# Understanding the Influencers of Second-Hand Apparel Shopping Behavior 

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# Understanding the Influencers of Second-Hand Apparel Shopping Behavior 

By<br>Robyn Hobbs

Submitted in partial fulfillment for the requirements of the degree of Masters of Environmental Studies

Wilfrid Laurier University
2016

Signed release form:

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DATE: September 20, 2016

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## 1. ABSTRACT

Shopping for second-hand apparel is rapidly growing and has become a notable segment of the retail market. The purpose of this study is to determine what influences consumers when shopping second-hand for apparel products in-store and online. According to the existing literature, a number of key factors play significant roles for second-hand apparel shopping consumer decisions. They include: social, costs, trends and environmental influencers. Past research has not concentrated in-depth on the hedonistic and social influences of second-hand apparel shopping, financial factors, and time spent shopping for second-hand apparel. This study has observed the socio-demographic profile of second-hand shoppers, what location is preferred for shopping, and what influences them in their purchase decision-making. Quantitative research methods were used to observe consumer behavior, shopping attitudes both instore and online, and socio-demographics. Surveys were conducted with 157 participants, in-person and online. The results of the study show the key factors which influence second-hand apparel shopping are social, economic, and environmental. The majority of shopping for second-hand apparel is in-store, more women are shopping than men and, perceived value and social influence are the key to what drives consumers to shop and purchase while income is not a key indicator. The findings of this study further our understanding of consumers of second-hand apparel, where they shop, and what influences them. This provides needed information to second-hand retailers to better tailor shopping environments.

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I would have never been able to finish this thesis without faculty, family and friends whose assistance, support and patience sustained me throughout my Masters.

## 3. INTRODUCTION

The second-hand apparel market is considered a space where fashion items that have been previously owned or used, are resold by the owner, a charity or a for-profit business (Castellani, Sala, and Mirabella 2014). This secondary market repurposes and diverts materials that otherwise would end up in landfills. It is driven by shoppers meeting their needs, or those who enjoy the thrill of the hunt and novelty of second-hand apparel shopping. It is growing every year and the percentage of the population involved in this market continues to increase. Second-hand apparel shopping and decision making encompass sustainability, human geography and retail geography. Location selection for retail stores and how to present goods based on where and how customers are shopping is a common question second-hand retailers face. For a relatively new and popular topic, there are many gaps in knowledge regarding financial and environmental considerations and consumer perceptions of the second-hand apparel market. The Waterloo Region consists of a growing number of second-hand stores, some of which are charitable and others are for profit, which will all benefit from the exploration of this research topic.

This study explored where people second-hand shop, shopper attitudes and influencers, and their socio-demographics. In particular, this study hypothesized that second-hand retail sector is likely to be highly influenced by social networks. A selfadministered survey questionnaire was utilized in this study. Participants were recruited in person nearby local stores.

To 'fit in' and be socially validated, consumers tend to seek apparel that helps reduce nonconformity and provides recognizable brands. Social influence is a large component for consumers when shopping in regards to what stores to shop at and what to purchase. Income is not expected to be a key indicator for second-hand consumers but their perceptions of value are of importance. Hedonistic traits play a key role in the consumer decision making process both in-store and online because consumers are searching for a one-of-a-kind deal. Consumers still want to dress presentably, but they want to purchase items of value, re-using resources is an added benefit. With the one-of-a-kind nature of second-hand fashions, online shopping is expected to be less prevalent than in-store shopping due to the time it takes to maintain e-commerce platforms with individual items, compared to thousands of items available in the conventional fashion market. Another component to deter consumers from purchasing second-hand fashion items online is the increased element of perceived risk since shoppers cannot evaluate the items by feel and trying on in person to gauge the condition of the items. This study will observe popular stores for second-hand apparel shopping which are expected to be the most visible stores for foot traffic such as Value Village and Goodwill. The findings of this study will add new information to the literature as well as understand the second-hand consumers and their attitudes, more in-depth.

### 3.1. Objectives

This study explores environmental, economic and social decision-making influencers on second-hand apparel shopping. In particular, this study hypothesizes that the second-hand retail sector is likely to be more highly influenced by social networks.

The specific objectives of this study are:

1. To examine where people shop for second-hand apparel
2. To explore what influences consumer second-hand apparel shopping behaviour
3. To determine key socio-demographics

## 4. LITERATURE REVIEW

Modern retail is characterized by a growth in online shopping from a variety of vendors and is increasingly being shaped by social and cultural influences. Understanding these determinants can help traditional and alternative (second-hand) retailers to tailor their product offering to consumers, better grasp what affects the decisions of where consumers purchase goods, and potentially influence consumer purchasing. The following literature review focuses on consumer behavior and the many influencers on it, including decision processes, consumption drivers and eco-consciousness.

### 4.1. Consumer decision-making theory and models

The consumer decision-making process involves seeking and acquiring goods. Shopping behavior can be described as the thoughts, actions, and decisions involved in acquiring and using goods or services (Perner 2010). The geographic phenomena of where to buy, purchase and delivery to the consumer are all key factors in the stages of the decision making process. Consumers are no longer limited geographically or by the local businesses in their city to make a purchase (Strugatz 2013).

Shopping and purchasing decision-making is mostly conceptualized as a structured mental approach (Teo and Yeong 2003). The literature on consumer decision-making theories stems from 1974, wherein models generally consider the shopper's motivations, search for options, evaluating what is available and making a selection, drawing heavily from the social sciences and business.

The most widely accepted consumers' overall evaluation and willingness to purchase was outlined by the Engel, Blackwell and Miniard (EBM) model (Teo and Yeong 2003). It is broad and applicable to many situations and introduces memory, information processing and weighing outcomes (Teo and Yeong 2003; Holmes, Byrne, and Rowley 2013; Jiang 2006; Zhang 2005). The EBM model, shown in Figure 1, theoretically outlines the core decision-making process of consumers which assumes rational consumers and dissonance.

## Figure 1 Consumer Decision Process EBM Model


(from Teo and Yeong 2003)
The process in Figure 1 begins with the realization of an imbalance between the actual and desired states of the consumer's needs. After identifying those needs the shopper searches for information to assess their options to satisfy their needs. This will result in a group of desired options. The consumer will employ internal information from their memory, and external information from various sources to establish their own set of criteria. These criterion will aid in evaluating the shopper's options and lead to the purchase which is made based on the selected alternative. Finally, post-purchase evaluation is completed to assist in future decision-
making. This is where a positive experience would encourage the shopper to return for a similar product to be purchased and a negative experience would deter the shopper from returning in the future (Teo and Yeong 2003; Strugatz 2013; Karaatli 2002).

Major themes across the literature indicate costs and perceived risk as major considerations in the decision making process. Mental Accounting Theory (MAT), shown in Figure 2, is a prominent concept which is defined as an overall assessment based on the comparison between benefits and sacrifices when searching for information and evaluating alternatives to realize the perceived values of the goods (Punj 2012; Teo and Yeong 2003; Hernandez, Jimenez, and Martín 2009; Zhang 2005; Gupta and Kim 2010; Liao and Chu 2013). MAT was originally proposed in 1985 by Thaler who based it on prospect theory, but only incorporated a single consideration, rather than compound decision factors such as price, risk, and convenience exhibited in Figure 2 (Gupta and Kim 2010).

Figure 2 Mental Accounting Theory Model

(Gupta and Kim 2010)
Sacrifices are costs which are not limited to monetary expenditures but also values associated with products. These costs include concepts such as perceived risks of social costs, cognitive costs and time costs (Soopramanien, Fildes, and Robertson 2007; Punj 2012; Teo and Yeong 2003). After the shopper identifies the sacrifices, they are estimated counter to the benefits through value which is defined in four ways: (1) low price, (2) whatever the consumer wants in a product, (3) the quality the consumer gets for the price paid and (4) value is what the consumer gets for what they give (Gupta and Kim 2010). The act of comparing the benefits and
sacrifices and perceived value will result in an outcome of purchase intention or rejection. Consumers will shop online, but this depends on their experience with online shopping and their consumer competency (Hernandez, Jimenez, and Martín 2009; Hill 2006; Chen, Shang, and Kao 2009).

### 4.1.1. Consumer Decision Making for Second-Hand Goods

Evaluating product attributes is fundamental for used goods because they indicate the quality of the items, value and its foreseeable future. This assessment in Figure 3 Conceptual Matrix for Product Cues in Second-Hand Market is categorized into two sets: (1) visible or verifiable (V/V) and (2) invisible or unverifiable (I/V). The first, V/V, is consistent throughout traditional to second-hand retail. Visible cues could include size, design or color and verifiable cues could be brand name or fabric type. The second set, I/U, include intrinsic and extrinsic product attributes and are estimates on the basis of information gained from V/V. Elements of the product's physical appearance act as product cues indicating quality and imply future performance and reliability (Gabbott 1991; Karaatli 2002).

## Figure 3 Conceptual Matrix for Product Cues in Second-Hand Market


(from Gabbott 1991)

### 4.2. Factors Influencing the Decision Making Process

The many reasons for shopping are captured in motivation theory (e.g., McGuire, 1974) which stimulates need recognition. This theory suggests that human motives can be broken down into cognitive or affective. The former is based on empirical factual knowledge and to serve a purpose, whereas the latter stems from emotions and feelings. However, both are primarily geared towards individual gratification and satisfaction. This provides the theoretical basis for examining the underlying reasons why people shop. Shoppers can be motivated by a number of different factors including convenience, opportunities of social interaction, the shopping
experience itself, information seeking, in search of variety and immediate possession of goods purchased (Koyuncu and Bhattacharya 2004).

Two main types of consumers can be identified in order to determine and understand purchase behavior. Consumers can range from being "satisficers" who are attempting to make a satisfactory choice, to "optimizers" who are attempting to make a perfect choice (Gabbott 1991; Bulbul 2007; Gupta and Kim 2010). The latter can experience stress and regret when faced with too many choices search criteria and filters are more beneficial for optimizers. An important function of bricks-and-mortar retailers is to help consumers abate the burden of product information screening and processing. However, on-line shopping also provides filters for search criteria and can lead consumers to shop differently depending on their type (Chen, Shang, and Kao 2009).

To delve further into categories of experiential shoppers, a study in 2012 identified six types of shopper archetypes which outline what the social consumer really wants out of a shopping experience (Chaney 2012). The driver for the 'Savvy Passionista' who is a trendsetter, influencer and stays in the know via social networks, is indulgence. Impulse buys drive the 'Opportunistic Adventurer' who is on the hunt for the best deal and looks for the unexpected. 'Strategic Savers' price compare and dig for deals and 'Quality Devotees' look for the best product available no matter the time or money spent. The latter two shoppers are motivated by information. Utility is the key driver for the 'Efficient Sprinter' whose strategy is to save time by using social media as well as the 'Dollar Defaulter' whose single objective is to find the cheapest deals around. These shopper archetypes were developed in 2012 through a study entitled SocialShop by ad agency Leo Burnett and ARC Worldwide. These two organizations studied specific ways
social media affects the process of shopping, then formulated the framework to match marketing efforts to people based on their shopping needs. The data were grounded in Arc's quantitative research in 2011 with more than 2,000 online shoppers, and 24 in-depth interviews with shoppers (Chaney 2012).

Decisions have been identified to serve either heuristic or utilitarian purposes which drive optimizers and satisficers, respectively (Chen, Shang, and Kao 2009; Teo and Yeong 2003; Smith, Menon, and Sivakumar 2005). Heuristic purposes are based on aesthetics and consumer emotions. This type of decision is based on pleasure as one of the major subtypes in motivating human behavior and decision-making. Pleasure refers to the degree to which a person feels good, joyful, happy, or satisfied in the situation (Gupta and Kim 2010). This could be finding a good deal, or an expensive attractive item a consumer wanted to purchase over a period of time and finally purchased it. It is worth noting that the heuristic purpose can include self-promotion with importance attributed to material goods in society, and people often buy certain products to exhibit status towards others (Pereira and M. 2012; Cherrier 2012). Meanwhile, utilitarian decisions are practical and useful rather than attractive, providing function for purchase satisfaction. However, style advice serves both heuristic and utilitarian purposes. Novelty also plays a role among certain individuals for shopping decisions (Chen, Shang, and Kao 2009).

### 4.2.1. Social Influence

Much of human behavior is not distinguished by an individual acting in isolation. Consumer theorists have long recognized the influence that friends and reference groups have on consumer decision-making (J. Kim, Yang, and Bu Yong Kim 2013; J. Lee, DoHyung, and Han 2011; Chin-Lung Hsu, Lin, and Hsiu-Sen Chiang 2013; Koyuncu and Bhattacharya 2004). Consumer decisions, especially on-line, are influenced by the large volume of information from online shoppers. These individuals who have previous experience and no personal ties are considered an informational social influence (M. K. Lee et al. 2011; Ridley 2013). Purchasing behavior is influenced by social dynamics. This can be reference groups, social circles, media and even online recommenders who are unknown to the shopper. Social media greatly enhanced access to information regarding quality of products available (Holmes, Byrne, and Rowley 2013; Cervellon, Carey, and Harms 2012; McCormick and Livett 2012). Social networks have accelerated online shopping adoption and assist in purchase decision-making (Banerjee, Mukherjee, and Bandyopadhyay 2012).

Loyalty and hedonistic value tie into social motivations for shopping (Alonso-Almeida et al. 2014). As well, consumption emotion during product usage or experience is significantly influenced by reference groups (Gupta and Kim 2010). External sources of information can influence online purchasing behavior from patterns of learned behavior formed from social factors like reference groups and personal contacts (Teo and Yeong 2003). Consumers may rely on these social factors to become comfortable with the idea of purchasing a used product online by getting a second opinion (S. M. Lee and Sang Jun Lee 2005). While online shopping, sites present visual cues that suggest products similar to items already being assessed by the consumer which increase view time and the
likelihood of product purchase (Teo and Yeong 2003; Kohli, Devaraj, and Mahmood 2004). It is clear that pre-purchase decisionmaking, emotions during usage and post-purchase are heavily influenced by social norms and affiliations whether they are internal or external.

### 4.2.2. Costs

Research on consumer online purchasing behavior is focused on willingness to buy (Teo and Yeong 2003). Time became a new cost factor and consumer purchasing behavior changed with the constraint of time. In the traditional retail sector, time costs are not weighed very highly, but online consumers are 'time starved' and shop online to save time (Punj 2012; Jiang 2006). With the increase in time costs, technology is reshaping the retail experience. Product information, reviews and price comparison are now at the shoppers' fingertips and they prefer maximum convenience at the lowest cost (Ferguson 2012).

The outcomes of consumer purchase decisions have been shown to carry some level of risk. Such that the possibility that a consumer's purchase may have negative consequences encompassing specifically performance, social, financial, physical and psychological consequences. These perceived costs of potentially purchasing a malfunctioning product, or even a product that is different than expected, supports the Mental Accounting Theory (Gupta and Kim 2010). To mitigate these potential negative outcomes, Risk Reduction Strategies (RRS) have been applied across product markets (Gabbott 1991; Teo and Yeong 2003). A
number of studies investigated RRS in relation to purchase tasks. Two dominant strategies appear in the literature outlined as information search and product cues (Gabbott 1991; Soopramanien, Fildes, and Robertson 2007).

Information can overload consumers during the buying decision, and internal factors may moderate external information (Chen at al. 2009; Jiang 2006; Gao et al. 2012; Gabbott 1991). The rich information conveyed in online shopping can be unfavorable for products such as clothing because they are dominated by attributes which are subjective. This makes purchasing fashion products online a more complex task than searching for simpler products such as DVDs (Gao et al. 2012). The paradox of choice indicates that too many options will lead to greater probability of dissatisfaction and regret (Bulbul 2007). Motives for buying online are driven by lower costs, comfort of shopping, saving time and buying non-traditional and exclusive goods. A Czech study found customers consider quality but look for special offers and good prices (Svatosová 2013). This lead to popularity in purchasing second-hand goods and shopping online (Smith, Menon, and Sivakumar 2005; Cervellon, Carey, and Harms 2012). However, Czech consumers have cultural differences influencing purchasing behaviors causing them to value paying more for environmental protection and human rights less than their European counterparts (Svatosová 2013).

Among online youth shoppers, four major themes in decision making processes for information search and product assessment were identified (Alonso-Almeida et al. 2014). They were outlined as personalized product viewing, zoom and multi-view, practical information and catwalk with videos of the fashion in motion (McCormick and Livett 2012). With online shopping lacking the tactile
component of bricks-and-mortar retail, these traits help compensate and add to the online shopping experience, making it interactive with the consumer.

### 4.2.3. Influence of Recommendations

When faced with decisions and looking for optimal satisfaction, value and reduced risk, consumers will engage in an information search for easy decision-making. Consumers look for the recommendations online, usually without considering recommenders personal characteristics (Smith, Menon, and Sivakumar 2005; Jiang 2006). This sense of online community trust shows social influence, even if the recommender has no credentials or other experience.

Surrogate shoppers are shopping assistants who provide recommendations to consumers. This assistance can be applied online as well in the form of virtual avatars to represent surrogate shoppers. Using relatively recent technology, these avatars are developed on websites to mimic bricks-and-mortar sales associates to adapt to specific shopper preferences and guide in the product and information search. This leads to happier purchase (Wood 2002; Zhang 2005).

### 4.3. Second-Hand Retail - Resale and Purchasing Non-New Products

While consumer behavior has been studied extensively, the second-hand clothing market is still not well explored. Recent developments in this sector are explored in popular periodicals and journal articles that generally lack academic. Nevertheless the second-hand fashion has emerged as a growing trend over the last ten years in Western cultures (New Zealand Apparel 2013).

Consistent with the Brundtland terminology of sustainability, consumption of goods should consider social and environmental responsibilities while meeting the needs of the present generation without compromising the future ones (Barnaby 1987; Cherrier 2012). That ideology requires consumers to mentally take into account ecological and social aspects in their product purchase, use and post-use. In promoting alternative consumption, second-hand goods and 'green' marketing promote sustainability (Cherrier 2012; Chahal 2013; Cervellon et al. 2012; Young et al. 2010).

Consumer need for uniqueness has been defined as "the trait of pursuing differentness relative to others through the acquisition, utilization and disposition of consumer goods for the purpose of developing and enhancing one's social and self-image" (Cervellon, Carey, and Harms 2012). If individuals consider their level of uniqueness to be insufficient, they may engage in activities such as the consumption of fashionable clothing in their pursuit to change this undesirable situation and improve their perception of uniqueness. These consumers are attempting to stand out from others while remaining with product choices that are accepted by peers or reference groups. An individual can display need for uniqueness by seeking one-of-a-kind and by refusing to purchase commonly used products. This is for the re-establishment of an individual's identity by discontinuing the purchase and consumption of commonly used products (Cervellon et al. 2012; Karaatli 2002; Svatosová 2013).

Consumers with a high need for status will purchase goods for social prestige value. These individuals prefer brands which signal their belonging to a wealthy and status-laden group, for example luxury brands with prominent logos. Consumers need to possess a certain level of fashion knowledge and connoisseurship to be able to identify an original vintage piece of high quality and
rarity (Cervellon et al. 2012; McCormick and Livett 2012; Holmes at al. 2013). For the more frugal consumers and those desiring individuality in their fashion, vintage clothing can satisfy the need for status from brands while shopping second-hand.

### 4.3.1. Identified special factors influencing purchases

Consumer decision-making processes are heavily influenced by motives, perceptions of cost, and social desires and expectations. Consumer may be influenced by a new wave of eco-consciousness in their purchasing decision making. Little is known about the profile of the consumer and the motivations to purchase second-hand apparel. Eco-consciousness plays an indirect role through bargain hunting but most purchases are influenced by the thrill of the hunt (Cervellon et al. 2012).

Growth in the second-hand fashion market has been driven by women. Research indicates than $35 \%$ of women and $25 \%$ of men say they bought more used products in 2013 than they had in 2012 (Chahal 2013). The main reason for shopping second-hand is to save money, particularly in the 18-24 cohort. Older consumers are more likely to favour supporting a charity while purchasing something for themselves. Women are more likely to enjoying searching for bargains, supporting a charity, and promoting environmental choices in comparison to men (Chahal 2013; Cervellon et al. 2012).

### 4.3.2. Costs

Consumers shopping in the second-hand retail market may perceive an increased probability of risk (Gabbott 1991). The clothing may have previously belonged to a smoker, or it may have other attributes that may influence the consumer in their decisionmaking process. The literature establish price and brand as strong indicators in purchase decision-making (Gabbott 1991; Koyuncu and Bhattacharya 2004; Gupta and Kim 2010; Jiang 2006). Previous positive experiences in shopping for second-hand clothing will enhance trust in quality and reliability of the store (Gabbott 1991). There is rarely an opportunity to compare prices because items in second-hand stores tend to be one-of-a-kind. (Gabbott 1991). Second-hand shopping adds new factors in Mental Accounting Theory (MAT), because these shoppers tend to consider a range of ethical and environmental issues in their decision-making (Shaw and Newholm 2002; Huang and Kuo 2012; Young et al. 2010; Heiskanen, n.d.).

The second-hand clothing market has grown in recent years as consumers seek opportunities for value for money. Price sensitivity has been found to be a positive predictor of second-hand shopping behaviour (Chahal 2013; Cervellon, Carey, and Harms 2012). Frugality is a lifestyle trait that has been neglected in the consumer behavior literature. The term has been defined as the degree to which consumers are both restrained in acquiring, and in resourcefully using economic goods to achieve longer-term goals. The frugal are less materialistic and less prone to purchase compulsively (Cervellon, Carey, and Harms 2012). This brings to surface whether or not social influence plays a large role in purchase decisions.

Cost factors that influence consumer purchasing in the second-hand market include time spent on information search, which is consistent with the traditional retail sector. However internet-based used-good markets (e.g., Amazon and E-Bay) reduce search and transaction costs for consumers and facilitate product exchanges (Ghose 2009). Online resale can be different from bricks-and-mortar second-hand retail because today's technology has altered the scale and scope of the sale of second-hand goods and enables buyers to locate and trade goods more efficiently (Liao and Chu 2013). This reduction in time and money spent is less likely to be achieved in a comparable bricks-and-mortar environment.

### 4.3.3. Social Influence

Media attention on celebrity fashion has revealed that people who are considered role models such as Kate Moss or Michelle Obama regularly wear vintage clothing. Popular movies and television series and movies such as Mad Men set in "the good old times" of the 1960's and fashion blogs such as Sea of Shoes have influenced street style (Cervellon, Carey, and Harms 2012). Individuality, status and satisfaction can all be achieved by consumers in the second-hand retail market.

Hedonistic motives are prominent throughout second-hand retail that can stem from the perceived value, uniqueness and rarity of the item or the feeling of eco-consciousness or 'do good-ing'. The recreational aspects which are at the core of the second-hand apparel shopping experience include social contact with friendly and passionate salespeople, the entertaining aspects of the shopping activity and the "serendipity ensuing from the unexpected encounter with certain objects", also known as the thrill of the bargain hunt
(Cervellon, Carey, and Harms 2012; Gupta and Kim 2010). Even the most affluent households engage in second-hand consumption for recreational or social motives (Cervellon, Carey, and Harms 2012; Chahal 2013; M.-J. Kim 2007).

To assist in reducing perceived costs in MAT, assurances such as guarantees promote trust relationships and encourage consumption. This trust is based on social norms that are influenced by learned behaviors and avoidance of negative consequences (S. M. Lee and Sang Jun Lee 2005).

### 4.3.4. Trends

Consumers shop to satisfy their own style preferences. Whether they follow trends or have a distinct type they choose to follow their penchant for a certain style influences them to purchase specific items over others. Traditional and second-hand fashion, clothing styles can be categorized which is shown in Table 1 Style by Category

Table 1 Style by Category

| Style | Characteristics | Example |
| :--- | :--- | :--- |


| Bohemian <br> (Boho) | Free-spirited style setters are inspired by <br> earthy, ethnic, colourful looks. Pair new with <br> second-hand and multiple textures or prints. | Tailored, polished and pulled-together stems <br> from Mad Men or Audrey Hepburn. Their <br> silhouette is feminine with minimal flourishes <br> Fach as a touch of lace. Classic colors and <br> quality materials are their go-to. |
| :--- | :--- | :--- |
| Classic | Prefer basics, such as the T-Shirt, blazer, <br> white shirt, suit, trousers, look effortlessly <br> chic in simple staple pieces. Rejects trends, <br> prefers clean lines and pared-down palettes. |  |


|  <br> Fashion <br> Forward | They look for pieces no one else has, enjoy <br> unique colors and trimmings with an added <br> bit of edge. |  |
| :--- | :--- | :--- |
| Minimalist | Monochromatic looks, simple toned-down <br> palette create this smart look. Black is a <br> staple, tailored and reserved with no details <br> defines them. | It is all about fun and playful style. Bright <br> colors, loud patterns. They are open to <br> everything and mixing and matching. |
| Eclectic |  |  |


| Utilitarian | They opt for a comfortable and easy going <br> style with sneakers, and clothing with some <br> stretch. Utilitarian and practical in nature. |  |
| :--- | :--- | :--- |
| Casual <br> Street | Mainstream style that is comfortable and <br> simple for the individual to grab from their <br> closet and go. | This style is aimed to be non-conforming. <br> Flannel in muted and slightly faded colors are <br> a staple. They wear lots of layers, oversized <br> scarves, distressed denim, wayfarer <br> sunglasses, moto boots, lots of vintage (and <br> vintage looking) clothing and oversized <br> glasses. |

(Harpers Bazaar 2010; Hoevel 2014; Valentino 2013; Scanga 2014; Vaidya 2015; Persad 2014)

There is a wide range of styles and it is important to note that every individual may not fit in one category isolated from other styles. However these styles stem from how each shopper identifies themselves as individuals and within their reference groups.

### 4.3.5. Environmentally-Friendly

Over the last decade, an eco-fashion movement has arisen among consumers who are increasingly concerned with the impact of the production of clothes on their health, the wellbeing of workers and the environment and society at large (Trusted Clothes 2015). The concept of re-using and recycling clothes prolongs the lifespan of products and thereby reduces waste (the 3 R's: Reduce, Re-Use, Recycle) (Cervellon, Carey, and Harms 2012). Acceptance for second-hand apparel shopping, which is motivated by saving money and recycling or 'upcycling' is now a growing factor. Continued media focus on this market has established alternative retail as part of the mainstream (Chahal 2013). However, there is a discrepancy between what the consumer does and what the consumer plans to do, regarding eco-consciousness related to purchasing second-hand pieces (Young et al. 2010). Although this movement is new, it can encourage a more positive consumption style.

One of the key ways that second-hand apparel shopping was popularized, is the emergence of eBay. It started as an ecommerce platform for purchasing second-hand goods leading to repurposing previously owned products (Ridley 2013). As ecommerce became more prevalent, younger generations were more comfortable with shopping online in general which re-shaped the
consumer market. The new generation of consumers is becoming more fluid in changing their shopping habits, which leaves room for 'fashion with a conscious' offering a more ethical alternative to mainstream strip malls and 'big-box' stores.

Research trends indicate second-hand purchasing will continue to rise particularly among consumers shopping for used items (Chahal 2013). The literature highlights the need for practitioners involved in the eco-fashion sector to educate the consumer on the respect of the environment in their decision-making process. It is important to valorize the purchase of second-hand clothes, especially among eco-conscious consumers (Cervellon, Carey, and Harms 2012). Alternative shopping requires time and space in people's lives that is not readily available in increasingly busy lifestyles (Young et al. 2010). This suggests that the current systems in place need to be restructured to save time and become more convenient for time-starved consumers.

### 4.4. Conclusion

There is still clearly ample scope for further in-depth study of the role of factors influencing second-hand apparel shopping in online versus bricks-and-mortar environments. Future research could take into account characteristics such as product preferences, product knowledge, and consumer involvement. Research is now starting to focus more on the Generation Y cohort (also known as Millennials) since this is the largest even when compared to the Baby Boomers (Ferguson 2012). Consumers enjoy a sense of control and pleasure when shopping which leads to positive subjective experiences. Finding rare bargains in a second-hand retail store may
enhance these positive experiences (Chen et al. 2009). Current research has failed to study the hedonistic and social components of second-hand apparel shopping. This study is designed to fill that gap in our knowledge.

The literature conveys little information regarding metrics such as expenditures and time spent in stores in the second-hand retail market. Shopping decisions do not occur in isolation; life influences and the use of technology change the dimensions of the perceived shopping experience (Van der Heijden at al. 2003). Results from this research will promote consumer transformations and lead to a rebranding of the second-hand retail market as something of greater value. Increased information from studies on the secondhand market can revolutionize the current unsustainable consumerism framework of consumption of fast-fashion, poor materials and cheap labor, within the Canadian second-hand retail market. Despite fast growth in the second-hand retail market, no study has addressed whether social and cultural characteristics influence consumer preference toward a certain second-hand retailer.

## 5. METHODS

The purpose of the study is to identify where people shop second-hand, what influences them to do so, and to determine their socio-demographics. The dominant demographics of the second-hand consumer population are presumed to be the 18-34 cohort, timestarved, with a full range of annual incomes and dominated by females. Other demographics of study participants include students and young professionals who are most likely avid social media users and are more heavily influenced by digital social influencers with less
disposable income. In comparison, the mature adults may range from those on a tight budget to affluent individuals. Generally, female consumers are image conscious having been influences by their social circles and reference groups (Cervellon, Carey, and Harms 2012).

A study instrument was developed by adopting existing validated questions. Some questions were adjusted for the specific context of this study. A self-administered questionnaire involving 157 participants was administered on an iPad via Survey Monkey (www.surveymonkey.net). The full details of the survey can be found in Figure 8 Study Questionnaire in the Appendix. Participants were recruited in 3 different areas in the KW region (see also, Section 7.2, Figure 6) and asked to complete the survey on the spot. Those who could not immediately participate were provided with a small handout with a link to the survey to complete later if possible. A record of non-response observations is recorded in the Table 18 in the Appendix. Non-responders included 30 males, 61 females and casual style was the most observed. Their approximate age was estimated to be about around 50. Participants were encouraged to share the link with those they know to encourage a random snowball sample to acquire more participants. To capture the student population, a site on Wilfrid Laurier University campus was selected. Students comprise a significant part of the population of Waterloo and thus were included in the study. This helped ensure that the self-reported purchase behavior was realistic and relevant. The researcher commenced the research by counting the third individual to walk by the survey location and then survey every other person who walked by the researcher thereafter. The participant surveyed was approved by the Wilfrid Laurier University Research Ethics Board (REB \# 4199).

### 5.1. Survey Instrument

The survey instrument shown in the Appendix (Figure 8) included questions on social influencers, socio-demographics, Likert scale questions on shopping attitudes, and questions regarding frequency, duration and amount spent in second-hand retail. Participants were asked about their fashion style and the researcher sought permission to take a photo of the participant's outfit excluding their face. The photos were not mandatory, and they were utilized only for an analysis of personal fashion styles. The survey required 10 minutes to complete. A photograph of the business card sized survey link handout is seen in Figure 4 Survey Handout.

## Figure 4 Survey Handout

## AIIDIED Social and Cultural Inspiring Lives. Second-Hand Shoppin

 Please Visit: goo.gl/rTA4cEOR for the exact same link
wlu.ca/page.php?grp_id=1124\&p=26978


Your participation
is greatly
appreciated and
assists in the
completion of my
Master's Thesis. Master's Thesis.

All the individuals in the sample were first asked if they had purchased at least one piece of second-hand clothing or apparel in the last six months, as a screening question. If not, they were not asked to complete the Likert scale questions. However, capturing the demographic information from those who do not purchase second-hand fashions was still deemed valuable for later analysis. To increase content validity, items selected for the questionnaire were revised primarily from previous studies of shopping second-hand (Chin-Lung, and Chiang 2013; Park 2007; Gupta and Kim 2010; J. Kim, Yang, and Kim 2013; Leo et al. 2005; Smith et al. 2005; Holmes et al. 2013). Participant self-reporting on style varied with what their image was, participants were asked if they consent to
having a photograph taken from the neck down to capture their style. It was categorized by the researcher based on style categories in Table 1.

### 5.2. Study Site and Population

The location of the study site was the Kitchener-Waterloo Region, Ontario. Three sites were chosen, one on the Wilfrid Laurier University Campus, a second in the Downtown Business District of Kitchener at Thrift on Kent, and a third at Staples store in Cambridge (Figure 6). The university study location targeted students, while Thrift on Kent is a second-hand clothing store that granted the researcher to survey its' customers, and Staples was chosen because it was not located by a second-hand clothing store. These locations were chosen to capture a broadly based sample.

Second-hand shoppers in the Kitchener Waterloo (KW) Region are the intended population. 2011 Census indicates that there are approximately 10,000 more females than males in the Kitchener Waterloo CMA and that the majority of the population is between 20 and 50 years of age as shown in Figure 5. According to the Census, the Kitchener - Waterloo - Cambridge Metropolitan Area totaled at 477,160 , with a population of $384,420(80.7 \%)$ aged over 16 years. The cultural composition of the KW region can be seen in Table 2. Study participants were expected to be comprised of students at Wilfrid Laurier University, University of Waterloo and Conestoga College as well as young professionals, mature adults and seniors will adequately be represented.

Table 2 KW Region Ethnic Groups, 2006 Census

| Ethnicity | Frequency |  |
| :--- | ---: | :--- |
| African | $-\quad(0.0 \%)$ |  |
| Arab | $-\quad(0.0 \%)$ |  |
| Aboriginal | $1710 \quad(0.4 \%)$ |  |
| Asian | 38,640 | $(8.1 \%)$ |
| Canadian | 99,320 | $(20.8 \%)$ |
| Latin American | 3,850 | $(0.8 \%)$ |
| European | 329,480 | $(68.2 \%)$ |
| Indian | 10,315 | $(2.1 \%)$ |

(Statistics Canada 2009)

Figure 5 Kitchener - Cambridge - Waterloo, Ontario Census Data

| Characteristic | $\begin{gathered} \text { Kitchener - Cambridge - } \\ \text { Waterloo (CMA) } \\ \text { Ontario } \\ \text { (Census metropolitan area) } \end{gathered}$ |  |  | Ontario <br> (Province) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Change geography |  |  | Change geography |  |  |
|  | Total | Male | Female | Total | Male | Female |
| Population and dwelling counts |  |  |  |  |  |  |
| Population in 20111 | 477,160 | $\ldots$ | - | 12,851,821 $\pm$ | -.. | $\ldots$ |
| Population in 20061 | 451,235 | - | - | 12,160,282 $\pm$ | -- | - |
| 2006 to 2011 population change (\%) | 5.7 | … | - | 5.7 | -.. | -.. |
| Total private dwellings $\underline{\text { ? }}$ | 191,739 | $\cdots$ | - | 5,308,785 | $\cdots$ | - |
| Private dwellings occupied by usual residents $\underline{3}^{\text {a }}$ | 181,493 | - | - | 4,887,508 | - | $\cdots$ |
| Population density per square kilometre | 576.7 | $\cdots$ | - | 14.1 | - | … |
| Land area (square km) | 827.43 | $\ldots$ | $\ldots$ | 908,607.67 | $\ldots$ | $\ldots$ |
| Age characteristics |  |  |  |  |  |  |
| Total population by age groups 4 | 477,160 | 234,900 | 242,260 | 12,851,820 | 6,263,140 | 6,588,685 |
| 0 to 4 years | 28,790 | 14,750 | 14,035 | 704,260 | 360,590 | 343,670 |
| 5 to 9 years | 28,395 | 14,460 | 13,935 | 712,755 | 365,290 | 347,465 |
| 10 to 14 years | 29,165 | 14,905 | 14,260 | 763,755 | 391,630 | 372,125 |
| 15 to 19 years | 32,355 | 16,590 | 15,765 | 863,635 | 443,680 | 419,950 |


| 15 years | 6,390 | 3,280 | 3,115 | 168,840 | 86,700 | 82,140 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16 years | 6,435 | 3,365 | 3,070 | 172,840 | 89,195 | 83,645 |
| 17 years | 6,260 | 3,130 | 3,125 | 171,405 | 88,230 | 83,170 |
| 18 years | 6,320 | 3,250 | 3,070 | 173,930 | 89,225 | 84,705 |
| 19 years | 6,955 | 3,565 | 3,390 | 176,620 | 90,330 | 86,290 |
| 20 to 24 years | 35,455 | 18,175 | 17,280 | 852,910 | 432,490 | 420,415 |
| 25 to 29 years | 34,205 | 17,135 | 17,075 | 815,120 | 400,045 | 415,075 |
| 30 to 34 years | 32,610 | 16,215 | 16,390 | 800,365 | 383,340 | 417,030 |
| 35 to 39 years | 33,230 | 16,425 | 16,810 | 844,335 | 405,845 | 438,485 |
| 40 to 44 years | 34,995 | 17,295 | 17,700 | 924,075 | 447,920 | 476,155 |
| 45 to 49 years | 38,375 | 18,975 | 19,395 | 1,055,880 | 517,510 | 538,370 |
| 50 to 54 years | 35,310 | 17,350 | 17,955 | 1,006,140 | 492,560 | 513,580 |
| 55 to 59 years | 29,880 | 14,570 | 15,310 | 864,620 | 418,755 | 445,865 |
| 60 to 64 years | 24,935 | 12,055 | 12,880 | 765,655 | 370,370 | 395,275 |
| 65 to 69 years | 18,060 | 8,495 | 9,570 | 563,485 | 270,875 | 292,610 |
| 70 to 74 years | 13,720 | 6,540 | 7,180 | 440,780 | 206,350 | 234,435 |
| 75 to 79 years | 11,060 | 4,930 | 6,130 | 356,150 | 161,345 | 194,805 |
| 80 to 84 years | 8,605 | 3,470 | 5,140 | 271,510 | 113,620 | 157,890 |
| 85 years and over | 8,010 | 2,555 | 5,455 | 246,400 | 80,925 | 165,475 |
| Median age of the population $\underline{5}$ | 37.6 | 36.6 | 38.7 | 40.4 | 39.4 | 41.3 |
| \% of the population aged 15 and over | 81.9 | 81.2 | 82.6 | 83.0 | 82.2 | 83.9 |

### 5.3. Sampling

A representative sample of the population in Uptown Waterloo and Downtown Kitchener and Cambridge was sought, shown in Figure 6. Starting with the third person passing by, the researcher then asked every second individual to voluntarily participate in the study. The demographics of the sample were monitored to assess the representativeness of the sample and adjustments made, including spending more research days at the Thrift on Kent location to capture second-hand shoppers and less time at Wilfrid Laurier

University where students are more willing to complete a survey compared to other study sites. The sample size of 157 is of moderate size compared to past studies that typically ranged from 100-300. A total of 44 days of sampling took place from November 6, 2014 to December 19, 2014.

Figure 6 Study Locations for Surveys in the KW Region


### 5.4. Data Analysis Procedures

The following are the variables to be analyzed:

- Where people shop for second-hand apparel (especially bricks-and-mortars vs. online)
- Influences on where consumers shop second-hand
- The socio-demographic differences in second-hand apparel shopping behaviour including income, ethnicity, number of dependents, occupation, education level, age where shoppers live and how long they have lived in their residence

All questions were coded for analysis in SPSS. The Likert scale had 5 categories: 1 being 'Strongly Disagree, 2 as 'Disagree', 3 as 'Neutral', 4 as 'Agree' and 5 as 'Strongly Agree'. When assessing the Likert Scale questions for attitude and behavior, it is assumed that the difference between the categories is relatively the same. Table 3 outlines the long study questions and the short descriptor used in the results section.

Table 3 Variable Name Guide for Results

| Short Descriptor | Survey Questions and Attitudes |
| :--- | :--- |
| In-stores $-\mathrm{hr} / \mathrm{wk}$ | Over the last 6 months, about how often do you shop for second-hand |
| Online $-\mathrm{hr} / \mathrm{wk}$ | apparel? |
| In-stores $-\$ / \mathrm{wk}$ | Over the last 6 months, approximately how much \$ have you spent on |
| Online $-\$ / \mathrm{wk}$ | second-hand clothing? |
| Shoes $-\% \$$ Spent |  |
| Clothing $-\% \$$ Spent | What percentage (\%) of your money spent on second-hand apparel |
| Accessories $-\% \$$ | were (in the last 6 months): Shoes, Clothing and Accessories |


| Spent |  |
| :---: | :---: |
| Buy best/perfect choice | When purchasing apparel I try to get the very best or perfect choice. |
| Getting good quality important | Getting very good quality is important to me |
| High standards | My standards and expectations for second-hand fashion I buy are very high |
| Stores have highquality | Second-hand stores have high quality apparel |
| Most talked about stores good | The most talked about stores are usually very good choices |
| Prefer popular stores | I prefer buying second-hand apparel from the most popular stores in my social group |
| Nice decor stores offer best | Nicely decorated boutique stores offer me the best apparel |
| Well-known brands best | Well-known branded apparel (second-hand) are best for me |
| Economic consciousness | I am conscious about my economic situation when shopping online. |
| Look for best value | I look carefully to find the best value for my money and watch how much I spend. |
| Useful and good price | I always buy apparel that are useful to me and are of reasonable price. |
| Price compare to save | I am willing to spend time to compare prices among shops in order to buy lower priced apparel |
| Buy best value | I buy apparel with the best value for my money |
| Buy from new stores | I don't mind buying from stores from which I never bought before. |
| Buy if someone shopped store | I would be more willing to buy from a store if someone I know has bought something from it. |
| Buy without hesitation | I usually buy without hesitation. |
| Indecisive what store to shop | Sometimes it's hard to choose which stores to shop at. |
| Shop at favourite store | I have favorite stores from which I buy over and over. |
| Enjoy shopping | Second-hand shopping is one of the enjoyable activities in my life. |


| Like using social <br> media | I enjoy being able to 'check-in', hashtag or Instagram when I am in a <br> store. |
| :--- | :--- |
| Take time shopping in <br> store | I prefer to take my time when shopping in-store. |
| Advice from others | I use the advice of other people in making my important purchase <br> decisions. |
| Steer in right direction | I like to have someone to steer me in the right direction when I am <br> faced with important purchase decisions. |
| Need assistance | I often need the assistance of other people when making important <br> purchase decisions. |
| Friends recommend <br> stores | I find out about second-hand apparel stores from my friends. |
| Options cause <br> confusion | There are so many options in-store to choose from that I often feel <br> confused. |
| Environmental impacts | I like that second-hand shopping is generally good for the environment <br> and reuses our resources. |
| Apparel origin | I like to know where the apparel comes from (Which country it's made <br> in, and comes from). |
| Drive to preferred store | I would be willing to drive to shop at a store I prefer. |
| Prefer to shop with <br> friend | I prefer to shop with a friend |$|$| Second-hand |
| :--- |
| sustainable |$\quad$| I consider second-hand retail sustainable. |
| :--- |
| Buy carelessly and |
| regret |$\quad$ Often I make careless purchases I later wish I had not. | Delivery time concerns | I am concerned about whether I get my merchandise quickly. |
| :--- | :--- |
| Education | What is your education level? |
| Length of Time in <br> Residence | How long have you lived in your residence? |
| Daily Hrly Internet at <br> Work | How much time do you spend on the internet daily at work? |
| Daily Hrly Internet in Free |  |
| Time | How much time do you spend on the internet daily in your free time? |

Where participants live and shop was spatially analyzed. The results were categorized into city of residence and counted to identify percentages of samples in each city. Statistical analysis included univariate and bivariate descriptive analysis techniques. One-way analysis of variance (ANOVA) was used to determine if there were any statistically significant differences between the means of independent groupings. This was followed by use of Principal Components Analysis to explore groups of shoppers with like characteristics, particularly valuable for interpretation from a marketing perspective. Variance (var) and Eigenvalues ( $\lambda$ ) will be utilized to interpret PCA results. Acceptable values of variance above the threshold 0.4 will be used to explain the extent the results describe the sample. Eigenvalues greater than one will be use as a threshold to validate which unique groups are substantial to interpret.

## 6. RESULTS

### 6.1. Sample Characteristics

A wide range of socio-demographic characteristics of the sample are provided in Table 4. In comparison to the population, the sample is comprised of a disproportionate number of females. They account for $71.3 \%$ of the sample. Previous studies have indicated that women ( $65.9 \%$ ) are much more likely than men to shop second-hand clothing stores (Chahal 2013; Durif et al. 2015). The non-
response observations showed twice the number of women than men at the study sites. Women make up a much larger proportion of the sample than the female population in the KW Region which stands at $56.4 \%$ (Statistics Canada 2012a).

The mean of the study participants was 41 year and ranged in age from 17 to 95 shown in Table 4 . In comparison the average age of the population of KW average age is 37.6 years old, and nationally is it 40.4 (Statistics Canada 2012b). The prominence of participants aged 16 to 30 could be attributed to a generation which is technologically savvy. Some of these participants may have shared the survey link with other contributing to the snowball sampling.

Canadian Census data indicated the highest frequency of ethnicity in the KW CMA is European (68.2\%) and Canadian (20.6\%) (Table 2, page 31) while these same ethnicities, European (14.0\%) and Canadian (65.6\%), were also the most dominant in the study sample shown in Table 4. The discrepancy may be explained by the definition of ethnicity to study participants being considered citizenship rather than heritage. It was noted that there were very few respondents of African (1.3\%) and Arab (1.3\%) ethnicities in the study sample which is consistent with Canadian Census data (shown in Table 2) (Statistics Canada 2009).

Participants' mean personal income of $\$ 54,375$ is higher than the mean income for Canadians $(\$ 32,020)$ and KW residents $(\$ 34,190)$ (Statistics Canada 2015c; Statistics Canada 2015b). Higher mean personal income of the sample compared to the population stems from the prevalence of post-secondary institutions and a growing technology industry. However, the result is somewhat unexpected given the number of students in the sample.

Over one third of the study population (38.9\%) reported having a university education at the bachelor level, while the 2011 Canadian National Household Survey (NHS) reported 26\% of Canadian adults have a university degree. The NHS data showed 64\% of adults had post-secondary qualifications, whereas $65 \%$ of the study sample reported completing post-secondary school. Canadian Census data indicated metropolitan areas had higher proportions of adults with university degrees and lower proportions of people with trade certificates. This trend of proportional education levels was observed in the study sample in the Waterloo region. Women accounted for over half of university degree holders which may point to the higher proportion of participants with a university education at the bachelor level (Statistics Canada 2015).

Women are much more concentrated in particular occupational categories compared to men. Census data shows women are more likely to be employed in 'sales and service' and 'business, finance and administration'(Statistics Canada 2011c). These tendencies may explain the higher frequency of participant reported occupations in sales and business, due to the study sample having more women than men. One of the most prominent reported occupations was 'business, finance and administration' (12.1\%). Comparatively, the NHS revealed 'business, management, marketing and other related support services' as the most common field of study for post-secondary graduates. Thus the overall high reports of work for study participants in 'business, finance and administration' is somewhat expected. A low reported occupation was 'art, culture, recreation and sport' ( $3.2 \%$ ), which matched the NHS proportion in 'arts, entertainment and recreation' employment in Canada (3.5\%) (Statistics Canada 2015a; Statistics Canada 2011b).

The average number of children reported in the study was 0.31 children, and approximately half of the sample is childless (Table 4). Results for the number of children from this study are slightly lower than the Canadian average (1.1) which could be due to the prevalence of students in the sample (Statistics Canada 2013).

Surprisingly, the sample included a significant proportion of out-of-town residents ( $26.1 \%$ ), as seen in Table 4. This may have resulted from the sampling method, that allowed participants recruited in person to share the survey URL with friends and family who shop second-hand, but lived outside the region.

Overall, the results in Table 4 show a sample dominated by females and those with Canadian and Europeans ethnicity. Notably, average participant personal income was $63 \%$ higher than the population average and a strong trend of occupation in sales and business was seen. More participants reported having a university degree as compared to the general population (12.9\%), and there were fewer children than the Canadian average. More than $25 \%$ of the participants live outside the KW Region. These similarities between census data and survey results indicate the study sample is somewhat representative of the population. The characteristics which are not as representative, such as age and gender, are better representations of second-hand apparel shoppers in the KW region. The boutique such as Le Prix, StylFrugal, and Lustre \& Oak stores carry second-hand fashion items catering to younger fashion styles which aligns with the younger mean age of study participants. Second-hand apparel shoppers were reported to be dominated by women in the literature, and the counts of females in participant responses, and non-response observations reflect the same trend.

Table 4 Socio-Demographic Characteristics of the Sample ( $\mathrm{n}=157$ )
a) Categorical variables

| Variable | Categories | Frequency |  |
| :--- | :--- | ---: | :--- |
| Gender | Female | 112 | $(71.3 \%)$ |
|  | Male | 37 | $(23.6 \%)$ |
|  | Missing | 8 | $(5.1 \%)$ |
| Ethnic | African | 12 | $(1.3 \%)$ |
|  | Arab | 2 | $(1.3 \%)$ |
|  | Aboriginal/North American Indigenous | 3 | $(1.9 \%)$ |
|  | Asian /Pacific Islander | 4 | $(2.5 \%)$ |
|  | Canadian | 103 | $(65.6 \%)$ |
|  | Latin, Central and South American | 6 | $(3.8 \%)$ |
|  | European | 22 | $(14.0 \%)$ |
|  | American | 1 | $(0.6 \%)$ |
|  | Indian | 6 | $(3.8 \%)$ |
|  | Missing | 8 | $(5.1 \%)$ |
| Education | No Certificate, Diploma or Degree | 2 | $(1.3 \%)$ |
|  | Secondary (high) school diploma or equivalent | 28 | $(17.8 \%)$ |
|  | Apprenticeship or trades certificate or diploma | 2 | $(1.3 \%)$ |
|  | College, CEGEP or other non-university certificate / diploma | 19 | $(12.1 \%)$ |
|  | University certificate or diploma below bachelor level | 10 | $(6.4 \%)$ |
|  | University certificate, diploma or degree at bachelor level | 61 | $(38.9 \%)$ |
|  | University certificate or diploma above bachelor level | 22 | $(14.0 \%)$ |
|  | Prefer not to answer | 3 | $(1.9 \%)$ |
|  | Missing | 10 | $(6.4 \%)$ |
| Occupation | Art, Culture, Recreation and Sport | 5 | $(3.2 \%)$ |


|  | Student <br> Retired <br> Not Applicable <br> Social Science, Education, Government Service and Religion <br> Business, Finance and Administration <br> Health <br> Management <br> Natural and Applied Science <br> Processing, Manufacturing and Utilities <br> Trades, Transport and Equipment Operators <br> Sales and Service <br> Self-employed <br> Missing | 22 16 11 8 19 6 8 4 3 7 20 5 | (14.0\%) $(10.2 \%)$ $(7.0 \%)$ $(5.1 \%)$ $(12.1 \%)$ $(3.8 \%)$ $(5.1 \%)$ $(2.6 \%)$ $(1.9 \%)$ $(4.5 \%)$ $(12.7 \%)$ $(3.2 \%)$ $(14.6 \%)$ |
| :---: | :---: | :---: | :---: |
| Marital Status | Married | 49 | (31.2\%) |
|  | Living with Common-Law | 15 | (9.6\%) |
|  | Single | 56 | (35.7\%) |
|  | Separated | 2 | (1.3\%) |
|  | Divorced | 12 | (7.6\%) |
|  | Widowed | 6 | (3.8\%) |
|  | Prefer not to answer | 4 | (2.5\%) |
|  | Missing | 13 | (8.3\%) |
| Time in Residence | 0-1 years | 22 | (14.0\%) |
|  | 1-2 years | 18 | (11.5\%) |
|  | 2-3 years | 10 | (6.4\%) |
|  | 3-4 years | 9 | (5.7\%) |
|  | 4-5 years | 6 | (3.8) |
|  | Over 5 years | 78 | (49.7\%) |
| Residence Location | Waterloo | 37 | (23.6\%) |
|  | Kitchener | 35 | (22.3\%) |
|  | Cambridge | 24 | (15.3\%) |
|  | Out of Town | 41 | (26.1\%) |
|  | No Response | 20 | (12.7\%) |
|  | Missing | 0 | (0.0\%) |
| Age | 16 to 30 | 63 | (40.1\%) |


|  | 31 to 45 | 25 | $(15.9 \%)$ |
| :--- | :--- | ---: | :--- |
|  | 46 to 60 | 37 | $(23.6 \%)$ |
|  | 61 to 75 | $19(12.1 \%)$ |  |
|  | 76 to 90 | 3 | $(1.9 \%)$ |

b) Continuous variables

| Variable | Mean | Minimum | Maximum | Standard Deviation |
| :--- | :---: | :---: | :---: | :---: |
| Personal Income* | $\$ 54,375$ | $\$ 4,999$ | $\$ 125,000$ | $\$ 21,520$ |
| Household Income* | $\$ 100,500$ | $\$ 4,999$ | $\$ 125,000$ | $\$ 17,450$ |
| Number of Children | 0.31 children | 0 | 6 | 2.02 |
| Time in Residence <br> (years)* | 4.989 years | 0.5 years | $5+$ years | 1.53 years |
| Participant Age (years) | 41.2 | 17 | 90 | 18.3 years |

* Values calculated using midpoint values; All other values used continuous data


### 6.2. Second-Hand Apparel

Shopping Behavior: Location, Duration, and Expenditures

The locations where consumers reported second hand shopping are shown in
Table 5. A total of $110(70.1 \%)$ respondents reported having shopped for second-hand apparel in the past year, whilst just over one third of those who shop second-hand reported shopping for second hand goods on-line. Overall, it appears that Value Village is favoured above all other stores. A strong trend towards shopping at charitable stores such as Bibles for Missions and Thrift on Kent is evident. A clear pattern of in-store shopping is evident among participants. Fewer shoppers shop at boutique stores such as White Tiger and Meow Boutique. One exception to this trend is Le Prix. This may be because Le Prix is the only second-hand clothing store with an online platform.

The amount of time second-hand shoppers spend in-store and online is shown in Table 6. The average amount of time spent shopping in-store is conservable long than that spent online. Nevertheless there is a very wide range of time spent shopping online. A general trend towards longer shopping time in-store is evident.

Table 7 Expenditures for Second-Hand Apparel Shopping per Week by Location (In-store vs. Online) examines second-hand apparel shopping expenditures in-store and online. There is a distinct difference in expenditure evident wherein shoppers almost exclusively spend $\$ 20$ or less online, versus in-store which widely varies. In-store spending exhibited greater variance by more than three times than online spending

Table 5 Second-Hand Apparel Shopping Locations

| Store Name | Frequency (\%) |  |
| :--- | ---: | ---: |
| Value Village | 70 | $(44.6 \%)$ |
| Thrift on Kent | 36 | $(22.9 \%)$ |
| Goodwill | 28 | $(17.8 \%)$ |
| Talize | 27 | $(17.2 \%)$ |
| Other | 26 | $(16.6 \%)$ |
| Salvation Army | 24 | $(15.3 \%)$ |
| Kijiji | 21 | $(13.4 \%)$ |
| Le Prix | 18 | $(11.5 \%)$ |
| Bibles for Missions | $12 \quad$ | $(7.6 \%)$ |
| Carousel Clothing | 9 | $(5.7 \%)$ |
| Twice is Nice/Twice the Man | 8 | $(5.1 \%)$ |
| Ebay | $7 \quad(4.5 \%)$ |  |
| Plato's Closet | 6 | $(3.8 \%)$ |


| KW New \& Used | 4 | $(2.5 \%)$ |
| :--- | :--- | :--- |
| Oak \& Lustre | 4 | $(2.5 \%)$ |
| Out of the Past | 4 | $(2.5 \%)$ |
| Meow Boutique | 2 | $(1.3 \%)$ |
| StyIFrugal | 2 | $(1.3 \%)$ |
| White Tiger | 1 | $(0.6 \%)$ |

Respondents were given the opportunity to indicate how many stores they shop in, hence the numbers do not add up to $100 \%$.

Table 6 Hours Spent Second-Hand Apparel Shopping per Week by Location (In-store vs. Online)

| Hours Spent Shopping per Week | Measurement | Frequency | Mean* | SD |
| :---: | :---: | :---: | :---: | :---: |
| In-Store | 1 hours <br> 2 hours <br> 3 hours <br> 4 hours <br> 5 hours <br> 7 hours <br> 9 hours <br> 11 hours | $\begin{aligned} & 50 \\ & 59 \\ & 17 \\ & 7 \\ & 7 \\ & 3 \\ & 2 \\ & 1 \end{aligned}$ | 2.67 | 2.9 |
| Online | 1 hours <br> 2 hours <br> 3 hours <br> 4 hours <br> 5 hours <br> 6 hours | $\begin{aligned} & \hline 111 \\ & 12 \\ & 4 \\ & 1 \\ & 3 \\ & 1 \end{aligned}$ | 1.42 | 1.6 |

* Mean calculated using midpoint values

Table 7 Expenditures for Second-Hand Apparel Shopping per Week by Location (In-store vs. Online)

| Money Spent per Week | Measurement | Frequency | Mean* | SD |
| :--- | :---: | :---: | :---: | :---: |
| In-Stores | $\$ 0-20$ | 56 |  |  |
|  | $\$ 21-40$ | 21 |  |  |
|  | $\$ 41-60$ | 7 |  |  |
|  | $\$ 61-80$ | 4 | 41.30 | 41.30 |
|  | $\$ 81-100$ | 5 |  |  |
|  | $\$ 101-120$ | 4 |  |  |
|  | $\$ 121-140$ | 1 |  |  |


|  | $\$ 141-160$ | 3 |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $\$ 181-200$ | 1 |  |  |
|  | $\$ 200+$ | 4 |  |  |
| On-Line | $\$ 0-20$ | 76 |  |  |
|  | $\$ 21-40$ | 1 |  |  |
|  | $\$ 41-60$ | 1 | 14.10 | 13.69 |
|  | $\$ 81-100$ | 1 |  |  |
|  | $\$ 200+$ | 1 |  |  |

* Mean calculated using midpoint values


### 6.3. Second-Hand Apparel Shopping Attitudes

An examination of a wide range of second-hand apparel shopping attitudes by location (in-store vs. online) is shown in Table 9Table 8. Overall, a general trend towards shoppers who most strongly agree with quality, value, social, and sustainability-oriented attitudes is evident. The attitudes shoppers most strongly disagreed with are risk, and a few select social attitudes regarding social media use, needing assistance, and being confused by options when shopping.

Only 5 of the 28 attitudes differed significantly by location based on the associated Chi-squared statistical test. A clear pattern of agreement is evident for "getting good quality important" and "high quality", where online stores exhibited stronger agreement than physical stores. One exception to this trend is "buy best/perfect choice" which reveals shopper agreement is stronger in-store compared to online. Overall, it appears that preference for online stores is significantly more influenced by social popularity than bricks-and-mortar stores. A general trend towards shoppers willing to price compare online is moderately higher than price comparing
in-store $(p=0.00)$. This pattern may be related to more information being readily available to price compare among online stores, with less time spent to execute the comparisons, whereas in-store comparisons take more time to complete. A clear pattern of overall stronger agreement is evident for online second-hand apparel shopping, compared to in-store. It appears that shoppers are less likely to buy in-store without hesitation than online. Overall, a general trend towards stronger agreement for hedonistic attitudes is evident instore compared to online. Regarding environmental and sustainability attitudes, "environmental impacts" exhibits stronger agreement for in-store shopping than online, whereas "apparel origin" shows the inverse.

This study hypothesized second-hand apparel shopping was highly socially influenced. Overall, it appears that people's preferences for stores are significantly influenced by social popularity ( $p=0.02$ ), and shoppers enjoy engaging with social media when shopping second-hand $(p=0.04)$. This relationship may be linked to the ease of social sharing of online stores via social media. A general trend towards higher risk acceptance is evident. People are more willing to buy from unfamiliar bricks-and-mortar stores than from unknown online sites ( $p=0.00$ ). Interestingly, the level of disagreement for "options cause confusion" in-store and online is the same. Another evident pattern in participant responses is the hedonistic component of second-hand apparel shopping. A clear pattern of increased shopping at favourite stores is evident for bricks-and-mortar locations compared to online stores ( $p=0.03$ ). This may be from greater hedonistic qualities offered in bricks-and-mortar locations than websites. Overall, it appears that the use of social media while shopping online is three times more likely ( $p=0.04$ ). This result is expected given that previous results indicate secondhand shoppers prefer shopping at popular online stores.

Table 8 Second-Hand Apparel Shopping Attitudes, by Location (In-store Versus Online)

| Attitudes | Locatio n | Disagree | Neutral | Agree | Chisquare | $p$-value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| When purchasing apparel I try to get the very best or perfect choice | In-Store | 3 (2.9\%) | 5 (4.8\%) | 97 (92.4\%) | 2.84 | 0.24 |
|  | Online | 1 (7.1\%) | 2 (14.3\%) | 11 (78.6\%) |  |  |
| Getting very good quality is important to me | In-Store | 4 (3.7\%) | 6 (5.7\%) | 96 (90.6\%) | 1.44 | 0.49 |
|  | Online | 0 (0.0\%) | 0 (0.0\%) | 14 (100\%) |  |  |
| My standards and expectations for second-hand fashion I buy are very high | In-Store | 13 (12.4\%) | 20 (19.0\%) | 72 (68.6\%) | 1.79 | 0.41 |
|  | Online | 1 (7.1\%) | 1 (7.1\%) | 12 (85.7\%) |  |  |
| Second-hand shops have high quality apparel | In-Store | 6 (5.8\%) | 35 (34.0\%) | 62 (60.2\%) | 4.52 | 0.10 |
|  | Online | 3 (21.4\%) | 3 (21.4\%) | 8 (57.8\%) |  |  |
| The most talked about stores are usually very good choices | In-Store | 18 (17.4\%) | 39 (37.9\%) | 46 (44.7\%) | 1.81 | 0.40 |
|  | Online | 4 (28.5\%) | 3 (21.4\%) | 7 (50\%) |  |  |
| I prefer buying second-hand apparel from the most popular stores in my social group | In-Store | 41 (39.1\%) | 45 (42.9\%) | 19 (18.1\%) | 7.52 | 0.02 |
|  | Online | 4 (28.5\%) | 3 (21.4\%) | 7 (50\%) |  |  |
| Nicely decorated boutique stores offer me the best apparel | In-Store | 37 (35.6\%) | 35 (33.7\%) | 32 (30.8\%) | 3.83 | 0.15 |
|  | Online | 3 (21.4\%) | 3 (21.4\%) | 8 (57.2\%) |  |  |
| Well-known branded apparel (second-hand) are best for me | In-Store | 20 (19.2\%) | 35 (33.7\%) | 49 (47.1\%) | 2.20 | 0.33 |
|  | Online | 5 (35.7\%) | 3 (21.4\%) | 6 (42.9\%) |  |  |
| I am conscious about my economic situation when shopping. | In-Store | 11 (15.4\%) | 15 (14.4\%) | 78 (75.0\%) | 0.62 | 0.73 |
|  | Online | 1 (7.7\%) | 1 (7.7\%) | 11 (84.6\%) |  |  |
| I look carefully to find the best | In-Store | 1 (1.0\%) | 8 (7.9\%) | 92 (91.1\%) | 1.16 | 0.56 |


| value for my money and watch my spending. | Online | 0 (0.0\%) | 1 (7.1\%) | 30 (93.1\%) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I always buy apparel that are useful to me and are of reasonable price. | In-Store | 4 (3.8\%) | 7 (6.8\%) | 92 (89.3\%) | 3.57 | 0.17 |
|  | Online | 2 (14.2\%) | 0 (0.0\%) | 12 (85.7\%) |  |  |
| I am willing to spend time to compare prices among shops in order to buy lower priced apparel. | In-Store | 33 (32.4\%) | 25 (24.5\%) | 18 (43.1\%) | 25.15 | 0.00 |
|  | Online | 4 (28.5\%) | 3 (21.4\%) | 7 (50\%) |  |  |
| I buy apparel with the best value for my money | In-Store | 6 (5.9\%) | 6 (5.9\%) | 90 (88.2\%) | 0.89 | 0.64 |
|  | Online | 0 (0.0\%) | 1 (7.1\%) | 13 (92.8\%) |  |  |
| I don't mind buying from stores from which I never bought before. | In-Store | 2 (1.9) \% | 8 (7.7\%) | 94 (90.4\%) | 19.44 | 0.00 |
|  | Online | 4 (28.5\%) | 2 (14.3\%) | 8 (57.2\%) |  |  |
| I would be more willing to buy from a store if someone I know has bought something from it. | In-Store | 26 (25.2\%) | 22 (21.4\%) | 55 (53.4\%) | 4.6 | 0.10 |
|  | Online | 1 (7.7\%) | 1 (7.7\%) | 11 (84.7\%) |  |  |
| I usually buy without hesitation. | In-Store | 52 (49.5\%) | 25 (23.8\%) | 28 (26.7\%) | 3.27 | 0.19 |
|  | Online | 5 (35.7\%) | 2 (14.3\%) | 7 (50\%) |  |  |
| Sometimes it's hard to choose which stores to shop at. | In-Store | 32 (30.7\%) | 31 (29.8\%) | 41 (39.4\%) | 3.37 | 0.19 |
|  | Online | 5 (35.7\%) | 1 (7.1\%) | 8 (57.2\%) |  |  |
| I have favorite shops from which I buy over and over. | In-Store | 5 (4.8\%) | 16 (15.4\%) | 83 (79.8\%) | 7.07 | 0.03 |
|  | Online | 3 (23.1\%) | 3 (23.1\%) | 7 (53.9\%) |  |  |
| Second-hand shopping is one of the enjoyable activities in my life. | In-Store | 19 (18.5\%) | 30 (29.1\%) | 54 (52.5\%) | 0.46 | 0.80 |
|  | Online | 3 (21.4\%) | 5 (35.7\%) | 6 (42.9\%) |  |  |
| I enjoy engaging with social media when shopping secondhand. | In-Store | 68 (66.6\%) | 22 (21.6\%) | 11 (10.7\%) | 6.34 | 0.04 |
|  | Online | 7 (50.0\%) | 2 (14.3\%) | 5 (35.7\%) |  |  |


| I prefer to take my time when shopping. | In-Store | 15 (14.7\%) | 16 (15.7\%) | 71 (96.1\%) | 0.98 | 0.61 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Online | 3 (21.4\%) | 1 (7.1\%) | 10 (71.5\%) |  |  |
| I use the advice of other people in making my important purchase decisions. | In-Store | 37 (36.7\%) | 18 (17.8\%) | 46 (45.6\%) | 1.98 | 0.93 |
|  | Online | 4 (28.6\%) | 1 (7.1\%) | 9 (64.3\%) |  |  |
| I like to have someone to steer me in the right direction when I am faced with important purchase decisions. | In-Store | 40 (40.0\%) | 23 (23.0\%) | 37 (37.0\%) | 4.15 | 0.13 |
|  | Online | 4 (28.6\%) | 1 (7.1\%) | 9 (64.2\%) |  |  |
| I often need the assistance of other people when making important purchase decisions. | In-Store | 59 (56.7\%) | 20 (19.2\%) | 25 (24\%) | 2.78 | 0.25 |
|  | Online | 7 (50\%) | 1 (7.1\%) | 6 (42.8\%) |  |  |
| I find out about second-hand apparel shops from my friends. | In-Store | 24 (23.0\%) | 22 (21.2\%) | 58 (55.8\%) | 2.26 | 0.32 |
|  | Online | 2 (15.4\%) | 1 (7.7\%) | 10 (76.9\%) |  |  |
| There are so many options to choose from that I often feel confused. | In-Store | 52 (50\%) | 28 (26.9\%) | 24 (23.1\%) | 3.86 | 0.15 |
|  | Online | 7 (50.0\%) | 1 (7.1\%) | 6 (42.8\%) |  |  |
| I like that second-hand shopping is generally good for the environment and reuses our resources. | In-Store | 2 (2.0\%) | 12 (12.0\%) | 86 (86.0\%) | 1.49 | 0.48 |
|  | Online | 1 (7.1\%) | 1 (7.1\%) | 12 (85.7\%) |  |  |
| I like to know where the apparel comes from (Which country it's made in, and comes from). | In-Store | 20 (19.2\%) | 32 (30.8\%) | 52 (50\%) | 0.89 | 0.64 |
|  | Online | 4 (28.5\%) | 3 (21.4\%) | 7 (52.7\%) |  |  |

Bolded values are statistically significant at the 0.05 level

### 6.4. Relationships between Shopping Behaviour, Attitudes and Socio-Demographics

An examination of a wide range of correlation values for in-store consumer variables is shown in Table 9 (on-line is presented in Table 10). The p -values in the correlation tables are coefficients and were found using linear regression analysis. To simplify discussion, short variable names are used, as given in Table 3.

It appears that looking for and buying the best value show the strongest correlation for in-store variables, suggesting that shoppers are more inclined to buy higher value items in-store where tactile experience may increase perceived value. Appealing décor and recognizable brands appear to moderately correlate with the perception of quality fashion items.

A general trend towards higher social influence on second-hand apparel shopping attitudes is also evident, given the strong correlations between attitudes desiring advice, assistance and direction from others, and shopping with others. These results are somewhat expected given that shoppers want social validation from others. Shoppers sometimes listen to their friends recommending certain stores while brands and attractive shops moderately aid social influence. Recognizable brands and shopping at stores with nice décor may reflect positively on shoppers' social status, therefore being preferable. Young people especially prefer to shop with friends and receive input from others when shopping.

Another prominent trend in the correlations is consumer value. It appears looking for value is more important than overall economic consciousness while shopping in-store. A notable relationship is seen where the more people are economically conscious
about spending, the less likely they are to drive to a shop they prefer. Finding items of value to the shopper may come at a price for the extra time spent price comparing in-store but shoppers enjoy taking their time.

Perceived risk is another common theme for second-hand shoppers. Generally, shoppers are more likely to shop at unfamiliar stores if they know someone who has shopped there previously especially when they can take their time shopping. Shoppers perceive less risk in an unfamiliar new store when they shop with a friend or if the store is recommended, and others assist the shopper in-store with their purchase decision. This result is expected since having someone you trust recommend and the availability of in-store assistance makes the shopper more comfortable. A notable relationship is seen where indecisive shoppers enjoy shopping less. This is may be because because the shopper perceives risk by being unable to make a confident decision and fear they will miss out on something better.

Second-hand shoppers generally show attitudes that exhibit hedonistic qualities. Overall shoppers are more likely to take their time and shop at their favorite stores if friends recommend those stores. The more participants enjoy the act of shopping second-hand and engage with social media, the less they feel overwhelmed by too many options. Note how this result is expected given that they are not in a rush and are likely to be using social media as a guide to find recommendations or comparative information.

Although few survey questions address themes of environmentalism, shoppers' attitudes towards second-hand apparel shopping is influenced by environmental benefits. Shoppers exhibit willingness to buy from a new store the more they perceive
second-hand apparel shopping as good for the environment and are knowledgeable of apparel origin. This may suggest that businesses with social, environmental and ethical values are more trustworthy to new shoppers. A clear pattern is that of shoppers preferring to take time to enjoy shopping in-store when it is considered good for the environment and sustainable. This is somewhat anticipated since the consumer will feel that they consciously did a good deed while shopping. Overall, the more consumers view second-hand apparel shopping as environmentally friendly, the more they will care about sustainability and apparel origin. In contrast it appears shoppers are more willing to drive to a preferred shop if they perceive it as being environmentally conscious. This may suggest that shoppers appreciate the sustainable and 'green' aspects of second-hand apparel shopping, although they are seen as an added benefit and not the n main driver.

Other interesting single correlations worth noting indicate that shoppers with higher household income are more willing to drive to a shop they prefer. This is likely because these consumers having more money for leisure shopping and access to a vehicle. Second-hand shoppers who price compare to save, have higher in-store expenditures which may suggest an increase focused on value rather than keeping expenditures low. In-store spending is higher when shoppers perceive well-known brands as the best purchases, which may be linked to higher prices for brand name clothing.

Table 9 Correlation Values Between In Store Behaviors and Attitudes

|  | In- <br> Store <br> S - <br> \$/wk | Buy best/pe rfect choice | Getting good quality import ant | High stand ards | Stores have highquality | Most <br> talked <br> about <br> store <br> s <br> good | Prefer popul ar stores | Nice <br> decor <br> stores <br> offer <br> best | Well- <br> know <br> n <br> brand <br> s best | Econo mic consci ousnes s |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| In-Stores - \$/wk | 1 |  |  |  |  |  |  |  |  |  |
| Buy best/perfect choice | 0.14 | 1 |  |  |  |  |  |  |  |  |
| Getting good quality important | 0.09 | . $38{ }^{* *}$ | 1 |  |  |  |  |  |  |  |
| High standards | 0.04 | . $41{ }^{* *}$ | . 62 ** | 1 |  |  |  |  |  |  |
| Stores have high-quality | 0.08 | -0.04 | 0.10 | 0.19 | 1 |  |  |  |  |  |
| Most talked about stores good | -0.06 | 0.12 | 0.05 | 0.05 | . 270 ** | 1 |  |  |  |  |
| Prefer popular stores | 0.04 | 0.07 | 0.12 | 0.13 | -0.13 | . $38 * *$ | 1 |  |  |  |
| Nice decor stores offer best | 0.00 | . $32 * *$ | . $276{ }^{* *}$ | . $280 *$ | -0.13 | 0.14 | . $37 * *$ | 1 |  |  |
| Well-known brands best | .230* | .248* | .225* | 0.16 | 0.00 | 0.12 | . $32{ }^{* *}$ | . $34{ }^{* *}$ | 1 |  |
| Economic consciousness | 0.04 | -0.04 | 0.13 | 0.05 | -0.06 | 0.06 | 0.19 | 0.14 | 0.04 | 1 |
| Look for best value | 0.06 | 0.18 | .244* | . $201{ }^{*}$ | 0.09 | 0.05 | 0.09 | 0.06 | 0.14 | .270** |
| Useful and good price | 0.02 | 0.12 | . $211^{*}$ | 0.12 | -0.11 | 0.03 | .198* | 0.16 | 0.16 | .258** |
| Price compare to save | .268* | .231* | 0.09 | -0.05 | 0.04 | 0.07 | 0.12 | 0.11 | 0.17 | .222* |
| Buy best value | -0.03 | 0.15 | 0.19 | 0.14 | 0.02 | 0.04 | 0.09 | 0.13 | .199* | .253* |
| Buy from new stores | -0.17 | 0.12 | . $236{ }^{*}$ | 0.14 | 0.07 | 0.01 | -0.12 | 0.04 | 0.06 | -0.02 |
| Buy if someone shopped store | -0.04 | 0.00 | 0.10 | -0.04 | -0.07 | .220* | . 43 ** | 0.18 | .20** | 0.15 |
| Buy without hesitation | 0.01 | -0.10 | 0.04 | 0.04 | 0.08 | 0.06 | 0.15 | . $34{ }^{* *}$ | 0.10 | 0.16 |
| Indecisive what store to shop | 0.05 | 0.06 | 0.02 | -0.06 | 0.06 | . $254{ }^{*}$ | . $269{ }^{* *}$ | 0.13 | 0.12 | -0.03 |
| Shop at favourite store | -0.02 | 0.04 | 0.01 | -0.02 | -0.04 | -0.04 | 0.01 | .210* | .226* | 0.03 |
| Enjoy shopping | 0.07 | 0.02 | 0.07 | .207* | . $32{ }^{* *}$ | 0.12 | -0.16 | 0.08 | 0.09 | -0.07 |
| Like using social media | 0.14 | -0.05 | -0.01 | -0.01 | -0.06 | 0.16 | . $286{ }^{* *}$ | .281** | 0.11 | 0.04 |
| Take time shopping in store | 0.07 | 0.16 | .207* | 0.14 | . $32{ }^{* *}$ | . 30 ** | 0.11 | 0.06 | 0.14 | 0.05 |
| Advice from others | 0.02 | -0.05 | -0.08 | -0.16 | 0.01 | 0.13 | . $268{ }^{* *}$ | . $253{ }^{*}$ | 0.09 | 0.07 |
| Steer in right direction | 0.10 | -0.13 | 0.02 | -0.11 | -0.05 | 0.11 | . $294 *$ | . $257{ }^{*}$ | 0.17 | 0.18 |
| Need assistance | -0.09 | -0.11 | 0.03 | -0.08 | -0.05 | 0.19 | . $287{ }^{* *}$ | 0.18 | 0.04 | 0.15 |
| Friends recommend stores | -0.10 | 0.09 | 0.03 | -0.07 | 0.00 | 0.09 | 0.17 | 0.18 | 0.01 | 0.18 |
| Options cause confusion | -0.04 | 0.05 | 0.07 | -0.14 | -0.10 | .203* | .222* | 0.09 | -0.01 | 0.17 |
| Environmental impacts | 0.13 | -0.05 | 0.09 | 0.04 | 0.13 | 0.06 | -0.14 | -0.11 | -0.08 | -0.16 |
| Apparel origin | -0.06 | 0.05 | 0.06 | 0.08 | 0.12 | 0.12 | 0.11 | -0.05 | -0.12 | -0.19 |
| Drive to preferred store | 0.18 | -0.07 | -0.08 | -0.13 | -0.01 | 0.04 | 0.11 | -0.14 | -0.01 | $-.263{ }^{* *}$ |
| Prefer to shop with friend | 0.06 | 0.03 | . $192^{*}$ | 0.06 | -. $19{ }^{*}$ | 0.01 | .294** | .260** | 0.02 | 0.18 |
| Second-hand sustainable | 0.05 | -0.15 | 0.03 | 0.09 | . $273{ }^{* *}$ | 0.18 | -0.06 | -0.11 | -0.12 | -0.02 |
| Age | -0.17 | -0.01 | -0.04 | 0.12 | 0.05 | 0.05 | 0.00 | -0.11 | -0.11 | -0.15 |
|  |  |  |  |  |  |  |  |  |  |  |

## the 0.01 level

*. Correlation of r -values is significant at the 0.05 level

|  | Look for best value | Useful and good price | Price compa re to save | Buy best value | Buy from new stores |  | Buy <br> witho ut hesit ation | Indeci sive what store to shop | Shop at favour ite store | Enjoy shop ping | Like using social medi a | Take time shopp ing in store |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Look for best value | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Useful and good price | .48** | 1 |  |  |  |  |  |  |  |  |  |  |
| Price compare to save | .48** | .240* | 1 |  |  |  |  |  |  |  |  |  |
| Buy best value | .70** | . $45{ }^{* *}$ | . $48{ }^{* *}$ | 1 |  |  |  |  |  |  |  |  |
| Buy from new stores | 0.09 | .232* | 0.01 | .21* | 1 |  |  |  |  |  |  |  |
| Buy if someone shopped store | .229* | . $39 * *$ | .228* | .25* | 0.08 | 1 |  |  |  |  |  |  |
| Buy without hesitation | -0.02 | 0.12 | 0.00 | 0.08 | 0.15 | 0.15 | 1 |  |  |  |  |  |
| Indecisive what store to shop | 0.09 | -0.05 | 0.09 | -0.02 | -0.07 | .240* | -0.04 | 1 |  |  |  |  |
| Shop at favourite store | 0.03 | -0.06 | 0.09 | 0.13 | -0.10 | 0.05 | 0.08 | -0.03 | 1 |  |  |  |
| Enjoy shopping | 0.04 | -0.04 | 0.03 | 0.05 | . $279{ }^{* *}$ | -0.19 | 0.10 | $-.282^{* *}$ | 0.07 | 1 |  |  |
| Like using social media | 0.01 | 0.08 | 0.13 | 0.03 | 0.00 | .202* | 0.08 | .226* | 0.17 | 0.06 | 1 |  |
| Take time shopping in store | .251* | 0.16 | . $276{ }^{* *}$ | .221* | .208* | . $32 *$ | 0.03 | 0.05 | 0.15 | . $36{ }^{* *}$ | 0.13 | 1 |
| Advice from others | -0.02 | 0.13 | 0.05 | -0.10 | 0.05 | .42** | 0.11 | . $38 *$ | 0.14 | -0.14 | .217* | .241* |
| Steer in right direction | -0.03 | 0.02 | 0.06 | -0.08 | -0.09 | . $37{ }^{* *}$ | 0.15 | . 33 ** | .206* | -0.19 | .226* | 0.06 |
| Need assistance | 0.05 | 0.15 | 0.08 | -0.09 | -0.10 | . $34{ }^{* *}$ | 0.16 | .240* | 0.02 | -0.10 | . $205^{*}$ | 0.09 |
| Friends recommend stores | 0.06 | 0.13 | .228* | 0.08 | 0.09 | .42** | 0.10 | 0.18 | . $35{ }^{* *}$ | -0.05 | 0.15 | . $35{ }^{* *}$ |
| Options cause confusion | 0.13 | 0.07 | 0.12 | 0.04 | 0.03 | .275** | 0.06 | . $32 \times *$ | 0.12 | -.20* | . $233{ }^{*}$ | 0.06 |
| Environmental impacts | 0.17 | 0.05 | 0.03 | 0.16 | . $235{ }^{*}$ | 0.02 | -0.12 | -0.04 | 0.04 | . $34{ }^{* *}$ | 0.08 | . $27{ }^{* *}$ |
| Apparel origin | 0.06 | -0.16 | 0.12 | 0.06 | .224** | 0.02 | -0.06 | .214* | -0.02 | 0.10 | 0.14 | 0.13 |
| Drive to preferred store | 0.04 | -0.09 | 0.01 | 0.03 | . $272{ }^{\text {** }}$ | 0.17 | -0.12 | 0.19 | -0.05 | 0.17 | 0.13 | 0.18 |
| Prefer to shop with friend | 0.10 | .231* | 0.15 | 0.09 | 0.17 | . $35{ }^{* *}$ | 0.13 | . $31{ }^{* *}$ | .194* | -. $195^{*}$ | 0.17 | 0.19 |
| Second-hand sustainable | 0.17 | -0.02 | 0.06 | 0.12 | .213* | -0.04 | 0.09 | -0.03 | -0.01 | .55** | -0.04 | . $35{ }^{* *}$ |
| Age | -0.08 | -0.06 | -0.08 | -0.01 | -0.15 | -0.09 | 0.04 | -0.11 | -0.08 | 0.17 | -0.06 | -0.04 |
| Personal Income | 0.01 | -0.05 | -0.01 | 0.09 | 0.05 | 0.02 | 0.14 | -0.01 | -0.10 | 0.16 | 0.06 | 0.06 |
| Household Income | -0.11 | -0.03 | -0.11 | -0.04 | 0.15 | 0.02 | 0.03 | -0.08 | -0.03 | .256* | .219* | 0.14 |
| Education | 0.11 | -0.02 | 0.12 | 0.16 | 0.18 | 0.03 | -0.13 | 0.03 | 0.07 | -0.05 | -0.07 | 0.08 |
| Length of Time in Residence | -.230* | -. $205^{*}$ | -. $244{ }^{*}$ | -0.11 | -0.17 | -0.15 | 0.04 | -0.14 | 0.05 | -0.01 | -. $214^{*}$ | -0.04 |
| Daily Hrly Internet at Work | 0.14 | -0.11 | 0.03 | 0.08 | 0.02 | 0.02 | -0.14 | 0.05 | 0.08 | -0.04 | 0.04 | -0.05 |
| Daily Hrly Internet in Free Time | -0.04 | 0.02 | -0.17 | -0.15 | -0.08 | 0.05 | -0.06 | -0.08 | 0.05 | -0.11 | 0.18 | -0.01 |

at the 0.01 level
*. Correlation of $r$-values is significant at the 0.05 level

|  | Advice from others | Steer <br> in the right directi on | Need assist ance | ds reco mme nd store s | Optio ns caus e confu sion | Envir onm ental impa cts | Appa rel origi n | Drive <br> to <br> prefer <br> red <br> store | Prefe $r$ to shop with frien d | Secon d- hand sustai nable | Age | Pers onal Inco me | Hou seho Id Inco me | Educ ation | Lengt h of Time in Resid ence | Daily <br> Hrly <br> Intern et at <br> Work |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Advice from others | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Steer in right direction | . $67{ }^{* *}$ | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Need assistance | . $55{ }^{* *}$ | .70** | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Friends recommend stores | . $34 *$ | . $35 * *$ | . 30 * | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |
| Options cause confusion | . $32 \times$ | . $34 *$ | .52** | . $31{ }^{* *}$ | 1.00 |  |  |  |  |  |  |  |  |  |  |  |
| Environmental impacts | -0.10 | 0.08 | -0.04 | 0.10 | -0.03 | 1.00 |  |  |  |  |  |  |  |  |  |  |
| Apparel origin | -0.06 | -0.08 | -0.02 | . 223 * | 0.10 | . $35 \times$ | 1.00 |  |  |  |  |  |  |  |  |  |
| Drive to preferred store | 0.15 | 0.03 | -0.07 | 0.03 | -0.04 | . 40 ** | .268** | 1.00 |  |  |  |  |  |  |  |  |
| Prefer to shop with friend | .49** | . $44{ }^{* *}$ | . $37{ }^{* *}$ | . $44 *$ | . $35 *$ | -0.10 | 0.00 | 0.11 | 1.00 |  |  |  |  |  |  |  |
| Second-hand sustainable | 0.05 | 0.18 | 0.11 | 0.01 | 0.05 | . 63 ** | 0.11 | . $285{ }^{* *}$ | -0.03 | 1.00 |  |  |  |  |  |  |
| Age | -.43** | -.276*********** | -0.11 | -0.08 | -0.12 | 0.15 | 0.16 | -0.11 | -.42** | 0.05 | 1.00 |  |  |  |  |  |
| Personal Income | -0.08 | -0.19 | -0.09 | -0.09 | -0.16 | -0.01 | 0.05 | .201* | -0.12 | 0.08 | . $44 *$ | 1.00 |  |  |  |  |
| Household Income | 0.00 | -0.04 | -0.06 | -0.03 | -0.10 | .223 ${ }^{*}$ | 0.15 | . $34{ }^{* *}$ | -0.15 | .206* | .245** | . $69{ }^{* *}$ | 1.00 |  |  |  |
| Education | 0.11 | 0.05 | 0.02 | -0.09 | 0.06 | 0.07 | .199** | 0.00 | -0.01 | 0.12 | -0.16 | -0.10 | -0.08 | 1.00 |  |  |
| Length of Time in Residence | -.31** | -0.10 | -0.16 | 0.02 | -.211* | 0.09 | -0.04 | 0.02 | -.269** | 0.01 | .290** | 0.15 | .268** | -.222* | 1.00 |  |
| Daily Hrly Internet at Work | 0.04 | 0.02 | 0.00 | -0.10 | 0.06 | 0.07 | -0.01 | 0.05 | 0.09 | 0.07 | -. $243{ }^{*}$ | -. 170 | -0.11 | 0.15 | -. $192 \times$ | 1.00 |
| Daily Hrly Internet in Free Time | 0.15 | 0.12 | 0.10 | -0.05 | 0.07 | -0.13 | -0.11 | -0.11 | 0.14 | -0.13 | -.40** | -. 195 | -0.01 | -0.04 | -0.09 | . $38 *$ |

significant at the 0.01 level
*. Correlation of $r$-values is significant at the 0.05 level

When analyzing online shopping behavior, similar correlation analysis was performed shown in Table 10Error! Reference
source not found. Overall, it appears that on-line attitudes and behaviors had significantly more strong relationships than in-store variables. A clear theme of quality when shopping online for second-hand fashions is apparent. Shoppers browse and purchase what
they perceive as best on second-hand websites, recommended or not, while focusing on obtaining quality items. Consumers want to
purchase quality items when they get their 'money's worth', given they are conscious of their financial state. The more focused on quality shoppers they are, the more likely they are to have buyer's remorse from impulse buying. Although, this priority of finding quality goods makes shoppers less risk averse.

Another strong relationship seen is hedonistic attitudes and quality. Shopping on attractive and popular sites while engaging with social media can increase consumer enjoyment and increase website loyalty. This trend is somewhat anticipated given the higherquality fashions a consumer finds second-hand, the more satisfied they may be while shopping, and thus return to their favorite website. With the growth in second-hand websites, too many options leave the shopper confused and impatient to receive their goods in the mail. A strong trend towards higher social influence as enjoyment of social media increases is evident. Overall, it appears that the enjoyment of shopping online may stem from the social responsibility of the company and combined with increased social time by getting input from others.

Overall, a trend towards online second-hand apparel shopping being greatly influenced by social attitudes is evident. Those who are socially influenced are more likely to shop on popular second-hand websites, identify branded clothing as best for them, and engage in social media while shopping online. These correlations are somewhat expected given shoppers' preferences to get input and feedback from others when making purchase decisions. Although shopping at popular stores and buying branded clothing is preferred, shoppers are still focused on purchasing items they value. They prefer to save money if they have the choice and watch their spending. Overall, a preference for purchasing well-known brands and shopping on popular websites increases consumers' willingness
to shop on new sites, impulse buy and possibly regret that purchase later. Consumers who are indecisive about where to shop will buy brands and shop on popular websites. Note how this results is somewhat expected given that social validation and influence are components in the purchase decision-making process. Attitudes for desiring to purchase high-quality fashions are stronger when social influence is apparent. Perceived quality of an item may be determined by social input and status. Thus having help from friends' recommendations made by friends and others' would help in the overwhelming purchasing decision process. Notice a strong trend towards higher social influence as second-hand apparel shopping online is perceived as environmentally friendly. People who spend more time on-line in their free time are more inclined to shop on socially popular sites and buy brand name apparel. This result is somewhat expected given that time spent online is heavily intertwined with social media.

An additional prominent focus second-hand shoppers exhibit is a strong desire for value. Overall, a general trend of price comparing to save money and finding the best value while being financially savvy is evident. Generally, the more value focused second-hand shoppers are, the more likely they are to shop on new websites and purchase carelessly. Note that this trend is somewhat anticipated given shoppers are indecisive. A clear pattern shows that shopping for value increases the enjoyable aspects of shopping second-hand. Another prominent trend is evident among value-driven participants who perceive second-hand shopping online is ethically and environmentally preferred.

Another overarching theme in second-hand shopper attitudes is the perception of risk while on-line shopping. It appears that shopping on an unfamiliar site strongly correlates with feeling more comfortable if someone the shopper knows has used the site. In
addition impulse shopping and possible regret, along with indecisiveness correlates with shopping on an unfamiliar site. Overall, this suggests that higher perceived risks increase shopper's desire for social input, recommendations, and use of social media. Note how correlation strengths for perceived risks are weaker than the other themes for online shopping. This is somewhat expected given shoppers may not trust websites.

Shoppers appear to prefer recommended sites with stronger belief that second-hand clothing sites are good for the environment. Notably, the more shoppers view second-hand items as higher quality, the more they prefer the environmental and clothing origin benefits. It appears that increased environmental and ethical interest decreases shopper risk aversion and increases impulse buying.

It is interesting to note that socio-demographic variables exhibited no statistically significant correlations with other variables. Other interesting single correlations worth discussing include, shoppers want their packages to be delivered more quickly if they are focused on purchasing higher quality fashion items online. This result is somewhat expected given the instant gratification consumers desire. Also, purchasing from socially popular sites increases desire for faster delivery of goods. Increased search for value when second-hand apparel shopping can increase consumer confusion from too many options. Prompt delivery concerns increase when shopping online for second-hand fashions is perceived as risky. Those who are concerned about delivery time believe that secondhand shopping is good for the environment. They also like to know the apparel's origin. This may suggest that second-hand fashions are an alternative way to still consume fashion items while still being a 'green conscious' consumer. Those with shorter lengths of
residence time, search more for fashion items which are useful and reasonably priced. Shoppers who watch their expenditures moderately, correlate with more time spent online in their free time. This may be related to taking time to peruse websites and price compare to get a deal. An unexpected result was found where shoppers who buy without hesitation strongly correlate with being indecisive about which website to shop on.

Table 10 Correlation Values Between On-Line Behavioral and Attitude Variables

|  | Onlin e\$/wk | Buy <br> best/ <br> perfe <br> ct <br> choic <br> e | Gettin <br> g <br> good <br> quality <br> import <br> ant | High stan dard s | Onlin e store s high qualit y | Most <br> talke <br> d about sites good | Prefe <br> popu <br> lar <br> sites | Desig <br> ned <br> sites <br> offer <br> best | Wellknow n brand s best | Econ omic cons cious ness | Watch spen ding | Usefu I and good price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Online - \$/wk | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Buy best/perfect choice | . $41{ }^{* *}$ | 1 |  |  |  |  |  |  |  |  |  |  |
| Getting good quality important | . $38 * *$ | . $98 *$ | 1 |  |  |  |  |  |  |  |  |  |
| High standards | .41** | . $97{ }^{* *}$ | . $99^{* *}$ | 1 |  |  |  |  |  |  |  |  |
| Online stores high-quality | . 217 | . $94{ }^{* *}$ | . $96{ }^{* *}$ | . $96{ }^{* *}$ | 1 |  |  |  |  |  |  |  |
| Most talked about sites good | . 238 | . 90 ** | .92** | . $91{ }^{* *}$ | . $95 *$ | 1 |  |  |  |  |  |  |
| Prefer popular sites | .54** | . 90 ** | .92** | . $94{ }^{* *}$ | . 93 ** | . 96 ** | 1 |  |  |  |  |  |
| Designed sites offer best | .54** | . $94{ }^{* *}$ | .96** | . $97{ }^{* *}$ | . $95{ }^{* *}$ | . 93 ** | . 96 ** | 1 |  |  |  |  |
| Well-known brands best | .65** | . 93 ** | . $94 *$ | . $98{ }^{* *}$ | . $91{ }^{* *}$ | . $92{ }^{* *}$ | . $96{ }^{* *}$ | . $98{ }^{* *}$ | 1 |  |  |  |
| Economic consciousness | .47** | . $95^{* *}$ | . $97{ }^{* *}$ | . $96{ }^{* *}$ | . 93 ** | . 89 ** | . 92 ** | . $95{ }^{* *}$ | . $94 *$ | 1 |  |  |
| Watch spending | .47** | . $94{ }^{* *}$ | . $96{ }^{* *}$ | . $95^{* *}$ | . 93 ** | . $88{ }^{* *}$ | . $89{ }^{* *}$ | . 93 ** | . $91{ }^{* *}$ | . $97^{* *}$ | 1 |  |
| Useful and good price | .42** | . $94{ }^{* *}$ | . $96{ }^{* *}$ | . $98{ }^{* *}$ | . $95 *$ | . $90 *$ | . $93{ }^{* *}$ | . 96 ** | . $93{ }^{* *}$ | . $94^{* *}$ | . $96{ }^{* *}$ | 1 |
| Price compare to save | .40** | . $95^{* *}$ | .97** | . $98{ }^{* *}$ | . 95 ** | . $91{ }^{* *}$ | . $94{ }^{* *}$ | . $95{ }^{* *}$ | . $94{ }^{* *}$ | . $95{ }^{* *}$ | . $95{ }^{* *}$ | . $99^{* *}$ |
| Buy best value | . $38{ }^{* *}$ | . $96{ }^{* *}$ | . 99 ** | . $97{ }^{* *}$ | . $96{ }^{* *}$ | . $91{ }^{* *}$ | . $91{ }^{* *}$ | . $94{ }^{* *}$ | . $91{ }^{* *}$ | . $97{ }^{* *}$ | . $98{ }^{* *}$ | . $96{ }^{* *}$ |
| Buy from new sites | .511** | . $91{ }^{* *}$ | . $92 *$ | . $92{ }^{* *}$ | . $88{ }^{* *}$ | . 83 ** | . $87{ }^{* *}$ | . $87{ }^{* *}$ | . 86 ** | . $90{ }^{* *}$ | . $91{ }^{* *}$ | . $93{ }^{* *}$ |
| Buy if someone used site | .40** | . $94{ }^{* *}$ | .98** | . $98{ }^{* *}$ | . $97{ }^{* *}$ | . 92 ** | . $94 *$ | . 96 ** | . 93 ** | . $93{ }^{* *}$ | . 92 ** | .98** |
| Buy carelessly and regret | . $58{ }^{* *}$ | . $93{ }^{* *}$ | .92** | . 90 ** | . $87{ }^{* *}$ | . $87{ }^{* *}$ | . $87{ }^{* *}$ | . 92 ** | . $91{ }^{* *}$ | . 90 ** | . $86 *$ | . $88{ }^{* *}$ |
| Buy without hesitation | .43** | . 93 ** | . $92 *$ | . $93{ }^{* *}$ | . $94{ }^{* *}$ | . $91{ }^{* *}$ | . 90 ** | . 93 ** | . 90 ** | .89** | . $88{ }^{* *}$ | . $93{ }^{* *}$ |
| Indecisive what site to shop | .45** | . $94{ }^{* *}$ | . 93 ** | . 92 ** | . $91{ }^{* *}$ | . $88{ }^{* *}$ | . 90 ** | . $94 *$ | . 90 ** | . 90 ** | .89** | . $93{ }^{* *}$ |
| Shop at favourite site | .41** | . $91{ }^{* *}$ | .92** | . $92 *$ | . 93 ** | . $97{ }^{* *}$ | . $97{ }^{* *}$ | . 92 ** | . $91{ }^{* *}$ | . $86{ }^{* *}$ | . 82 ** | .89** |
| Enjoy shopping |  | . 92 ** | . $94{ }^{* *}$ | . $95{ }^{* *}$ | . $95{ }^{* *}$ | . $91{ }^{* *}$ | . $91{ }^{* *}$ | . $91{ }^{* *}$ | . $91{ }^{* *}$ | . 90 ** | . 89 ** | . $94{ }^{* *}$ |
| Like using social media | . 33 * | .89** | .89** | . $88{ }^{* *}$ | . $88 *$ | . $84{ }^{* *}$ | . $85{ }^{* *}$ | . 90 ** | . 90 ** | . $90{ }^{* *}$ | . $89{ }^{* *}$ | .85** |
| Take time shopping online | . $35^{*}$ | . $95^{* *}$ | . 93 ** | . $94{ }^{* *}$ | . $95{ }^{* *}$ | . $92{ }^{* *}$ | . 92 ** | . $93{ }^{* *}$ | . $91{ }^{* *}$ | . $88{ }^{* *}$ | . 86 ** | . $92{ }^{* *}$ |
| Advice from others | . 175 | . 92 ** | . 93 ** | . $92 \times$ | . 95 ** | . $94{ }^{* *}$ | . $91{ }^{* *}$ | . $91{ }^{* *}$ | .86** | . 90 ** | . $88{ }^{* *}$ | . $92 *$ |
| Steer in right direction | . 190 | . $93{ }^{* *}$ | . 93 ** | . 93 ** | . $95{ }^{* *}$ | . $95{ }^{* *}$ | . 92 ** | . $91{ }^{* *}$ | . $87{ }^{* *}$ | . 90 ** | . $88{ }^{* *}$ | . $93{ }^{* *}$ |
| Need assistance | .53** | . 93 ** | . 90 ** | . $91{ }^{* *}$ | . $88 * *$ | . 90 ** | . $93{ }^{* *}$ | . 90 ** | . $91{ }^{* *}$ | .89** | . $84 *$ | .89** |
| Delivery time concerns | . 43 ** | . $94{ }^{* *}$ | . $96{ }^{* *}$ | . $94{ }^{* *}$ | . $96{ }^{* *}$ | . $92{ }^{* *}$ | .93** | . $95 *$ | . $92{ }^{* *}$ | . $97{ }^{* *}$ | . $93{ }^{* *}$ | . $92{ }^{* *}$ |
| Friends recommend sites | . 127 | . $95^{* *}$ | . $97{ }^{* *}$ | . $98{ }^{* *}$ | . $98{ }^{* *}$ | . 93 ** | . $93{ }^{* *}$ | . $97{ }^{* *}$ | . 93 ** | . $93{ }^{* *}$ | . $94{ }^{* *}$ | . $98{ }^{* *}$ |
| Options cause confusion | .61** | . 93 ** | . 92 ** | . 92 ** | . 90 ** | . 90 ** | . $94{ }^{* *}$ | . $94{ }^{* *}$ | . $95{ }^{* *}$ | .87** | . 86 ** | . $91{ }^{* *}$ |
| Environmental impacts | . $37{ }^{* *}$ | . $94{ }^{* *}$ | . $97{ }^{* *}$ | . 96 ** | . 95 ** | . 93 ** | . 93 ** | . 92 ** | . $91{ }^{* *}$ | . $95{ }^{* *}$ | .95** | . $95{ }^{* *}$ |
| Apparel origin | . 217 | . $90 *$ | . 93 ** | . $91{ }^{* *}$ | . $94 *$ | . $91{ }^{* *}$ | . 90 ** | . $87{ }^{* *}$ | . $84{ }^{* *}$ | . $89{ }^{* *}$ | . 92 ** | . 93 ** |
| Age | -. 021 | -. 181 | -. 173 | -. 186 | -. 177 | -. 155 | -. 160 | -. 192 | -. 171 | -. 168 | -. 150 | -. 192 |
| Personal Income | -. 085 | -. 058 | -. 039 | -. 063 | -. 038 | -. 018 | -. 034 | -. 076 | -. 069 | -. 070 | -. 066 | -. 077 |

### 0.01 level

*. Correlation of r-values is significant at the 0.05 level

|  | Price comp are to save | Buy best value | Buy from new sites | Buy if <br> some <br> one <br> used <br> site | Buy carel essly and regret | Buy witho ut hesit ation | Indec isive what site to shop | Sho <br> p at <br> favo <br> urite <br> site | Enjo <br> y <br> shop <br> ping | Like using social media | Take time shop ping onlin e |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Price compare to save | 1 |  |  |  |  |  |  |  |  |  |  |
| Buy best value | . $97 *$ | 1 |  |  |  |  |  |  |  |  |  |
| Buy from new sites | . 95 ** | .95** | 1 |  |  |  |  |  |  |  |  |
| Buy if someone used site | . $98{ }^{* *}$ | . 96 ** | . $91{ }^{* *}$ | 1 |  |  |  |  |  |  |  |
| Buy carelessly and regret | .89** | .89** | .83** | . $91{ }^{* *}$ | 1 |  |  |  |  |  |  |
| Buy without hesitation | . 92 ** | . $91{ }^{* *}$ | . $88{ }^{* *}$ | .93** | . $94 *$ | 1 |  |  |  |  |  |
| Indecisive what site to shop | . 93 ** | . 92 ** | . $88{ }^{* *}$ | . 92 ** | . 93 ** | . $95{ }^{* *}$ | 1 |  |  |  |  |
| Shop at favourite site | . $91{ }^{* *}$ | .89** | . 83 ** | . $94 *$ | .89** | . 93 ** | .88** | 1 |  |  |  |
| Enjoy shopping | . 96 ** | . $95 *$ | . 93 ** | . 96 ** | . $82 \times$ | . $87{ }^{* *}$ | .87** | .89** | 1 |  |  |
| Like using social media | . $86 *$ | .88** | . $77 *$ | .85** | . $77 \times$ | .78** | .79** | . $81{ }^{* *}$ | . 86 ** | 1 |  |
| Take time shopping online | . $94 *$ | . 92 | . $88{ }^{* *}$ | . $94 *$ | . $91{ }^{* *}$ | . 96 ** | .96** | .95** | . $91{ }^{* *}$ | .85** | 1 |
| Advice from others | . 93 ** | . 92 ** | . $87{ }^{* *}$ | . $93{ }^{* *}$ | . $90 \times$ | . $96{ }^{* *}$ | .93** | . 93 ** | . $89 \times$ | . $78{ }^{* *}$ | . 96 ** |
| Steer in right direction | . $94 *$ | . 92 ** | . $87{ }^{* *}$ | . 93 ** | . 90 | . $96 *$ | . 92 ** | .94** | . 89 ** | .79** | . $96{ }^{* *}$ |
| Need assistance | . 92 ** | . 89 ** | . $90{ }^{* *}$ | . $91{ }^{* *}$ | . $91{ }^{*}$ | . 93 ** | .92** | .94** | . $87{ }^{* *}$ | . 78 ** | . $94{ }^{* *}$ |
| Delivery time concerns | . 92 ** | . 96 * | . $89{ }^{*}$ | . $94 *$ | .90** | . 92 ** | . 90 ** | . 92 ** | . 90 ** | . $89{ }^{*}$ | . 93 ** |
| Friends recommend sites | . $97{ }^{* *}$ | . $96{ }^{* *}$ | .89** | . $97{ }^{* *}$ | . 92 | .96** | . $96{ }^{* *}$ | .92** | . 93 ** | . $84{ }^{* *}$ | .95** |
| Options cause confusion | . $91{ }^{* *}$ | .89** | .85** | . 92 ** | . 90 | . $91{ }^{* *}$ | . $94{ }^{* *}$ | . 923 * | . 88 ** | .83** | . $94 *$ |
| Environmental impacts | . $95{ }^{* *}$ | . $97{ }^{*}$ | . 93 ** | . 96 ** | . $85 *$ | . 89 ** | . $87{ }^{* *}$ | . $92{ }^{* *}$ | . $94{ }^{* *}$ | . $88{ }^{* *}$ | . $91{ }^{* *}$ |
| Apparel origin | . $94 *$ | . 96 ** | . 93 ** | .92** | . $79{ }^{* *}$ | . $87{ }^{* *}$ | . $88{ }^{* *}$ | . 88 ** | . 92 ** | .81** | .90** |
| Age | -. 183 | -. 170 | -. 152 | -. 160 | -. 188 | -. 199 | -. 201 | -. 132 | -. 147 | -. 137 | -. 179 |
| Personal Income | -. 043 | -. 042 | -. 055 | -. 010 | -. 083 | -. 096 | -. 060 | . 016 | -. 003 | -. 017 | -. 028 |
| Household Income | -. 130 | -. 152 | -. 174 | -. 075 | -. 132 | -. 164 | -. 146 | -. 022 | -. 091 | -. 061 | -. 089 |
| Education | -. 011 | . 028 | -. 055 | . 013 | . 017 | . 057 | . 033 | . 026 | -. 015 | . 074 | . 054 |
| Length of Time in Residence | -. 196 | -. 197 | -. $218^{*}$ | -. 160 | -. 156 | -. 206 | -. $240{ }^{*}$ | -. 160 | -. 173 | -. 126 | -. 206 |
| Daily Hrly Internet at Work | -. 006 | . 047 | -. 017 | . 013 | . 007 | . 011 | . 035 | . 028 | . 015 | . 051 | . 001 |
| Daily Hrly Internet in Free Time | . 132 | . 187 | . 174 | . 132 | . $242 *$ | . 193 | . 159 | . 200 | . 113 | . 154 | . 137 |

**. Correlation of r-values is significant at the

### 0.01 level

*. Correlation of $r$-values is significant at the 0.05 level

|  | Advice from others | Steer in right directi on | Need assista nce | Deliver y time concer ns | Friend <br> s <br> recom <br> mend <br> sites | Optio ns cause confu sion | Envir <br> onme <br> ntal <br> impa <br> cts | Appar el origin | Age |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Advice from others | 1 |  |  |  |  |  |  |  |  |
| Steer in right direction | $1.0{ }^{*}$ | 1 |  |  |  |  |  |  |  |
| Need assistance | . $93 *$ | . $94 *$ | 1 |  |  |  |  |  |  |
| Delivery time concerns | . 92 ** | . 91 ** | . 90 ** | 1 |  |  |  |  |  |
| Friends recommend sites | . 96 ** | . $95 *$ | .89** | . 92 ** | 1 |  |  |  |  |
| Options cause confusion | . $88{ }^{* *}$ | . 89 ** | . $94 *$ | .89** | . $92 \times$ | 1 |  |  |  |
| Environmental impacts | . 90 * | . 91 ** | .90* | .95** | . 92 ** | . $90 *$ | 1 |  |  |
| Apparel origin | . 92 ** | . 93 ** | . $88{ }^{* *}$ | .90* | . 92 ** | . $87 *$ | . 96 ** | 1 |  |
| Age | -. $205^{*}$ | -. 201 | -. 178 | -. 173 | -. 203 | -. 157 | -. 136 | -. 147 | 1 |
| Personal Income | -. 057 | -. 057 | -. 060 | -. 055 | -. 049 | -. 034 | -. 015 | -. 005 | . $438{ }^{* *}$ |
| Household Income | -. 136 | -. 133 | -. 124 | -. 149 | -. 130 | -. 095 | -. 111 | -. 132 | . $245{ }^{* *}$ |
| Education | . 074 | . 063 | -. 008 | . 056 | . 077 | . 026 | . 045 | . 071 | -. 158 |
| Length of Time in Residence | -. 200 | -. 205 | -. 240 | -.211* | -. 176 | -. $254{ }^{*}$ | -. 205 | -. $251{ }^{*}$ | .290** |
| Daily Hrly Internet at Work | . 010 | . 008 | -. 015 | . 079 | . 057 | . 058 | . 052 | . 049 | -. 243 ** |
| Daily Hrly Internet in Free Time | . 150 | . 158 | . $217{ }^{*}$ | . $259{ }^{*}$ | . 107 | . 193 | . 189 | . 114 | -.398** |

**. Correlation of r-values is significant at the 0.01 level
*. Correlation of $r$-values is significant at the 0.05 level

An examination between means of second-hand apparel shopping socio-demographics is shown in Table 11 through Table 13 for both in-store and online results. The r-values in Table 11 are correlation coefficients used to determine statistical significance by linear regression analysis. One-Way ANOVA tests were completed on Table 11 and Table 12. Those with higher levels of education tended to spend significantly less time shopping online ( $p=.05$ ), and those with lower personal income spend more money in-store ( $p$ $=.02$ ). Shoppers with lower income spent a mean of $\$ 54.50$ per week in-store (SD $\$ 52.74, p=0.2$ ), while respondents with higher income spent a mean of $\$ 23.60$ per week in-store (SD $\$ 19.80$ ). Household income exhibits strong statistical significance with both instore and online weekly expenditures. However in-store spending ( $p=0.2$ ) is more than two times higher as online spending $(p=0.3)$. Overall, it appears that in-store spending is significantly higher in Cambridge than other cities ( $p=.03$ ). A trend towards higher online spending in Kitchener is evident. This is also somewhat expected given different income levels for various regions with Waterloo being the highest. A general trend towards the highest percent of money spent on shoes ( $p=.04$ ) by shoppers who have more dependents is evident. Those with no dependents exhibited a weekly spending mean of $\$ 16.16$, while those with dependents had a mean of $\$ 23.21$. Overall, average shoe spending was four times as much as clothing and eight times as much as accessories. Note how this result is somewhat expected given the number of shoes Canadians need for four distinct seasons and everyday wear and tear.

Table 11 Correlation Values between Money Spent and Socio-Demographics

|  | Online \$/wk | In-Stores \$/wk | Length of Time Living in Residence | Education | Number <br> of Children | Style | Age | Personal Income | Household Income |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Online \$/wk | 1 |  |  |  |  |  |  |  |  |
| In-Stores \$/wk | . $45 *$ | 1 |  |  |  |  |  |  |  |
| Length of Time Living in Residence | -0.10 | -0.19 | 1 |  |  |  |  |  |  |
| Education | -0.22 | -0.11 | $-.20 *$ | 1 |  |  |  |  |  |
| Number of Children | 0.05 | -0.15 | . $34 *$ | $-.20 *$ | 1 |  |  |  |  |
| Age | -0.02 | -0.15 | . $31{ }^{* *}$ | -0.16 | . $74 *$ | $-.19 *$ | 1 |  |  |
| Personal Income | -0.04 | -. 25 * | . $23 *$ | 0.17 | . $37 *$ | -0.17 | . $377 *$ | 1 |  |
| Household Income | -0.13 | -0.17 | . $38 *$ | 0.00 | . $23 *$ | -0.01 | . $22 *$ | .50* | 1 |

**. Correlation of r -values is significant at the 0.01 level
*. Correlation of r -values is significant at the 0.05 level

Table 12 Hours Spent Second-Hand Apparel Shopping Per Week by Education Level and Household Income


* Denotes differences that were
statistically different when tested at 0.05
level of significance
Table 13 Money Spent Second-Hand
Apparel Shopping Per Week by Personal Income and City of Residence

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### 6.5. Unique Groupings of Second-Hand Shoppers

Principle Component Analysis (PCA) was chosen to explore second-hand apparel shopper groups because it analyzes a large number of interrelated variables, and decomposes the data to get linear variates, which contribute to unique components of shopper archetypes. This type of analysis is suitable for the dichotomous variables present in Table 14, as well as other variable types seen in Table 15, Table 16, and

Table 17. The limits of PCA assume all variance is common and assign all variables a communality of one. Also, following Kaiser's criterion of eliminating components with a value below one results in not all data variance being explained. Researchers may also execute factor rotation if values do not have high loading values to identify maximally different groupings, but this technique was not applied in this analysis.

PCA was applied to try to identity groups of the second-hand market that tend to shop at the same stores, shown in Table 14. Although some unique groups had Eigenvalues above one, the first three exhibited the most interpretability. The first group explained $18 \%$ of variance and appeared to be those who tended to shop at more frugal locations such as Value Village, Salvation Army, etc. These shoppers can be called "Dollar Defaulters", who are characterized by utilitarian motivations where they are focused solely on finding the cheapest deals around and brand loyalty is not important (Chaney 2012). The second group explaining $10 \%$ of variance tend to shop at the higher-end second hand boutiques such as Le Prix, StylFrugal, etc. This group exhibited characteristics of "Opportunistic Adventurers" who want to stay trendy and have a minimum quality threshold (Chaney 2012). Group 3 explained $8 \%$ of variance and tends to find deals on Kijiji and Twice is Nice and Twice the Man, while staying away from White Tiger. Shoppers with an affinity for Kijiji, represent the "Mature Enthusiasts" consumer tribe, who frequently purchase second-hand goods on the platform (Durif et al. 2015). Kijiji has clothing, shoes and fashion accessories as the most widely traded goods on the platform (Durif et al. 2015). The demographic which shops at Twice is Nice and Twice the Man is generally mature women which aligns with the third unique group of consumers. The application of Chaney's shopper archetypes to components in Table 14

Principal Component Matrix for Shopper's Second-Hand Store PreferencesTable 14 was matched with second-hand clothing store product offerings, prices, type of second-hand apparel store, social popularity, and location. The characteristics associated with the individual shopper archetypes were matched appropriately with the factors inherent in second-hand apparel shop groupings. This aids in identifying what groups of shoppers prefer which selection of stores, given that consumer attitudes and priorities can determine where they shop most frequently.

Table 14 Principal Component Matrix for Shopper's Second-Hand Store Preferences

| Second Hand Stores | Unique Groups |  |  |
| :---: | :---: | :---: | :---: |
|  | "Dollar Defaulters" $\begin{gathered} 1(\mathrm{var}=18 \%, \\ \lambda=3.3) \end{gathered}$ | "Opportunistic Adventurers" $\begin{gathered} 2(\operatorname{var}=12 \%, \\ \lambda=2.2) \end{gathered}$ | "Mature Enthusiasts" $3 \text { (var=8\%, } \lambda=1.4)$ |
| Value Village | . 45 |  |  |
| Talize | . 62 |  |  |
| Bibles For Missions | . 70 |  |  |
| Salvation Army | . 70 |  |  |
| Thrift on Kent | . 47 |  |  |
| KW New \& Used | . 62 |  |  |
| Goodwill | . 61 |  |  |
| Kijiji |  |  | . 51 |
| Ebay |  |  |  |
| Le Prix |  | . 48 |  |
| Lustre \& Oak |  | . 58 |  |
| Meow Boutique |  |  |  |
| Twice is Nice/Twice the Man |  |  | . 50 |
| Carousel Clothing | . 58 |  |  |
| Plato's Closet |  | . 51 |  |
| StylFrugal |  | . 72 |  |
| White Tiger |  |  | -. 50 |
| Out of the Past | . 43 | . 61 |  |

Bolded values denote values that were statistically significant at the 0.05 level Var denotes total variance explained $\lambda$ denotes the eigenvalues which indicate substantive importance of that factor

An examination of shopper's socio-demographic variables and second-hand store preferences by PCA is shown in Table 15. This table further explores the relationships between consumers and stores they prefer (from Table 14) by adding the sociodemographic variables to the PCA in an effort to better explain what drives consumer store preferences. Group 1 represents $18 \%$ of variance and is characterized by shoppers who spend some time shopping online, and even more time shopping in-store. These
"Dollar Defaulters" (Chaney 2012) spend most of their money on clothing compared to other fashion goods and have lower household income. They tend to shop at well-known stores with charitable involvement and multiple locations. One exception to this trend is KW New \& Used. This may be because the décor is unattractive and there is a lack of parking.

The next most prominent group embodies $10 \%$ of variance and is characterized by younger shoppers with less overall income who have lived in their home for a short time. These "Opportunistic Adventurers" (Chaney 2012) favor Lustre \& Oak and StylFrugal more than other stores they shop at and avoid Thrift on Kent and Carousel Clothing. This second grouping shop at boutique stores that market trendy fashions towards young adult consumers. Note how these relationships are somewhat expected given the first group is mostly shopping at commonly known and boutique second-hand stores.

The third most prominent group which describes $8 \%$ of variance are older, with more money and have lived in their home for a longer period of time. Shoppers identified as "Mature Enthusiasts" (Durif et al. 2015) in Group 3 avoid shopping online and enjoy shopping at Lustre \& Oak, Twice is Nice and StylFrugal. These traits exhibit shoppers who desire to dress fashionably that may be less tech savvy or desire hedonistic qualities of shopping in-store.

Group 4 represent $6 \%$ of variance, which is characterized by younger male consumers with more household income who spend most of their money on accessories. Note that it the only group that has a strong relationship between gender and store preference. This group can be called the "Strategic Savers" (Chaney 2012) who use custom suggestions to get advice on how to save money on their favorite brands. These
shoppers like to shop at Le Prix, White Tiger and Out of the Past, while avoiding StylFrugal and Twice is Nice. This result is somewhat expected given that the preferred stores carry only female fashions, and these male shoppers buy mostly accessories which are a common and safe gift choice for females.

Another unique grouping that describes $6 \%$ of variance is Group 5, which is characterized by generally shopping very little and spending most of their second-hand apparel shopping expenditures on shoes. These "Savvy Passionistas" (Chaney 2012) are trendsetters and shop indulgently by buying their favorite brands. It appears that these shoppers like Thrift on Kent, Le Prix, Meow Boutique and eBay. Note how these trends are somewhat expected given that the preferred stores offer high-quality and designer items, and shoppers may selectively look for designer shoes.

Group 6 exhibits another $6 \%$ of variance and is described as shoppers with higher personal income who spend most of their money on clothing. This unique group can be called "Quality Devotees" (Chaney 2012) and they are focused on finding the best quality items and will spare no time or expense to attain this. They like Value Village, Twice is Nice, Kijiji, and eBay, while avoiding Bibles for Missions, Thrift on Kent and KW New \& Used. Note how the results show that stores that are avoided are all within a one kilometer radius in Kitchener. This may be because of a lack of free parking in the area.

The seventh unique group explains 5\% of variance characterized by mostly males who spend more money on shoes, have more income and higher education. They have not lived in their residence for a long time and notably avoid Twice is Nice, Carousel Clothing and White Tiger. Note how this cluster has no significant store preferences. This group can be called the "Efficient Sprinters" who focus solely on saving time and
simplifying the buying process without much consideration of the cost (Chaney 2012).
The general trends in Table 15 are similar to the results in Table 14, which highlights little difference in second-hand store preference on from socio-demographic variables.

Table 15 Principal Component Matrix for Second-Hand Apparel Shopper's Store Preferences, with added Socio-Demographics Variables

|  | Unique Groups |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Demographics and Stores | "Dollar Defaulters" 1 (var=18\%, $\lambda=5.2$ ) | "Opportunistic Adventurers" $\begin{gathered} 2(\text { var }=10 \%, \\ \lambda=2.9) \end{gathered}$ | "Mature <br> Enthusiasts" <br> 3 (var=8\%, <br> $\lambda=2.2$ ) | "Strategic Savers" 4 (var=6\%, $\lambda=1.7$ ) | "Savvy <br> Passionistas" <br> 5 (var=6\%, <br> $\lambda=1.6$ ) | "Quality <br> Devotees" <br> 6 (var=6\%, <br> $\lambda=1.6$ ) | $\begin{gathered} \text { "Efficient } \\ \text { Sprinters" } \\ 7 \\ (\mathrm{var}=5 \% \text {, } \\ \lambda=1.5) \\ \hline \end{gathered}$ |
| Online - Hr/wk | 0.55 |  |  |  |  |  |  |
| In-Stores - Hr/wk | 0.71 |  |  |  |  |  |  |
| Shoes - \% \$ Spent |  |  |  |  | 0.66 |  |  |
| Clothing - \% \$ Spent | 0.46 |  |  |  |  | 0.60 |  |
| Accessories - \% \$ |  |  |  | 0.52 |  |  |  |
| Spent |  |  |  |  |  |  |  |
| Gender |  |  |  |  |  |  | -0.43 |
| Age |  | -0.56 | 0.44 |  |  |  |  |
| Personal Income |  | -0.48 | 0.47 |  |  |  | 0.41 |
| Household Income |  |  | 0.45 | 0.42 |  |  |  |
| Education |  |  |  |  |  |  | 0.48 |
| Length of Time |  | -0.43 |  |  |  |  |  |
| Living in Residence |  |  |  |  |  |  |  |
| Value Village | 0.50 |  |  |  |  |  |  |
| Talize | 0.66 |  |  |  |  |  |  |
| Bibles For Missions | 0.72 |  |  |  |  |  |  |
| Salvation Army | 0.78 |  |  |  |  |  |  |
| Thrift on Kent | 0.55 |  |  |  | 0.52 |  |  |
| KW New \& Used | 0.67 |  |  |  |  |  |  |
| Goodwill | 0.68 |  |  |  |  |  |  |
| Kijiji | 0.42 |  |  |  |  | 0.49 |  |
| Ebay |  |  | -0.44 |  |  | 0.48 |  |
| Le Prix |  | 0.48 |  |  |  |  |  |
| Lustre \& Oak |  | 0.61 | 0.43 |  |  |  |  |
| Meow Boutique |  |  |  |  | 0.47 |  |  |
| Twice is Nice |  |  | 0.54 |  |  |  |  |
| Carousel Clothing | 0.59 |  |  |  |  |  |  |
| Plato's Closet |  | 0.55 |  |  |  |  |  |
| StylFrugal |  | 0.70 | 0.51 |  |  |  |  |
| White Tiger |  |  |  | 0.67 |  |  | -0.41 |
| Out of the Past | 0.40 | 0.52 |  | 0.46 |  |  |  |

Bolded values denote values that were statistically significant at the 0.05 level
Var denotes total variance explained
$\lambda$ denotes the eigenvalues which indicate substantive importance of that factor

A PCA analysis examination of in-store attitudes and socio-demographics of shoppers is shown in .

Table 16. The methods used to determine the unique group names developed from the results were by assessing characteristics evident in each component group of secondhand apparel shopper attitudes and behaviors, such as social image and quality focused while searching for value by price comparing. These traits were then summarized by a few words, in this case, "Social Valuers".

Unique Group 1 can be called "Social Valuers" who exhibit $13 \%$ of total variance and are moderately affected by social influencers. They are characterized by being more willing to shop at a store because their friends have shopped there previously, and they favour being steered in the right direction, receiving advice and assistance from others when making purchase decisions. These Group 1 shoppers search for value, avoid purchasing shoes, will drive to a store they prefer and like knowing the origin of the apparel, and recognize second-hand apparel shopping is sustainable.

Group 2 explained $12 \%$ of variance and are categorised as shoppers who view second-hand apparel shopping as one of life's enjoyable activities and have moderately high standards and expectations for the second-hand fashions they buy. These shoppers can be called "Budget Fashion Conscious" who are confident in their choices since they don't use advice from others and don't want to be steered in any direction for what to purchase, but like to have company when shopping. They are conscious shoppers given they like that second-hand apparel shopping reuses resources, and want to know the origin of the fashions.

The third group describes $9 \%$ of total variance and is characterized by shoppers who prioritize price comparing among shops in order to buy lower priced apparel, and spend large amounts of time and money shopping. With their appreciation of second-
hand fashions and higher spending, this group is called "Fashion Splurgers. One unexpected trend is that Group 3 shoppers may move frequently in shorter times in each of their residences.

Group 4 represents $8 \%$ of variance and is characterized by shoppers who like nicely decorated stores and prioritize buying apparel they find valuable. These shoppers can be called "Logical Seekers" who have higher personal income and appreciate nice décor in stores. They are conscious about their money and purchase fashion items based on value.

Shoppers in the fifth group comprise $7 \%$ of variance and they can be described as those who avoid shopping at unfamiliar stores and prefer shopping at second-hand stores most popular in their social group. These shoppers are older and have lived in their homes for longer. They tend to be comfortable with where they shop now and are not looking for change. This group can be identified as "Decisive Pragmatics" given traits such as not hesitating when purchasing.

Group 6 consumers represent $5 \%$ of variance and are typically younger, have higher personal income and more education. These "Label Queens" perceive branded apparel as best for them and are somewhat more willing to buy from a store if someone they know has shopped there, given they can be indecisive about where to shop. These shoppers avoid using social media when shopping and will drive to their favorite stores.

Table 16 Principal Component Matrix Groupings of In-Store Shopping Attitudes and Socio-Demographics

| In-store Attitudes and Socio-Demographic Variables | Unique Groups |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | "Social Valuers" 1 (var=13\%, $\lambda=5.6$ ) | "Budget Fashion Conscious" 2 (var=12\%, $\lambda=5.3$ ) | $\begin{gathered} \hline \text { "Fashion } \\ \text { Splurgers" } \\ 3 \\ (\text { var }=9 \%, \\ \lambda=4.1) \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { "Logical } \\ \text { Seekers" } \\ 4 \\ (\operatorname{var}=8 \%, \\ \lambda=3.7) \\ \hline \end{gathered}$ | ```"Decisive Pragmatics" 5 (var=7%, \lambda=3.2)``` | "Label Queens" $\begin{gathered} 6(\text { var }=5 \%, \\ \lambda=2.4) \end{gathered}$ |
| Online - Hr/wk | -0.43 |  | 0.72 |  |  |  |
| In-Stores - Hr/wk |  | -0.40 | 0.67 |  |  |  |
| Online - \$/wk | -0.46 |  | 0.64 |  |  |  |
| In-Stores - \$/wk |  |  | 0.74 |  |  |  |
| Shoes - \% \$ Spent | -0.51 |  |  |  |  |  |
| Clothing - \% \$ Spent |  |  |  |  |  |  |
| Accessories - \% \$ Spent |  |  |  |  |  |  |
| Gender |  |  |  |  |  | -0.41 |
| Age |  | 0.49 |  |  | 0.56 |  |
| Personal Income |  | 0.43 |  | 0.41 | 0.48 |  |
| Household Income |  | 0.45 |  |  |  |  |
| Education |  |  |  |  |  | 0.57 |
| Length of Time Living in Residence |  |  | -0.55 |  | 0.50 |  |
| When purchasing apparel I try to get the very best or perfect choice. |  |  |  | 0.47 |  |  |
| Getting very good quality is very important to me. |  |  |  | 0.41 |  |  |
| My standards and expectations for second-hand fashions I buy are very high. |  | 0.51 |  | 0.46 |  |  |
| Second-hand stores have high-quality apparel. |  | 0.42 |  |  |  |  |
| The most talked about stores are usually very good choices. |  |  |  |  | 0.41 |  |

I prefer buying second-hand apparel from the most popular stores in my social group.

Nicely decorated and boutique stores offer me the best apparel.

Well-known branded apparel (second-hand) are best for me.

I am conscious about my economic situation when shopping in-store.
I look carefully to find the best value for my money.
I always buy apparel that are useful to me and are of reasonable price.

I am willing to spend time to compare prices among shops in order to buy lower priced apparel.
I buy apparel with the best value for my money
I don't mind buying from stores from which I never bought before.

I would be more willing to buy from a store if someone I know has bought something from it. I usually buy without hesitation.

Sometimes it's hard to choose which stores to shop at.
I have favorite stores from which I buy over and over.
Second-hand shopping is one of the enjoyable activities in my life.

I enjoy being able to 'check-in', hashtag or Instagram when I am in a store.
0.50
0.53
0.41
-0.52


Bolded values denote values that were statistically significant at the 0.05 level Var denotes total variance explained
$\lambda$ denotes the eigenvalues which indicate substantive importance of that factor

A PCA of online shopping attitudes and socio-demographic variables is shown in

Table 17. The first unique group, coined 'Social Valuers', represents 35\% of variance and are influenced strongly by quality, concerns with image and social standing. This group does not watch spending but still prioritize value and will price compare. Social influence and preferring to take time when shopping in-store indicate heuristic shoppers. Social influence may help choose which sites to shop on and aid in purchase decisions.

The 'Budget Fashion Conscious' group accounts for $18 \%$ of variance and encompasses younger shoppers who do not buy accessories as much and are not buying only branded apparel. Sometimes these shoppers are price conscious and will price compare to pay less. However, these shoppers want high value fashions and are open to shopping on unfamiliar sites. Sometimes they enjoy second-hand apparel shopping as a key life activity and do not like using social media when shopping online. Group 2 are somewhat environmentally conscious and care where the apparel comes from. Their aversion to social media is somewhat unexpected given that the group is represented by younger shoppers who as McCormick and Livett note are heavy users of social networking sites (2012).

The third group of 'Label Queens' represents 13\% of variance and these shoppers spend most of their money on shoes and clothing, and sometimes have higher household income and enjoy second-hand apparel shopping. They have lived in their house longer than others and are not usually conscious of their economic situation when shopping. Note how these results are somewhat anticipated given that people who have more money and are settled in their residence may worry less about finances and spend money on their wardrobe.

Shoppers in the 'Fashion Splurgers' group account for $11 \%$ of variance and these shoppers do not spend a lot of time shopping online and their purchases are mostly made up of clothing. These shoppers have higher levels of education and sometimes want to get very good quality items regardless of if they are branded apparel or not. They do not really think about their economic situation when shopping second-hand online and like that second-hand apparel shopping is good for the environment. These findings are to be expected. Members of this group have higher education are more likely to have a higher income and thus are not as economically conscious about their levels of spending when second-hand apparel shopping (Manski 1992; Statistics Canada 2011a).

The shoppers who are grouped into 'Decisive Pragmatics' explain $10 \%$ of variance and spend some time shopping online and even more time shopping in-store. These shoppers just want their apparel, which is mostly clothing, delivered promptly. These shoppers appear to be driven mostly by utilitarian purposes.

The final unique grouping of 'Logical Seekers' represents $6 \%$ of variance and characterizes male shoppers with higher overall income, but who are smart with their money and shop for value. They like to use social media and take their time while shopping online.

Table 17 Principal Component Matrix Groupings for Online Shopping Attitudes and Socio-Demographics

| Online Attitudes \& SocioDemographic Variables | Unique Groups |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | "Social Valuers" 1 (var=35\%, $\lambda=$ 13.1) | $\begin{gathered} \text { "Budget Fashion } \\ \text { Conscious" } \\ 2(\operatorname{var}=18 \%, \\ \lambda=7.0) \end{gathered}$ | "Label Queens" $\begin{gathered} 3(\operatorname{var}=13 \% . \\ \lambda=5.3) \end{gathered}$ | "Fashion Splurgers" $4(\mathrm{var}=11 \%$, $\lambda=4.8$ ) | "Decisive Pragmatics" $5 \text { (var=10\% }$ $\lambda=3.7)$ | "Logical Seekers" 6 (var=6\%, $\lambda=2.4)$ |
| Online - Hr/wk | 0.47 | 0.09 | 0.21 | -0.54 | 0.56 | -0.24 |
| In-Stores - Hr/wk | -0.37 | 0.27 | 0.33 | 0.25 | 0.73 | -0.16 |
| Shoes - \% \$ Spent | -0.02 | 0.20 | 0.95 | -0.06 | 0.06 | -0.19 |
| Clothing - \% \$ Spent | 0.01 | 0.07 | 0.71 | 0.61 | 0.20 | -0.06 |
| Accessories - \% \$ Spent | 0.43 | -0.74 | 0.36 | -0.14 | 0.19 | 0.24 |
| Gender | -0.12 | -0.57 | -0.31 | 0.41 | 0.47 | 0.39 |
| Age | -0.78 | 0.09 | 0.36 | 0.41 | -0.06 | -0.18 |
| Personal Income | -0.62 | 0.22 | 0.36 | 0.26 | -0.40 | 0.45 |
| Household Income | -0.04 | -0.46 | 0.59 | 0.14 | -0.35 | 0.52 |
| Education | -0.09 | -0.26 | -0.31 | 0.83 | 0.08 | 0.23 |
| Length of Time Living in Residence | -0.44 | -0.43 | 0.68 | -0.11 | -0.32 | 0.15 |
| My standards and expectations for second-hand fashions I buy are very high. | 0.71 | 0.28 | 0.36 | -0.28 | 0.27 | 0.27 |
| Getting very good quality is very important to me. | 0.66 | 0.13 | 0.26 | 0.51 | 0.35 | 0.05 |
| Second-hand online stores have high-quality apparel. | 0.59 | -0.33 | 0.15 | 0.47 | -0.03 | -0.39 |
| I prefer buying second-hand apparel from the most popular Web sites in my social group. | 0.79 | -0.17 | -0.02 | 0.04 | 0.39 | -0.09 |


| Nicely designed and specialty Web sites offer me the best apparel. | 0.68 | -0.48 | 0.12 | -0.38 | 0.29 | 0.05 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Well-known branded apparel (second-hand) are best for me. | 0.60 | -0.52 | 0.24 | -0.54 | 0.06 | -0.11 |
| I am conscious about my economic situation when shopping online. | -0.05 | -0.25 | -0.52 | -0.52 | 0.46 | 0.32 |
| I carefully watch how much I spend. | -0.57 | 0.41 | -0.36 | -0.04 | 0.05 | 0.32 |
| I always buy apparel that are useful to me and are of reasonable price. | 0.63 | 0.57 | 0.19 | -0.08 | 0.26 | 0.30 |
| I am willing to spend time to compare prices among Web sites in order to buy lower priced apparel. | 0.59 | 0.55 | 0.21 | -0.33 | -0.03 | 0.37 |
| I buy apparel with the best value for my money. | -0.18 | 0.87 | -0.35 | -0.15 | 0.09 | 0.21 |
|  | 0.04 | 0.94 | -0.04 | -0.22 | -0.16 | -0.06 |
| Websites from which I never bought before. |  |  |  |  |  |  |
| I would be more willing to buy from a Website if someone I know has bought something from it. | 0.71 0.58 | 0.37 0.45 | 0.36 0.14 | -0.09 0.15 | 0.24 0.38 | 0.22 |
| Often I make careless purchases I later wish I had not. | 0.58 | -0.45 | -0.14 | -0.15 | -0.38 | -0.24 |
| I usually buy without hesitation. | 0.86 | 0.01 | 0.03 | 0.41 | -0.23 | -0.11 |
| Sometimes it is hard to choose which Website to shop on. | 0.73 | 0.14 | -0.46 | -0.22 | -0.41 | 0.11 |
| I have favorite second-hand Websites from which I buy over and over. | 0.82 | -0.26 | 0.20 | 0.46 | 0.02 | -0.06 |
| Online second-hand shopping is one of the enjoyable | 0.30 | 0.57 | 0.61 | -0.35 | -0.01 | -0.01 |



Bolded values denote values that were statistically significant at the 0.05 level
Var denotes total variance explained
$\lambda$ denotes the eigenvalues which indicate substantive importance of that factor

## 7. DISCUSSION \& CONCLUSION

### 7.1. Summary of Results

Second-hand shoppers sampled for this study were observed to be somewhat representative of the population. The sample was over-represented by women and had an above average reported income of $\$ 54,375$. The majority of the sample indicated that their ethnic origins were Canadian and European, and half of the participants were in their early to mid-20's resulting in an overrepresentation of younger participants. The lack of representativeness may be the result of self-selection given that the sample includes only those who chose to volunteer and these individuals may have stronger opinions than those who chose not to participate. Similarly participants who provided their friends with access to the survey may have had similar opinion. The implications of a biased sample make inferences and trends less trustworthy. Trends cannot be applied to the greater population, and statistics computed in this study may not be replicated elsewhere, and results may not be transferrable to other locations.

Attitudes towards second-hand apparel shopping in-store and online varied significantly among the participants. Overall, preference to shop longer and to spend more money in-store was exhibited, as expected. In general, purchasers are conscious about their economic situation when shopping and look for fashions with value and utility. Shoppers are more willing to price compare
online than in-store. Notably, online shoppers bought without hesitation more often than in-store shoppers, yet they did not later regret the purchase.

Shopping location preferences were apparent throughout the study. Well-known second-hand stores with many locations such as Value Village and Salvation Army have higher reports of participants shopping in those locations. This may be due to increased brand awareness and stores located at prime locations. Shoppers who are concerned about fashion trends, they select shops that cater to their desires such as StylFrugal and Le Prix. For shoppers who have specific shopping goals such as purchasing designer footwear, store location has little influence on where they wills shop. Shoppers are willing to drive to stores they favor which could render location less important. It appears that some shopper archetypes such as "Dollar Defaulters" prefer blending online and in-store shopping for second-hand fashions rather than favouring only one. Meanwhile, other shopper archetypes like "Mature Enthusiasts" avoid online shopping. For bricks-and-mortar locations, "Quality Devotees" will avoid stores in the same proximity they perceive, or have experienced, as having low quality fashions such as Bibles for Missions, Thrift on Kent and KW New \& Used. This trend is somewhat expected given they may avoid these stores in Downtown Kitchener, perhaps due to difficulty with parking or negative perceptions of the neighborhood. Overall, these patterns suggest that a convenient location is less important, while a run down location may be detrimental to drawing shoppers to stores.

Second-hand shoppers have very high expectations when they shop for second-hand items. Notably, second-hand shoppers perceive the best apparel is purchased in-store rather than online because they can execute tactile evaluation when shopping, leading to
increased time and money spent in-store. Time and money spent shopping online and in-store are positively related, and those with
higher quality expectations spend more money online shopping. Different types of shoppers have different priorities, such as looking
for second-hand designer pieces, to browsing for unique vintage graphic tees. Additionally, fewer risks and costs are associated with
in-store shopping since the shopper can accurately purchase a product they have determined as in good condition.

While social influences do not significantly affect second-hand shoppers in-store locations, it did significantly influence which websites to shop on. Most shoppers find out about second-hand stores and websites from friends, and $\mathbf{2 5 \%}$ shop in-store with friends. There are strong social influences for those who have a hard time picking websites to shop on. They listen to websites friends recommend, and they want to have someone give advice and help them with their purchase decisions (Table 10,

Table 17). Generally, store loyalty undermined brand loyalty and shoppers require help when there are too many options. These results are expected given indecisive people may choose to listen to the recommendations of others in order to evaluate alternatives and to reach a decision. These trends suggests that second-hand apparel shopping for fashion goods extends past the utilitarian level. Elements of frugality and novelty with the 'one-of-a-kind' nature of second-hand apparel shopping are evident. Frugality has been identified in the literature as those who are less materialistic and less prone to purchase compulsively according to Cervellon, Carey, and Harms (2012), and the results align with this concept.

Participants are generally open to shopping at new stores and websites, but become increasingly willing to buy from a store or site that someone else they know has shopped at. Using other people's advice when shopping is preferred whereas having someone steer shoppers in the right direction has mixed reviews. Needing assistance is not preferred in-store but it is online. Those second-hand shoppers who spend more online, require more assistance from others when making purchase decisions. This relationship is somewhat expected because they may be shopping beyond utilitarian purposes and want fashion advice on what to purchase. The desire for assistance with online purchasing could be fulfilled by avatars, live chats with service agents, and websites that suggest similar items. Surprisingly there is little engagement with social media and second-hand apparel shopping in-store, but generally people prefer to engage while shopping online. Notably there are some groups who are more concerned about their economic situation and may be less influenced by social pressures. It is conceivable that social influence becomes a prominent factor when consumers have a comfortable
level of income where they can shop past their utilitarian needs, given the results show income related to the ways and reasons shoppers purchase.

Shoppers who are environmentally conscious favour shops they perceive as sustainable. They are also very willing to drive to a shop they prefer. Paradoxically, responses indicated second-hand apparel shopping is good for the environment, sustainable and reuses resources. Only when looking through an environmental lens, does the second-hand shopper decision-making process differ from conventional retail decision making in the EBM Model (Figure 1). The first step of the EBM Model is Need Recognition where the shopper realizes they desire something they do not have, which applies to both conventional and second-hand apparel shopping. The notable difference may be a stronger relationship with sustainability and apparel origin in the next two steps of Information Search, and Alternative Evaluation (Teo and Yeong 2003). The last two steps of the Model are Purchase, and After Purchase Evaluation which again are similar between conventional and second-hand apparel shopping.

The study was consistent with the literature regarding one of most prominent benefits of second-hand apparel shopping being the hedonistic quality. Second-hand apparel shoppers were found to have favourite websites they frequent, generally enjoy shopping second-hand online, engaging with social media, and take their time while shopping. This result is expected because of the pleasureseeking qualities in the trends. Given the results indicating consumers enjoy shopping, and want to take their time, suggested they would be loyal to a website which evokes positive feelings. Spending more time shopping was also related with hedonistic aspects and financial considerations. This study's shoppers are in contrast to the literature which explains shoppers explore websites to see if the
company's social media has other fashion information for the purchase process (McCormick and Livett 2012). This would contribute to the shoppers fashion knowledge. Taking time perusing the website would allow the shopper to learn something during the process, rather than directly and immediately completing the sale (Chen, Shang, and Kao 2009; McCormick and Livett 2012). Given the results showed significantly less second-hand shoppers shop online, the behavior online differs for second-hand apparel shopping.

Second-hand shoppers have very high quality expectations when shopping on popular websites. Consumers exhibit brand buyin, preference for nice décor, and economic consciousness while shopping. However overall, shoppers still buy what is perceived to them as best. These hedonistic and social influences appear to effect online shopping much more than in-store shopping.

Second-hand shoppers exhibit elevated ethical consciousness compared to the conventional retail consumers who often choose to be 'willfully ignorant'" (Walker Reczek 2016; Hobbes 2015). Shoppers care where the apparel originates and find second-hand apparel shopping environmentally friendly. Although, they prefer to receive their merchandise quickly when shopping online which may suggest that the concern for the environment and ethics is a secondary priority when shopping and not a significant difference compared to the conventional retail shopper. The results indicate the majority of participants are financially conscious, experience buyer's remorse, and yet continue to purchase. This finding is somewhat expected since consumerist society is focused on consumption and desire to acquire items new to the shopper, meanwhile dealing with other financial pressures in the consumer's life. Contrasting the EBM Model to this trend, the last stage of the consumer decision process (Figure 1), After Purchase Evaluation occurs, where consumers may experience buyer's remorse. A negative experience should deter the shopper from returning in the
future, however the study indicates that the shoppers continue to return but may spend less money per week online shopping (see also "Buy carelessly and regret" in Table 10). This suggests that there may be a threshold of how negative the shopping experience has to be to deter the shopper, or since the price point in second-hand apparel shopping is lower, the shopper may be more lenient when reflecting on a past negative experience since they perceive it to be higher value.

Education and income level had a significant impact on several second-hand apparel shopping trends and attitudes. Shoppers with less than a high school education were found to spend more than double on second-hand fashions as any other education level. This may be related to an increased purchasing power at second-hand stores, leading lower income shoppers to spend more money while also attaining more fashion goods. It appears that shoppers with a Bachelor's degree or above, spend less of their income on second-hand footwear than any other education level. Note how this result is somewhat expected given the level of comfort shoppers have with used footwear compared to other items, since they cannot easily be cleaned, and this group of shoppers has more money to spend on new items. This study found that shoppers with lower personal income are more likely to spend a larger portion of their earnings on second-hand apparel compared to higher income shoppers. Interestingly, students spend the least percentage of expenditures on clothing. This result is somewhat expected given those in their late teens to 20 's are highly concerned with their image and desire to purchase trendy and branded clothing similar to what their peers are wearing. Generally, shoppers were found to spend the largest percentage on shoes, and the least on accessories.

Consumers with children spent less time shopping online than those without. This is a good indication of the time-starved
shoppers who can price compare and purchase more efficiently online. These shoppers do not have to bring their children with them to the stores, only adding to perceived costs and value consistent with the MAT Model (Figure 2). Additionally, shoppers with children spend $50 \%$ more on second-hand apparel than those without, which is consistent with child growth and an increased number of individuals in the household requiring fashion goods.

Interestingly, some socio-demographic factors exhibited stronger influence than others on second-hand apparel shopping.
Although, many fashion styles such as Minimalist, Bold and Fashion Forward, Casual, and Bohemian were observed in the study,
fashion style had no statistical significance on shopping influencers and socio-demographics. Results indicate that shoppers who spend more money online, will also spend more money in-store. Cambridge residents spent the most shopping second-hand in-store compared to Kitchener and Waterloo residents. Surprisingly, people from out of town spend the least per week. This trend may
suggest a culture of second-hand retail prevalence and acceptance in the KW Region.

The PCA results revealed unique and new groupings and archetypes of second-hand shoppers that may not be adequately represented with conventional shopper characteristics. Value, social, hedonistic and utilitarian traits are common themes in second-hand shoppers, both in-store and online. Certain groups of shoppers prefer chain second-hand stores like Value Village, which may be for reasons of social acceptance, convenient location, and brand awareness. Style is not very important to these shoppers and many just want to find a deal. Others prefer boutique stores where they have a tailored, high-quality experience with items in their fashion style which makes shopping more efficient and products purchased more fashionable overall. They are concerned with dressing fashionably and are willing to spend a little more than the best available deal. Another grouping was geared towards low-priced charity shops which have a wide selection of items of varying quality,
leading to the 'thrill of the hunt' while second-hand apparel shopping. These new shopper archetypes were coined: Social Valuers, Budget Fashion Conscious, Fashion Splurgers, Logical Seekers, Decisive Pragmatics and Label Queens. Based on the results from Table 16 and

Table 17, "Social Valuers" are the most prominent unique new group followed by "Budget Fashion Conscious". Both of these groups were characterized by environmental and ethical consciousness.

### 7.2. Contribution to the Literature

The univariate and multivariate analysis results show significant clusters of second-hand shopper influencers and traits beyond what has been reported in the literature thus far. In particular, the influencers of consumer second-hand apparel shopping behavior appear to be predominantly economic and social, while concern about the environment is secondary. Two key groups of second-hand apparel consumers were found during this study which are categorized into 'thrifty shoppers' and 'budget fashion conscious shoppers'. "Social Valuers" were found to shop in-store and online, and favour charity shop and chains with lower prices. These shoppers still consider fitting in socially important which challenges the literature that states secondhand shoppers mostly prioritize frugality and novelty. Those labeled as "Budget Fashion Conscious" were described as those who have high standards and want low prices, shop in boutiques, are trendy and confident. This group differs from the conceptions reported in the literature because of the difference of what is considered valuable. The 'Budget Fashion Conscious' shopper want to have fun with fashion in an ethical and affordable way. They are confident in their own purchases and want high quality items, sometimes even higher quality than they can purchase in conventional stores with new apparel. Consumers with high-fashion interest consider fashion as a lifestyle, holding appearance in high regard,
possessing advanced levels of fashion confidence, and exhibiting an orientation towards fashion leadership (McCormick and Livett 2012). These "Budget Fashion Conscious" shoppers are different from other groups and their needs should influence how secondhand stores undertake their business.

Strugatz found that consumers are not limited geographically when shopping online (2013). While this concept may be true, shoppers still have other influencers to how and why they shop aside from location. Additional literature states that if a retailer is not focused solely on trend-driven fashion, concentrating on an online platform may not be of value them (Apparel Magazine 2013). Note that spending time online is among the top five most common everyday activities, and shoppers become consumption-oriented earlier in their lives due to assisting purchasing online items for family (Hernandez, Jimenez, and Martín 2009; Hill 2006). Yet, the study results indicate that the majority of participants do not shop second-hand online and the most common self-reported style of participants, as well as observations from non-respondents, was casual. Second-hand shoppers buy high-quality and/or trendy fashions online, and if most shoppers have casual style, there is little need and use of online websites for second-hand fashions. Although reported second-hand apparel shopping online was low, the study results indicated those with more children, shop more online. However the sample had a low mean of .03 for the number of children and may suggest if the mean was higher for the number of children in the study, more participants would shop online for second-hand fashions.

Consistent with the literature, second-hand shoppers are represented by more women than men (Chahal 2013). This trend is somewhat expected given women prefer to
shop second-hand due to the hedonistic benefits. With the feel-good nature of secondapparel hand shopping, and the popularity of mindfulness and self-care, second-hand apparel shopping for fashion items can benefit people's lives if they enjoy the activity of thrifting itself (Bernstein 2014).

The results showed that income is less important in influencing preference for shopping online so stores could experiment if more affordable or expensive items are more desirable when shopping online. If the latter is more popular, higher-end and expensive items could be sold online where they may not sell as quickly in-store, and be accessible to a wider audience of customer archetypes such as the "Label Queens" or "Fashion Splurgers". This can enable higher margins for second-hand businesses with fewer costs for location and greater profits for higher priced items.

Various types of shoppers exist and shopping attitudes vary from those who are looking for something specific to window shopping (Moe 2003; Chaney 2012). Conventional bricks-and-mortar stores are able to identify these attitudes based on instore behavior and tailor their approach to reach a sale. However, second-hand stores generally do not tailor their approach to the needs of their customers and if store owners take more time responding to shoppers needs, they could increase their sales. This adoption of services will also benefit the consumer since the act of shopping and purchasing in general is no different from a traditional store. In fact, it may require more assistance given there is greater variability in product size, price and offering at secondhand stores.

The trends from this study remained consistent with the literature regarding social influence on second-hand shoppers. Shoppers appeared more willing to shop at stores and websites to which they have been referred by someone they know. Understanding how peers refer one another to a store and the value of social networks can help second-hand stores continue to extend their reach to increase sales. The lack of social media engagement of online second-hand stores is surprising since the market has been growing consistently since 1998 . However, this could be related to the notion of those who are shopping second-hand are not generally time-starved, whereas those who shop online are identified as time-starved and focused on convenience (Punj 2012; Soopramanien, Fildes, and Robertson 2007). Currently businesses may not desire or think they are capable of having an online platform or to execute digital marketing and social media properly, although this may be a good opportunity for the second-hand retail market to become more prominent in the consumer world.

Concerns and evaluations regarding costs and value are a central theme in the findings of this study. Shoppers were found to assess price and utility for items they intend to purchase while also price comparing to find the best option. However, price comparing is surprising since second-hand items are typically one-of-a-kind and this would cause an imbalanced comparison, with no guarantee the item will still be available once comparing items has occurred. With the low use of online second-hand apparel shopping, and few websites available to shop on for second-hand fashions, price comparison is difficult and shoppers are comparing imperfect data. Shoppers follow the product cues matrix for evaluating products, seen in Figure 3 (Gabbott 1991). Evaluating second-hand fashion goods online can be perceived as risky, given the elements of the
product's appearance may not be as depicted or described. This is a potential problem that causes barriers to the adoption of online shopping. Online sites would need to include customer testimonials and trust in addition to trying to upload images that appear authentic and represent the item accurately.

Overall, this study has revealed many new influences on second-hand apparel shopping beyond those explored in past literature, including geographic, social, economic, and environmental factors. The results showed that online shopping is significantly less popular than shopping in-store, which challenges the theory that the growth of e-commerce has rendered location unimportant. Second-hand shoppers are greatly influenced by social attitudes but economic considerations such as value are still a priority in the purchase decision. Participant responses also revealed a consciousness for the environment and ethical origin of the fashions.

### 7.3. Implications for Retailers

One of the motivations for conducting this study was to better understand the geographical and socio-economic influencers of second-hand shoppers, given the authors ownership of a pre-loved women's fashion boutique in Waterloo. Extensive literature and information has been published on the traditional fashion retail market of new merchandise because it exists at a significantly larger scale. However, very little academic research can be found on the second-hand market and this research is at the emergence of knowledge building in this field.

Although living "green" has become more common and mainstream, it is not a major motivator for why people shop second-hand. The average personal income of
participants is categorized as middle class, although income did not significantly correlate with shopping trends (Error! Reference source not found., Table 10). This suggests that average second-hand fashion consumers are motivated by alternative lifestyle choices, frugality and novelty. To cater to these shopper preferences, outward communication from businesses can emphasize the one-of-a-kind and treasure hunt nature of shopping available at second-hand stores. This would again increase customer visit frequency since stores have a quick turnover and replenishment rate. The results indicate that if businesses can tailor their message to focus more on lifestyle and novelty, similar to traditional stores, there can be widespread adoption of second-hand apparel shopping. The study findings indicate that Ontario businesses should acknowledge consumers will drive to stores they like best, even if they have an environmentally conscious lifestyle (Table 9). Also, influencers could promote second-hand products for consumers to see on social media. This might include popular bloggers and Instagram users recommending second-hand products or businesses, given social networks accelerate online shopping adoption (Ridley 2013; Banerjee, Mukherjee, and Bandyopadhyay 2012). However, the cost of marketing to endorse products may be too expensive and thus not be feasible for small-scale businesses. Retailers choosing to focus on high-quality items and brands, while not using terms such as "thrift" or "second-hand" in outreach marketing may increase widespread adoption and acceptance of stores that carry second-hand fashions.

Similarly to the use of fossil fuels and intensive farming, the fashion industry has environmental making it a significant contributor to global environmental issues (Trusted Clothes 2015). Many believe sustainable consumption should not be perceived as an
alternative to mass consumption, but as the superior option. Culturally, shoppers in North America are most accepting to second-hand apparel shopping, which is consistent with my own experiences abroad. Second-hand apparel shopping is largely discouraged and frowned upon in other countries outside the Western world. However, a recent development in the traditional fashion market is led by H\&M by creating a closed loop for textiles by its launched of an in-store recycling program in 2013, where customers deposit gently used clothing in $\mathrm{H} \& \mathrm{M}$ stores. They have since released a capsule collection of 'Denim Re-Born' with each piece having 20 per cent recycled materials. They claim to highlight eco-consciousness, but they are ultimately receiving used materials, and then selling them back to customers in 'new' condition. If this trend persists with retailers, it is another way mass consumption can continue while companies greenwash their practices (Bergman 2015; Young et al. 2010).

With increased awareness of the environment, students who are educated about sustainable consumption and the depletion of finite resources could eliminate the stigma of second-hand apparel shopping. The mass media does not address fashion's negative impacts on the environment, and even luxury fashion brands are hiding their 'green' initiatives, but still encourage fast fashion and high consumption (Givhan 2015). However, when environmental education broadens, it may become common knowledge to think about the apparel origin, source and product life cycle in order to make more ethically-driven shopping decisions. Not-for-profit organizations such as Trusted Clothes are also engaging in the sustainable fashion conversation to aid in educating consumers. More fundamentally, 'being green' requires time and space in shopper's lives that is not readily available in increasingly busy lifestyles (Young et al. 2010). Over the last 25
years there has been an evolution in the organic food industry, from small niche farmers to the current wide variety of product offerings with a large footprint in conventional grocery stores to stand alone health food stores (Trusted Clothes 2015). With similar trends, the second-hand retail market is in a position that will transform the way fashion is consumed.

Survey responses indicated that the design and aesthetic of stores did not significantly influence store preference, which could be linked to the positive emotions experienced by shoppers purchasing items they perceive as high-value and the perfect choice. I have observed this first-hand when I started my business, and executed sales from my apartment with price stickers (rather than tags) and no other amenities such as change rooms and packaging that other stores offer. Shoppers remained happy, loyal and recommended people in their social circle due to the positive experience with finding affordable and brand name quality items.

Participants mostly reported their personal style as casual, which may suggest these shoppers are not trend-driven, and want a tactile experience to find clothing they prefer in-store and avoid online shopping. This possible development may indicate that second-hand stores do not need an online store for shopping, but may benefit from images of items to browse in order to increase shopper interest and encourage consumers to return to the bricks-and-mortar store.

The most prominent group of second-hand consumers are frugal followed by budget conscious fashion shoppers. Given price comparing is key to shoppers, stores could offer complementary Wi-Fi in-store to allow shoppers to search online for
comparable items, realize the price of the item new, which will encouraging the shopper to purchase the product second-hand at the same value but at a much lower price.

### 7.4. Theoretical Implications

The main purpose of this research was to summarize the influencers of second-hand retail. Past theory suggests that human motives are largely geared towards individual gratification and satisfaction, which provides the theoretical basis for examining the underlying reasons for why people shop (Koyuncu and Bhattacharya 2004). The theoretical framework of this study was based on a social, cultural and retail geography perspective looking at relationships that influenced consumers to shop for second-hand fashions.

Figure 7 presents a conceptual diagram of the influencing factors that underlie the second-hand purchase process, based on results of this study. Environmental, social and economic factors influence where people shop, what they purchase and how they come to that decision. Online shopping has intangible qualities viewed as risks and accessibility that are complex and may divert shoppers away from considering shopping online for second-hand apparel. Alternatively, the hedonistic and tangible experiences of services and the location of bricks-and-mortar stores has a positive influence on shoppers considering shopping in-store. The components in Figure 7 are all taken into consideration when consumers are shopping second-hand and influence what items they purchase and where they shop. Different archetypes of consumers will have different priorities on what they evaluate to reach a purchase decision. These considerations can
range from price conscious, brand conscious, high-quality to impulsive. It is key to recognize that they are still influenced by the similar factors, though the priorities differ.

Figure 7 Conceptual Map of Process and Influencers for Second Hand Shopping


### 7.5. Further Research \& Limitations

In conclusion, this study provides an analysis of consumer types and influencers for purchasers of second-hand fashion goods. This study makes an important contribution to the literature to date and raises further questions for future research. Browsing and purchasing online is an important area that indicated the need for future research to
investigate attitudes and influencers using higher numbers of participants to better represent the greater population. The results question that if participants have more children, would they be more likely to shop online for second-hand items? Another study could survey consumers with children and see if the results changes for online shopping frequency and spending.

Results from this study showed consumers shop with friends more than expected, and field observations showed many consumers shop in pairs. Further evaluation on who consumers shop with would increase our understanding of group dynamics while shopping second-hand. Further research may explore the differences between shoppers at charitable second-hand stores, chain stores, such as Value Village and Talize, and boutique stores. While this study begins to understand the socio-demographics and shopping location preferences of second-hand fashion consumers, characteristics such as age, ethnicity and survey location point to the need for additional research on this evergrowing field.

Further data could be collected and spatially analyzed to evaluate where secondhand fashion consumers live and shop. The mode of transportation, or structural type of dwelling can also be looked at which may have a relation to second-hand apparel shopping behaviors. Another factor that may be considered is vehicle ownership or lack thereof, which could affect where they shop in-store. Additional research could investigate what tasks and activities shoppers enjoy spending time doing while shopping second-hand online. This could explore social media use, interactions with website features, seeing photos which all help the consumer with fashion information. The results capture the typical shopper, although there non-traditional shoppers such those who
purchase only luxury items or those that are 'Made in Canada'. Understanding how shoppers behave and how they come to their decisions should be looked at more in depth based on style, given that certain stores cater to a specific style such as hipster or designer. Casual is the most prominent style but should be broken down further into more descriptive categories such as fashion forward, sporty, unkempt, and no style.

Further research could take a greater environmental lens approach to assess greenwashing of stores and environmentally conscious shoppers compared to those who join the bandwagon of being 'green'. There were correlations that linked quality expectations and the environmental and ethical background of second-hand fashion items and this can be delved into further. It is also important to note that the second-hand apparel shopping market is constantly growing and some stores have entered or exited the market since the beginning of this study. The research method was largely quantitative, thus a more in depth study could further validate findings, and research in the mentioned areas would serve to expand and build upon the findings reached in this study.

Given the many limitations of this study, it is important to note that they do not hinder or detract from the reached conclusions. The study was conducted in KitchenerWaterloo using only residents of Canada therefore the findings are not applicable to the broader international scope of shoppers. The fashion categories established in the literature review were realized to address fashionable people. The casual category encompasses people without any style and that presents a limitation for further investigation in this study. Gender was less representative of the KW region population but reflected more of the typical second-hand apparel shopper. Participant age was most frequently in the early to mid-twenties which may limit the generalizations that can be
made about second-hand apparel shoppers. The job classifications lacked rigor due to 'retired' and 'not working' categories being excluded in the study. These categories should be added in future research. Also, exploring more in depth the role that social media plays in the acceptance, adoption and decision-making process for second-hand fashion shopping consumers would be interesting future research.

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## 9. APPENDIX

Figure 8 Study Questionnaire

## Social and Cultural Determinants of Second-Hand Shopping <br> Screening Questions

1. What is your assigned ID number? (SKIP THIS QUESTION IF ANSWERING ONLINE).

2. Have you purchased at least one piece of second-hand clothing or apparel in the $\mathbf{1 2}$ months?Yes
Prefer Not To Answer

Leave any question below blank if you prefer not to answer.
3. Over the last $\mathbf{6}$ months, about how often do you shop for second-hand apparel?

4. Over the last $\mathbf{6}$ months, approximately how much \$ have you spent on second-hand clothing?

| Online | \$ Spent Per Week |
| :--- | :--- |
| In-Stares |  |

5. What percentage (\%) of your money spent on second-hand apparel were (in the last $\mathbf{6}$ months):
Shoes
Clothing
Accessories

## Social and Cultural Determinants of Second-Hand Shopping

6. In the last $\mathbf{6}$ months, where did you most frequently shop second-hand for apparel? (select all that apply)
$\square$ Profer Not To AnswerGoodwillCarousel ClothingValue VillageKilijiTallizeEbayPlato's Closet

Bidies for MissionsLe PrixOak \& Lustre

## sytugal

white TigerSalvation ArmyMeow BoutiqueTurifit on KentKW New \& UsedTwice is Nice/Twice the Man

Other (please specify)
7. Approximately how many other second-hand apparel stores do you shop at outside of Kitchener-Waterloo?

## How do you shop for SECOND-HAND APPAREL OFFLINE (In-Store)?

Social and Cultural Determinants of Second-Hand Shopping
8. (In-Store)

|  | Strongly Disagree | Disagree | Neither Disagree Nor Agree | Agree | Strongly Agree | Prefer Not To Answer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| When purchasing apparel I try to get the very best or perfect choice. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Getting very good quality is very important to me. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| My standards and expectations for secondhand fashions I buy are very high. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Second-hand stores have high-quality apparel. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| The most talked about stores are usually very good chaces. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I prefer buying second-hand apparel from the most popular stores in my social group. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Nicely decorated and boutique stores offer me the best apparel. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Well-known branded apparel (secondhand) are best for me. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I am conscious about my economic siluation when shopping in-stow. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I look carefully to find the best value for my money. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I always buy apparel that are useful to me and are of reasonable price. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I am willing to spend fme to compare prices among shops in order to buy lower priced apparel. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I buy apparel with the best value for my money | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I don't mind buying from stores from which I never bought before. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I would be more willing to buy from a store if someone I know has bought something from it. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I usually buy without | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |



## Social and Cultural Determinants of Second-Hand Shopping

## eBay,...

*If you never purchase second-hand apparel online, please skip this section by dicking 'Next' at the bottom of the page. Choose one answer for each statement to indicate the extent to which you disagree or agree.
9. If you do NOT shop second-hand ONLINE, please select "I don't shop online" and skip this sectionI don't shop online

In general, how would you describe yourself when you purchase 'second-hand' fashions ONLINE (such as purses, clothes, shoes, jewelry, etc.)?

## 10. (Online)

When purchasing apparel I
try to get the very best or
perfect choice.
Getting very good quality is
very important to me.
My standards and
expectations for second-
hand fashions I buy are very
high.
Second-hand online stores
have high-quality apparel.
The most talked about Web
sites are usually wery good
chaces.
I prefer buying second-hand
apparel from the most
popular Web sites in my
social group.
Nicely designed and
specialty Web sites offer me
the best apparel.
Well-known branded
apparel (second-hand) are
best for me.
I am conscious about my
economic situa ton when
shopping online.
I carefully watch how much
I spend.
I always buy apparel that
are useful to me and are of
reasonable price.
I am willing to spend fme
to compare prices among


## Social and Cultural Determinants of Second-Hand Shopping



Leave any queston blank you prefer not to answer.
11. What is your gender?
$\square$ $\rightarrow$
12. In what year were you born? (enter 4-digit birth year; for example, 1976)
13. What is your approximate annual personal income?
$\square$ $\rightarrow$
14. What is your approximate annual household income?
$\square$ $-1$
15. How would you classify your ethnic background?
$\qquad$ 7
Other (please specily)

## 16. What is your education level?

$\qquad$ $\cdot$
17. What is your current occupation?
18. Do you work:
$\square$ $\cdot$
19. How many children do you have?
$\qquad$ $\cdot$

## Social and Cultural Determinants of Second-Hand Shopping

20. What is your marital status?
$\square-7$
21. What are the first $\underline{3}$ alpha/numeric al digits of your postal code?
22. How long have you lived there?
$\square$
23. How much time do you spend on the internet daily at work?
$\qquad$ 7
24. How much time do you spend on the internet daily in your free time?
$\square$
25. How would you identify/describe your dominant personal fashion style?


Thank you very much for your completion of the survey.

Table 18 Non-Response Observations by Random Sample n=91

| \# | Date/Time | Age | Gender | Style/Notes | Location |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 06-Nov-14 | 20 | F | Casual student | WLU Concourse |
| 2 | 12p-5p | 20 | F | Boots, tights, coat, dark colours | WLU Concourse |
| 3 |  | 19 | F | Hoodie, Jeans, ponytail,, "It's ok I look like crap" | WLU Concourse |
| 4 | 08-Nov-14 | 68 | F | Jeans, running shoes, jacket, relaxed, with grand child | Staples, Cambridge |
| 5 | 4p-8:30p | 50 | M | Dress coat, dark jeans, pullover | Staples, Cambridge |
| 6 |  | 50 | F | "no time" leather coat, dry hair, denim, with son | Staples, Cambridge |
| 7 |  | 20 | M | with mom, jeans, sweater | Staples, Cambridge |
| 8 |  | 57 | M | leathershoes, jeans, ball cap, leather coat, tee | Staples, Cambridge |
| 9 |  | 38 | F | mom 2 kids, bobby pin in hair, black coat, denim | Staples, Ca mbridge |
| 10 |  | 70s | F | trousers, mary jae shoes, black coat, "my husband sent me.. No time" | Staples, Cambridge |
| 11 |  | 48 | M | Sneakers, hoodie, jeans | Staples, Cambridge |
| 12 |  | 60 | F | Relaxed coat, dyed hair, cross body bag, sneakers, cropped denim | Staples, Cambridge |
| 13 |  | 45 | F | Combat boots, skinny jean, cross body bag, black coat, dyed hair | Staples, Cambridge |
| 14 |  | 60 | M | denim, balding, glasses, "don't have internet at home, this is a pit stop" | Staples, Cambridge |
| 15 | 11-Nov-14 | 55 | M | Jeans, tee | Staples, Cambridge |
| 16 |  | 55 | F | jeans, worn out sneakers, fleece sweater, sunglasses | Staples, Cambridge |
| 17 |  | 25 | F | with boyfriend, ponytail, glasses, backpack | Staples, Cambridge |
| 18 |  | 25 | M | with girlfriend, althetic pant, boots, jacket with hood up | Staples, Cambridge |
| 19 | 12-Dec-14 | 40 | M | Sneakers, jacket, with girl, did not even look at researcher | Thrift on Kent |
| 20 |  | 40 | F | Tights, sneakers, sweater, with male | Thrift on Kent |
| 21 |  | 75 | F | Black pants, comfortable shoes | Thrift on Kent |
| 22 |  | 38 | M | Well dressed, coat, man spoke on behalf of himself and woman, middle eastern background | Thrift on Kent |
| 23 |  | 38 | F | Well dressed, coat, with man | Thrift on Kent |
| 24 | 12-Dec-14 | 68 | F | Sporty, short hair | Thrift on Kent |
| 25 |  | 60 | M | All black clothing, "too busy" | Thrift on Kent |
| 26 |  | 55 | F | Red lipstick, dress coat, dressed up, "it's Christmas, not time, wish I had more time" | Thrift on Kent |
| 27 |  | 75 | F | Baseball cap, "hungry","don't do online" | Thrift on Kent |
| 28 |  | 80 | F | Black clothing, stylish fur trim, "with friend who wants to go home" | Thrift on Kent |
| 29 |  | 90 | F | Silk scarf, left mid survey | Thrift on Kent |
| 30 |  | 60 | F | All black clothing, casual, put together, did not make eye contact with researcher | Thrift on Kent |
| 31 |  | 32 | M | Sloppy and casual, with female, "not right now" | Thrift on Kent |
| 32 |  | 32 | F | Sloppy, relaxed brown coat, with male, "not right now" shakes head no | Thrift on Kent |
| 33 |  | 40 | F | Sloppy, relaxed clothing, "not right now" | Thrift on Kent |
| 34 |  | 50 | M | Khakis, dressed up, "I work upstairs, it's a different organization" | Thrift on Kent |
| 35 |  | 35 | F | Casual, ignored researcher | Thrift on Kent |
| 36 |  | 80 | F | Dressy, "not now sorry" | Thrift on Kent |
| 37 |  | 80 | M | Relaxed, golf hat, ignored researcher | Thrift on Kent |
| 38 | 12:50p | 42 | F | Business casual, likes "Refashioning" | Thrift on Kent |
| 39 |  | 38 | F | Dressy, cream coat, "no time" | Thrift on Kent |
| 40 |  | 85 | M | Dressed up, volunteer at location, "no don't have time" | Thrift on Kent |
| 41 |  | 37 | F | Dressed up, heels, glasses, dress pants, "no thank you ha ha" | Thrift on Kent |
| 42 |  | 50 | F | dressed up, boot heels, purple coat, "no" | Thrift on Kent |
| 43 |  | 19 | M | Casual, vest, Puma clothing, hat, "nope" | Thrift on Kent |


| \# | Date/Time | Age | Gender | Style/Notes | Location |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 44 |  | 28 | F | Lululemon pants, with man, "not right now" | Thrift on Kent |
| 45 |  | 35 | M | Leather coat, with woman, ignored researcher | Thrift on Kent |
| 46 |  | 60 | F | Dressed up, highlights, "not today thanks" | Thrift on Kent |
| 47 |  | 70 | F | Traditional head scarf, no teeth, Serbian, little english | Thrift on Kent |
| 48 |  | 75 | F | Sprty, relaxed style, "just waiting for a friend" | Thrift on Kent |
| 49 |  | 28 | F | much" | Thrift on Kent |
| 50 | 15-Dec-14 | 55 | F | casual jeans, floral purse, leather shoes, scarf, "no English" | Thrift on Kent |
| 51 |  | 45 | F | Sport suit, navy, well dressed | Thrift on Kent |
| 52 |  | 70 | F | Dressed well, glasses, in a hurry, with man | Thrift on Kent |
| 53 |  | 70 | M | Short hair, coat on, in a hurry, with woman | Thrift on Kent |
| 54 |  | 35 | F | dark clothing, relaxed a little, with a man | Thrift on Kent |
| 55 |  | 35 | M | soppy but clean, hesitant to do online, with woman | Thrift on Kent |
| 56 |  | 50 | F | computer" | Thrift on Kent |
| 57 |  | 40 | F | time and no computer" | Thrift on Kent |
| 58 |  | 60 | M | sporty, well dressed, with woman | Thrift on Kent |
| 59 |  | 60 | F | sporty, well dressed, with man | Thrift on Kent |
| 60 |  | 56 | M | jeans and jacket, ignored researcher | Thrift on Kent |
| 61 |  | 45 | F | dress pants, boots, button up top, "no thanks not now" | Thrift on Kent |
| 62 |  | 88 | F | Black dress pant, fleece sweater, "no" | Thrift on Kent |
| 63 |  | 86 | F | Grey dress pant, scarf, floral bag, short hair, glasses, "no ESL" | Thrift on Kent |
| 64 | 17-Dec-14 | 50 | F | Casual sport coat, glasses, jeans, short hair, with man | Thrift on Kent |
| 65 |  | 50 | M | time" | Thrift on Kent |
| 66 |  | 70 | M | clarify" | Thrift on Kent |
| 67 |  | 70 | F | clarify" | Thrift on Kent |
| 68 |  | 20 | F | female | Thrift on Kent |
| 69 |  | 23 | F | female | Thrift on Kent |
| 70 |  | 50 | F | Jeanns, sport coat, short hair, "not right now no thank you" | Thrift on Kent |
| 71 |  | 45 | M | Sweats, sneakers, overweight, skicoat, glasses, "no thank you" | Thrift on Kent |
| 72 |  | 65 | M | "no thanks" | Thrift on Kent |
| 73 |  | 27 | F | Chanel scarf | Thrift on Kent |
| 74 |  | 45 | F | Orange coat, dark pants, leather shoes - casual, "no its ok" | Thrift on Kent |
| 75 |  | 48 | F | sorry" | Thrift on Kent |
| 76 |  | 45 | F | timeline" | Thrift on Kent |
| 77 |  | 18 | F | casually well dressed, with mom | Thrift on Kent |
| 78 |  | 26 | M | baggy jeans, fur trim coat, "I can't sorry", with female | Thrift on Kent |
| 79 |  | 25 | F | Gangster, plaid coat, heels, jeans, with male | Thrift on Kent |
| 80 |  | 50s | M | researcher | Thrift on Kent |
| 81 |  | 45 | F | Short hair, sport coat, with son, "no thanks no time" | Thrift on Kent |


| $\#$ | Date/Time | Age | Gender | Style/Notes | Location |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 82 |  | 20 | M | Hipster beard like Mumford \& Sons, with mom | Thrift on Kent |
| 83 |  | 68 | F | Long coat, scarf like old Iady over hair, sneakers, <br> "no" | Thrift on Kent |
| 84 |  | 65 | F | Old bun ahir and Iong skirt with nice new boots, <br> "I have no time" | Thrift on Kent |
| 85 | $4: 00 p$ | 48 | M | Casual, dress shirt, sneakers, scruffy, "would do <br> survey but too lonng and no internet" | Thrift on Kent |
| 86 |  | 68 | F | Sporty, casual, "afraid not" | Thrift on Kent |
| 87 |  | 70 | F | Sneakers, jeans, sport coat, "sorry maybe next <br> time" | Thrift on Kent |
| 88 |  | 78 | F | Fabric snow boots, hooded coat, "no" | Thrift on Kent |
| 89 |  | 75 | F | Leather boots, denim, ski coat, "ignored <br> researcher" | Thrift on Kent |
| 90 |  | 19 | M | Hipster with elderly grandma, mustard pants, <br> glasses, "no not today" | Thrift on Kent |
| 91 |  | 60 | M | casual, "no sorry" | Thrift on Kent |


[^0]:    * Denotes differences that were statistically different when tested at 0.05 level of significance

