EVALUATING THE BASIC PSYCHOLOGICAL NEEDS AND EXTRINSIC

MOTIVATIONS OF CONSUMERS FOR SUSTAINABLE CLOTHING PURCHASES

by

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(Under the Direction of Yoo-Kyoung Seock)

ABSTRACT

This study explored the potential relationships between consumer's basic psychological needs, their extrinsic motivations for sustainable clothing, as well as their purchasing intention for sustainable clothing. Additional analyses extended the evaluation of these variables' relationship with multiple purchase intention constructs. The results indicate that there are relationships of various strength between all of the variables. The study indicates that consumers can have purchase intentions toward sustainable clothing at all levels of extrinsic motivation. The respondents fell into two categories of either passive or active in their purchase intentions. The three basic psychological needs do not have significant relationships with all levels of extrinsic motivation. The results suggest that evaluating consumer's basic psychological needs and extrinsic motivations can share significant information regarding sustainable clothing purchase intention, a valuable resource to businesses, education, and future academic research.

INDEX WORDS: Sustainable clothing, Purchase intention, Motivation

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For Yahweh.

For John Tyler.

For Andrew River.

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CHAPTER 1

INTRODUCTION

The introductory chapter addresses the background and processes in conducting this research. Chapter one contains the following sections: (1) background of study, (2) purpose of study, (3) justification and research gap, (4) research questions, (5) research objectives, and (6) conceptual definitions.

Background of Study

An inevitable part of the human condition is the dynamic interaction between the planet, people, and the products they use. This interaction holds a tension between fulfilling one's needs and desires while also respecting the natural resources provided by the earth. Individuals' awareness of their consumption patterns can change and drive economic demand for apparel products. These kinds of cultural shifts are what will provide positive and lasting impact toward consumers' sustainable behavior. Leadership in academia and industry are constantly sourcing new determinates in helping understand and drive these cultural shifts. By way of self-determination research, can evaluating consumers' basic psychological needs influence their extrinsic motivations and purchase intentions toward sustainable clothing?

Consumption is an important aspect of our global economy, but purchasing unsustainable products causes environmental, social, and ethical harm to the planet (Kasser, 2011). The United States demands more apparel per capita than any other country in the world and clothing retail is a significant contributor to the national gross

domestic product (Quantis, 2018). Resolving challenges to this ecological dynamic is important for any business that wishes to engage and grow within the overall economy (Kumar, Manrai, & Manrai, 2017). Businesses must be aware of their contribution to social and ecological global impacts for creative business model innovations (Quantis, 2018). Business model adaptations that reevaluate key performance indicators will provide lasting results for all parties involved in a product life cycle.

In the clothing industry there are many involved entities, including manufacturers, marketers, and retailers, and each party needs consistent language for communication regarding the expectations when creating sustainable products (Kumar, Manrai, & Manrai, 2017). The life cycle of a product and its subsequent value chain are constantly under evaluation for social, ecological, and economic impacts and optimization (Quantis, 2018). In 2016, the apparel industry alone contributed to 6.7% global climate pollution impacts (Quantis, 2018). Research suggests that from the year 2016 to the year 2030, the apparel industry will negatively increase their impacts on climate change by 49% (Quantis, 2018).

Over the years, consumers have become accustomed to societal norms that promote lower quality clothing at discounted costs (Rausch & Kopplin, 2021). This shift has sped up manufacturing practices, shortened product life cycles, and led to excessive waste (Rausch & Kopplin, 2021). The demand and pace of current clothing production is irresponsible and has cause irreparable damage to natural resources (Rausch & Kopplin, 2021). For example, cotton fiber production requires over twice as much freshwater in comparison to any other fiber and typically employs an ecologically unhealthy amount of pesticide pollutants (Quantis, 2018). Additionally, dying and finishing processes of

clothing depletes resources and negatively impacts global human health more than any other step in the product life cycle (Quantis, 2018).

It is well known that consumers typically drive product demand (Kumar, Manrai, & Manrai, 2017). However, research is unclear on consumers' interest in sustainable clothing, suggesting that consumers have loss any intrinsic value in their garments, while also stating that consumers self-identify with environmental concerns as well as brands which engage in sustainable practices (Rausch & Kopplin, 2021). Other research suggests that while there is an increase in demand for sustainable products from companies, sustainable purchase behavior is still new to most consumers (Park et al., 2017).

Past research has segmented and labeled certain consumer groups as explicitly sustainable purchasers and suggested companies market products only to this niche target population as supposed to general consumers (Kang et al., 2013). This is a gross oversight that places limitations on consumer understanding for environmental concerns as well as caps the potential for growing businesses that produce sustainably (Kang et al., 2013). From an ecological and economic standpoint, it is important not to limit sustainable products to only one segment of the population, but to create solutions that can involve various types of consumers.

Often cultural variables can impact how individuals perceive value in sustainable products, including clothing (Kasser, 2011; Park et al., 2017). Research shows that consumers have perceived barriers, hesitations, and resistance preventing them from making sustainable purchases (Shen, Richards, & Liu, 2013; Rausch & Kopplin, 2021). Consumers' non-sustainable clothing purchase behaviors are not necessarily a reflection of the individual's environmental value or ethical consciousness, but a bias reflection of

their lack of control (Shen, Richards, & Liu, 2013).

Consumers' purchase decision making is a complex combined mix of variables that can be weighted differently (Park et al., 2017). Not all consumers who purchase sustainable clothing are the same because they can have varying degrees of commitment, also known as integration (Park et al., 2017). Individuals have the ability to think independently and make different decisions under various levels of control (Ryan & Deci, 2000b; Kasser, 2011). These variations affect an individual's self-determination, preceded by the satisfactions of three basic psychological needs (BPN): autonomy, competency, and relatedness (Ryan & Deci, 2000b). Research shows that consumer indications toward product intention can be measured with the Self-Determination Theory (SDT) (Widyarini & Gunawan, 2017). Purchasing intentions of clothing is often a reflection of one's priorities within their greater culture (Kasser, 2011; Park et al., 2017). These purchasing intentions can also be important predictors of behavior (Rausch & Kopplin, 2021).

Studies concerning consumers' shopping decisions evaluate a plethora of variables. The variables studied are often associated with traditional marketing standards or they develop new variables, diluting research language, compromising many definitions, and providing inconsistencies across academia (Kang et al, 2013; Shen et al., 2013; Lundblad & Davies, 2016; Park et al., 2017; Rausch & Kopplin, 2021). One aspect of this study's purpose is to use consistent language from the research of various industries that use Self-Determination Theory, and it's subsequent theories, in defining the variables within the context of sustainable clothing and consumer purchase intentions.

Purpose of Study

The purpose of this study was in investigating how sustainable clothing purchase intentions are associated with basic psychological needs and extrinsic motivations. Also, this study examined the relationships between basic psychological needs and extrinsic motivations.

Justification and Research Gap

Most previous studies with foundations in Self-Determination Theory do not consider clothes shopping or consumption (Ryan & Deci, 2000b; Park et al., 2017). There is a great opportunity for evaluating the apparel industry using this conceptual framework.

Several studies explore the tension between individuals' internal selves, external products, and how people can develop psychological attachments to compensate for a lack of basic psychological needs satisfaction without addressing the specific needs themselves (Ahuvia, 2005). Other research evaluates the affect of tangible versus experiential activities on perceived basic psychological needs satisfaction for individuals or others, but there is confused language about motivation within the results (Howell & Hill, 2009). Research can show the effect of specific outside variables, such as income level, on peoples basic psychological needs perceived satisfaction, but that still leaves a significant gap within research on the multiple of variables connected to clothing and sustainable product consumption that are not addressed (Howell & Hill, 2009).

There are several gaps within research around sustainable clothing in regards to self-determination and consumer purchase motivations. Current studies are limited in their scope; often research using the Self-Determination Theory focuses on one basic

psychological need, such as autonomy, which does not properly address how the three needs are dynamically related (Pelan et al., 2010; Chen & Sengupta, 2014; Kasser, 2011; Wertenbroch et al., 2020). A similar limitation is when researchers chose measuring only one particular level of extrinsic motivation, such as introjected regulation, instead of all four regulations within the OIT (Chen & Sengupta, 2014). This significantly limits the understanding of the complexity of extrinsic motivation and the continuum of the multiple regulation levels. Some researchers reverse order the directionality of the Self-Determination Theory, assessing the variables of consumers' perceived basic psychological needs after the shopping action (Lee, 2016). These diluted studies show a lack of understanding in the multidimensionality of the theory's concepts (Saavedra & Bautista, 2020). A matrix perspective that encompasses all variables within each SDT sub-theory is the most adequate evaluation of the inter-dynamics of these concepts.

In understanding consumers' psychological needs deeper, including which specific variables have significant affects on needs satisfaction, whether cultural or otherwise, researchers can measure these specific contextual changes. This form of data analysis can give way for understanding how those within the clothing industry can potentially change consumer's motivation toward purchasing sustainable products. This information can provide hope for the clothing segment of the overall economy, by not limiting all production and consumption, but in creating direct solutions and high value propositions for consumers that resolve their tension between clothing products and natural resources.

Research Questions

Some questions that are addressed in this study include: (1) Are sustainable clothing purchase intentions associated with basic psychological needs? (2) Are sustainable clothing purchase intentions associated with various extrinsic motivations? and (3) Are the basic psychological needs associated with extrinsic motivations?

Research Objectives

The objectives of this study are in investigating and examining (1) how basic psychological needs are related to sustainable clothing purchase intentions, (2) how extrinsic motivations are related to sustainable clothing purchase intentions, and (3) how BPN and extrinsic motivations are related to each other. This research investigated consumer variable patterns within the context of self-determination in that industry leaders could potentially change target consumer's level of motivation, positively or negatively, toward sustainable clothing purchase intentions.

Conceptual Definitions

1. Sustainable Clothing

   Garment items that are multi-dimensional conceptually comprised of many different variables including environmental, ethical, and social cultural standards (Shen et al., 2013; Lundbad & Davies, 2016; Park et al., 2017). The definition of sustainable clothing is subjective to the individual.

2. Purchase Intention

   An internalized thought process of consumers based on various objectives before executing a purchase behavior (Widyarini & Gunawan, 2017).

3. Basic Psychological Needs

   Innate qualities of every individual despite cultural differences that have

   various levels of satisfaction given the context of a situation and are the

   foundation for all human interactions that are always comprised of three

   needs: autonomy, competence, and relatedness (Ryan & Deci, 2000b).

4. Autonomy

   Often defined as "free will," autonomy designates an individual's level of

   perceived control within any context (Wertenbroch et al., 2020). It is the

   ability to act solely on the thoughts of the self, whether automatic or

   deliberate, without any sort of external influences (Wertenbroch et al.,

   2020). It is also seen as the opportunity to be able to get one's own needs

   met, activate a goal, or make a difference (De Young, 2000; Barbopoulos

   & Johansson, 2017).

5. Competency

   Competency is associated with intellectual ability, information, and

   perceived familiarity or feasibility (Kasser, 2011; De Young et al., 1993;

   Barbopoulos & Johansson, 2017). Positive or negative forms of support

   can include feedback of one's efforts or performance (De Young, 1996).

   Confidence in reason and in procedure can significantly impact one's level

   of self-determination (De Young, 1996).

6. Relatedness

   Defined as how one interprets social norms or interpersonal relationships

   (Ahuvia, 2005). The positive or negative association with relatedness can

come from an individual's perceived level of unconditional love from others (Kasser, 2011). Positive or negative effects can include how one feels more or less involved and participatory within a given group (De Young, 1996; De Young, 2000). These associations can also be tied to environmental connectivity (De Young, 1996; De Young, 2000).

7. Extrinsic Motivation

When an activity is done to achieve a separable outcome varying in autonomy, within different levels of internalization and integration (Ryan & Deci, 2000a).

8. Integrated Regulation

Integrated regulation are behaviors done that coincide with one's self or identity. The behavior is still not fully enjoyed for itself and is still affected by a small level of external promises (Deci & Ryan, 2000).

9. Identified Regulation

Identified regulations are behaviors that are goal driven and seen as personally significant. These behaviors are done consciously for their specific outcome (Deci & Ryan, 2000).

10. Introjected Regulation

Introjected regulations are behaviors done without considering one's own. These are done because of external influences, often to avoid guilt or maintain one's pride (Deci & Ryan, 2000).

11. External Regulation

External regulation has the lowest level of locus of causality. It is defined by behaviors determined by an incentive of a reward or demand (Deci & Ryan, 2000).

CHAPTER 2

LITERATURE REVIEW

Chapter two consists of a literature review of previous studies with foundations

formed around Self-Determination Theory, and it's subset, Organismic Integration

Theory. This chapter also discusses the concepts pertaining to these theories, including

human basic psychological needs and extrinsic motivation. Using the instrument of

sustainable clothing, this study used these theoretical concepts in evaluating their

relationships with consumer's purchasing intentions. Based on Ryan and Deci's (2000a)

SDT model for the continuum of extrinsic motivation within the organismic integration

theory, a new conceptual model was developed for exploring the relationships of specific

BPNs and the levels of extrinsic motivation on consumer purchasing intention. Chapter

two consists of the following sections: (1) theoretical background, (2) sustainable

clothing, (3) purchase intention, (4) basic psychological needs, (5) extrinsic motivation,

and (6) conceptual research model.

Theoretical Background

The foundation for this research study was the Self-Determination Theory (SDT),

first proposed by Richard Ryan and Edward Deci in 1985. Most research based around

this theory explores health and education (Ryan & Deci, 2000b). Very few studies have

used SDT to evaluate consumer behavior toward clothing purchases. The SDT core

premise evaluates the psychological reasoning for optimal human functioning and

assumes that humans are active in their decision making with the ability to adapt

themselves to their surroundings (Ryan & Deci, 2000b). Ryan and Deci suggest that these adaptations within individuals align themselves with the human's satisfactions of three basic psychological needs (BPN): autonomy, competency, and relatedness (2000b). The three needs are psychologically innate and fluid; ever changing based on situations and context, but all are associated with human's interactions with the social world (Ryan & Deci, 2000b). By evaluating the three BPN, predictions can be made about what conditions are necessary to promote optimal performance in humans, including purchasing intentions (Ryan & Deci, 2000b). In determining the necessary conditions for BPN satisfaction for a target market, a retailer can create situations that stimulate positive purchasing intentions for the company, an invaluable resource for marketing strategic planning.

This study focused on consumer purchasing intentions, a concept that involves an instrument, or product, in the individual's decision making, determining it to be extrinsically motivated. Ryan and Deci (2000a) suggest that in any specific context self-determination is based on a regulatory continuum when a person is either amotivated, extrinsically motivated, or intrinsically motivated. Between the extremes of amotivation, a fully controlled action with lack of any self-interest, and instrinsic motivation, an action fully adapted to the self and an individual's internalized values, most people experience extrinsic motivation (Ryan & Deci, 2000a). Actions that are autonomous or controlled are intentional, regardless of their different regulatory reasons and processes (Deci & Ryan, 2000).

Ryan and Deci (2000a) suggest that extrinsic motivation is not singular in regulatory processing, but instead consists of various levels based on an individual's

perceived locus of causality. These levels are based on the subjective integration of an activity to one's self and values, referred to as the Organismic Integration Theory (OIT), a subtheory of SDT (Ryan & Deci, 2000a). This study explored these extrinsic motivation levels within the context of sustainable clothing purchasing intentions.

Self-Determination Theory. This study used Self-Determination Theory (SDT) as the theoretical background for research. SDT was proposed by Deci and Ryan (2000b) and suggests that an individual's proliferate of self-determination consists of three basic psychological needs (BPN) that are innate in every human, the need for autonomy, competency, and relatedness. Each need is subjective to an individual in any context and is satisfied independently. Studies show that an increase in satisfaction of any of the three BPN correlates with the increased internalization an individual holds toward an action leading to increased feelings of self-determination (Ryan & Deci, 2000b).

Organismic Integration Theory. Extrinsic motivation's propensity for self-regulation is defined within the Organismic Integration Theory (OIT), a sub-theory of SDT (Deci & Ryan, 2000). This sub-theory is composed of four regulatory levels, all extrinsically motivated, but with definitive positions of integration between the self and the behavior (Deci & Ryan, 2000). These levels are placed on the continuum for locus of causality with more or less external influence. The continuum is end-capped by regulation levels being considered either controlled or autonomous (Deci & Ryan, 2000). Deci & Ryan suggests that OIT shows a direct relationship between supported BPN and the internalization level of a behavioral intention (2000). These expressed levels of internalization are important for brands that hope to develop intimate, trusting relationships with their customers. Consumers can initially fall in one place on the

continuum but then they can also change over time to find themselves positioned at another level; the continuum is not inherently linear in nature (Ryan & Deci, 2000a). Each regulation level is determined by person-environment engagement (Deci & Ryan, 2000). Since these changes are subjective and dependent on context, retailers of sustainable clothing can create strategic plans that support the BPN that best resonates with their target market for optimal purchasing intentions.

Sustainable Clothing

Sustainable clothing is a broad, multidimensional product category, which can incorporate environmental, economic, ethical, and social factors (Lundblad & Davies, 2016; Shen et al. 2013, Kang et al., 2013). Sustainable practices, whether through use of labor or materials, are an increasingly important value proposition for clothing producers. Brands that engage in sustainable practices are no longer niche. These practices are increasingly considered an expected and innate part of business development. Clothing companies that are incapable of adapting to changing consumer demands in sustainability falter while emerging businesses fill these gaps in the industry. However, it is difficult for emerging businesses that have not developed their consumer base to target their initial audience for their products given their limitations in financial resources. This is particularly true when much of these businesses' financial resources are allocated towards sustainable product manufacturing.

Consumers are generally not aware of all of the dimensions integrated within sustainable clothing, impacting their perceptions of the industry subset and creating convoluted purchasing motivations (Shen et al., 2013). The companies with the most success in marketing their sustainable practices are legacy brands that have plenty of

financial capital to allocate toward various consumer engagement strategies.

Most studies on sustainable clothing are focused on consumer behavior, segmenting consumers based on their general attitude toward sustainability versus their preferences for traditional retail incentives such as price and style (Lundblad & Davies, 2016; Park et al., 2017). These studies state that pricing is of higher importance to consumers than any other consideration. This research can be limiting because it does not evaluate the multidimensional nature of sustainable clothing products or the depths of persuasion consumers might have in determining their behavior.

Other people groups that need deeper consideration within research are those that consider any form of consumption to be in opposition of sustainability or those who have zero consideration for the tension between the planet and products. Although these groups are not initially targeted by businesses, examining the nuances of these individuals and learning how to change their perceptions toward products is important in developing strategies that can scale companies in their specific industry.

Purchase Intention

Research shows that purchase decision-making is multidimensional and a wide variety of factors can contribute to specific types of consumption intentions. Shen et al. (2013) suggests that married individuals are more likely to purchase locally made goods and are generally more aware of the environmental and social tensions for their purchases. While there are purchasing patterns within certain demographics, statements like these can be an oversimplification. Understanding the depth of consumers' basic psychological needs and how those combined factors could place them into certain demographic categories within their culture would be more appropriate and informative.

People are adaptable and are capable of changing their behavioral intentions. Kang et al. (2013) suggests that an increased exposure to information or direct experience with specific products, like sustainable clothing, can increase the intentions of consumer purchases over time. However, this is only true if the exposure increases the individuals' perceived well-being, also factors such as cultural differences and product availability have significant influence on the opportunities one might have for these types of exposures (Kang et al., 2013).

With the shared human experience of the COVID-19 pandemic, sustainable products and business practices are at the forefront of innovation and consumer preference within retail. Shen, Richards, & Liu (2013) state that "[a]n increase in the importance of ethical and sustainability... in consumer decision making can [come from] unexpected and quite tragic events." This reality could not ring more true in the present outcome of a global pandemic.

Along with COVID, other past global events have caused a noticeable shift in purchasing intentions. A part of this can be associated with increased awareness of corporate social responsibility practices by the general population. Often this is a direct result of heightened media coverage of specific events that changes the general public's purchasing intention based on their emotional reactions to the news (Shen et al., 2013; Park et al., 2017).

Social media's prolificacy today significantly impacts consumers purchasing intentions. Consumers are smart; comparative shoppers can research any product or business from the convenience of their phones providing them with immediate impressions of a brand. In leveraging social media, nonprofits and global social

movements, are pushing for corporate accountability and radical business transparency. Despite these advantages, some studies suggest that people are naive to the tension between their products and the planet and that, in opposition, lack awareness or knowledge about the products they purchase thus leading to fewer sustainable purchase intentions (Shen et al., 2013).

Previous research does show that despite the increase in conversation surrounding sustainable clothing, consumers do not intent on purchasing sustainable products if given the option between products of lesser personal monetary cost (Lundblad & Davies, 2016; Park et al., 2017). According to Park et al. (2017), the only exception for an increased willingness to pay would be after times of a global crisis and heightened emotions. However, in Lundblad and Davies (2016) research, they found that people who had previously purchased sustainable clothing did not associate price with the value of their purchase intentions, but instead considered sustainable clothing a significant contributing factor toward their individuality and expressed style. The study suggests that ego is highly involved in sustainable clothing purchase intentions and a proposed potential symptom of increased popularity of this clothing segment could turn original adopters away from purchase intention involvement despite the ecological benefits (Lundblad & Davies, 2016).

Basic Psychological Needs

For consumers to be motivated toward purchasing sustainable clothing their basic psychological needs (BPN), comprised of autonomy, competency, and relatedness, have to be satisfied in one way or another, otherwise a lack of support for any three BPN could mean avoidance of a particular sought behavioral intention (De Young et al., 1993).

Opportunity exists in research for discovering the extent each BPN can be satisfied for changing intentions as well as maintaining the changes (De Young et al., 1993; Deci & Ryan, 2000).

The factors, context, and weight of importance for each BPN can vary among consumers. Not only can each BPN be supported, but they can also be hindered, making any potential change in intentions more difficult (De Young et al., 1993; De Young, 2000). Satisfaction can be found in many different ways and it is multidimensional in and of itself (De Young et al., 1993; Barbopoulos & Johansson, 2017). However, it is proposed that there could be common factors that support BPN determined by the context of the sought intentions, such as in sustainable clothing purchasing, and the only difference between consumers could be the weight of their significance or motivational regulation (Barbopoulos & Johansson, 2017; Deci & Ryan, 2000). Some of these BPN satisfactions can be extremely subtle but highly significant (De Young et al., 1993). Determining the BPN of consumers' motivation toward purchase intentions can focus businesses applications in developing strategic interventions that target consumer groups for turning them into reliable repeat customers (De Young, 2000).

A few studies within research that consider BPN fulfillment and shopping consumption evaluate consumers based on specific types of retail experiences. Lee (2016) considers how consumers chose customization options in online shopping, which integrates the customer into the product development process, and whether BPN satisfaction is achieved through this experience. Lee found that competency was more positively associated with the experience than autonomy (2016). In opposition to other research, Lee suggests that those with higher levels of autonomy had lower levels of

product knowledge, not helping them with their choices (2016). When it came to customization, competency was more important than autonomy, regardless of product knowledge (Lee, 2016). Lee found that a brand's engagement experience resonated with customers' BPN fulfillment more than the product itself (2016).

De Young suggests that experience of the purchase is less significant than the familiarity of the purchase intention itself (2000). If customers perceive themselves confident, a higher satisfaction of the BPN competency, in a situation they will be more likely to enjoy an experience (De Young, 2000). De Young states that this should be considered hopeful information for marketers since customers have the ability to develop positive familiarity with a product without experiencing direct interactions (2000). This can be particularly important for emerging brands that hope to acquire customers with a lack any previous direct customer and product experiences, especially those with online retail environments.

A perpetual business strategy toward consumers' non-autonomous intentions includes proposing external market stressors, suggesting an unidentified problem for an individual and then immediately proposing a product as the solution. Creating this external stress on an individual can manipulate their intentions and motivate them into purchasing a product without consciousness (Wertenbroch et al., 2020). It makes one wonder if "the pursuit of happiness" within American culture, although intrinsically articulated, is a more observable expression of extrinsic motivation in one's self.

Studies show that the level of importance an individual associates with a product can determine intentions toward a product purchase. If the BPN of that individual are not satisfied, they are less invested in the product and will then consider other retail

determinants as more important in their decision making, such as price or ease of purchase (De Young, 2000; Lundblad & Davies, 2016).

Autonomy. An individual needs to feel that they are in control of their own life through decision-making and action (Wertenbroch et al., 2020). There are many environmental variables that can hinder or support the subjective satisfaction of an individual's autonomy (Ryan & Deci, 2000b; Wertenbroch et al., 2020). Autonomy can be categorized as perceived or actual, both should be important to marketers of products for creating environments that support this basic psychological need for consumers and various cultural contexts (Kasser, 2011; Wertenbroch et al., 2020).

Competency. Individual's ability to feel that they are able to accomplish an action is important for their decision-making and motivations toward a particular action (Lee, 2016). As retailers sell through various omni-channel options and provide unique services for customers, it is important that they feel they can engage with these developments because it can affect the consumer's perceived relationship with the brand and presumably purchase intentions (Lee, 2016). For sustainable clothing retailers, consumers should feel that they could comprehend the context in which the product is sustainable with ease.

Relatedness. Purchases often involve other people, creating feelings of social belonging (Howell & Hill, 2009). When this need is satisfied, individuals can have increased feelings of security, love, or trust (Ryan & Deci, 2000b). This is increasing true for individual's who seek out acceptance from particular communities based on perceived ideal identities and values (Ryan & Deci, 2000b). Consumers can often associate brands as a form of community, a marketing strategy that can be advantageous to satisfying the

BPN of relatedness.

The summations of each of these BPN satisfactions are considered that individual's locus of causality in their behavioral intentions. Any lack of support for the BPN, whether external or internal, will result in a lower level of self-determination and thus motivation (Deci & Ryan, 2000). Over time, individuals integrate particular values into their identity, considering them a part of their subjective well-being and affecting their behavioral intentions (Deci & Ryan, 2000). Every individual desires to express their truest authentic self, which is defined by Deci & Ryan as executing a higher level of overall autonomous behavior (2000).

Factors and context can fulfill or detriment BPN satisfaction, antecedents to self-determination and motivation. Environments, starting in childhood, can coerce individual's to have more positive or negative associations with various BPN (Deci & Ryan, 2000). As one becomes more or less self-determined in different contexts, their motivations will reflect their intentions and can potentially be changed (Deci & Ryan, 2000).

Extrinsic Motivation

Extrinsic motivation toward a behavior consists of some sort of perceived outcome, for the self or for others (Deci & Ryan, 2000). Sustainable clothing, because it is a tangible item that must be purchased, is automatically associated with rewards and extrinsic motivation. Extrinsic motivation is regulated in various degrees depending on how much the behavior is geared toward helping oneself or contributing to others (Deci & Ryan, 2000). Motivation can vary for individuals by level or amount as well as orientation or kind based on the degree of satisfaction of each BPN (Ryan & Deci,

2000a). This dualistic description of motivation opposes other theories, which suggest

that motivation is singular in nature, either present or not present, i.e. extrinsic motivation

or amotivation (Ryan & Deci, 2000a). Deci and Ryan go one step further, stating that

extrinsic motivation levels can be vary and be defined based on the internalization and

integration of specific values (Ryan & Deci, 2000a).

The depth of self-integration an individual has towards their intentions defines the

various levels of motivation regulation, a continuum of various stages (Ryan & Deci,

2000a). Figure 1, from Deci and Ryan's research, shows the continuum of extrinsic

motivation defined as OIT (Ryan & Deci, 2000a).
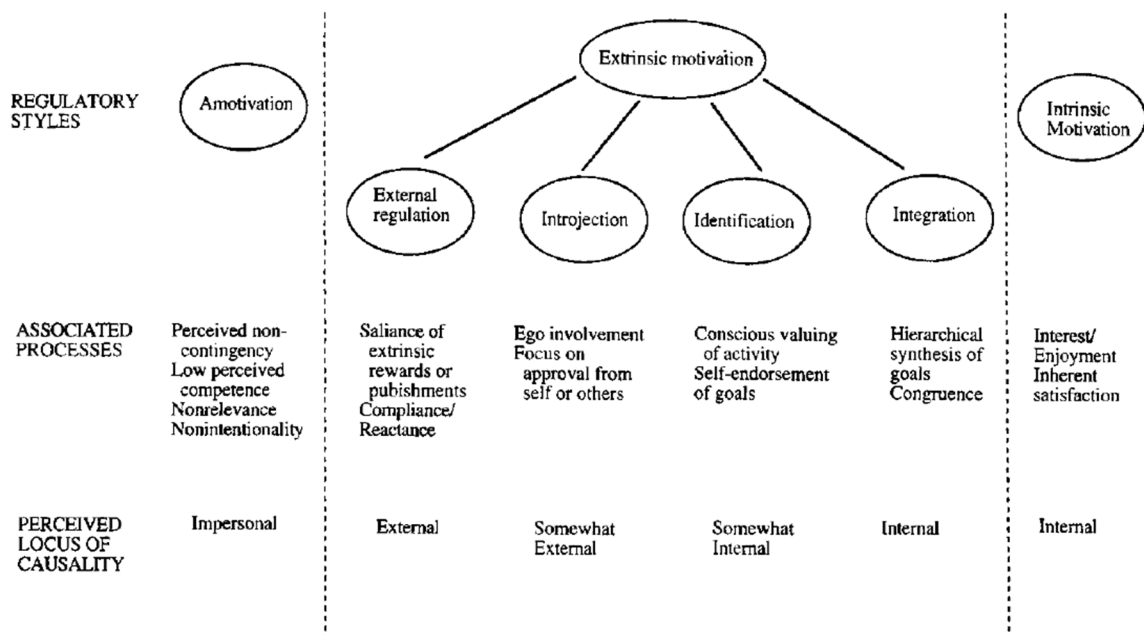
Figure 1

A Taxonomy of Human Motivation

Deci and Ryan suggest that types of motivation regulation are distinguishable based on an individual's reasoning behind an action, or their basic psychological needs satisfaction (Ryan & Deci, 2000a). Their research shows that these variations lead to very different perceptions of experience quality and can be used for evaluating a multitude of predictive outcomes, including purchase intention (Ryan & Deci, 2000a).

Studies on student behavior in educational settings suggest that students' motivational orientation toward a task can vary and that these distinctly relate to the success of the desired outcome (Ryan & Deci, 2000a). Understanding these distinctions, or antecedents, to the motivation can provide opportunities for strategic planning for desired success (Ryan & Deci, 2000a). Deci and Ryan suggest that by researching these distinctions, planning can be made around how to recognize the internalized variables, or basic psychological needs, and in-turn create conditions that support the less satisfied BPN to ultimately change the desired outcome of an individual (Ryan & Deci, 2000a). However, they also state that the continuum for regulation is not developmental, but instead have an order correlation through a quasi-simplex pattern (Ryan & Deci, 2000a). Individuals do not have to progressively move along the continuum; instead individuals can adopt a different level of regulation at any time in their life, dependent on contextual factors, or BPN satisfaction (Ryan & Deci, 2000a). A shift in orientation can cause a change in extrinsic motivation regulation level, whether positive or negative, and ultimately toward a specific behavioral intention (Ryan & Deci, 2000a).

Based on previous studies, potential benefits for sustainable clothing retailers with consumers with higher regulation levels of extrinsic motivation could include more brand engagement, higher customer retention, purchase repeatability, lower product return

ratios, as well as an increased interest in learning more about sustainable clothing development (Ryan & Deci, 2000a). Consumers could also develop more positive purchase intentions and retail experiences toward a specific product or brand (Ryan & Deci, 2000a).

External regulation. The least autonomous form of extrinsic motivation, it is regulated by rewards or demands and is highly controlled (Ryan & Deci, 2000a). An individual is externally motivated, and not amotivated, however the choice for action or regulation is completely controlled by outside demands (Ryan & Deci, 2000a). Any expected reward can be perceived as a form of control over a desired behavior (Ryan & Deci, 2000a). The contextual factors, or BPN, that promote external regulation are externally produced (Ryan & Deci, 2000a). Previous research suggests that consumers might be externally regulated if they have higher perceptions of relatedness, but lower forms of autonomy or competency (Ryan & Deci, 2000a).

Introjected regulation. Controlling in nature, actions are lead by feelings of guilt, anxiety, or pride (Ryan & Deci, 2000a). The BPN that affect introjected regulation relate to self-esteem (Ryan & Deci, 2000a). These variables can place feelings of pressure on an individual to perform a behavior in certain ways to attain, maintain, or out of fear of losing a form of positive ego (Ryan & Deci, 2000a). Based on previous research on student behavior, consumers might put in some effort in their purchasing intentions, but they will not feel good about it (Ryan & Deci, 2000a). These consumers could feel that their BPN for competency and relatedness are satisfied, but their need for autonomy is still lacking (Ryan & Deci, 2000a).

Identified regulation. When a person chooses to accept some outside control because they find value in it and associate it as beneficial for their self (Ryan & Deci, 2000a). Since the contextual factors, or satisfied BPN, are self-valued, the individual maintains a high level of autonomy in their behavioral intentions (Ryan & Deci, 2000a). According to previous research, identified regulation could produce feelings of enjoyment toward purchasing intentions, however lower associations with interest (Ryan & Deci, 2000a).

Integrated regulation. The most autonomous level because the action is fully associated with the self, but it also has an outcome with significant value (Ryan & Deci, 2000a). This level of extrinsic motivation does have an element of outside influence. For the individual, their regulation or choice of action is only affected by an outside influence because the influence directly relates with their psychological sense of self or well-being. If there were no benefits of outer influence, then the action would be considered without extrinsic motivation and the individual would be fully self-integrated psychologically, or internally motivated (Ryan & Deci, 2000a).

The level of integrated regulation suggests that the individual feels satisfied in both their BPN of competency and autonomy, and these two needs satisfactions are dependent on each other to achieve higher integrated regulation (Ryan & Deci, 2000a). Allowing individuals the ability to create their own choices supports these BPN and in relation their integrated regulation toward a desired behavioral outcome (Ryan & Deci, 2000a). Creativity is often associated with integrated regulation because an individual prioritizes aesthetics, challenges, or novelty in their behavioral intention (Ryan & Deci, 2000a). Previous research suggests that integrated consumers could feel high interest,

excitement, and general shopping competence toward their purchasing intentions (Ryan & Deci, 2000a). Essentially, a consumer who experiences integrated regulation has satisfaction of all three BPN (Ryan & Deci, 2000a).

Conceptual Research Model

The conceptual research model, shown in Figure 2, suggests a relationship between the BPN, regulation levels of extrinsic motivation within OIT, and a desired outcome, which for the purposes of this study is sustainable clothing purchase intention.
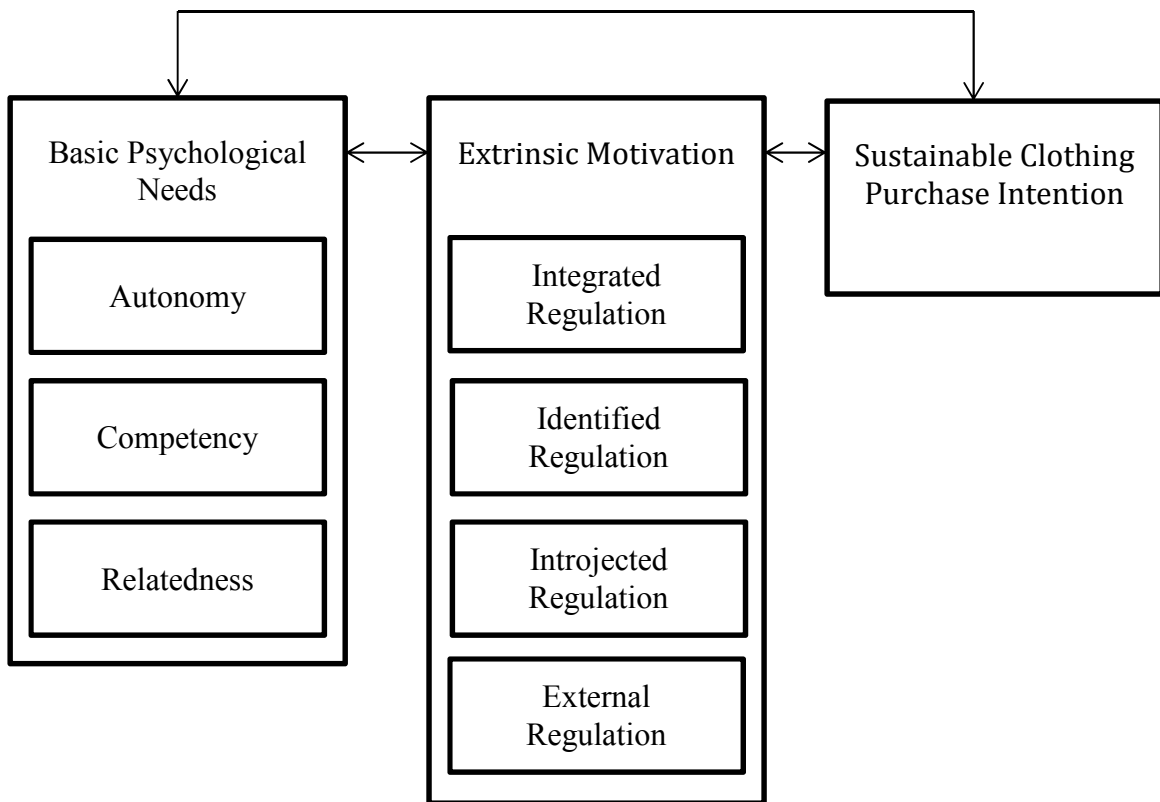
Figure 2

Conceptual Research Model

CHAPTER 3

METHOLOGIES

The purpose of this study was in evaluating consumer's level of BPN satisfaction

in regards to sustainable clothing as well as in measuring their level of extrinsic

motivation toward sustainable clothing. These measurements examine the relationships of

these theoretical concepts on consumer purchasing intentions toward sustainable clothing.

Chapter three consists of the following sections: (1) instrument development, (2) data

collection and sampling, and (3) data analysis.

Instrument Development

Consumer purchase intention toward sustainable clothing was measured through

the use of an online consumer survey. The questionnaire consisted of five sections,

including screening and demographic questions. The basic psychological needs of

autonomy, competency, and relatedness was measured in regard to one's perception of

sustainable clothing for understanding the individual's level of BPN satisfaction within

each conceptual category. In addition, individuals were measured on the four regulatory

levels of extrinsic motivation, integrated, identified, introjected, and external, toward

sustainable clothing products. All measurement variables and scales were adapted and

modified from previous studies for the specific purposes of this research on sustainable

clothing.

Section one consisted of a consent form and one screening question asking if

participants reside in the United States. The consent form can be found in Appendix B on

page 63. Section two asked the participants about their purchasing intentions toward

sustainable clothing. The scale used for measuring purchase intention consisted of sixteen

statements, referenced and combined from two studies, Kumar et al. (2017) and Raucsch

et al. (2020). Both studies had four statements for purchase intention and four statements

for purchase behavior. These studies measured sustainable product intention and

behavior, not specifically clothing products. The statements for this study were adapted to

pertain specifically to sustainable clothing and purchase intention. For this study, all

statements were used because of the generalization and variation of the statements

phrasing.

Participants were asked how much they agreed with the sixteen statements from

"strongly agree (1)" to "strongly disagree (5)." All statements were modified for

vocabulary. The first four statements were from Baker and Churchill (1977) as cited in

Kumar et al. (2017) and include: (1) I would like to buy sustainable clothing., (2) I would

buy sustainable clothing if I happen to see them., (3) I would actively seek out

sustainable clothing in order to purchase it., (4) I would patronize and recommend

shopping at a company with sustainable clothing. The next four statements were from

Kumar et al. (2017) and Lin (2018) as cited in Rausch et al. (2020) and include: (1) I

consider purchasing sustainable clothing., (2) I intend to buy sustainable clothing instead

of conventional clothing in the future., (3) I might possibly buy sustainable clothing in

the future., (4) I would consider buying sustainable clothing if I happened to see them.

Four statements from Schlegelmilch et al. (1996) as cited in Kumar et al. (2017) were

modified to reflect purchase intention instead of purchase behavior. These items include:

(1) I would choose to buy the sustainable clothing alternative if other conventional

clothing with a similar price is also available., (2) I consider bringing my own shopping bag to a store in order to reduce the use of plastic bags., (3) If I understand the potential damage to the environment that some clothing can cause, I consider not purchasing those products., (4) I will consider not buying clothing if the company that sells it is environmentally irresponsible. The following four statements were modified to reflect purchase intentions as opposed to behavior and are based on Lee (2008) and Schlegelmilch et al. (1996) as cited in Rauschel et al. (2020). The statements include: (1) I intend to buy exclusively sustainable clothes., (2) I intend to buy sustainable clothes instead of conventional clothes if the quality is comparable., (3) I intend to buy sustainable clothes even if they are more expensive than conventional clothes., (4) When I intend on buying clothes, I pay attention that they are sustainable.

Section three addressed participant's extrinsic motivation regulatory levels toward sustainable clothing. This section consisted of twelve questions where participants were asked how much they agreed with each statement and respondents selected between "strongly agree" to "strongly disagree." The statements and response measures were modified from Gilal et al. (2020) to reflect consistencies in this study's vocabulary and the survey's 5-point Likert scale. The three statements for intrinsic regulation included: (1) I find shopping for sustainable clothing very pleasant., (2) Shopping for sustainable clothing is fun for me., (3) Shopping for sustainable clothing is full of enjoyment for me. Three statements for measuring identified regulation included: (1) I personally like shopping for sustainable clothing., (2) Shopping for sustainable clothing helps me improve my life experiences., (3) Shopping for sustainable clothing helps me to express my identity or temperament. Introjected regulation items included: (1) I will feel ashamed

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in front of people if I do not shop for sustainable clothing., (2) I will feel ashamed of myself if I do not shop for sustainable clothing., (3) Using sustainable clothing helps me to avoid feelings of shame in front of friends and/or colleagues. Finally, three statements for external regulation included: (1) Using sustainable clothing helps me to improve the way others treat me., (2) My friends will get upset with me if I do not use sustainable clothing., (3) My colleagues will feel bad about me if I do not use sustainable clothing.

Section four asked participants twenty-one questions about their basic psychological needs and perceived level of satisfaction based on how true the statements were to them and their lives. The scale was adapted to reflect the 5-point consistency of the survey design. Respondents chose between "very true (1)" to "very untrue (5)." The twenty-one statements were from Deci and Ryan (2000) and are generable to any human and situational context. Seven items that access autonomy satisfaction included: (1) I feel that I am free to decide for myself how to live my life., (2) I feel pressured in my life., (3) I generally feel free to express my ideas and opinions., (4) In my daily life, I frequently have to do what I am told., (5) People I interact with on a daily basis tend to take my feelings into consideration., (6) I feel that I can pretty much be myself in my daily situations., (7) There is not much opportunity for me to decide for myself how to do things in my daily life. Six survey items for measuring competency satisfaction included: (1) Often, I do not feel very competent., (2) People I know tell me I am good at what I do., (3) I have been able to learn interesting new skills recently., (4) Most days I feel a sense of accomplishment from what I do., (5) In my life I do not get much of a chance to show how capable I am., (6) I often do not feel very capable. Items for relatedness satisfaction included: (1) I really like the people I interact with., (2) I get along with

people I come into contact with., (3)I pretty much keep to myself and don't have a lot of social contacts., (4) I consider the people I regularly interact with to be my friends., (5) People in my life care about me., (6) There are not many people that I am close to., (7) The people I interact with regularly do not seem to like me much., (8) People are generally pretty friendly towards me. Section five asked seven questions regarding participants' demographic information including: age, gender, employment status, relationship status, level of education, current income level, and residential zip code.

The following table represents the instrument constructs, the items used for measurement, the reliable and valid associated Cronbach's alphas, as well as the correlating studies from which the items were adapted and referenced. A complete list of the individual instrument items and measures can also be found in Appendix C on page 64.

Table 1

Survey Instrument Items and Their References

Construct	Instrument Item	Cronbach's Alpha	Reference
Purchase Intention for Sustainable Clothing (PI)	PI1 I would like to buy sustainable clothing. PI2 I would buy sustainable clothing if I happen to see them. (A) PI3 I would actively seek out sustainable clothing in order to purchase it. PI4 I would patronize and recommend shopping at a company with sustainable clothing. (A)	0.892	Baker & Churchhill, 1977, and Schlegelmilch et al., 1996, as cited in Kumar et al., 2017; Kumar et al., 2017, Park & Lin, 2018, Lee, 2008, and Schlegelmilch et al., 1996, as cited in Rausch et al., 2020
	PI5 I consider purchasing sustainable clothing. PI6 I intend to buy sustainable clothing instead of conventional clothes in the future. PI7 I might possibly buy sustainable clothing in the future. PI8 I would consider buying sustainable clothing if I happened to see them. (A)	0.891	
	PI9 I would choose to buy the sustainable clothing alternative if other conventional clothing with a similar price is also available. (A) PI10 I consider bringing my own shopping bag in order to reduce the use of plastic bags. (A) PI11 If I understand the potential damage to the environment that some clothing can cause, I consider not purchasing those products. (A) PI12 I will consider not buying clothing if the company that sells it is environmentally irresponsible. (A)	0.874	
	PI13 I intend to buy exclusively sustainable clothes. (A) PI14 I intend to buy sustainable clothes	0.854	

	instead of conventional clothes if the quality is comparable. (A) PI15 I intend to buy sustainable clothes even if they are more expensive than conventional clothes. (A) PI16 When I intend on buying clothes, I pay attention that they are sustainable. (A)		
Extrinsic Motivation Regulation Levels (EMRL)	EMRL1 I find shopping for sustainable clothing very pleasant.[a] (A) EMRL2 Shopping for sustainable clothing is fun for me.[a] EMRL3 Shopping for sustainable clothing is full of enjoyment for me.[a]	0.96[a]	Gilal et al. (2020)
	EMRL4 I personally like shopping for sustainable clothing.[b] EMRL5 Shopping for sustainable clothing helps me improve my life experiences.[b] EMRL6 Shopping for sustainable clothing helps me to express my identity and/or temperament.[b]	0.93[b]	
	EMRL7 I will feel ashamed in front of people if I do not use sustainable clothing.[c] EMRL8 I will feel ashamed of myself if I do not shop for sustainable clothing.[c] EMRL9 Using sustainable clothing helps me to avoid feelings of shame in front of friends and/or colleagues.[c]	0.96[c]	
	EMRL10 Using sustainable clothing helps me to improve the way others treat me.[d] EMRL11 My friends will get upset with me if I do not use sustainable clothing.[d] EMRL12 My colleagues will feel bad about me if I do not use sustainable clothing.[d]	0.95[d]	
Basic Psychological Needs (BPN)	BPN1 I feel that I am free to decide for myself how to live my life.[e] BPN2 I really like the people I interact	0.71 0.83	Deci & Ryan (2000)

with.[f]	
BPN3 Often, I do not feel very competent.[g] (R)	0.71
BPN4 I feel pressure in my life.[e] (R)	0.71
BPN5 People I know tell me I am good at what I do.[g]	0.71
BPN6 I get along with people I come into contact with.[f]	0.83
BPN7 I pretty much keep to myself and don't have a lot of social contacts.[f] (R)	0.83
BPN8 I generally feel free to express my ideas and opinions.[e]	0.71
BPN9 I consider the people I regularly interact with to be my friends.[f]	0.83
BPN10 I have been able to learn interesting new skills recently.[g]	0.71
BPN11 In my daily life, I frequently have to do what I am told.[e] (R)	0.71
BPN12 People in my life care about me.[f]	0.83
BPN13 Most days I feel a sense of accomplishment from what I do.[g]	0.71
BPN14 People I interact with on a daily basis tend to take my feelings into consideration.[e]	0.71
BPN15 In my life I do not get much of a chance to show how capable I am.[g] (R)	0.71
BPN16 There are not many people that I am close to.[f] (R)	0.83
BPN17 I feel that I can pretty much be myself in my daily situations.[e]	0.71
BPN18 The people I interact with regularly do not seem to like me much.[f] (R)	0.83
BPN19 I often do not feel very capable.[g] (R)	0.71
BPN20 There is not much opportunity for me to decide for myself how to do things in my daily life.[e] (R)	0.71
BPN21 People are generally pretty friendly towards me.[f]	0.83

Note. Items denoted with (A) reference that they are adapted for language consistency within the scale. Items denoted with (R) reference that the instrument item is reverse coded.

[a]Item measures intrinsic regulation. [b]Item measures identified regulation. [c]Item measures introjected regulation. [d]Item measures external regulation. [e]Item measures autonomy. [f]Item measures relatedness. [g]Item measures competency.

Data Collection and Sampling

Data collection for the online survey was conducted through *Amazon's Mechanical Turk ("M-Turk").* Reasons for using this survey method included convenience, affordability, and timeliness (Schonlau and Couper, 2017; Couper, Traugott, and Lamias, 2001). Although this survey was open to any age, it was expected that this online survey method would skew the participants into younger age cohorts, including Millennial and Generation Z groups, however, this format is considered appropriate for the study's approach (Schonlau and Couper, 2017). This survey format research design was chosen based on consistencies with previous studies evaluating and measuring these theoretical concepts within other or similar contexts (Deci & Ryan, 2000; Gilal et al., 2020; Kumar et al., 2017; Rausch et al., 2020).

In this collection method, respondents were unlikely to experience panel fatigue, nor express signs of panel conditioning for items surveying attitudes or intentions (Schonlau and Couper, 2017). The survey design did not include a progress indicator, but did present survey items as multiple-item-per-screen selections, both

of which were to decrease time for respondent completion and not for statistical significance (Couper, Traugott, and Lamias, 2001).

This format is a popular form of research for quick access to population samples spread out over large geographical areas. Before beginning the survey, participants were asked if they are citizens of the United States, the primary target sample population for this study. This screening information can be found in Appendix C, Section 1 on page 64.

The study and its measurements were approved by the IRB for human subjects before conducting the research. The approval form can be found in Appendix A on page 62. Sample participants consisted of adult consumers aged 18 and over, and participants self-identified as female, male, or other. The research sample consisted of 383 participants reduced from a total of 400 total survey participants. Seventeen participants were removed from the data set because of inconsistencies in responses related to U.S. residential zip code. All 383 participants within the research sample responded with zip codes that are designated within the U.S. postal service. Consumers responded to other demographic criteria and can be found in Appendix C, Section 5 on page 67.

Data Analysis

Statistical analysis for this research data was conducted using *Statistical Package for Social Sciences ("SPSS")*. Descriptive statistics and frequencies examined the demographic associations of the research participants. Cronbach's alpha values were computed to test the internal consistency aspect of reliability of the multi-item scales that measures the basic psychological needs, extrinsic motivation regulation levels and sustainable clothing purchase intention. Pearson's correlation analysis was conducted in

evaluating the linear relationships between the individual dimensions of the basic

psychological needs and extrinsic motivation regulation levels with purchase intention for

sustainable clothing.

CHAPTER 4

RESULTS

Objectives of this study included evaluating the relationships of individual's basic

psychological needs and level of external motivation on consumer's purchase intentions

toward sustainable clothing. Recruitment for participants and data collection was

conducted through *Amazon Mechanical Turk ("Amazon M-Turk")*. Chapter four consists

of the following sections: (1) participant demographics, (2) reliability, (3) correlation, and

(4) additional analysis.

Participant Demographics

The demographic information asked from the participants included gender, birth

year, zip code, relationship status, highest level of education, current employment status,

and yearly income level. The year of birth and zip code frequencies were grouped to

evaluate generational age cohorts and U.S. regions. A full summary of the frequencies

and percentages of demographic information can be seen in Table 2.

The 383 participants were comprised of 196 males (51.2%) and 187 females

(48.8%). The majority of participants at 276 (72.1%) were married and 100 (26.1%) were

single. Only 5 (1.3%) respondents were divorced and 2 (0.5%) widowed. All participants

were citizens of the United States. Regionally, 125 participants lived in the south

(40.6%), 71 in the west (23.1%), 63 in the midwest (20.5%), and 49 in the northeast

(15.9%). The age cohorts represented included 281 (73.4%) Millennial participants born

between the years 1981 and 1996, 67 (17.5%) Generation X participants born between

1965 and 1980, 18 (4.7%) Boomers born between 1946-1964, and 17 (4.4%) Generation

Z participants, that were at least 18 and older, born 1997 and on.

Table 2

Demographic Information

		Frequency	Percentage (%)
Gender	Male	196	51.2
	Female	187	48.8
	Other	0	0
Relationship status	Single	100	26.1
	Married	276	72.1
	Divorced	5	1.3
	Widowed	2	0.5
Education level	High school	13	3.4
	Some college	38	9.9
	Bachelors	257	67.1
	Masters/Doctorate	75	19.6
Employment status	Unemployed	8	2.1
	Part time	31	8.1
	Full time	342	89.3
	Retired	2	0.5
Income level	Less than $30,000	61	15.7
	$30,000 to $50,000	110	28.7
	$51,000 to $75,000	161	42.0
	$76,000 to $100,000	45	10.5
	More than $100,000	6	1.6
Age cohort	Generation Z	17	4.4
	Millennial	281	73.4
	Generation X	67	17.5
	Boomer	18	4.7
U.S. region	South	125	40.6
	Northeast	49	15.9
	Midwest	63	20.5
	West	71	23.1

Reliability

Internal consistency of each multi-item scale was confirmed through tests of reliability. This allows for confidence in research repeatability and stability of the scales used. All scales combined within the research survey are statistically reliable, as well as each individual scale. All scales surpassed the Cronbach's alpha threshold for reliability of 0.7.

Table 3

Scale Reliability

Scale	Number of Items	Cronbach's Alpha
Purchase Intention for Sustainable Clothing (PI)	16	0.94
Extrinsic Motivation Regulation Levels (EMRL)	12	0.92
Basic Psychological Needs (BPN)	21	0.93
Total	49	0.97

Correlation

Pearson's correlation analysis was comprised of the averages for all factors including, sustainable clothing purchase intention (PI), and the four total components of EMRL (Intrinsic Regulation, Identifed Regulation, Introjected Regulation and External Regulation) and the three total components of BPN (Autonomy, Relatedness and

Competency). This correlation analysis evaluated the significance, strength, and directionality of the factor relationships. The absolute value of the thresholds states the strength of the relationship, while the directionality is determined by the positive or negative correlation. A description of the correlation matrix by construct group is most telling of the relationships. Most of the correlating relationships are found to be significant and positive, an exception are those between the basic psychological needs with introjected and external regulation levels of extrinsic motivation.

All constructs had significant relationships with purchase intention. The basic psychological needs' have strong positive relationships with purchase intention. The three needs have relatively similar strength with relatedness having the highest (.577) followed by autonomy (.532) and then competency (.522). The largest variation in strength came from the relationships between purchase intention and the extrinsic motivation regulation levels. The more autonomous regulation levels along the OIT have higher relationship strengths with sustainable clothing purchase intention. Intrinsic regulation's correlation being very strong (.745) and identified regulation being strong (.674). The two more controlled regulation levels, introjected and external, have much lower strengths in comparison with moderate correlations of .376 and .352.

The three basic psychological needs have very strong, positive and significant correlations between themselves. In descending order of strength, competency and relatedness have a very strong relationship at .938, followed by autonomy and relatedness at .934, and lastly competency and autonomy at .808.

The correlations between the four regulation levels of extrinsic motivation are significant and positive, however there are variations in strength. A very strong relationship is between the more controlled variables, introjected and external regulation (.838). Similarly, the more autonomous variables, intrinsic and identified regulation, are very strong in their relationship (.787). All other corerlations between the extrinsic motivation regulation levels were strong. Listed in decreasing order, first is identified and external regulation (.600), then identified and introjected regulation (.574), followed by intrinsic and external regulation (.548), and then intrinsic and introjected regulation (.536).

The basic psychological needs have significant, strong, and positive relationships with both of the more autonomous extrinsic motivation regulation levels, intrinsic and identified. All BPN have slightly stronger correlations with identified regulation over intrinsic regulation. Relatedness has the strongest relationships with identified regulation(.562) and introjected regulation (.552), then autonomy (.493 and .469), followed by competency (.455 and .436). All three BPN have insignificant relationships with the more controlled extrinsic motivation regulation levels, introjected and external. Table 4 shows the corresponding correlation matrix.

Table 4

Correlation Matrix

	Purchase Intention	Autonomy	Relatedness	Competency	Intrinsic Regulation	Identified Regulation	Introjected Regulation	External Regulation
Purchase Int.	1	.532**	.577**	.522**	.745**	.674**	.376**	.352**
Autonomy	.532**	1	.932**	.808**	.469**	.493**	.019	-.074
Relatedness	.577**	.934**	1	.938**	.552**	.562**	-.111	-.047
Competency	.522**	.808**	.938**	1	.436**	.455**	-.223	-.126
Intrinsic Reg.	.745**	.469**	.552**	.436**	1	.787**	.536**	.548**
Identified Reg.	.674**	.493**	.562**	.455**	.787**	1	.574**	.600**
Introjected Reg.	.376**	.019	-.111	-.223	.536**	.574**	1	.838**
External Reg.	.352**	-.074	-.047	-.126	.548**	.600**	.838**	1

Note. n = 383.

**p < .01 (2-tailed).

Additional Analysis

Further analysis was conducted in evaluating differing constructs for the variable sustainable clothing purchase intention. Also, these purchase intention constructs were evaluated with the corresponding relationships of the constructs within the variables BPN and EMRL determining the changes in significance or strength.

Factor Analysis for Purchase Intention. An exploratory factor analysis was conducted for the multi-item construct sustainable clothing purchase intention. This was done with principal extraction and varimax rotation with Kaiser normalization. Factors with eigenvalues greater than 1.0 and rotated factor loadings close to and above 0.50 were kept. Items that cross-loaded at 0.4 or higher between multiple constructs were removed. Two items cross-loaded and were removed from the analysis as seen below in Table 5.

The factor analysis resulted in two components of sustainable clothing purchase intention that had a total cumulative variance of 59.59%. The first component, Passive Purchase Intention, was produced with 10 items. Passive Purchase Intention had a total eigenvalue of 5.06 with a percent variance of 36.11%. The second component, Active Purchase Intention, was composed of 4 items, had a total eigenvalue of 3.29 with a percent variance of 23.47%. Table 6 shows the EFA results for both purchase intention components.

Table 5

Removed Items for Sustainable Clothing Purchase Intention

	Factor Loadings	
Item	Component 1	Component 2
PI4 I would patronize and recommend a shopping at a company with sustainable clothing. (A)	.624	.402
PI6 I intend to buy sustainable clothing instead of conventional clothing in the future.	.574	.526

Note. Items denoted with (A) reference that they are adapted for language consistency

within the instrument scale.

Table 6

Factor Analysis for Sustainable Clothing Purchase Intention

Component	Item	Factor Loading	Eigenvalue	Variance Explained
Passive Purchase Intention	PI5 I consider purchasing sustainable clothing.	.773		
(M = 3.75)	PI7 I might possibly buy sustainable clothing in the future.	.765		
(Cronbach's alpha = .911)	PI8 I would consider buying sustainable clothing if I happened to see them. (A)	.758	5.06	36.11%
	PI1 I would like to buy sustainable clothing.	.690		
	PI2 I would buy sustainable clothing if I happen to see them. (A)	.683		
	PI14 I intend to buy sustainable clothing instead of conventional	.682		

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	clothes if the quality is comparable. (A)	.669		
	PI9 I would choose to buy the sustainable clothing alternative if other conventional clothing with a similar price is also available. (A)	.627		
	PI11 If I understand the potential damage to the environment that some clothing can cause, I consider not purchasing those products. (A)	.624		
		.555		
	PI10 I consider bringing my own shopping bag in order to reduce the use of plastic bags. (A)			
	PI12 I will consider not buying clothing if the company that sells it is environmentally irresponsible. (A)			
Active Purchase Intention	PI13 I intend to buy exclusively sustainable clothing. (A)	.781		
(M = 3.48)	PI15 I intend to buy sustainable clothing even if they are more expensive than conventional clothing. (A)	.774	3.29	23.47%
(Cronbach's alpha = .842)				
	PI3 I would actively seek out sustainable clothing in order to purchase it.	.759		

PI16 When I intend on buying clothes, I pay attention that they are sustainable. (A)		.749

Note. Items denoted with (A) reference that they are adapted for language consistency within the scale.

Correlation. Pearson's correlation analysis was comprised of the averages for all factors including the two components for sustainable clothing purchase intention (Passive and Active), the four total components of EMRL (Intrinsic Regulation, Identifed Regulation, Introjected Regulation and External Regulation) and the three total components of BPN (Autonomy, Relatedness and Competency). The majority of relationships were significiant at the .01 threshold, only two relationships differ, BPN relatedness and competency with active purchase intention are significant at the .05 threshold. Each correlation is positive and significant.

The two components of sustainable clothing purchase intention, passive and active, correlated with eachother in a significiant, positive and strong relationship at .691. All constructs were significant with passive purchase intention at the .01 threshold. The BPN relatedness correlated the highest with passive purchase intention at .624, compentency was second (.571), and autonomy third (.552). The controlled and autonomous extrinsic motivation regulation levels, although all significant, greatly varied in strength of their relationship with passive purchase intention. The correlation with intrinsic regulation are strong at .659, then identified regulation is also strong at .574. The controlled motivation constructs have weak relationships with passive purchase intentention, introjected regulation at .241 and external regulation at .202.

Active purchase intention and autonomy have a strong relationship (.441) whereas both relatedness (.395) and competency (.328) have weak relationships. Autonomy also is significant at the .01 threshold and the other two constructs are significant at the .05 threshold. The four extrinsic motivation regulation levels have significant and positive relationships with active purchase intention for sustainable clothing, the more controlled levels are a little weaker than their more autonomous counterparts. Intrinsic regulation has a very strong relationship at .763, similarly, identified regulation also has a very strong relationship at .719. External regulation has a strong relationship at .596, slightly higher than the strong relationship between introjected regulation and active purchase intention at .593. Table 7 shows all the correlations designating significance and strength of the relationships between each of the basic psychological needs and extrinsic motivation regulation level components with the two sustainable clothing purchase intention components found in the additional analysis.

Table 7

Correlation Matrix with Passive and Active Purchase Intention

	Passive Purchase Intention	Active Purchase Intention	Autonomy	Relatedness	Competency	Intrinsic Regulation	Identified Regulation	Introjected Regulation	External Regulation
Passive Purchase Intention	1	.691**	.552**	.624**	.571**	.659**	.574**	.241**	.202**
Active Purchase Intention	.691**	1	.441**	.395*	.328*	.763**	.719**	.593**	.596**

Note. n = 383.

**p < .01 (2-tailed), *p < .05 (2-tailed)

CHAPTER 5

DISCUSSION

The conclusion of this study discusses the importance of the evidence pertained through the data analysis for various professionals within the sustainable clothing industry. It also makes suggestions for potential opportunities in academic evaluation to expand the context of this study's theoretical approach. Chapter five consists of the following sections: (1) conclusion, (2) implications, (3) limitations, and (4) future studies.

Conclusion

The research questions for this study were sufficiently answered. Sustainable clothing purchase intention is related to the basic psychological needs and extrinsic motivation regulation levels. The basic psychological needs are related to the more autonomous extrinsic motivation regulation levels, intrinsic and identified regulation. However, the basic psychological needs are not related to the more controlled motivation levels, introjected and external regulation.

Despite the difference in significance in relation to BPN, all of the extrinsic motivation regulation levels are significantly correlated with purchase intention. A consumer, whether more highly controlled or autonomous in their motivations, still has intentions to purchase sustainable clothing. In further analysis, active purchase intention and the more autonomous motivations, identified and intrinsic regulation, have a very strong relationship. These specific results can speak to the previous literature by Kang et al. that focuses on consumers who are internally motivated toward sustainability (2013).

It shows that people who are more self-driven in their motivation regulation practices and have internalized decision making will have higher purchase intentions for sustainable clothing than those who are more externally motivated by their perception of their peers and others within their community. These findings are relative to Rausch and Kopplin's research that suggests consumers are influenced by social norms for purchasing only cheap, conventional clothing (2021). However, this study's results continue the conversation, expanding the consumer base that intends on purchasing sustainable clothing beyond niche subsets.

Within the additional analysis, passive purchase intention has a strong relationship with the more autonomous motivations, identified and intrinsic regulation, but similarly, active purchase intention and controlled motivation have a strong relationship. This suggests that these two groups are not that different and their forms of motivation as well as their purchase intentions toward sustainable clothing should not be overlooked within the marketplace. Consumers who have passive purchase intention and are more controlled in their motivations by either introjected or external regulations have a very weak relationship. It is important to note that do they still have purchase intentions and are not amotivated toward shopping for sustainable clothing, however, this study suggests that their weak relationship implies that there are other unknown variables, beyond the three basic psychological needs, which could be more significant in impacting their motivations.

All of the basic psychological needs have stong relationships with purchase intention, they are also highly correlated amongst their own BPN construct group. The highest correlating BPN is relatedness. In relation to the other two BPN, autonomy and

competency, relatedness has a very strong correlation. Where as the relationship between autonomy and competency is still very strong, it is less than each constructs individual relationship with relatedness. Similarly, all BPN have strong correlations with purchase intention and are close in significance value, however, of the three, relatedness is the highest. This suggests that while all BPN are important, relatedness is the top influencer in relation to all other constructs.

An interesting finding of this study is in the relationship division between basic psychological needs and extrinsic motivation regulation levels. The relationship between BPN and the more controlled EMRL, introjected and external regulation, is insignificant. However, the BPN for the two autonomous EMRL, identified and intrinsic regulation, is strong. Furthermore, by assessing the impact of BPN on the ERML within the lens of the OIT continuum, the BPN are stronger in relationship to the lesser of the autonomous levels, identified regulation, when compared to the more autonomous intrinsic regulation. This slight drop in significance value of each BPN moving along the continuum to more autonomous motivation is interesting.

The insignificant relationship between BPN and the more controlled motivation levels, introjected and external regulation, suggests that these two regulations are less impacted by psychological needs, but could instead have significant relationships with other variables such as physiological needs. When considering this alternative within the self-determination framework by evaluating the motivations along the organismic integration theory continuum, there could be a threshold where consumers change from potentially having only motivations with physiological significance to psychological significance within their needs satisfactions. Furthermore, the weak relationship between

passive purchase intention and the controlled motivation levels, might suggest that physiological needs could be of more significance within that correlation than psychological. This study does not evaluate this particular threshold, but would be something to consider in future research.

Implications

Where Park et al. suggested that sustainable purchases are still relatively new for most consumers, this data would prove that there are distinctive groups of people who are highly motivated toward sustainable clothing purchases, while others can be swayed to purchase or not to purchase based on criteria (2017). This study confirms for industry leaders that the most confident and intentional consumers of sustainable clothing are those with BPN satisfaction and more autonomous motivation. These consumers are confident in themselves, in their jobs, and the world around them. Their overall positive disposition is reflective in their purchasing intentions toward sustainable clothing. Their can-do attitude shows that they believe that their intended purchases of sustainable clothing will help make a positive contribution to the greater world around them. These people are repeat customers of sustainable clothing brands. Loyal to the cause, they already advocate for sustainable practices ecologically and socially and will continue to seek out solutions to the people-planet tension. They have internalized their problem-solving motivations into their self-identity and seek solutions that express this idealization.

Consumers who are similar in their autonomous motivations, and yet passively shop for sustainable clothing are capable of increasing their intentions and this can be done by evaluating their basic psychological needs satisfactions. While there are strong

significance in these relationships, there is room for growth and further connectivity between sustainable practices and shopping behavior. By increasing the conversation and centering them around the BPN, thought leaders can shape these consumers into more active purchasers.

Similarly, increasing conversations and removing barriers for consumers who are active purchasers but more controlled in their motivations can create opportunities for increased engagement and potential sales within this consumer segment. The largest challenge being that the conversation must differ from their passive and autonomous counterparts. These consumers will not relate to BPN satisfactions, but need other variables to impact their current purchase intentions for sustainable clothing.

The segment that presents as the highest challenge for leaders looking into make impacts on consumers are those which are both passive in their purchase intention and controlled in their motivations. These individuals are not thinking about sustainable clothing, their current sphere of influence for sustainable behavior is relatively small and unimpactful. These individuals can still have purchase intentions, however, because they are highly controlled in motivation, it is unlikely at brands will attempt to reach out to them. The cost of both the initial and subsiquent sales could be too expensive when compared to their more active or autonomous counterparts. The hope for leaders looking to create impacts for this consumer group would be in continued exposure and developing an effective trickle-down of efforts that eventually win out the consumer. However, this scenario seems highly volatile and unlikely. Those leaders with less financial risk in regards to sustainable clothing, such as those in academia, could have greater influence in creating these spaces for opportunity that support and satisfy these

individuals with their current needs to help them learn and discover the importance of sustainable purchase behavior, perhaps encouraging them to move along the OIT into more autonomous motivation regulation levels, or becoming active in their purchase intentions.

This study has powerful implications for brands and educators alike. Those looking to create cultural shifts toward increased sustainable clothing shopping behavior need to be evaluating the fulfillment of peoples' basic psychological needs as well as to what extent they are extrinsically motivated by external or internal factors. All areas of the value chain can help consumers drive demand against pollution and for sustainable clothing by creating problem solving solutions that connect with consumers on a psychological level and also spur healthy economic growth (Quantis, 2018; Kumar, Manrai & Manrai, 2017).

Brands can help create fulfillment of BPN by creating connections with their customers though strategic communication efforts that emphasize satisfying consumers' BPN, particularly relatedness. There are many different ways that companies can cultivate the success of consumers' need for autonomy through their brick and mortar or omni-channel experiences. Similarly with fulfilling relatedness, consumers can feel a stronger sense of connection with businesses that emphasize the importance of human empathy and kindness with customers through their brand messaging.

Engaging consumers and building relationships is key to developing their BPN satisfaction with a brand. Businesses can help their customers feel a sense of competency by creating ease of education around products, sales transaction processes, and overall user experiences both online and in-store. Since the majority of people are highly

influenced by their perceptions of peers, engaging a broad spectrum of people by educating the importance and value of sustainable clothing in connection to solving tensions between people and the planet is important. Information must be communicated in a way that connects with the individual for internalization if these consumers are to be turned into the confident repeat buyers of sustainable clothing. Campaigns that negate any of the three basic psychological needs and communicate shame, fear, or communal disconnection might provide temporary sales success by providing an immediate solution to these unfulfilled BPN, but this will not create confident consumers for brand longevity and repeat sales.

Evaluating consumers through the lens of self-determination, brand marketers can expand their conversations with their target market, adjusting to their changing needs and priorities. These findings can be useful to forecasting teams looking into consumer changes within cultural tensions, both ecologically and socially. Multitudes of professional tiers within the sustainable clothing industry can find the data pertaining to each significant affect a critical part of their creative strategic planning regardless of their place within the product value chain.

Limitations

Most of the limitations of this study are directly resulted from it being for thesis research work, including the convenience sampling through the use of an online survey tool that skews participants toward younger populations. Other limitations included the researchers allocated time and monetary constraints, and only using respondents from the United States.

While the use of an online survey was appropriate for the exploratory nature of this study, experimental design would create interesting results evaluating the same variables. Since this was for thesis research, the time allowances were limited in organizing and executing an experiment of that nature. The choice to use *Amazon M-Turk* as the online tool was a limitation toward the demographics of participants. Other means for recruiting participants could provide a more diverse population, particularly in age or income level.

Further limitations of this study are in the exploratory nature of these constructs. Since self-determination theory has not been used for evaluating consumers toward sustainable clothing, an initial analysis was critical in testing both the appropriateness and the relationships of these constructs. The success of this initial study leans greatly into further research pertaining to these constructs of basic psychological needs, extrinsic motivations, and variations of consumer intentions and behavior toward clothing products.

Future Studies

Ideas for additional research includes experimental designs that satisfy or convolute a consumers' immediate basic psychological need, while controlling for the other two, before having them interact with random tests for purchase intention, specifically toward sustainable clothing versus generic clothing offerings. Experimental design would also be best for studying and measuring purchase behavior over purchase intention.

Further studies can evaluate the relationships of the constructs by a multiple regression analysis. This can decipher the difference in significance between the groups

of constructs (BPN or EMRL) impact on purchase intention without further reduction. This will measure the percent variance the constructs have on each dependent variable.

Evaluating the data through structure equation modeling can provide a differing perspective on the construct relationships and futher evaluate the substantiation of sustainable clothing and consumer behavior through the lens of the self-determination theory and it's subtheories.

Additionally, since the scale for purchase intention used in this study was a mutli-item scale that originated from two different studies measuring purchase intention and behavior for sustainable products, although valid, further testing can be done to decipher the scale for best use when evaluating these components moving forward. This can help reduce any possibility of participant fatigue and provide additional accuracy.

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APPENDIX A

HUMAN SUBJECTS APPROVAL

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Human Research Protection Program

EXEMPT DETERMINATION

July 20, 2021

Dear Yoo-Kyoung Seock:

On 7/20/2021, the Human Subjects Office reviewed the following submission:

Title of Study:	Evaluating the basic psychological needs and extrinsic motivations of consumers for sustainable clothing purchases
Investigator:	Yoo-Kyoung Seock
Co-Investigator:	Amy Manley
IRB ID:	PROJECT00004156
Funding:	None
Review Category:	DHHS Exempt 2ii

We have determined that the proposed research is Exempt. The research activities may begin 7/20/2021.

Since this study was determined to be exempt, please be aware that not all future modifications will require review by the IRB. For more information please see Appendix C of the Exempt Research Policy (https://research.uga.edu/docs/policies/compliance/hso/IRB-Exempt-Review.pdf). As noted in Section C.2., you can simply notify us of modifications that will not require review via the "Add Public Comment" activity.

A progress report will be requested prior to 7/20/2026. Before or within 30 days of the progress report due date, please submit a progress report or study closure request. Submit a progress report by navigating to the active study and selecting Progress Report. The study may be closed by selecting Create Version and choosing Close Study as the submission purpose.

In conducting this study, you are required to follow the requirements listed in the Investigator Manual (HRP-103).

SURVEY CONSENT FORM

UNIVERSITY OF GEORGIA
CONSENT FORM
EVALUATING THE BASIC PSYCHOLOGICAL NEEDS AND EXTRINSIC MOTIVATIONS OF CONSUMERS FOR SUSTAINABLE CLOTHING PURCHASES

Dear Research Participant:

By continuing with this survey, you agree to participate in the research study *Evaluating The Basic Psychological Needs and Extrinsic Motivations of Consumers For Sustainable Clothing Purchases*.

Your involvement in the study is voluntary and you may choose not to participate at any time. All participants for the survey will be approached through *Amazon Mechanical Turk (Amazon M-Turk)*. Any individual age 18 and older that is a citizen of the United States is welcome to participate. At completion of the survey respondents will be given $1.00 as a reward. The purpose of this study is to investigate the needs and motivations of consumers for sustainable clothing purchases.

Participants are asked to respond to each question within the survey by making a selection of which best relates to them. The survey can be done from any device and should take around 15 minutes to complete. The survey will be available and open to participants for a two-week period, after which the responses will undergo primary analysis.

Please keep in mind that internet connections can be insecure and there is a limit to the confidentiality that can be guaranteed due to the nature of technology itself. However, once responses are received, standard confidentiality procedures will be employed. Any data collected about the participant will be confidential as IP addresses are stripped upon data submission. The data will remain secure by being sent to the researchers as an encrypted file. The researchers' computers also have an enabled firewall that blocks unauthorized access. After all identifiers have been removed, the completed analysis of this research will be shared and made available for future studies without additional consent.

If you have any questions, please email the researchers. At any time you can exit the survey. There are no foreseen risks in this research. The principal researcher conducting this study is Dr. Yoo-Kyoung Seock, a professor within the Department of Textiles, Merchandising and Interiors at the University of Georgia. If you have any questions or concerns regarding your rights as a research participant in this study, you may contact the Institutional Review Board (IRB) Chairperson at 706-542-3199 or irb@uga.edu

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Co-Investigator, Coordinator and Analyst:
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APPENDIX C

SURVEY

Section 1 – Screening

Instruction: Please answer the following question.

1. Are you a resident of the United States of America?   Yes/No

If you selected "yes," please proceed with the following survey.

If you selected "no," please do not proceed with the following survey.

Section 2 – Purchasing Intentions

Instruction: Please select how much you agree with the following statements.

(5-point scale: 1 – Strongly agree, 2 – Agree, 3 – Neither agree or disagree, 4 –

Disagree, 5 – Strongly disagree)

2. I would like to buy sustainable clothing.

3. I would buy sustainable clothing if I happen to see them.

4. I would actively seek out sustainable clothing in order to purchase it.

5. I would patronize and recommend shopping at a company with sustainable

   clothing.

6. I consider purchasing sustainable clothing.

7. I intend to buy sustainable clothing instead of conventional clothing in the future.

8. I might possibly buy sustainable clothing in the future.

9. I would consider buying sustainable clothing if I happened to see them.

10. I would choose to buy the sustainable clothing alternative if other conventional clothing with a similar price is also available.

11. I consider bringing my own shopping bag in order to reduce the use of plastic bags.

12. If I understand the potential damage to the environment that some clothing can cause, I consider not purchasing those products.

13. I will consider not buying clothing if the company that sells it is environmentally irresponsible.

14. I intend to buy exclusively sustainable clothes.

15. I intend to buy sustainable clothes instead of conventional clothes if the quality is comparable.

16. I intend to buy sustainable clothes even if they are more expensive than conventional clothes.

17. When I intend on buying clothes, I pay attention that they are sustainable.

<div align="center">Section 3 – Extrinsic Motivation Regulation Levels</div>

Instruction: Please select how much you agree with the following statements.

(5-point scale: 1 – Strongly Agree, 2 – Agree, 3 - Neither agree or disagree, 4 – Agree, 5 – Strongly disagree)

18. I find shopping for sustainable clothing very pleasant.

19. Shopping for sustainable clothing is fun for me.

20. Shopping for sustainable clothing is full of enjoyment for me.

21. I personally like shopping for sustainable clothing.

22. Shopping for sustainable clothing helps me improve my life experiences.

23. Shopping for sustainable clothing helps me to express my identity or temperament.

24. I will feel ashamed in front of people if I do not shop for sustainable clothing.

25. I will feel ashamed of myself if I do not shop for sustainable clothing.

26. Using sustainable clothing helps me to avoid feelings of shame in front of friends and/or colleagues.

27. Using sustainable clothing helps me to improve the way others treat me.

28. My friends will get upset with me if I do not use sustainable clothing.

29. My colleagues will feel bad about me if I do not use sustainable clothing.

Section 4 – Basic Psychological Needs Satisfaction

Instruction: Please select how true these statements are to you and your life.

(5-point scale: 1 – Very true, 2 – True, 3 – Neither true or untrue, 4 - Untrue, 5 – Very untrue)

30. I feel that I am free to decide for myself how to live my life.

31. I really like the people I interact with.

32. Often, I do not feel very competent.

33. I feel pressure in my life.

34. People I know tell me I am good at what I do.

35. I get along with people I come into contact with.

36. I pretty much keep to myself and don't have a lot of social contacts.

37. I generally feel free to express my ideas and opinions.

38. I consider the people I regularly interact with to be my friends.

39. I have been able to learn interesting new skills recently.

40. In my daily life, I frequently have to do what I am told.

41. People in my life care about me.

42. Most days I feel a sense of accomplishment from what I do.

43. People I interact with on a daily basis tend to take my feelings into consideration.

44. In my life I do not get much of a chance to show how capable I am.

45. There are not many people that I am close to.

46. I feel that I can pretty much be myself in my daily situations.

47. The people I interact with regularly do not seem to like me much.

48. I often do not feel very capable.

49. There is not much opportunity for me to decide for myself how to do things in my daily life.

50. People are generally pretty friendly towards me.

Section 5 – Demographic Questions

Instruction: Please fill out or select your answer to the following questions.

51. What year were you born? *(Fill in the blank)*

52. What is your main residential zip code? *(Fill in the blank)*

53. What is your gender? *(Male, Female, Other)*

54. What is your current relationship status? *(Single, Married, Divorced, Widowed)*

55. What is your highest level of education? *(High School, Some College, Bachelors, Masters/Doctorate)*

56. What is your personal income range? *(Less than 30k, 30k-50k, 51k-75k, 76k-100K, More than 100k)*

56. What is your current employment status? *(Unemployed, Part-time, Full-time,*

Retired)