things.

Madori did not provide me with a definition of sustainability, but she did call the excessive consumption of “stuff” one of the major causes of environmental degradation. Madori identified one of the key concepts of sustainability—the carbon footprint—but she was sceptical about reducing the carbon footprint when manufacturing garments. According to her research findings for the course assignment, only 2.8% of the carbon footprint can be attributed to actually creating clothing, while 35% to 50% has to do with transporting the clothing (Carbon Footprint Ltd.).

When asked to tell me how she understands the concept of sustainability, this was Jenny’s explanation:

Sustainability can mean anything from just environmentally friendly practices to not using slave labour or child workers and having good, like, like—I'm trying to think of the word, ah, environments for the workers, so even if it means paying a little bit more at least other people are not, you know, losing fingers at a sewing machine, and then not getting ... re-compensated for it, or not getting compensated for it.

Jenny started by mentioning environmentally friendly practices when producing garments and moved into fair labour conditions and worker protection. Jenny displayed a fair bit of knowledge related to sustainability. Juliann, on the other hand, had something quite different to say:
I think sustainability is creating clothing in more efficient ways, but I don’t think sustainable clothes really affect anything in life. Like, if you’re gonna have a garment that decays sooner than something else, I don’t think that’s really ... that big of a deal. I guess, more of the natural fabrics though, that are being made. Sorry, I’m kinda rambling, um like, when you make something with glue or something, obviously I realize that that’s less environmentally friendly, so I get that, as opposed to a cotton shirt which, obviously a cotton shirt is gonna decay faster than the rubber one, so I guess I’m for it but not everyone wants to—I’m a fan of bright colours and I’m a fan of like, funky, funky designs, so I’m not sure how much, ah, I wanna be for sustainability, but then if it limits my creative process, then I don’t know where I stand ... ‘cause it’s debatable.

The first sentence of the above excerpt contains a statement, with two opposing thoughts. The second part of the sentence diminishes the meaning of the statement’s first part: If sustainable clothing does not affect anything in life, then there would be no reason to produce clothing in more efficient ways. In the middle of the quotation, Juliann notices that she is rambling (which could indicate incongruence between conscious and unconscious attitudes), followed by another opposing claim that begins with her saying, “I’m for it, but not everyone wants to” and continues with “I am not sure how much, ah, I wanna be for sustainability.” Juliann thinks that sustainable conduct might limit her creativity. Out of 7 participants, she alone stated that she is not sure about the importance of sustainability.

Discussions about sustainability revealed the participants’ varied knowledge about the subject matter. For example, during the first interview, Juliann contributed the
following insights when asked if she would like to say anything more about sustainability:

I guess this is just relating my [knowledge of] architecture to fashion. At my architecture firm, I would do a lot of wall construction and there's a lot of material within the walls that lots of people don’t know about, and there's a lot of waste that goes on there. Trying to minimize that, it's pretty tough but we worked with [it]—I’m not sure if you ever heard of LEED but, ah, it’s Leadership in Energy and Environmental Design, and it’s like documentation you get if your building’s LEED certified. It just means that you—you’ve went through a lot of pretty much extra money and, ah, longer design hours, to get an environmentally friendly building. It’d be nice to get factories like that. The thing is, in third-world countries most of these factories [are not environmentally friendly]. For them to try to, for them to try to, like, adjust their buildings, would be so expensive and they can’t afford that and I understand that, but it should almost be like North America compensating for that. Like, if you’re gonna have a third-world country produce this for you.

This contemplation contrasts with the comments that Juliann previously stated about the importance of sustainability. All the excerpts demonstrate that the participants provided examples of unsustainable actions rather than definitions. The excerpts also show that the participants have various levels of knowledge and understanding of the concept of sustainability and the array of these responses would require further analysis.
Self-Evaluation of Acquired Knowledge

When asked to evaluate their environmental awareness and knowledge about sustainability, all of the participants expressed that their knowledge felt incomplete and that they could stand to learn more about this subject matter. The data derived from the interviews show that regardless of high or low self-evaluation, the participants did not have a clear understanding of the overall fundamental concepts, especially when asked if they could link concepts such as sustainability, consumerism, and ethical design. Participants were, however, aware of the contradictions and challenges that humans must face if they want to make sustainable lifestyle choices. The participants told me that most of their generalized knowledge was gained from family members who encouraged environmentally friendly habits, as well as some of the required courses at their fashion program where the professors have made an effort to introduce the concept of sustainability. For instance, Maureen noted that she really enjoyed the guest speakers in one of the courses, who were brought in to discuss issues of sustainability. Madori and Juliann had learned about sustainability while working for companies that engage in sustainable practices. The participants expressed interest in gaining more knowledge about the concept of sustainability.

Frederic, Madori, Roxanna, Maureen, and Elise stated that they lacked sufficient environmental knowledge and understanding of related concepts; this contrasts with Juliann and Jenny, who stated that even though they could learn more about sustainability, their knowledge about the subject matter was above average. Juliann was sceptical about sustainability and stated that she had already heard too much about the subject.
When asked to evaluate his own knowledge, Frederic put it quite simply: “Well, I think I know a fair bit [about sustainability], I don’t know everything obviously. But a lot of times, maybe I know less than I think I know.” Frederic questioned his own assessment of his knowledge and contemplated that he might not realize the extent of his lack of knowledge. Even though Madori had previously shown considerable understanding of sustainability, she was critical when it came to self-evaluating her knowledge:

It’s not very good. Not very ... I mean, I’m aware of some things but there’s a lot of ... ah, I try to, well I don’t, well I guess I try to, it’s kind of embarrassing, I don’t really follow politics, anything on ... I don’t really watch television, so I don’t really watch the news, don’t read the newspaper, so I don’t really know enough about these things, really, unless I’m doing, like, a research paper.

Madori’s statement shows her confusion and also her disappointment in the extent of her own knowledge. The statement is disjointed and fragmented, and as she was reflecting on her own knowledge to try and answer my question, I got the impression that she was trying to justify her perceived lack of knowledge regarding sustainability. Roxanna regarded her knowledge as basic, gained from introductory courses at her school:

I would say it used to be not very much, but I’ve kind of, um, I’ve taken an interest into environmental issues, kind of like minimally through my entire life, but now with intro to fashion and stuff like that, I’ve kind of gained a little bit of base knowledge, but it’s not very in-depth.

Maureen evaluated her knowledge and explained why, in her opinion, it was so limited:
I'm not at all knowledgeable on that, I mean we touch on environmental factors a bit in first year, um, ... in textiles a little bit, but we find out about chemical processes and things, but no sort of overview on it. And in [another] class, we do a little bit too—[the professor] had speakers come in and talk, but it wasn’t—you just touch upon it, so. ... And second year, we [are] still very, very new to the sustainable fashion stuff.

Maureen said that she felt she had not gained substantial knowledge regarding sustainability. (At the time of the study, Maureen was in the second year of her studies.)

Elise's account of her own knowledge can be seen as a summary of how the participants felt about their knowledge overall:

Um, it’s not very high. For example, for design class we had to use synthetic fur, so I bought cheap synthetic fur, which is I think probably the worst textile 'cause it’s just stapled polyester colour-treated, brushed conditioned fibres that are too tacky to be really used in another project and terrible on the environment. And that’s something that I use a lot of. You know, I don’t think it’s very high. Um, amongst fashion students it’s probably ok or not very high, maybe. But amongst the general population, it’s probably higher, because I’m aware of how textiles are made. So, it’s in the middle.

To evaluate her knowledge, Elise positioned herself in relation to the general population. At the end of her evaluation, she sounded content with her position—right in the middle.

These 5 participants were critical of their knowledge of sustainability in the fashion industry. Jenny and Juliann, even though more confident about their knowledge, did not demonstrate accepting attitudes towards sustainability. Jenny, when asked about her
environmental awareness, stated, "I think I’m aware. Sometimes I choose to ignore it, just because it’s easier.” This quotation demonstrates cognitive dissonance in that Jenny has environmental awareness but it is too difficult for her to live in accordance with it in her everyday life; therefore, she chooses to “ignore it” to mend the discord. Jenny explained to me that her specialized knowledge of sustainable textiles came from her courses at fashion school, but that this knowledge was too specialized to allow her to practise sustainability in the fashion industry after graduating from the program:

The whole faculty’s been trying to push the whole eco-friendly designs, eco-friendly everything and in textiles, we have this whole segment on environmentally friendly textiles and threads and fabrics and weaves and things like that, and that was helpful, but then if you get out in the industry, there’s just so much going on, and yeah, it could say polyester, or it could say cotton, but you don’t know if the dye is eco-friendly. And if it says vegetable dye, well you don’t know if they have to use a super chemical treatment to get the dye to stay in it in the first place, so a lot of things are, even if you are educated, once you get out there, it’s still really hard to be able to tell what’s eco-friendly from what isn’t.

When asked to evaluate her knowledge, Juliann told me that she had gained substantial knowledge about sustainability while working for a sustainable architecture firm. Compared to the general public, Juliann had this to say about her knowledge: “I’d probably say... in buildings for sure, like a 7 out of 10.” She went on to explain:

Well, I just worked for a sustainable architecture firm so I guess I know a lot about that so it seems a little bit, not old but ... I almost feel like sometimes I
wanna ignore it 'cause I, everyone just talks about it. I think everyone just talks about it to talk about it.

This statement illustrates how acquiring substantial knowledge might not lead to more conscious behaviour if a person's attitude is not consistent with acquired knowledge. Juliann did not mention her knowledge about sustainability related to the fashion industry.

I perceive my environmental knowledge as average. Frederic's description of his knowledge resonated with me because I feel the same way when thinking about sustainability and the environment. I think that I possess some knowledge and understand the basic concepts and structures, specifically those which are related to my field of expertise, but the more I educate myself about sustainability, the more I realize how shallow my understanding of the unsustainable structures that humans have created really is (Appendix G).

The excerpts from the interviews show that the participants and I have acquired specialized knowledge regarding sustainability issues as they relate to apparel production, sustainability, and consumerism, but also that this knowledge is inconsistent. According to the participants, they had acquired most of their specialized knowledge by taking courses at the fashion program at university. The data also indicated that the participants demonstrated in-depth knowledge in some areas of sustainability, especially textiles, while in other areas this knowledge was limited.

**Dissonance Between Knowledge Versus Attitude and Consumer Habits**

The second theme emerged in response to one of the main questions of this research, which was to discover if the participants applied their knowledge of
sustainability to their daily lives—in other words, did their lifestyles reflect what they had learned about sustainability? I discovered within participants’ responses information regarding a variety of topics; and in answering these questions (Appendix C), participants reflected on some of their habits and shed light on their attitudes. What emerged was a dissonance between participants’ knowledge of sustainability and their attitudes and habits related to consumption of fashion-related products, and at times lack of sustainability awareness when contemplating design process. I discuss these themes under the subheadings: Consumer Habits and Lack of Sustainability Awareness.

**Consumer Habits**

Most of the participants had mixed feelings towards consumerism, describing it as a phenomenon that is complex and difficult to evaluate. The participants were, however, aware that Western society is characterized by considerable overconsumption of goods. When asked the initial question—How do you understand the concept of consumerism?—Jenny, Elise, and Maureen all connected consumerism to sustainability in their responses. Juliann, Roxanna, and Frederic, on the other hand, explained consumerism from the consumers’ perspective. Madori had a different perspective in that she associated consumerism with the loss of certain “Do-It-Yourself” skills, such as sewing and mending.

All participants described the impact of consumption in terms of economy and individual consumers. For example, when asked to explain consumerism, Jenny quickly responded:

Consumerism—are we thinking of this in a positive way, or a negative way? ... I would say, um, yeah, consumption can be good and bad. Consumption can be
good for the fact that it helps stimulate the economy and gets people those jobs that they would otherwise not have just because people are buying. But at the same time, it’s the fact that we’re using up all these resources and that we really don’t need to be and we would be perfectly happy having less of what we have.

Jenny incorporated the individual, the economy, and sustainability issues into one statement describing consumerism. This was a trend all of the participants demonstrated when asked about consumerism.

Elise had this view of fashion and consumption:

I think I’m in the most consumptive program that I could’ve maybe, I could’ve chosen as a designer or creator, and that’s because fashion consumes, consumes resources, it consumes labour, it consumes like, ah, gasses when you’re transporting it. And then, with [product] on the shelves, it’s, um, it’s the way people spend money.

This excerpt reveals a subtle inner conflict, in that Elise will become a designer and creator, yet, at the same time, the fruit of her creative work will perpetuate unsustainable traditions.

Maureen’s explanation of consumerism similarly showed that she also is aware of the negative impact of excessive consumption on people. In her response, she mentioned the importance of economy, which is, in turn, reinforced by the consumption of goods:

People have to buy things, no matter what it is, to make the economy run. So, as long as they’re making things that are good for people instead of bad for people, it’s not so bad I guess. I think excessive consumerism ... definitely, you know, there’s a problem—for all the sort of big box stores and everything. I don’t know.
Um, I think there always has to be a product that people buy, so if it’s not material goods, then an economy must be based on something, but it’s bought and sold, so if it wasn’t products, I don’t know what, what it would be. Um, yeah, I don’t know.

Maureen, like many other participants, showed a lack of confidence in discussing consumerism and economy. Unlike Roxanna, Maureen did not try to provide me with a definition of consumerism. Even though Roxanna was quick to reply, however, it sounded as if she was reciting a definition of consumerism that she had learned at school, to me exemplifying a case where the participant has been taught a concept but is not sure if she fully understood it:

How much you buy—well, yeah, how much you buy, what kind of products you buy, their life use. Some people buy things, get rid of them 3 months after, and then go buy more without really thinking about it. So, I think yeah—and mass consumption, definitely in North America. Um, I don’t know.

After giving her definition, Roxanna was uncertain if her reply was correct.

Frederic described consumerism from a more personal perspective:

Oh ... I like shopping when I’m looking for something, but I don’t feel like I need to have something forced down my throat, you know, so in that sense, I don’t think it’s necessary. I mean, I guess big companies find it necessary ‘cause that’s how they make their money and stay afloat. But on the consumer end of things, I don’t think it’s that necessary, and maybe people shouldn’t be so dependent.

In his reply, Frederic touched on consumerism, individuality, manipulation, and big companies’ need to make profit. Frederic even posited that consumerism is encouraged by big companies to ensure profit through consumer manipulation.
According to Juliann, consumerism is acceptable because “it runs the economy.” Following this statement, Juliann took time to think about how to explain her point, and with hesitation, elaborated further:

It’s ... I don’t know, ‘cause everyone wants ... I think the styles almost change too quickly. I guess you could say ... ‘cause consumerism, everyone wants to buy to keep the market going, but then when it comes down to it how much stuff do we need, I guess is the other debate. And how many times do we really need style to change like sometimes I get worried if style’s gonna change, like I still wanna wear those boots from last season, but like, people kind of, people are gonna bug me about it, which they don’t, obviously and I’m not that concerned about it, but ... I don’t know, I guess it’s like a, it’s a good thing and it’s a bad thing for all over ... like... overabundance of products that we don’t really need but ... we want new and shiny things, so ... I don’t know how to really answer that.

Like Juliann, all of the participants justified purchasing new clothing as valid means of creating a self-image. The findings indicate that visual identity was important to participants, and that regardless of sustainability knowledge, a dissonance existed where importance was placed on the creation of a desired appearance achieved through purchasing, whether it be new clothes (Jenny, Roxanna, Juliann, Elise), second-hand clothes (Frederic, Elise), or vintage clothing (Madori).

This creation of a visual identity with fashionable outfits also emerged from the data as a prevalent focus; and the importance of appearing “fashionable” was not referenced in terms of whether it was sustainable or not. Often, a story about creating a certain look would result from more general questions, such as: What are important
things in your life, what makes you happy, or how much of your happiness is related to fashion? When answering the question about importance of fashion in her life, Juliann expressed how important it is for her to appear fashionable:

"Um, people are judged on their looks, like that’s just a fact of life. There’s, there’s lots of different clothing, depending on what kind of people, what kind of person you are, if you’re gothic, if you’re preppy, if you’re sporty, and I find in every day of life you suit up to what you’re planning on doing for that day. So, if I were to suit up for a job interview, and I was feeling really good about something that I just put on and I feel really good about going in the meeting, but if I really hated what I was wearing, I’d assume that they were just judging me the entire time. So, I guess that’s my answer. I pretty much am materialistic. I like, if I’m doing something I really like, I like to wear something that looks good and other people want, almost, so I guess that’s kind of important to me, I guess that’s why I’m in fashion design, ‘cause it’s important.

Juliann summarized that it is important to dress up for special occasions because everyone is judged by their looks, which is why she is in design. She expressed strong awareness and assigned great importance to her visual appearance.

The rest of the participants were more concerned with how their clothes make them feel, rather than other people’s opinions of their appearance. Roxanna, for example, was very aware of her visual appearance; when I asked her about the latest fashion item she purchased, she told me, “It was these pants from H&M. I got them because I mostly had just jeans in my wardrobe, and I need to start looking more, I don’t know, fashionable, rather than mid-Western.” Frederic, Madori, Elise, and Jenny expressed
similar sentiments. Frederic and Madori told me that they strove to create a unique appearance through second-hand and vintage clothing. Jenny, despite having an extensive wardrobe, emphasised that the reason she does not blindly follow the latest trends is that she knows what looks good on her. Maureen discussed purchasing mainly inexpensive clothes and occasionally investing money in more expensive shoes, though she commented that she rarely wears these more expensive items.

All of the participants were comfortable discussing how they create their looks. They all seemed comfortable with their wardrobes and said that they would not have any difficulty going shopping. The participants exhibited confidence in their appearance and knew exactly what would make them look and feel good.

When asked to discuss sustainability and consumerism, Juliann indicated that she would like products to be made in sustainable ways that did not diminish her urge to buy them:

I don’t like the intermixing of plastics and ... cottons and different ... like when people make purses, they’ll add every sort of, like, metal and plastics and so it’s hard to, hard to recycle or hard to, I guess, disintegrate in the ground. But then, those items are always the ones that I wanna purchase ‘cause they’re so unique and they have everything ... I wish they could make the same—products that aren’t sustainable today, I wish they could make them sustainable so I would still have the same urge to buy them.

Juliann was the only participant to wish that products could be sustainably produced but remain appealing, so that she would not lose her urge to shop. Her statement suggested a
compromise between supporting the environment and preserving the enjoyment of shopping.

All of the participants, with the exception of Juliann, also mentioned that they were aware of their excessive shopping habits and that they would like to control their urges to purchase more clothing, and on occasion participants noted that their shopping habits did not reflect their actual knowledge and understanding of sustainability. Feelings of guilt and helplessness were commonly expressed by the participants when we discussed their shopping habits. For example, when asked about consumerism, Maureen responded by reflecting on her own shopping habits:

I'm kind of a hypocrite with it because I believe that in, you know, buying pieces that are quality investment pieces, but in reality I just do the same thing—I buy junk and wear it out and throw it out. So, yeah, the two ideas of investment pieces and, and just buying stuff in mass quantities are at odds with each other. Um, yeah I've, I'm torn between what I think and what I actually purchase myself.

Maureen expressed a similar attitude when asked about which fast fashion stores she shops at:

Um, H&M of course, it's across the street. Ha-ha ... I have a love–hate relationship with Joe Fresh, ha-ha ... those 10-dollar t-shirts. I try to say no. ... But, yeah, I end up buying a lot of Joe Fresh lately. Um, it's convenient, it's cheap, but I'm ultimately unhappy with it. Ha-ha. But, yeah. Mostly those two right now. And online. It's so much easier to impulse shop online than it is to physically go out and buy stuff, so ... there's been a lot of mistaken eBay purchases.
In her response, Maureen linked sustainability with the impact of excessive consumption of fast fashion apparel and sounded disappointed with herself when describing her shopping habits; Maureen’s discussion of her shopping habit was slow and frequently interrupted by nervous laughter and she showed embarrassment about not being able to control her shopping habit. Despite being displeased with her behaviour, Maureen seemed to think it would be almost impossible to change. In Maureen’s case, the incongruity between her knowledge regarding sustainability and her actual shopping habit was creating a discord in her consciousness—she would like to adjust her behaviour, but admits that it would be very challenging to do so.

Jenny fully disclosed her habits of excessive consumption of apparel when asked to describe consumerism:

Well, there definitely is overconsumption. Definitely I would agree on that one. Oh, I look at my closet and I see overconsumption. I’m kind of a hypocrite because if you look at my closet, I could live for about 2 months without doing my laundry once, and that is how much stuff I have.

Compared with Maureen, Jenny appeared comfortable when discussing her extensive wardrobe. During both interviews, Jenny demonstrated an understanding of sustainability, but her attitude and habits were not affected by her knowledge. Even though she called herself a hypocrite when discussing consumerism, she made no mention of adjusting her behaviour to live according to her knowledge of sustainability.

Roxanna revealed that she makes exceptions for herself when purchasing new clothes. This is her response when asked what thoughts instigate her decision to buy a new item:
The new colours—it’s, like, the new style. You see, you see it and you think to yourself, “Oh, that would look so good with this, like my jeans.” And you kind of, oh how do you say ... make exceptions for yourself, even though, even if you’re like. “Oh, I’m not gonna buy new clothes,” you kind of make it ok, especially if you try it on and you’re like, it looks so good, right?

As Roxanna was telling me about her reasons to purchase a new garment, she seemed to be looking for my approval and agreement. It was as if she was waiting for me to agree with her (“Right?”). I went on to ask Roxanna why she thought it was important to look trendy:

Well, I guess because you get bored with the same wardrobe. Well, I do. And then you go into a store and you see the new things and you want to have it, you’re like, “Oh that’s so cute and new and fresh.” Um, so that you can be in style, you can have the stylish image and new things. I’m always, I always like new things, right? It’s kind of bad but even though my wardrobe currently isn’t filled with, like, old and yucky clothes, but you know, you see the new things and you just want them.

These excerpts indicate that Roxanna likes to shop, and that she is aware that she does not actually need new clothes. Nevertheless, she makes excuses for herself to purchase new products because it is important for her to look stylish. During the conversation, Roxanna constantly switched from using first-person (“I”) to second-person (“you”) pronouns, as if she was not actually talking about herself. She described it as “you” that has the shopping problem and “you” that sees new things and just wants to buy them. It seemed like Roxanna divided herself into “I” and another person that she could dissociate herself from. Another interpretation could be that Roxanna believed that she belongs to
the “you” group that “just wants new things.” At the time, it felt to me that by using the second-person “you,” she was trying to encourage me to agree with her. I may have read too far into these excerpts, and I readily acknowledge that it was virtually impossible to remove myself from the conversation to participate as a neutral investigator, especially as I found myself reflecting on my own shopping habits when talking to Roxanna. I found affinity in her descriptions of desires of “wanting new things.”

When I asked Roxanna if there could be any link between consumerism and fast fashion, she explained:

Fast fashion has really no relation to sustainability. ‘If you’re going through so much clothes and as a consumer you’re buying so much, buying this every season, and like, it’s not necessarily made sustainable, and how can you be sustainable if you keep buying this stuff. And keep putting your money into the unethical ... practices employed by some of these companies, trying to maintain fast fashion.

Such a statement shows that Roxanna understands the link between consumerism, fast fashion trends, and sustainability. Roxanna is aware that buying new clothes to try to follow every new style is not sustainable, but she has no intention of changing her behaviour; again there is a discrepancy between knowledge, attitude, and habits.

During the interviews, Juliann demonstrated in-depth understanding of sustainable practice—a result of her past employment, but this knowledge was also incongruent with her attitude and behaviour related to consumerism. Juliann was once employed by a company that chose to follow very strict guidelines regarding environmentally sound practices. She also identified challenges with fair labour in the fashion industry; however, when discussing consumerism in terms of her own shopping
habits, Juliann expressed hope that products could be made more sustainably so that she would not lose the urge to shop but did not contemplate consuming less to live a more sustainable lifestyle.

Madori, Frederic, and Elise displayed somewhat similar attitudes when discussing consumerism and describing themselves as consumers, though Madori and Frederic emphasized that they were aware of their urges to impulse shop and made an effort to shop in second-hand stores. Their behaviour and habits may be that of an ordinary Western consumer, but their attitudes were more in agreement with their knowledge of sustainability. For example, when asked about impulse shopping, Madori said,

I don’t really buy kind of frivolous things. In a way, I mean ... I try not to buy, I buy basics. I do impulse shop, but it’s usually vintage stuff so at least it’s not like buying more crap... and that’s something that I really try not to buy.

When asked about a recent purchase, Frederic mentioned that he was excited to be able to make a winter coat for himself. Both Madori and Frederic were well informed about sustainability challenges, both displayed attitudes of concern for the environment, and both made an effort to match their behaviour with their knowledge.

When asked to evaluate their daily habits related to sustainability, all of the participants emphasised that they recycle plastics and paper. The participants appeared comfortable discussing recycling and stated with confidence that recycling has become their way of life.

**Lack of Sustainability Awareness**

During the interviews, at times it felt as if participants “knew” how to answer my questions, but in real-life examples their behaviours did not reflect sustainable
consumption. This finding surfaced when the participants discussed topics that were not directly related to sustainability, and also when we created the designs for the three imagined individuals (Appendix C). For example, Juliann mentions Canada Goose, which manufactures high-quality down-filled outerwear in Canada, and wonders about the sustainability of its production. However, when questioned about their favourite brands or designers, all of the participants (including myself) named fast-fashion producers among some of our favourite fashion purchases. None of the participants hesitated to mention fast-fashion producers like H&M, and while it is beyond the scope of this study to discuss the sustainable production of each of the producers mentioned by the participants, I am able to mention that H&M is particularly popular, and known to be a producer of fast-fashion.

None of the participants mentioned sustainable fashion when discussing their favourite brands or designers, nor did the participants suggest sustainable fabrics when contemplating the design of the outfits—even though in their journals some took care to mention qualities like “fire resistant,” and specialty fabrics, such as fibreglass and silk. Considering the topic of the interviews, it could have been easy for the participants to sound sustainable by reflecting the knowledge they spoke of in the interviews in their designs and journals. They, however, did not make that effort, leading me to conclude that their drawings reflected unconscious, ingrained attitudes. When faced with the challenge of designing and drawing the outfits, other factors, like aesthetic and function, came through more naturally. I, too, made no mention of sustainable fabrics or sustainable production in my designs.
Similarly, most of the 7 participants expressed that the fair treatment of all involved in the production process is an ideal priority. I also considered this to be part of my sustainability knowledge repertoire. Yet, we all either consciously or unconsciously disassociated ourselves from “others” potentially mistreated or exploited in the mass production of fashion-related products. Roxanna’s statement encompasses both:

It’s just such a sad thing—those people in the third-world countries—the sweatshops, all of that, it goes basically unnoticed and I think as a designer if you can produce your designs ethically, it will definitely benefit you and definitely the world, in the future.

The same distancing occurred in some cases when participants were confronted with the challenge of designing for an individual who is homeless. For instance, Juliann had this to say:

Yeah, but I have an issue. I guess I don’t really know their story and never cared to ask, but I just find that ... well, I guess a lot of homeless people probably have issues that I don’t know of, but I find it so hard to, to just have to stand outside and beg for money, like it doesn’t like process through my mind of why you would have to do that.

I was similar to the participants in both homogenizing and distancing myself from this “other”—that the very task of my choosing “an individual who is homeless” as the theme for one of the sketches created or reinforced a distance between “us”—the participants and myself, and “them.”

The participants stated that the current culture of consumption was unsustainable, but were reluctant to change their own habits as they identified clothing to be important
in creating, maintaining, and updating their visual identity. The data therefore show that most of the participants have discrepancy between their knowledge about sustainability, consumerism, their attitudes, and habits.

**Surrendering to the Unsustainable Structures**

The third theme that emerged from the interviews was the participants’ belief that the present systems that reinforce and support the unsustainable structure of the fashion industry are too ingrained in society, and too complicated to affect any real change. The participants mentioned the economy, media, society, culture, and the fashion industry as part of the system that seems to encourage unsustainable practices.

The attitude that is sceptical of the possibility of positive change in the fashion industry arose as a theme during our conversations without my ever addressing the issue directly. Often, I would ask a question about sustainability and consumerism, or I would ask about a possible link between various concepts that affect sustainability, and participants frequently responded to such questions with doubt that change is possible in the fashion industry. For example, when asked about production, Frederic said,

> I think in a perfect world it would be great to have [production] done offshore, if it was cheaper, but still as long as the people were treated fairly. And I think that’s also kind of like hard to monitor, and so that might be a little unrealistic and, I think that will be a little bit closer to utopian.

Here, Frederic reveals that he does not believe that the production process could be easily monitored. When asked to comment on the possible link between fashion design and environmental issues, this was Frederic’s response:
The gears are turning slowly. Um, yeah. I think they could be linked. I think it would make it even harder and then, I'm not sure if back with the consumerism thing, like making something ethical and sustainable and that consumers wanna buy. I think it's just like each piece of the puzzle makes the puzzle harder to put together, I guess. But I definitely think it is possible. Sure. I have never thought about it though, to be honest.

Frederic used a mechanical metaphor—gears turning slowly—to explain the challenge of producing ethically and being able to sell the product. The metaphor of gears turning slowly could suggest an image of a heavy gear that is difficult to turn. Frederic also provided the metaphor of a puzzle that is difficult to put together, suggesting a sense of incongruence. According to how I received Frederic's description, these two metaphors combine to create a rather intimidating image: pieces of a difficult puzzle, turned by gears. Although daunting, Frederic mentioned that he thought it might still be possible. His closing sentence suggests he was not particularly concerned with environmental issues.

When asked about what would help foster environmentally sound habits, Elise expressed a desire for the fashion industry to help young designers start environmentally friendly businesses:

I think if it was accessible in a way that it was, the fabrics were available to me, and I guess if anything it was more, it was put as a focus, or a general—a greater goal for us—then it would be a better situation for those kinds of things. It's like two: it's like dream world versus reality right now.

Frederic expressed a similar sentiment:
Like, you’re looking for a certain kind of fabric that has to like drape a certain kind of way or something, and you can’t find that with any of the sustainable resources you have, you know, at your disposal. So, it, often times it would be a lot easier to just go with something not sustainable because it's more accessible.

Both Elise and Frederic believed that the idea of sustainable practices in the fashion industry is “utopian” and dream-like.

Roxanna, when discussing the environment, mentioned media manipulations and marketing strategies that coerce consumers into buying products because they are supposedly environmentally friendly:

A small portion of people are acting on the [environmental] changes that should have been [started] a long time ago, but I think a lot of it is also talk for the media, or for basically capitalizing on the current trend of consumers to be green, or to be ... I don’t know how to say ... conscious of their choices. So, I think it’s also a lot of marketing. I think there are people that are not doing what they say, green washing, and stuff like that.

Roxanna did not mention the system, but she did point out that only a small portion of people try to initiate change and that there are many more who would exploit the sustainability movement to sell more products. During the interview, she sounded generally sceptical about the authenticity of the green movement.

When I asked Madori to describe sustainable design to me, she thought for a while and then responded:

Um, that’s something I’m not too clear on. I just know that it has a lot to do with, like, like on many levels, kind of being good to the environment and also ethical
to like the workers who are making it. And that, there’s huge problems within
that too, that, it just, it’s kind of such a huge problem, but it kind of seems
insurmountable sometimes. I mean, there are solutions, but the thing is that all
the solutions to these problems would mean, like, um … would have, like bad
effects on the global economy because they’d have to either raise their wages and
that is a possibility really, they’re not gonna do that. And if they stopped
production and transport, then trade would be over. And it would just have
detrimental effects. It’s kind of, in a way they’re kind of at a crossroads and
they’re stuck in so many ways, and I don’t really know too much about it, I don’t
know what they’re doing to solve it but it doesn’t really seem like something
that’s gonna be easy, anyways.

In her contemplations, Madori linked the environment to manufacturing, workers, trade,
and the global economy. She used the word “insurmountable” to describe the problems
of trying to be ethical toward the environment and factory workers. Madori also used the
word “detrimental” to describe the impact on the economy that would result from trying
to solve such problems. Madori used the metaphor of being “stuck in the crossroads” to
describe the challenge that a sustainable fashion industry would face. The metaphor
evokes an image of confusion, where there are so many directions and possibilities that
the traveler becomes indecisive about which path to take. Jenny, when asked about her
environmental awareness, reflected, “I think I’m aware. Sometimes I choose to ignore it,
just because it’s easier.”

These excerpts show that the participants were aware of the challenges and
controversies that people will have to face if they want to make significant changes in the
fashion industry; however, being sustainable was considered to be more challenging than going with the flow of common unsustainable practices and habits. The participants held substantial knowledge regarding sustainability, and they were able to recognize and reflect upon the extent, complexity, and depth of this problem that we all are facing.

In analysis of the visual exercises, I found that in the majority of cases, the participants’ drawings adhered to and reinforced current fashion trends, evidencing an acceptance of the system. In the creation of the outfit for the incarnated being, for instance, all the participants, except Frederic, illustrated outfits where the individual would fit in quite stylishly according to the current fashion trends. All of the participants and I essentially went along with the system in creating designs that reinforced stereotypes dictated by current fashion trends, which means that even though we might wish to affect the current unsustainable system, we simultaneously belong to the system and might unconsciously be supporting it.

**Design Process and Caring Attitude**

The fourth theme that resulted from the data is that the creative process of researching, designing, and drawing the outfits acted as a catalyst for a change in attitude in the participants and me. This theme is supported by findings mainly from the visual data (Appendix C). When discussing the possible change of attitude to a more caring one, I used findings from the visual data, journals, and the interviews (Appendix C, Appendix B, Appendix A). Exploring the participants’ attitudes was part of one of the main research questions in this study; therefore, I provided the participants with a design challenge that was meant to reach for and expose less conscious attitudes that might not have surfaced during the interviews. I discuss the findings derived from the second
exercise under the subheading Anthropomorphising an Individual, whereas I discuss the findings derived from the designing for an individual who is homeless under the subheading Change in Attitude.

**Anthropomorphising an Individual**

The process of deeper thinking was first initiated while designing for the incarnated being and the intention behind this exercise was to have the participant delve into imagining the needs of the incarnated person; however, most of the participants drew anthropomorphised versions of the animals but did not necessarily reflect on what the animal who was incarnated as a human would prefer from their own perspective. For example, Elise’s dog persons are fully anthropomorphised and dressed up like well-groomed individuals who would belong to society’s upper class. In her journal, Elise sketched various dogs and a list of dog characteristics. However, when it came to the drawing of the design—maybe unconsciously—she drew an individual who did not display the characteristics of the animal (Appendix C, Figure 5b). In her notes, Elise called dogs “submissive, loyal, easy, and happy, something loveable and forgiving,” and noted that it is important for dogs to have food, comfort, and love. Based on the drawings and notes in her journal, Elise’s approach was to look at dog breeds and then proceed with the design based on how humans perceive the different breeds. For example, the common perception of poodles is that they are uptight, whereas labs are seen as playful. Elise created two luxurious evening gowns for two poodle ladies with big, spherical detailing and accessories that mimic a common haircut of a poodle. Even though Elise mentioned in her notes that dogs are playful, all the outfits would not allow
for free movement; the dresses narrow towards the hem, which makes silhouette of the outfits restraining.

Elise’s dog-women are removed from nature and controlled by the role of a pet as perceived in the human world, similar to Juliann’s cat-woman, who was a calico cat in her previous life. The woman looks like an urban cat-woman, with a short trendy haircut and long, naked legs adorned with tall gladiator-style sandals. In her notes, Juliann wrote, “the collar adds an edge to the outfit that makes people feel uneasy, like cats do.” Another accessory that Juliann added to the gladiator sandals is feathers. According to her notes, the feathers symbolize the food chain, in which the cat would be above the bird in hierarchal order.

Madori did the same, anthropomorphising her cloud into a person. The woman in her image appears both elegant and comical; she has elongated legs, a very tight pencil skirt embroidered with free-hanging crystals (Madori’s explanation of the detailing), an oversized top, round exaggerated cheeks, disproportionally long eyelashes, and a big puffed up and round hairdo. The top that the woman is wearing looks like an oversized fur or feather jacket. The woman’s eyes are closed and her tilted neck appears to have difficulty carrying her hairdo. In my interpretation of Madori’s illustration, the woman, who was a cloud in her past life, is a restrained and restricted human that conforms to certain conservative roles of women: The woman in the illustration would not be able to walk freely in the tight skirt that she is wearing and her hairstyle would require constant maintenance. There is incongruity in the restricting nature of the garment and perception of what clouds could symbolize. The illustration and the outfit do not depict Madori’s
description of the function and meaning of the cloud that she provided in her journal, where she states:

A cloud is the most privileged and omniscient object. They experience the world on all levels. They always continue living + moving. When they rest in the sky they see everything. They throw rain + turn into water + the cycle continues. There’s something quite exquisite, beautiful + strong about clouds. Another weird aspect, however, is that they are kind of moody. They’re light, but also profoundly heavy. It’s just an interesting object and existence.

There is a disconnect between Madori’s written idea and the actual drawing that she produced. I found that I did the same in my initial design when I constructed my first drawing of the raven woman. In these cases, minor attention or care was given to imagining the needs of the dog, or the cheetah, or the cloud, or imagining what their experiences and emotions might be. Yet, there was more creativity and care in imagining the needs of the individual in this exercise than was evidenced in the first illustrations of brand designs.

**Change in Attitude**

"Designing an outfit for a homeless person" was meant to be a metaphorical act in the form of an exercise to trigger reflection on personal attitudes. According to the findings, compared to the responses in the first interview, all of the participants—upon deeper reflection during and after the process of designing and drawing the illustrations—evidenced an increase in regard or care for the hypothetical individual who was homeless. The sketches illustrated participants going further than merely designing an outfit for the individual—they thought about, illustrated, and/or discussed particular design features
that indicated a reflection on need—for example, clothing that disguises, or does not readily identify the homeless status of the person, and a “survival kit.” I also found, like many of the participants’ drawings and comments illustrated, that engaging in the process of reflection on the design process and the actual drawing for this person increased my capacity to care for that person’s life situation.

Compared to the responses in the first interview and to the process of designing for an incarnated being, all of the participants—upon reflection during and after designing and drawing the illustrations—demonstrated more care for the hypothetical homeless individual. This can be heard in Elise’s response: “[Surviving] unguarded from wind and illness is a state I have never had to experience. It is a horrible thought, and by creating a garment to protect and live in I feel I became aware of the holistic struggle to survive as a homeless person.”

The sketches illustrated participants going further than merely designing an outfit for the individual—they thought about, illustrated, and/or discussed particular design features that indicated a reflection on need; for example, clothing that disguises, or at the very least does not readily identify the homeless status of the person. Elise chose to research the common illnesses and struggles of the individuals who were homeless, and created a survival kit. While it is possible that her desire to conduct thorough research was merely to design a sellable product, I suggest that it was a reflection of Elise’s to extend greater care to the individual. It could have also been some combination of the two. Another example of a possible change in attitude during the design process could be witnessed in Madori’s design. When asked if individuals who are homeless deserve empathy, her response was:
It's a very complicated issue, yeah. I kind of ... like I do feel empathetic towards a lot of homeless people, but I also don’t feel empathetic towards some of them, but it just depends on the situation, like, which I also am not familiar with so maybe I can’t really make that judgement call at all, in any way really. I do feel, yes for the sake of argument, I do feel empathetic towards homeless people because everyone deserves shelter and somewhere to live.

When I analysed Madori’s drawing, as an artist who is used to expressing emotions through artwork, I could not help but notice tension in the jarring contrasting dark purple strokes that Madori drew across the layout. I provide the further interpretation of the drawing in Appendix C and suggested that Madori’s attitude was affected during conceiving the idea for the design and the act of drawing the illustration. Her attitude towards homeless individuals transformed from somewhat neutral and indifferent during the first interview, to possibly disturbed and confused towards the homeless girl during the design process.

During the interviews, Juliann did not seem to demonstrate a caring attitude for those who are homeless:

Yeah, but I have an issue. I guess I don’t really know their story and never cared to ask, but I just find that ... well, I guess a lot of homeless people probably have issues, and that I don’t know of, but I find it so hard to, to just have to stand outside and beg for money, like it doesn’t like process through my mind of why you would have to do that.

However, her design and notes showed some amount of care. While contemplating the design, Juliann thought of needs of the person who is homeless and her illustration turned
out to depict a man who could be interpreted as walking away from his past. The man’s body is at a slight angle and his right arm spear to have a swing, and unlike the women in her previous sketches (who seem to be “planted” in the surroundings), he is not static but moving fast forward. Frederic, after researching homelessness and reading about an individual who was homeless being set on fire, decided to fabricate an outfit that was fire retardant.

I also found, like many of the participants’ drawings and comments illustrated, that engaging in the process of reflection on the design process and the actual drawing for this person increased my capacity to care for that person. In undergoing the process, first I tried to define what it means to be without a home, and the more I thought about that, the more I realized that from the perspective of visual identity, an individual who is homeless in North America might not necessarily look any different than an ordinary tenant or a homeowner. After more contemplation, I proceeded to design an outfit for a woman who is homeless with no available shelter (Appendix C, Figure 10). This design challenge, ultimately, turned out to be both distracting and disturbing. The design process simultaneously awoke my creativity and triggered overwhelming caring attitude toward individuals with no access to shelter. I found that my reactions and responses in this design challenge were very much like those of my participants.

**Summary**

In Chapter Four, I discussed four themes that emerged from visual, auditory, and written data. These themes illuminated the participants’ knowledge, attitudes, and habits related to sustainability, consumerism, and the fashion industry. The major themes discussed were: Knowledge—Concepts Linked and Fragmented, Dissonance Between
Knowledge Versus Attitudes and Consumer Habits, Surrendering to the Unsustainable Structures, and Design Process and Caring Attitude.

The theme Knowledge—Concepts Linked and Fragmented illustrates that participants possess knowledge about sustainability and link the related concepts, such as consumerism and the fashion industry, but this knowledge is fragmented. The participants’ understanding or interest ran deep in some areas, while being incomplete in others. For example, most expressed concern about the fair treatment of all involved in the fashion-making process and, yet, the participants often disassociated themselves from the distant “others” who may be treated unfairly or exploited. The interviews revealed awareness about the importance of sustainability while illuminating that all the participants believed they could learn more about the issue.

The second theme, Dissonance Between Knowledge Versus Attitudes and Consumer Habits, explores how participants exposed that their knowledge about consumerism and sustainability often stood in contrast to their own attitudes and habits. While they acknowledged the importance of the economy, and evidenced the importance of the construction of their visual identity through purchasing of fashion items, they also stated that the current culture of consumption was unsustainable. Even though they themselves were complicit participants in the consumerism they denounced, the participants found it difficult, or were reluctant, to change their own consumer habits.

The third theme, Surrendering to the Unsustainable Structures, showed the participants’ beliefs that significant change is difficult to initiate because the current system cannot be affected. All the participants expressed feelings of helplessness or impotence in the face of challenging the fashion industry status quo. They used
metaphors of moving gears and puzzles to create imagery of a monolith nearly incapable of change or reorganization.

The fourth theme, Design Process and Caring Attitude, uncovers less conscious attitudes towards sustainability and subtle changes in attitude during the process of designing an outfit for an individual who is homeless. All of the participants drew anthropomorphised versions of the animals but did not necessarily reflect on what the animals that were incarnated as humans would prefer from their own perspective. While the participants demonstrated varying levels of caring attitude towards individuals who are homeless during the interviews, all of the participants demonstrated considerable caring attitude towards the person who is homeless when creating the outfits for him or her. Furthermore, participants who cared about the homeless during the interviews showed even deeper levels of caring when creating designs.

I located myself as an inextricable part of my research, including myself as a reflexive researcher participating in, as well as reflecting on, all methods of data collection and analyses—interviews, visual exercises, and journal writing—along with the participants. I discovered that my knowledge was similar to the participants’ knowledge about sustainability and that my attitudes often echoed their own attitudes which made me realize that the challenge of sustainability is to be intergenerational.

Chapter Five focuses on the discussion of findings and recommendations for further research. In the discussion section the four major themes will be discussed and linked to the literature addressing sustainability, consumerism, and fashion design. The recommendations will be organized around educators, researchers, and fashion designers.
The focus will be on ways each group can use the information, suggestions for future practice, and recommendations on areas for future research.
CHAPTER FIVE: SUMMARY, DISCUSSION, AND RECOMMENDATIONS

An awareness and understanding of the controversies and challenges that future designers will face in the currently unsustainable fashion industry is necessary if they are to become sustainable designers and producers of their craft. Independent designers decide how their clothing is produced and the outcome of these decisions can significantly impact the environment, due to damage created by textile manufacture, clothing production, consumption, and generated waste. To avoid, remedy, and reverse environmental damage, fashion designers should understand the industry’s environmental and humanitarian impact, and act in agreement with their acquired knowledge. In the context of fashion education, then, it is important to understand what kind of environmental knowledge fashion students have gained, how they perceive sustainability, what their attitudes are, and if their knowledge manifests in practice. It is important to understand cultural and societal factors that influence students’ beliefs and actions, as such an understanding could inform educators’ decisions when creating learning experiences for the students.

The purpose of this study, therefore, was to examine entry-level fashion design students’ knowledge, attitudes, and habits relating to fashion design, consumerism, and sustainability. Seven undergraduate fashion students were engaged in this inquiry to explore connections between their knowledge, attitudes, and habits concerning sustainability, consumerism, and fashion design. The findings in this study enrich the literature in the field, offering closer focus on individual participants’ knowledge and attitudes in specialized areas of the fashion industry.
This chapter begins with the summary of the study, including an overview of the chapters. This is followed by a discussion of the four main themes that emerged from the gathered data. The chapter then continues with recommendations directed towards educators, researchers, and fashion designers. The chapter concludes with the reflection on the researcher’s experience and final thoughts.

**Summary of the Study**

I began with an introduction to the study, which examined fashion design, students’ knowledge and habits relating to fashion design, consumerism, and sustainability. I listed the possible benefits of the study and suggested that the information and conclusions obtained could be useful for both environmental educators and for the students participating in the study. I also discussed the background, context, purpose, rationale, and theoretical and methodological frameworks for my study and acknowledged the limitations of my research.

A literature review followed, where I briefly discussed postmodernism and defined fashion, the fashion industry, and sustainability. I identified and discussed excessive consumption as one of the reasons for the environmental degradation. I also reviewed research that investigates young adults’ environmental awareness and the gap between this awareness and their attitudes and behaviour. The review was followed by a discussion about the theory of cognitive dissonance as a possible cause of this gap. The chapter concluded with the review of research papers where the authors employed visual journaling and art-making to gather data. I discussed the findings in those papers, namely the evidence that art-making and visual journaling can affect emotions, facilitate empathetic feelings, and allow for reflection that could change the perspectives in the
individual’s mind. The chapter then concluded that the creative process and art-making could be used as the agents for change in the education for sustainability.

I then discussed the methodology of the study, outlining that this qualitative research used a variety of strategies to answer questions pertaining to knowledge, attitudes, and behaviour. I discussed theoretical and methodological frameworks of the study and described that this is postmodern research using crystallization—a methodology that does not try to uncover or define one truth, but lends depth and credibility to a research project through the use of multiple modes of data collection such as auditory data from the interviews, visual data from fashion illustrations, and written data from journals (Ellingson 2009). This study employed four methods of data gathering: two semistructured interviews, visual exercises, journal entries, and the researcher’s reflections and designs. This research examined 7 entry-level students’ knowledge, attitudes, and habits in regards to fashion design, consumerism, and sustainability. I included myself as part of my research and reflected on the interview questions, and completed the visual exercises and journal, along with the participants. I recognized my study’s limitations; however, I established credibility for my study—mainly through crystallization, along with reflective participation, member checks, and external readers.

The interviews with the participants were created with a postmodern constructivist perspective (Kvale, 1996) to facilitate a conversational approach in which both the interviewer and interviewee engage in a dialogue and knowledge that is accumulated based on an emerging story. I created the protocol for the follow-up interviews after carefully analysing, in the spirit of grounded theory, the designs, the journals, and the initial
interview. A grounded-theory approach allowed me to immediately reflect on the initial conversations, analyse the interviews, modify interview questions for the subsequent interviews, and flexibly look at the data at any time during my study.

To interpret the visual data, I analysed the images using a methodological framework developed by Rose (2007), in which each image can be looked at as three different sites. All three sites have set aspects, called modalities, which allow for describing and analysing visual data. To interpret the images, I also used multimodal analysis, which Machin (2007) describes as a social semiotic analysis; in other words, visual grammar. This type of analysis examines design elements of the artwork (e.g., colour, layout, background, balance, proportion) with a focus on their relations to each other.

I presented the results of the interviews and visual exercises completed by the participants. While each participant brought her or his own unique perspective to both the interviews and assigned drawings, four major themes emerged across the data. They are: Knowledge—Concepts Linked and Fragmented, Dissonance Between Knowledge Versus Attitudes and Consumer Habits, Surrendering to the Unsustainable Structures, and Design Process and Caring Attitude. I will again discuss these themes in this chapter under the heading Discussion.

In the interviews, it became clear that while the participants possessed knowledge about sustainability issues that relate to the production of garments, they lacked a well-rounded understanding of the environmental and humanitarian implications of modern Western societies. The drawings provided me an insight into the less conscious attitudes of the participants. Based on the findings in my journal and designs, I discovered that my
knowledge was similar to the participants’ knowledge about sustainability and that my attitudes often echoed their own attitudes, which made me realize that the challenge of sustainability is intergenerational.

Discussion

The main exploration of this study was to consider entry-level fashion design students’ knowledge, attitudes, and habits relating to fashion design, consumerism, and sustainability. The study sought to reveal the degree of agreement and discord between the students’ knowledge, attitudes, and habits concerning sustainability, consumerism, and fashion design. To enrich the findings gained from the participants’ interviews and illustrations, I included myself in the study and derived data from my reflective journal, and illustrations.

As I explored participants’ knowledge and attitudes in regards to sustainability, consumerism, and the fashion industry, the four themes noted earlier emerged as a framework that helped illuminate findings from the auditory, written, and visual data. What follows is a short discussion of how the themes connect.

The first theme explores the participants’ knowledge about sustainability, reveals how they link the concepts (such as consumerism and the fashion industry), and concludes that this knowledge is fragmented. The second theme, then, suggests that as a result of this fragmented knowledge, it could be that the participants’ knowledge about sustainability is dissonant with their attitudes and habits. The next theme emerged to suggest why the first two themes may be accurate, in that participants believe that significant change or movement towards sustainability is difficult to initiate because the current societal structures cannot be affected. The last theme that emerged illuminated
that the creative process of designing and drawing the outfits acted as a catalyst for change in attitudes, and could potentially lead to more sustainable design practices and behaviours. This fourth theme is not illustrated in the following figure because it crystallized during the visual data analysis as a subtle emotional shift. The first three themes emerged mainly during interview analysis.

Figure 1 illustrates the initial research query as well as the themes that arose in answer to the following interview questions: What do the participants know about and associate with sustainability as it relates to the fashion industry? Do participants link the concepts “consumerism,” “sustainability,” and “fashion industry”? Do participants’ knowledge and attitudes regarding sustainability manifest in their daily lives?

The connection of these areas—sustainability, knowledge, consumerism, and the fashion industry—resulted in the emergence of these themes. The first theme that emerged from the findings was that the participants’ knowledge is fragmented, and this became evident with the intersection of the fashion industry, limited knowledge about sustainability, and consumerism. The second theme revealed dissonance between participants’ knowledge about sustainability as it relates to the fashion industry versus personal attitudes and habits—the participants’ attitudes and consumer habits did not match their knowledge regarding sustainability. This theme also explained how consumerism and the fashion industry intersect, and exposed a link to visual identity. The third theme (positioned in the centre of the diagram shown in Figure 1) shows how all the concepts overlap, resulting in fragmented knowledge and possibly creating a feeling of helplessness where participants ultimately claimed to be in surrender to the unsustainable structures.
Figure 1. Connecting and overlapping themes and corresponding concepts.
Knowledge—Concepts Linked and Fragmented

The theme Knowledge—Concepts Linked and Fragmented provided an insight into one of the main research questions about participants as they relate to sustainability, consumerism, and the fashion industry, and how they link these concepts. The exploration of our knowledge provided evidence that all of the participants and I understood issues that relate to sustainability and the fashion industry, but we appeared to lack a holistic understanding of this subject. This type of knowledge was described by Jucker (2002) and by O’Sullivan (1999), both of whom emphasised that there is a lack of proper education for sustainability and that educational institutions do not provide adequate curriculum for teaching sustainability to young people. The difficulty that some of the participants had when discussing the concept of sustainability reflects the accuracy of this observation especially knowing that they have been exposed to this concept in high school and some of the first-year fashion courses.

Even though the participants were able to link various concepts that affect each other, such as consumerism and fair labour practices in production of the garments, they recognized that their knowledge lacked depth. This experience of knowing concepts, yet confusing them and of being unsure, echoed my own behaviour because I, too, possessed fragmented knowledge about sustainability and at times could not grasp the complexity of the issue. This was evident when the participants discussed and tried to link concepts such as sustainability, consumerism, and fashion design. This finding echoes the findings of Kola-Olusanya (2008); even though he did not expand his discussion of participants’ acknowledgment of having fragmented environmental knowledge, he mentions it briefly in his work. Participants were, however, aware of the contradictions and challenges that
designers must face if they want to make sustainable lifestyle choices, which Chapman (2006) and Fletcher (2008) extensively elaborated on in their writing; the authors emphasised the complexity of the subject matter.

The participants were very aware that they lacked a holistic understanding of the subject matter because when asked to evaluate their environmental awareness and knowledge about sustainability, all of the participants expressed that their knowledge felt incomplete and that they could stand to learn more about this subject matter.

**Dissonance Between Knowledge Versus Attitudes and Consumer Habits**

Having incomplete and fragmented knowledge could be one of the contributing factors to the dissonance between the participants’ knowledge related to sustainability, attitudes, and habits. It could be that the lack of holistic understanding of how the fashion industry, consumerism, and lifestyles affect both the environment and humans contribute to what Beattie (2010) calls dissonance between implicit and explicit attitudes. Lack of deeper knowledge might be affecting the participants’ unconscious attitudes. In this study, the participants expressed that it was important to produce and consume sustainably, but their comments, actions, and habits suggested that they had not embodied this knowledge. During the interviews, at times it felt as if they knew how to answer my questions, but in real-life examples, their behaviour did not reflect sustainable consumer behaviour. This finding surfaced (a) when the participants discussed topics that were not directly related to sustainability, (b) when they discussed the importance of, and actions taken, in order to create their own visual identity through fashion purchases, and also (c) when they created the designs for the three imagined individuals. From a psychological perspective, in the context of sustainability, this type of dissonance where underlying
attitudes of an individual would influence his or her habits and behaviour was also described by Beattie (2010). Beattie emphasises that in order for the individual’s knowledge of sustainability to manifest in his or her lifestyle, the individual’s underlying attitudes should be very pro-environmental. While Beattie’s psychological research involves examining people’s implicit and explicit attitudes to global warming and carbon footprint, my research focused on exploring attitudes and habits related to sustainability, consumerism, and the fashion industry. My research findings support and extend Beattie’s findings by offering additional findings, as well as an alternative perspective on the related subject.

While the literature provided many examples of the importance of merging environmental knowledge with psychology, I could not find writings on sustainability and fashion from a psychological perspective. Fletcher (2008) discussed the importance of linking sustainability, fashion design, and human emotions and beliefs; however, in her writing she focused on creating fashionable clothing that would cater to human emotions, rather than exploring how attitudes and habits could be influenced through education of the designers and the consumers.

Dissonance also surfaced when discussing the participants’ favourite brands and production priorities, and when contemplating designs for the three individuals. None of the participants mentioned sustainable fashion when discussing their favourite brands or designers, nor did the participants use sustainable fabrics when contemplating the design of the outfits. Similarly, most of the 7 participants expressed that the fair treatment of all involved in the production process is an ideal priority. I also considered this to be part of my sustainability knowledge repertoire. Yet, we all either consciously or unconsciously
disassociated ourselves from “others” potentially exploited in the mass production of fashion-related products. When faced with the challenge of designing the outfits, other factors, such as aesthetic and function, came through more naturally. I, too, made no mention of sustainable fabrics or sustainable production in my designs. This evidence links the previous theme of Knowledge—Concepts Linked and Fragmented to the theme Dissonance Between Knowledge Versus Attitudes and Consumer Habits. Even though during the interviews the participants showed understanding of major concepts of sustainability, this knowledge did not manifest when the participants were engaged in tasks, such as designing and drawing an outfit. Hume (2010) has conducted similar research where she presented findings that showed evidence that the humanistic approach to defining sustainability that the young people talked about during the interviews, was not manifested in their daily lives. Her findings and conclusions regarding the behaviour of young consumers were much more pessimistic than both my and Kola-Olusanya’s (2008) conclusions.

For all of the participants, how they appear to others and how they perceive their own appearance were extremely important factors and reflected in the process of creating a visual identity, where the creation of a desired appearance is achieved through purchasing new clothes, second-hand clothes, or vintage clothes. According to Cook (2004), Jacobson (2008), McNeal (2007), Schudson (1984), and Stearns (2001), the consumer culture is institutionalized and intergenerational, and both adults and children embrace consumption as a way to define identity. Some of the participants stated that it is important for them to visually conform to the latest fashion trends to appear fashionable and, as a result, be socially accepted, whereas for other participants it was
more important to stand out from the crowd by communicating a unique visual identity. Still, some stated that it was most important to create a visual identity that would make them feel good. All of the participants assigned great importance to their visual appearance. All of the participants were comfortable discussing how they created their looks and they all seemed comfortable with their wardrobes and shopping for clothes. The participants exhibited confidence in their appearance and knew exactly what would make them look and feel good. This finding is supported by Giddens (1991), who suggests that dress has tremendous importance in communicating self-identity because it is a symbolic display and extension of the inner self to the outside world. Dunn (2008) and Fletcher (2008) also discuss human desire to exhibit visual self-identity and suggest that fashion helps in fulfilling this desire.

The participants stated that the current culture of consumption was unsustainable, but were reluctant to change their own habits as they identified clothing to be important in creating, maintaining, and updating their visual identity. Bauman (2007) and Baudrillard (1981) discuss this theme from the postmodern perspective, saying that commodification of consumers has led to fierce competition to be recognised among peers and in society, which leads to excessive consumption of goods regardless of the individuals’ knowledge of sustainability, and that communication with consumer goods as symbolic signs has increased over the years. From the perspective of education for sustainability, Clover (1999, 2001) and Sandlin (2004) discuss consumerism and how youth and adults could be educated to reflect critically on their consumer habits which could then encourage a sustainable lifestyle. From an anthropological perspective, Kozinets and Sherry (2005) observe the new tribal identity building with consumer
products where consumers, in addition to creating their own visual identity, form an identity of their favourite immediate micro-community or a tribe, which adds another dimension to consumerism.

Kola-Olusanya (2008) identified the theme of dissonance between knowledge and habits in his study where, when discussing excessive consumerism—the desire to create self-identity and to obtain happiness by acquiring luxury items—the participants spoke for other young adults and blamed advertising and media for manipulating youth. The discussions showed that the participants believed that their excessive consumerism is a direct threat to the environment; however, they had difficulty imagining the trend reversed or even slowed. Their suggestions for dealing with consumerism included promoting environmentally friendly products, making environmentally friendly products look “cool,” eco-labelling, and consumer education. In other words, if consumerism is unavoidable, consumers could at least be educated to consume more responsibly. This theme in Kola-Olusanya’s dissertation mirrored the findings in my study. All the participants in my study claimed that they are avid consumers who take great care in creating visual identity using fashion related products, and, at the same time, they claimed that consumerism is an unsustainable tradition. I cannot claim that having fragmented knowledge about sustainability could be entirely singled out as a reason for developing excessive shopping habits, but I could suggest that lack of education for sustainability beginning in the early years of life might contribute to less environmental awareness in individuals.

Surrendering to the Unsustainable Structures

Other findings exposed the participants’ feelings that significant change is difficult or complicated to initiate because the current system (encompassing the
economy, media, society, culture, and the fashion industry) which encourages unsustainable practices cannot be affected. This theme was reflected in the participants’ responses when they discussed their shopping habits and the fashion industry, while at the same time identifying that consumerism was detrimental to the environment. According to the participants, being sustainable was considered to be more challenging than going with the flow of common unsustainable practices and habits. In the context of researching attitudes towards global warming, Beattie (2010) describes this phenomenon of feeling helpless as “learned helplessness.” According to Beattie, the “learned” general agreement that the planet will heat up no matter what, inhibits behavioural change and personal initiative to instigate pro-environmental action.

My analysis of the visual exercises revealed that in the majority of cases, the participants’ drawings adhered to and reinforced current fashion trends, evidencing an acceptance of the system. This finding also crosses over with the previous theme, Dissonance Between Knowledge Versus Attitudes and Consumer Habits. In the creation of the outfit for the incarnated being, for instance, all the participants, except Frederic, illustrated outfits where the individual would fit in quite stylishly according to the current fashion trends. All of the participants and I essentially went along with the system in creating designs that reinforced stereotypes dictated by current fashion trends, which means that even though we might wish to affect the current unsustainable system, we simultaneously belong to the system and might unconsciously be supporting it.

Design Process and Caring Attitude

The fourth theme that resulted from the data revealed that the creative process of researching, designing, and drawing the outfits acted as a catalyst for a change in the
participants' attitudes (Appendix G; Appendix B). This phenomenon is described by Thomas (2009) as a process of experiencing empathy while reflecting on another person's life circumstances. Thomas has developed educational tools meant for promoting design students' empathetic feelings towards people globally and locally. Her approach is to trigger a caring attitude while looking at and reflecting on photographs of individuals who are either in conflict or in a vulnerable position in their lives. Her proposed task is for the student to imagine the other person's life. In my research I asked the participants to engage the creative process of designing an outfit for specific imagined individuals in the hope to witness any shift in their attitude.

Findings derived from the first exercise where the participants drew an outfit that was inspired by their favourite brand or a designer revealed that the participants exposed and explored their self-identity. This finding is in agreement with Oster and Gould's (1987) suggestion that the drawing of an artwork and specifically a person is a very personal process where the artist expresses both conscious and unconscious meanings and often reveals perceptions of self. There was no evidence in the drawings or the journals of attitude change in the participants after the first drawing exercise—to draw someone wearing their favourite brand. Rather, the findings supported the earlier theme about conforming to the current fashion trends without challenging the status quo of the industry.

The second exercise revealed that the participants drew anthropomorphised versions of the animals but did not necessarily reflect on what the animal that was incarnated as a human would prefer from her/his own perspective. In these cases, minor care was given to imagining the needs of the incarnated beings, or imagining what their
experiences and emotions might be. Yet, there was more creativity and care in imagining the needs of the individual in this exercise than was evidenced in the first illustrations of brand designs. Again, these drawings showed evidence of conforming to the current fashion trends.

According to the findings derived from the third exercise and the notes in the journals, all of the participants, upon deeper reflection during and after the process of designing and drawing the illustrations, evidenced an increase in their regard or care for the hypothetical individual who was homeless. This was in contrast to what some of the participants were saying during the interviews about the individuals who are homeless. From the perspective of art therapy, Oster and Gould (1987) insinuate that the drawing of a person may initiate emotions concerning interpersonal relationships. Findings in research projects by Clover (2011), Deaver and McAuliffe (2009), Hickman (2007), and Smeijsters et al. (2010) also confirm that the creative process and reflection can affect emotions and attitudes. It could be that the act of reflecting on, designing, and then drawing a vulnerable person has triggered an emotional response, which, in turn, has affected deep-seated attitudes towards vulnerable and ostracized individuals.

I personally experienced this feeling of altered attitude while completing the third exercise—the design for an individual who is homeless. Like many of the participants’ drawings and comments illustrated, engaging in the process of reflection on the design process and the actual drawing for this person increased my capacity to care for that person’s life situation. This design challenge ultimately turned out to be both distracting and disturbing. I found that my reactions and responses in this design challenge were very much like those of my participants.
Recommendations for Practice, Theory, and Research

This study stemmed from a belief that there is a significant gap in the learning experiences addressing sustainability offered to students in educational programs that teach about the fashion industry, and that fashion students have fragmented knowledge about environmental issues and how they relate to the fashion industry. Based on the findings in this study, in addition to the lack of holistic understanding of sustainability, the participants’ underlying attitudes and habits do not always reflect knowledge that they have gained.

After a thorough analysis of the data, the following recommendations can be made for practitioners, such as educators teaching fashion and design, and researchers who would like to advance knowledge about sustainability and fashion design in the fields of psychology and education.

Recommendations for Practice

All of the participants expressed that they could stand to learn more about sustainability. They also told me that their main source of learning about environmental challenges and sustainability has been family and a few courses at the university. My environmental learning truly started when I reflected on my unsustainable habits about 10 years ago and more so at the onset of this research project. This indicates a need for better access to education for sustainability at all levels of the educational system, for all socioeconomic groups, and all ages.

The first recommendation for practice, therefore, is to develop curricula for sustainable education starting at the kindergarten level, as well as primary, secondary, and postsecondary levels. Until education for sustainability is fully institutionalized in
consumer society, the generational gap in environmental education will not allow for meaningful knowledge transfer from the elder to the younger generations.

The research findings also revealed that reflection using arts-based exercises encourages the exposure of unconscious attitudes and affects emotions. All the participants noted that the experience was deeply satisfying and it encouraged them to reflect on values that they did not consider previously. Based on this finding, I recommend that arts-based reflective exercises should be part of the environmental education. The exercises that I developed for this study could be adapted for different age levels, and for various fields. The reflective exercises involving existing images that Thomas (2009) developed could also become part of the learning experience.

In the context of education for sustainability, learning activities that involve the creative process, critical self-reflection, and visual journaling could possibly affect emotions and underlying attitudes, and facilitate the transformative process towards pro-environmental behaviour and habits, which, in turn, would reduce the cognitive dissonance between individuals’ knowledge and attitudes.

**Recommendations for Theory**

When self-evaluating their knowledge about sustainability, all participants told me that their knowledge is incomplete and that they would like to learn more. The findings also revealed that the participants experience dissonance between their knowledge and underlying attitudes, which, in turn, affected how the participants’ knowledge manifested in their daily life. My research supported and extended Beattie’s (2010) study with additional findings showing how this surrender to the unsustainable
structures is manifested in young adults who feel they have become part of this structure.

In addition, the findings revealed that reflection, creative thinking, and the act of drawing could initiate a change in attitude in regards to a vulnerable individual. These findings expose how deep and broad education for sustainability should be if it is to trigger and facilitate transformative learning process in the students. Education for sustainability could support sustainability theory, which, in turn, is enhanced by psychological research and the cognitive dissonance theory, transformative learning theory, knowledge about economics, sociology, anthropology, and arts. Exploring a variety of epistemological perspectives and theories when creating teaching and learning experiences regarding sustainability would foster curricula that offer a holistic overview of sustainability challenges.

In regards to environmental education, many authors—among them Clover (1999, 2001), Fletcher (2008), Jucker (2002), Sandlin (2004), and Thomas (2009)—have explored education for sustainability and offer various teaching methods and methodologies to encourage more successful knowledge transfer. Each of these authors explores the field of their interest and expertise when offering their perspective on the subject matter; for example, Clover (1999, 2001) emphasises that education for sustainability must be considered a political and collective problem, whereas Sandlin looks at ways of how to engage an adult learner. Jucker advocates for sweeping reforms in educational systems, whereas Fletcher focuses on introducing fashion designers to the world of sustainable production and emphasises that catering to human emotions would nurture sustainable fashion design. Thomas’s research involves teaching and fostering
empathetic feelings in the design students, which could further enforce a caring attitude towards the people and the eco-systems of the planet.

During my research, I became more fully aware of the many dimensions that the concept of “survival of the human race on this planet” entails. For example, it is impossible to remove human emotions and deeply ingrained attitudes from a political debate when discussing sustainability issues. It is also virtually impossible to separate institutionalized consumer culture from the intimate desires of a human being to be accepted among peers. Another example is that creating visual identity is currently imbedded in institutionalized traditions of the dress code and socially defined norms. These examples illustrate that the education for sustainability should look at all the structures that humans and society have created, and simultaneously it should consider the most intimate and subtle emotional dimensions of the human psyche.

There is a wealth of knowledge available about how to implement education for sustainability. I recommend, however, that researchers and practitioners investigate merging of the findings from a variety of theoretical frameworks and work closely to implement the findings in the educational system.

**Recommendations for Research**

There are several points of interest that could be pursued for further research. The first recommendation is to conduct a longitudinal study to explore if attitudes towards sustainability change over the years, and, if so, how. This work should include an intergenerational study to determine how and when attitudes are ingrained in participants, and how and when they change over time, and to further explore the cause and effect of an increased amount of teaching about sustainability. If attitudes do change, it would be
pertinent to find out if these attitude shifts manifest behaviourally. Conducting such a study could reveal the patterns of knowledge transfer between generations and could help determine which factors (e.g., income level, individual influences, and geographical location) have an impact on such knowledge transfer. If there is a shift in attitude towards being more sustainable, it would be necessary to explore what initiated the change in order to apply it in educational environments. For instance, it was mentioned by some of the participants that their mothers were significant in the development of their visual identity, their relationship with fashion, and their sustainability knowledge. It is here that the topic of behavioural influences could be further explored. Mentioning mothers during the interviews encouraged me to reflect on my own attitudes and habits that relate to fashion, consumerism and sustainability, and how I might have influenced my children, and how my mother had influenced me during my formative years (Appendix G). This critical reflection turned into a personal learning experience and I recommend that researchers, who will study this field, engage in such critical reflection.

Another recommendation is to conduct psychological research concerning fashion, sustainability, and their role in the creation of identity. It would be valuable to conduct research on the formation of a visual identity, to determine more specifically how and why individuals choose to follow fashion rather than going through the creative process of developing a distinctly unique identity—an identity that potentially would be more sustainable than fast-fashion based images. Within this work, I suggest a consideration of the theory of cognitive dissonance developed by Festinger (1957/1985) and how it could be applied to sustainable habits and identity building. The impact the mother has on behaviours of consumption could be further explored here. In addition,
none of the participants in my research mentioned their fathers or other family members as being influential in the learning process of how to create an identity or how to shop. This appears to be a new finding that invites further investigation.

To determine whether developing feelings of empathy and care of vulnerable groups could lead to more sustainable practices, a further and final recommendation is to design psychological research to reveal how humans experience empathy during a directed conversation, and to contrast this with how they experience empathy during a creative process—for example, the act of drawing, and the details of their self-reflection on this process. This research would be built on the principles and practise of art therapy (Oster & Gould, 1987) and I feel it could have a significant impact on how fashion is considered and sustainably created in the future.

**Final Thoughts**

During the course of this study, as well as upon and after reflection, it became clear how little my participants know about sustainability and what it means to live a truly sustainable lifestyle, both at the local and global levels. Knowing about sustainability and believing in the importance of it is not enough to initiate change in unsustainable attitudes and behaviours. Like the participants, I recycle everything I can and shop at second-hand stores, but this accounts for a small part of what is needed to make a difference in and to the world. The impact of these actions might not be significant enough.

To adjust my lifestyle to embody sustainability knowledge, I would like to undergo a fundamental shift in how I put into practice my knowledge, and how I perceive reality. I feel as though my perception of reality is fogged by the systems and structures
of the modern world. During this research project, I started to feel more and more confused with my own attitudes and habits regarding sustainability. On the one hand, I became much more aware of the challenges of living a sustainable lifestyle, which inspired me to further educate myself. On the other hand, I felt helpless to affect the system, just like my participants. This feeling of helplessness was demoralizing and somewhat debilitating because at times it triggered total inertia in me.

The discovery that my knowledge of sustainability was so similar to the participants and that my attitudes often echoed their own attitudes, made me realize that the challenge of sustainability—knowing what it is, and acting on it—is likely intergenerational. If this is the case, then ensuring that humans will survive as a species well into the future will require time to alter the worldviews of younger and older generations simultaneously, where one of the first steps to take would be to initiate, in a sense, an “unlearning” of some unsustainable habits that we have learned from our parents and grandparents. It would involve looking critically at our knowledge, attitudes, and habits over time, letting go of certain institutionalized unsustainable traditions, and developing very different approaches to educating children, young adults, and adults—as teachers and as parents.

At this moment I could not agree more with Chapman (2006) that it will be difficult to save the planet because what the planet really needs to be saved from is us, myself included, and I am not sure whether to be pessimistic or optimistic about the future. Over the course of this study, there were moments when I felt discouraged about the current system and my study at times made me feel like a jaded cynic. I often asked myself: How would it be possible to affect a structure, such as mass production of
garments, or a tradition, such as a dress code? When I did not immediately know the answers, the system felt more and more daunting as more questions surfaced. I struggled with this emotion quite a bit. But then, I also think that I do not have the right to be pessimistic because my pessimism would support the current unsustainable system. If I am pessimistic and think that the structures are too strong to be affected, then they are.

With mild hesitation, I am choosing to be perhaps cautiously optimistic and believe that the unsustainable system could be changed, perhaps through different approaches to ways of growing up and teaching sustainability. I am also realizing that reducing the issue to the question of whether or not change in the current system could be initiated is too simple and too limited. In life there are more possibilities than just yes or no—there could be a continuum between gullible optimism and debilitating pessimism with all the emotions in between. I, then, choose to experience and manifest all those emotions in-between, such as scepticism, caring attitude, courage, patience, and love to inspire me, and enrich my knowledge, and transform my habits into more sustainable ones. If I cannot affect the system, I hope I have the power to affect myself, and then this could be the first step in affecting the system.
References


Appendix A

Interview Protocol for the First Interview

Introduction:

Thank you for participating in my study. I am researching fashion design students’ knowledge, perceptions and belief systems as they relate to sustainability, ethical design, and use of apparel. In addition I would like to find out how the students’ environmental knowledge manifests in their daily life.

You are under no obligation to answer all questions. and you may withdraw from the study at any time without penalty. Feel free to ask me questions during the interview.

This interview is being audiotaped to ensure greater accuracy during analysis. I will send you the transcript of the interview for review. This will give you opportunity to confirm accuracy, remove parts of our conversation, or add anything that might be missing.

1. What do first-year undergraduate fashion students currently know about environmental degradation, sustainability, fashion design, and consumerism?

   - Why did you choose to participate in this research project?
   - What inspired you to become a fashion designer?
   - Where do you usually look for inspiration for your designs?
   - What are your priorities when making production decisions?
   - Why are these particular decisions your priorities?
   - How would you describe present environmental state on the planet?
   - How do you understand the concept of sustainability?
   - How do you understand consumerism?
   - How would you evaluate your own knowledge about sustainability and environmental awareness?

2. How do students link environmental degradation, human caring attitude, and happiness with the fashion industry, consumerism, and sustainability?

   - What is the most important thing in life?
   - What makes you happy?
   - What part and how much of your happiness is related to fashion?
   - What part and how much of your happiness is related to being and appearing fashionable?
   - Can you link caring attitude with design? Why yes, or no?
   - Do the homeless deserve caring attitude? Why yes, or no?
   - What are your thoughts on a possible link between homelessness and the fashion industry?
   - Is there a possibility that fashion could help the homeless?
• If there is, how?
• If you had the choice to be reincarnated as any natural object or live being (tree, insect, bird, fish, etc.), which would you choose?

3. How do the students' knowledge and beliefs regarding sustainability manifest in their daily life?

• How would you evaluate your daily habits related to consumerism and sustainability?
• Tell me about your favourite brands.
• Why do you like them?
• What is the latest fashion item you purchased?
• In which store did you purchase the item?
• What was your motivation for purchasing this item?
• How did you single out this particular item?
• What thoughts instigate your decision to purchase a new item?
• Can you roughly estimate how many pairs of pants/jeans/shoes (or other fashion items) you own?
• Is there anything more you would like to add to our conversation?
• Is there anything you would like to ask me?
Appendix B

Suggested Entries for the Journal

1. You are welcome to include any doodles or images that inspired your designs in the journal.
2. Explain whether you consider the supplied art materials and/or my drawings appropriate for these designs.
3. Explain whether you found the templates of the people appropriate for the character of the imagined individuals.
4. Explain which of the designs was the most challenging to create, and why.
5. Explain your rationale behind each design. In other words, discuss how you came up with the idea for each of the outfits and how the idea developed in the actual drawing.
   - Your favourite brand
   - Incarnated being
   - Homeless person
6. Explain any additional research you conducted to help you design appropriate outfits.
7. Explain how thinking about the three different individuals made you change your perceptions about how to approach each design problem. You can include anything you did differently from what you would normally do when starting a design process (thinking, mulling ideas, researching, etc.).
8. Discuss to what degree you empathised with the individuals while thinking about the designs. You can include any thoughts you had about their well-being and how to make them happy.
9. Explain how you believe this exercise affected you as a person and a designer.
10. Feel free to include any additional afterthoughts.
11. Feel free to ask any questions you may have.
Appendix C
Excerpts of Designs and Sketches

Figure 2. Exercise 1: Outfits inspired by participants’ favourite designer.

The illustrations for Exercise 1 offered insights into the participants’ perceptions of self (Oster & Gould, 1987), and the type of world and community they situate themselves. According to Oster and Gould, “The drawing of a person seems to stimulate conscious feelings regarding bodily image and self-concept, both physically and psychologically...[and] may also be seen as arousing emotions concerning interpersonal relationships and may also tend to elicit feelings towards an ideal self” (p. 41). This “ideal self” seemed to manifest itself in the designs that the participants created for an individual who favours the participants’ preferred brand or a designer.
Figure 3. Exercise 2: Outfits designed for the reincarnated being.

In Figure 3, I have compiled the designs created for Exercise 2. In their notes, all of the participants noted that they enjoyed completing Exercise 2, which involved designing an outfit for an incarnated human who was their favourite animal or inanimate being in a past life. The outfits in Figure 2 are quite eclectic and one-of-a-kind. For Exercise 2, it was implied that the participant was designing for an individual, which led to a greater focus on personal identity than was evident in Exercise 1. Thinking about an imaginary person instead of a specific brand or target market also meant that the participants had much more freedom for their creative expression. The costume-like outfits that the individuals are wearing in Figure 3 could be classified as sportswear, eveningwear, or daywear. The outfits are much more colourful than the outfits from the
first exercise (see Figure 2), and like in Exercise 1, once again, all of the individuals appear to belong in an urban setting. The outfits show some departure from the "comfort zone" and the participants' familiar world.

Figure 4. Exercise 3: Outfits designed for the individuals who are homeless.

In Figure 4, I have compiled the designs for Exercise 3. All of the participants, with the exception of Frederic, noted that creating the outfit for an individual who is homeless was the most difficult task. In their drawings, it came across to me that all of the participants showed thoughtfulness and care in designing the outfits, and appear to have genuinely tried to reflect on what it means to have no shelter. All of the participants did some research on what a homeless person would need to survive in Toronto, and some of the participants contemplated what items a homeless person would require on a cold winter night. All of the outfits in Figure 3 appear comfortable and warm. It is
evident that the participants tried to design outfits that would protect them from the elements and ensure that they could not be easily identified as homeless; at the same time, all of the participants wrote that they neglected the aesthetic quality of the garments and focused instead on practicality. The participants claimed that this exercise affected their perceptions of a design challenge, what it means to create purely functional design, homelessness, and designing for a vulnerable social group.

*Figure 5.* Elise’s sketches and designs for the individuals who were dogs in their past life.
Elise designed outfits for women and a man whom she imagined were dogs in their past lives. In her notes, Elise called dogs “submissive, loyal, easy, and happy, something loveable and forgiving,” and noted that it is important for dogs to have food, comfort, and love. Based on the drawings, Elise’s approach was to look at dog breeds and then proceed with the design based on how humans perceive the different breeds. For example, the common perception of poodles is that they are uptight, whereas labs are seen as playful. Elise created two luxurious evening gowns for two poodle ladies with big, spherical detailing and accessories that mimic a common haircut of a poodle. Even though Elise mentioned in her notes that dogs are playful, all the outfits are somewhat structured and constraining and would not allow for free movement; the dresses narrow towards the hem, which makes silhouette of the outfits restraining. Elise’s designs portray a conception of a pet that is kept in an urban and highly controlled and clean environment, where playtime is allowed as long as it is tidy. Elise did not appear to take into account a design that would allow for the fact that dogs quite often like getting dirty and roll around in smelly things. All of Elise’s dog persons are fully anthropomorphised and dressed-up like well-groomed individuals who would belong to society’s upper class. In her journal Elise sketched various dogs and a list of characteristics of a dog, however when it came to drawing of the design—maybe unconsciously—she drew an individual who did not display the characteristics of the animal
Elise compared homelessness with camping, and she indicated in her notes that she researched camping survival tips and looked at camping gear when contemplating the designs. In fact, the homeless individuals in her drawings indeed could be visually perceived as “happy campers”; they are nonthreatening, slightly rounded or chubby, and cozily wrapped up in her outfits. Elise did not draw faces for her other individuals—only the individuals who are homeless have faint facial features. This could suggest that on an unconscious level Elise did not relate to the consumers who would wear garments designed by Ralf Rucci, or perhaps that she did not quite relate to the exuberantly dressed “poodle ladies.” Contemplating real human beings having to rough it out on the streets on a cold night, however, triggered an empathetic connection to the homeless individuals. This exercise could have made Elise feel like she was thinking about real people, rather

Figure 6. Elise’s sketches and designs for the individuals who are homeless.
than an imagined target market. One of the most heartening drawings, done by Elise, depicts a big, warm, cushioned sock that fills an entire page of her sketchbook. In terms of sheer size and scope, this looks like Gulliver’s sock. Elise provides a detailed description about the fibre content of the yarn and how the sock would be constructed. Among all the other drawings, it stands out as a focal point and I see and feel it radiating attitude of care.

Figure 7. Juliann’s designs: Exercise 1 (top left); exercise 2 (top right); exercise 3 (bottom).
For Exercise 2, Juliann chose to design an outfit for a person who was a calico cat in her previous life. The woman looks like an urban cat-woman, with a short trendy haircut. Juliann's use of the feathers as a symbolic indication of the food chain mirrors her perception of the order of society and its economic system. Apparently, the cat-woman is meant to represent a more powerful status in society. Another important feature is the rope around the woman's waist. If Juliann said that the rope belt "adds to the sense of the wild that is tamed." Juliann clearly assigns symbolic meanings to her designs. She did not mention in her notes symbolical meanings assigned to the brand outfit, whereas designing for the cat-woman made her think about the individual, her preferences, identity and her role in the society. A much deeper thinking process is evident in the second design.

The third design conveys thoughtful consideration of the possible needs of a homeless man: the coat has multiple pockets, a removable fleece lining, a hood, and removable shoulder pads that she describes in her notes as possible pillows, the gloves are attached to the sleeves so that they could not get lost, and the boots are waterproof. The man is walking forward, facing the audience, which contrasts with the women in Juliann's illustrations, who are uniformly static and positioned in a three-quarter turn. By walking away from the city, the homeless man appears to be leaving it behind him. If not for the grey garbage can right beside him, the appearance of the homeless man would be poetic and even romantic, especially since Juliann depicted him as blond with light blue eyes.
Figure 8. Madori’s designs: Exercise 1 (top left); exercise 2 (top right); exercise 3 (bottom).

Madori’s illustrations are very expressive. They look like sketches that were done fast, without careful consideration or rendering. When she handed the artwork to me, she asked apologetically if I would not mind pasting the collages together myself and gave me a folder with a bunch of loose pieces of paper meant to form the background and cut
out “paper dolls” meant to be arranged on top of the background paper. Madori’s illustrations are prime evidence of how rushed the participants were while I was conducting my research. Her illustrations look like visual free-association of a design idea. She used fast, expressive strokes when drawing human figure and did not pay too much attention to fine detailing or correct proportions of a human body.

Madori’s illustration is in line with stereotypical characterizations of homeless individuals, suggesting that those who are homeless are sad, vulnerable, and invisible. Without the emotional undertones, this illustration would look like a diagram of a survival kit for the homeless. The purple strokes clearly overpower the human figure and add emotional impact to the drawing, and these contrasting purple stripes feel overwhelming and strangely foreign. In the middle of these heavy stripes, Madori has placed a vulnerable individual wearing a red sweater that could symbolise a warm heart. While carefully deciphering the meaning of the visuals and the order in which Madori drew the elements in this illustration, it became evident to me that Madori cared deeply for the homeless population during her reflections on their vulnerabilities and day-to-day challenges. Madori’s analysis and reflection can be seen in the order of how the drawing was executed (the human figure was drawn before the technical drawings were). The back of the jacket in the middle appears to wrap around the woman’s hand instead of the other way around, which indicates that the figure was drawn first. In contrast with other participants’ depictions of the homeless, Madori dresses the woman in a red sweater. The red in her sweater is not as aggressive or jarring as the purple strokes, and the subtler red could perhaps symbolise love, rather than aggression or anger.
Figure 9. The researcher’s initial design sketches for the woman who was a raven in her past life (top left, top right); a sketch of a raven completed after reflection on the essence of a raven (bottom).
Figure 10. The researcher's designs: Exercise 1 (top left); exercise 2 (top right); exercise 3 (bottom).
Figure 11. The researcher as a child with her mother (left); the researcher's daughter wearing custom designed and handmade dress (right).
Appendix D

Three Visual Exercises

Use this set of pencil crayons, paper, and templates of human figures to design three or more outfits for the three different individuals described below. You may design the outfits for a male, female, or both if you choose to. You are welcome to be as elaborate with your designs as you wish. For example, you may add other colours, use additional mediums and use collage techniques by gluing scraps of paper, fabric or any three-dimensional objects to the image. If you wish, you may draw your own illustration to depict each individual.

Exercise 1
Design a full outfit for a person who prefers wearing your favourite brand(s). Your challenge is to be very accurate when drawing the outfit(s) so that the outfit(s) will precisely represent the chosen brand(s). You might want to do rudimentary online research about your favourite brand(s) to understand the target market, overall image, and the price-point of the brand(s).

Exercise 2
Imagine that (insert the name of the natural object or the live being that you referred to during our initial interview) is reincarnated in his/her next life as a human. Design a full outfit for this person. Keep in mind this person’s “past life” dictates their emotions, wants, needs, and desires, and also remember that they must be able to communicate and survive in a human world.

Exercise 3
Design a full outfit for a homeless person. The outfit may consist of several pieces of different garments. It should be extremely functional and versatile, since it will be the only outfit he/she will wear throughout the year. While you are designing the outfit, consider satisfying as many of the needs this person might have as possible.

While designing the three outfits, please keep notes of your thoughts and rationale behind the design process as well as your reasoning if you choose to use additional art materials and/or draw your own illustration. If you feel inspired, you are welcome to write a journal.
Appendix E
Templates for the Visual Exercises
Appendix F

Research Ethics Board Clearance Letter

The Brock University Research Ethics Board has reviewed the above research proposal.

DECISION: Accepted as clarified

This project received ethics clearance on October 8, 2009. The study may now proceed.

Please note that the Research Ethics Board (REB) requires that you adhere to the protocol as last reviewed and cleared by the REB. During the course of research no deviations from, or changes to, the protocol, recruitment, or consent form may be initiated without prior written clearance from the REB. The Board must provide clearance for any modifications before they can be implemented. If you wish to modify your research project, please refer to http://www.brocku.ca/researchservices/forms to complete the appropriate form Revision or Modification to an Ongoing Application.

Adverse or unexpected events must be reported to the REB as soon as possible with an indication of how these events affect, in the view of the Principal Investigator, the safety of the participants and the continuation of the protocol.

If research participants are in the care of a health facility, at a school, or other institution or community organization, it is the responsibility of the Principal Investigator to ensure that the ethical guidelines and clearance of those facilities or institutions are obtained and filed with the REB prior to the initiation of any research protocols.

The Tri-Council Policy Statement requires that ongoing research be monitored. A Final Report is required for all projects upon completion of the project. Researchers with projects lasting more than one year are required to submit a Continuing Review Report annually. The Office of Research Services will contact you when this form Continuing Review/Final Report is required.

Please quote your REB file number on all future correspondence.

MM/mb
Appendix G

Reflective Journal

There are many reasons why I wanted to reflect on my own attitudes and knowledge regarding sustainability and fashion while conducting this research. First, I believe that by completing the same design challenge that I ask my participants to complete, I can uncover potential methodological weaknesses in my research design. Second, I believe that values and attitudes are passed from generation to generation; therefore, including myself in this research exposes the intergenerational transfer of rites of consumerism from parent to child. Finally, I hope that this reflexive exercise will help me become more aware of my own unsustainable habits.

Four of the participants mentioned their mothers when asked about creating identity, early shopping experiences, the sewing of garments, and sources of inspiration. To address this finding, I thought it would be appropriate to reflect on my relationships with my mother and my children from the perspective of creating a visual identity and fostering consumer habits. To further involve myself in the research process, I designed and illustrated all three outfits that I asked my participants to design. I am including my reflection on the design process, as it illuminates my assumptions and attitudes regarding the design process and reveals a major methodological flaw that I discovered while designing the outfit for a homeless person.

On Dressing Up and Bonding—Mothers and Daughters

One of my favourite early childhood memories is of getting transformed into a little “princess” by my mother when I was about four. It was my grandmother’s birthday, warm summer day on June 4. I vividly remember the pale pink dress that my mother put
on me and her hands touching my back as she buttoned up the dress. Somebody took a photo of us at that moment (Appendix C, Figure 11).

My mother and I were having an intimate bonding moment and, as is evident in the photo, we are both in total bliss. I still remember gentle surges of loving energy trickling from my mom’s fingers as she fastened each of the little loops and the even smaller buttons at the back of the dress. My eyes were closed to prevent any other outside stimulus from interfering with the delightful shivers surging through my little body, and I think now that I was wishing that time would stop and that there would be an infinite number of buttons to be pushed through those tiny loops. I loved the dress; I especially loved how it had to be buttoned by my mother, as I always yearned for her touch. I realize now that, at the time, being dressed up by my mother involved not only the visual delight of knowing that I looked pretty, but also an intensely pleasant, kinaesthetic bodily experience. This yearning for my mother’s touch and presence, in addition to learning how to evaluate and modify my appearance using outfits, is what transformed me into a lifelong fashionista.

My mother is a costume designer, which means that I grew up learning that I must deceive with the first appearance of things, for “show is substance”—in other words to my mother, outward appearance and aesthetic image is extremely important. Creating visual identities has always been a very important part of my mother’s existence, and showing me the path to visual fulfillment through dressing up was a major part of her parenting. She immensely enjoyed dressing me up in the most fashionable outfits for all kinds of occasions. I remember going to bed at night and falling asleep to the purring sound of my mother’s sewing machine as she rushed to finish a dress for me to wear the
next day—often for a special event at my kindergarten. Wearing a new outfit made me more popular and reputable among the fiercely critical pack of little girls, though I was also sometimes ridiculed because the majority of children attending kindergarten did not follow the latest fashion trends.

Growing up, I learned many inviolable fashion commandments from my mother: the style and colour of a purse must always match the shoes and one cannot wear a monochromatic outfit without a small contrasting colour accent—to name only two. From my early childhood to the present day, these proscriptive decrees have determined my daily dress-up and shopping rituals. Over time, my mother’s fashion commandments have become firmly held beliefs that dictate my daily behaviour; it is at times excruciatingly difficult to resist the desire to buy a new purse to match my shoes, or vice versa. By becoming a costume designer myself and reflecting critically on my upbringing, I have realized that I have become a slightly distorted mirror image of my mother. As in Frederic’s, Elise’s, Juliann’s, and Roxanna’s case, my mother was instrumental in forming my attitudes and habits related to the creation of visual self-identity. From the moment I became aware of my unsustainable habits, I have struggled to strike a balance between opposing facets of my visual identity: one devoted to creating art pieces with one-of-a-kind, handmade garments and the other going on a maniacal shopping sprees to find just the right winter coat to match my gloves and earrings.

Canadians often ask me to tell the story of my journey from Latvia to Canada; they want to hear the reasons I had for leaving home. To this day, I emphasise two reasons, the first being that one of my children has health issues and I wanted to immigrate to a country with a better health care system. The second was my
unwillingness to live in the Soviet political and economic system, with all the limitations it imposed on my freedom. Until now, I have never verbalised the third reason: I wanted to leave my home because it did not offer consumer products that were available to the rest of consumers in Western countries. In Soviet-run Latvia, I simply could not dress myself as extravagantly and outrageously as I felt befitted my artistic ambitions. The state-run economy of the Soviet Union set up a facade for consumers, in which (to paraphrase Henry Ford) citizens could purchase any colour pants as long as they were grey. I cannot speak for all Soviet citizens, but since childhood I have craved the freedom to travel the world and experience consumers’ abundance; I was certain that leaving Latvia would provide me with the opportunity to finally match my purse with my belt and my scarf. Did my thoughts run any deeper than matching outfits? In all honesty, not really. There was no such thing as education for sustainability in the former Soviet Union. When I finally left in 1990, I was 26. Just like Roxanna who told me in her interview that she would like to shed her “mid-Western looks,” I, too, wanted to shed my Eastern European identity and transform into my vision of an outlandish and thoroughly cosmopolitan costume designer.

My children grew up in Canada. Early in their lives, I rummaged through second-hand clothes to do exactly what my mother did: I indulged in dressing up my children. I had a vision of how I wanted my children to look, and, until a certain age, they did not protest my efforts of dressing them up. Even though I did not purchase new clothing for my children, sustainability was never on my mind. I occasionally created custom outfits, such as the dress shown in Figure 11 (Appendix C), though I did not mean to sexualize my daughter by letting her apply make up at such an early age. My intent was to create a
visual spectacle of my child, one that depicted elegance, sophistication, and a specific visual identity. Unbeknownst to me, I was all the while encouraging my child to pay attention to her looks, express herself with costume-like dress, and certainly not pay much attention to sustainability, other than recycling paper and plastics. Just like Roxanna’s, Frederic’s, Elise’s, and Juliann’s mothers, I, too, encouraged my children to pay attention to their appearance. From putting on school clothes to dressing up for special occasions, dress was emphasised as an important means of communication in succeeding generations.

I moved to Canada in 1990 and started my thesis in 2009. Those two decades made up a transformational period, during which I went through significant changes. Some things have stayed the same—I still cherish creating visual identities—but as I have become more aware of sustainability challenges, I have striven to become more conscientious about what I use to create these identities. As a costume designer, I immensely enjoy witnessing the transformational ability of an outfit and hope that, in the (hopefully near) future, custom garments made by local designers can come to replace the unsustainable fads brought about by mass-produced apparel.

**Design Process**

I asked my participants to design three outfits: one that represented their favourite brand, one for a human who was an animate being or inanimate natural object in a past life, and one outfit for a homeless person. The purpose of this design exercise was to observe participants’ ability to empathise and relate to the other. I, too, wanted to experience this design process, and in doing so, I hoped to illuminate any possible pitfalls in my concept and process.
Designing for the Favourite Brand

I first had to identify my favourite brand or designer to be able to create the appropriate visual. For me, the biggest challenge was simply picking a designer or a brand, as there are just too many to count. During this process, I became aware of my blatantly incongruent tastes. I admire the lavish designs found in garments created by Vivienne Westwood, the late Alexander McQueen, Tamae Hirokawa, and even Issey Miyaki; at the same time, I cherish the minimalism of designers such as Miuccia Prada, Hussein Chalayan, and Raf Simons. In the end, I was able to define how I would like the outfit to look and drew a sketch (Appendix C, Figure 10). I found the process surprisingly easy and comfortable, and I would enjoy wearing my design and possibly using it as a starting point for a future collection. Like my participants, I found that this design did not challenge me, as I did not think about sustainability or my possible clientele. I did what I enjoyed doing—I drew a fashionable outfit. I played with it, without any deeper contemplation, and the process was fun and offered great sense of satisfaction.

Designing for the Incarnated Being

For this design, the exercise was to imagine what we would most like to be reincarnated as and to convey that in our drawings. The research participants were asked to come up with any inanimate object or animate creature, except for a human. I then asked them to design an outfit for a person that had been this creature or an object in a past life, a person who had retained some characteristics of this past life. The purpose of this exercise was to uncover whether the participants exercised care and were able to “put themselves in another person’s shoes” during the design process.
For this exercise, I thought of birds. I enjoy birds for their beautiful aerodynamic shape and ability to fly, and I think that I would enjoy being reincarnated as a bird (if volitional reincarnation were possible). I narrowed my bird of choice down to the raven because of its intelligence and social skills, in addition to its stunning, restrained appearance. As I started to think about a woman with the characteristics of a raven, I quickly realized that I was not thinking about her and her needs, but instead about my own perception of the raven, which is through a cultural lens that views the raven as a mythological creature; my approach was human-centered, and as a result, I was anthropomorphising the raven (Appendix C, Figure 9). I was remembering all sorts of fables that I have heard about ravens and their mystical powers. My first sketches, therefore, depict a woman with long black hair, wearing intricate jewellery created out of rustic beads, fragile little skulls, and skeletons of long-dead creatures. She was wrapped up in an elaborate outfit that, in hindsight, looks like something a shaman might wear; she was wearing what looked like a costume of someone who interacts with the mythological afterlife. After sketching my initial outpouring of ideas, I did some more research into ravens and forced myself to override my preconceived notions of a raven as a human being. I sketched a raven in its simplest form to remind myself of the bird’s natural beauty (Appendix C, Figure 9). According to Savage (1995), the common raven has one of the largest brains of any bird species. Ravens create tools, are very social, eat anything and everything, and adapt well to any kind of environment. Ravens mate for life, live up to 40 years, and they often live in symbiotic relationships with wolves, forming a mutually beneficial hunting and scavenging society.

2 All citations used in the appendixes are presented in the document’s References list.
After conducting this research, a completely different image of a reincarnated raven woman started forming in my mind (Appendix C, Figure 10). I began to picture my reincarnated raven as a down to earth, practical woman who works at the Haliburton Forest Wolf Centre, which hosts a pack of wolves. The Raven woman prefers pants to skirts and enjoys adorning her long black braided hair with beads and feathers. Her identity is that of a human being in constant, deep communication with wildlife and the forest. She would definitely not be wearing the uncomfortable maxi coat with tall boots that I initially imagined her wearing, and she would definitely not wear the gruesome skull necklace. Like all of my participants, my first creative impulse urged me to design an outfit not from the perspective of the other, but from my own assumptions and perceptions of how the other is represented and interpreted in the Western culture that is so familiar to me.

Designing for the Person Who Is Homeless

I asked the participants to design an outfit for a member of what I see as society’s most vulnerable group: the individuals who are homeless. I was well aware that, by raising the issue of homelessness, I was touching on something that was way beyond my field of expertise and even the scope of this research project. Nevertheless, I wanted to discover whether my participants would be able to show a deep level of care for another individual during the design process, which I believe is important when approaching any design challenge.

To immerse myself in the same thought pattern of my participants, I undertook the same process. First, I tried to define what it means to be without a home, and the more I thought about that, the more I realized that from the perspective of visual identity,
an individual who is homeless in North America might not necessarily look any different than an ordinary tenant or a homeowner. I realized that trying to characterize homelessness or designing special clothing for a homeless person was an error in my methodology. It was a mistake to conceptualize the homeless as a homogenized, clearly defined group of people; it would be comparable to asking my participants to design an outfit for all homeowners or tenants. By asking the participants to design an outfit for an individual who is homeless, I unknowingly reinforced the stereotype of “the homeless as an amorphous mass” (Daly, 1996). When I realized this, I had to face my total ignorance of the subject matter. When I arrived in Canada with no possessions, my friend provided a shelter for me and my children. As I applied for refugee status, this friend helped me to rent an apartment and provided my family with all the basic necessities. Thankfully, this means that I have never experienced what it is like to not have a home. To address my lack of experience, I decided to conduct some additional research to learn more about the issue before designing my outfit for an individual who is homeless.

After some additional reading, I learned that “homelessness is a fluid and elusive concept” (Daly, 1996, p. 1). According to Daly (1996), a person is homeless if he or she lacks the adequate shelter to which he or she is entitled in order to live safely. In addition, people are considered “homeless” whether they are absolutely without shelter or are at serious risk of being without shelter in the near future. This description captures not only those who are totally homeless—living literally on the street—but also those who live in unsafe conditions or who lack proprietary rights over the housing they are in (e.g., “couch surfing” or “squatting”). As I learned more about homelessness and listened to the narratives of the homeless women I read about, I felt more and more
disturbed and confused, but I also wanted to help; I wanted to make a difference in the system, though I did not know where to start. More than anything, I felt an overwhelming sense of helplessness in the face of the system that we conform to, though I also felt embarrassment for having learned about this daunting issue through mere curiosity.

After more contemplation, I proceeded to design an outfit for a woman who is homeless with no available shelter (Appendix C, Figure 10). I designed a warm but very light down-filled cape, with built-in pockets, that can be transformed into a sleeping bag. I thought about closure for the cape garment and decided to avoid zippers and buttons because they could get damaged or lost. I even contemplated approaching the “Canada Goose” company to create a prototype for such a cape. I felt that I could have talked to individuals without homes and asked about their needs and preferences, but I did not feel ready to immerse myself in such interactions and I did not have ethics clearance either. I was hesitant to interact with the persons who are homeless as I felt afraid of: possibly getting hurt, accidentally offending the person I would approach, or creating a false sense of hope for something that I would not be able to follow through on. Here, I am reminded of Jenny’s response, “I actually wanted to go and interview a homeless person to find out what they’re wearing, but the thing is you can’t tell which ones are sick, which ones are assholes, and which ones are just, you know, nice people there ‘cause out of their luck and it can be kind of dangerous to go and talk to them.”

This design challenge ultimately turned out to be both distracting and disturbing. It has made it hard for me to get back on track and focus on writing my thesis: my writing suddenly felt arbitrary and superficial. The design process simultaneously awoke my
creativity and triggered overwhelming caring attitude toward individuals with no access to shelter. I found that my reactions and responses in this design challenge were very much like those of my participants, and I was faced with the awareness that although I had judgemental feelings towards my participants, I was experiencing the challenges much like they were.

Acceptance

During and after reflection, I realized how little I know about sustainability and what it means to live a truly sustainable lifestyle, both at the local and global levels. Like the participants, I recycle everything I can and shop at second-hand stores, but this accounts for such a small part of what could be done to make a difference in the world.

To truly adjust my lifestyle to a more sustainable one, I need to undergo a fundamental shift in how I perceive reality, as my perception of reality is fogged by the systems and structures of the modern world. During this research project, I started to feel more and more confused with my own attitudes and habits regarding sustainability. On one hand, I became much more aware of the challenges of living a sustainable lifestyle, which inspired me to further educate myself. On the other hand, I felt helpless to affect the system, just like my participants. This feeling of helplessness was demoralizing and somewhat debilitating because at times it triggered total inertia in me.

I learned so much about myself from reflecting on my own knowledge and attitudes regarding sustainability. The discovery that my knowledge was so similar to the participants’ knowledge about sustainability and that my attitudes often echoed their own attitudes made me realize that the challenge of sustainability—knowing what it is, and acting on it, is likely intergenerational.