

ABSTRACT

TAO, QIONG. Fashion Subscription Retailing through the Lens of the S-O-R Theory (Under the direction of Dr. Yingjiao Xu).

Subscription retailing is a fast-growing innovative online shopping medium. This market has grown by more than 100 percent per year over the last five years, with the most successful retailer generating more than \$2.6 billion in sales in 2016 compared to \$57 million in 2011. The fashion industry has also successfully adopted subscription retailing. However, consumer knowledge of the service, perception towards the service, and user experience may vary greatly. Limited research has been conducted regarding this new business model in the fashion industry. This current study uses the Stimulus-Organism-Response (S-O-R) model to evaluate consumers' adoption intentions of fashion subscription retailing services. There are two main goals of this study. First, the study examined different cognitive and affective values (Stimulus) that influence consumers' attitudes (Organism), which then influence their adoption intention (Response) towards fashion subscription retailing. Secondly, this study evaluated the influence of consumers' fashion involvement and risk aversion on their adoption process. An online survey was conducted to gather consumers' perceived cognitive and affective values, attitudes and adoption intentions, as well as degrees of fashion involvement and risk aversion. Structural equation modeling (SEM) and multi-group comparison analyses were used to test the hypotheses. This study suggests that perceived cognitive values, including monetary value, product variety, convenience, risk, and perceived affective value, hedonic value, had significant influences on consumers' attitudes toward fashion subscription retailing services, which, in turn, exerted significant influences on their adoption intentions. Additionally, fashion involvement and risk aversion were both found having moderating effects on the relationship between perceived cognitive and affective values (Stimulus) and consumers' attitudes (Organism). This study not

only provides contributions to existing literature on fashion subscription retailing services, but also offers managerial insights to fashion subscription retailing practitioners in their marketing and segmentation efforts.

© Copyright 2019 by Qiong Tao

All Rights Reserved

Fashion Subscription Retailing through the Lens of the S-O-R Theory

by
Qiong Tao

A dissertation submitted to the Graduate Faculty of
North Carolina State University
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

Textile Technology Management

Raleigh, North Carolina
2019

APPROVED BY:

Dr. Yingjiao Xu
Committee Chair

Dr. Trevor Little

Dr. Cynthia Istook

Dr. Delisia Matthews

DEDICATION

To my Parents and Husband for their Unconditional Love and Relentless Support!!

BIOGRAPHY

Qiong Tao was born on September 16, 1990 and grew up in Wuxi, China. She came to the U.S. in 2011 and graduated from Case Western Reserve University with a B.S. in Marketing Management in 2014. Upon graduation, she continued her education at Kent State University and accomplished an M.A. in Fashion. She identified a strong interest in research through an internship with the Fashion and Marketing Innovation team at GrafTech International along with two years of research assistant experience at her graduate program. Those experiences led her to the Textile Technology Management Ph.D program in the Wilson College of Textiles in 2016, conducting research on marketing strategies, consumer behavior, and technology adoption pertaining to fashion products.

During her graduate education, she had the opportunity to independently teach several courses, including Fashion Visuals at Kent State University, Visual Merchandising, and Textiles Brand Management & Marketing at North Carolina State University. She greatly enjoys teaching and making a difference in students' lives. She wants to be able to use her knowledge and research to influence future generations of fashion professionals.

ACKNOWLEDGMENTS

I am wholeheartedly thankful to everyone who has been part of my wonderful academic and personal journey. It is my great pleasure to express my sincere thanks and deepest gratitude to Dr. Yingjiao Xu, my advisor, for her excellent mentorship and admirable supervision. Thank you for your consistent feedback, insightful advice, and provision of great research opportunities. I had the pleasure of working with you for three and half years and was constantly encouraged by your dedication to research, professionalism, and care for students.

I would also like to offer my sincere thanks to Dr. Trevor Little, Dr. Cynthia Istook, and Dr. Delisia Matthews for serving as members on my committee. Thank you for your support, invaluable insights, and continued guidance. Special thanks to Dr. David Tilotta for serving as the Graduate School Representative on my committee.

I also want to thank my family. I want to thank my husband, Matthew, for his kindness, unconditional love, patience, encouragement, and support during my doctoral study journey. You have always encouraged me to persevere and challenged me to strive for excellence. I want to thank my son, Daniel, for making me a proud mother and bringing joy and meaning into my life every day. I want to thank my mother, who loves me unconditionally, and helped my husband and I take care of our new born son while I was preparing my dissertation and final defense. We could not have done it without her. I want to thank my dad, for his love, sacrifices and guidance throughout my entire life.

Most importantly, I would like to thank God for all the love and blessings He pours into my life, all the opportunities He has presents, and the strength and peace He provides.

TABLE OF CONTENTS

LIST OF TABLES	vii
LIST OF FIGURES	viii
CHAPTER ONE: INTRODUCTION	1
Fashion Subscription Retailing Services	3
Statement of Problems	3
Purpose of the Research	5
Conceptual Framework	5
Perceived Cognitive and Affective Values	6
Significance	7
CHAPTER TWO: LITERATURE REVIEW	9
Fashion Subscription Retailing	9
History of Subscription Retailing	9
Development of Fashion Subscription Retailing	11
Benefits to Fashion Subscription Service Providers	13
Benefits to Consumers	14
Challenges for Fashion Subscription Retailers	16
Academic Research on Fashion Subscription Retailing	17
S-O-R framework	20
Stimulus (Cognitive and Affective Values)	22
Monetary Value	24
Product Variety	25
Convenience	26

Risk	28
Customization	29
Ease of Use	31
Hedonic Value	32
Organism (Consumer Attitude).....	33
Response (Adoption Intention).....	34
Moderating Effect	35
Fashion Involvement.....	36
Risk Aversion.....	38
Proposed Hypotheses	40
CHAPTER THREE: METHODOLOGY	42
Sample and Data Collection.....	42
Instrumentation	43
Measures	43
Monetary Value (MV)	44
Product Variety (PV)	44
Convenience (CO)	45
Risk (PR).....	45
Customization (CU).....	46
Ease of Use (PEOU)	46
Hedonic Value (HV).....	47
Attitude (ATT).....	47
Adoption Intention (AI).....	48

Fashion Involvement (FI)	48
Risk Aversion (RA)	49
Data Analysis	49
CHAPTER FOUR: RESULTS	52
Sample Profile.....	52
Measurement Model	54
Structural Model	58
Moderating Effects.....	59
Moderating Effects of Fashion Involvement	60
Moderating Effects of Risk Aversion	61
CHAPTER FIVE: DISCUSSION, IMPLICATIONS	64
Stimulus-Organism-Response (RQ1)	65
Moderating Factors (RQ2).....	69
Fashion Involvement.....	70
Risk Aversion.....	71
CHAPTER SIX: LIMITATIONS AND DIRECTION FOR FUTURE RESEARCH	74
REFERENCES	76
APPENDICES	101
Appendix A: Fashion Subscription Retailing Survey	102

LIST OF TABLES

Table 1. Items used to measure Perceived Value.....	44
Table 2. Items used to measure Product Variety.....	45
Table 3. Items used to measure Convenience.....	45
Table 4. Items used to measure Perceive Risk.....	46
Table 5. Items used to measure Customization.....	46
Table 6. Items used to measure Perceived Ease of Use.....	47
Table 7. Items used to measure Hedonic Value.....	47
Table 8. Items used to measure Attitude.....	48
Table 9. Items used to measure Adoption Intention.....	48
Table 10. Items used to measure Fashion Involvement.....	49
Table 11. Items used to measure Risk Aversion.....	49
Table 12. Demographics and General Shopping Habit.....	53
Table 13. Confirmatory Factor Analysis Results.....	56
Table 14. AVE Values and Squared Correlation of Each Latent Variable.....	57
Table 15. Mean and Standard Deviation of Each Latent Variable.....	57
Table 16. Path Coefficients between Latent Variables.....	59
Table 17. Multi-group Analysis Results (Fashion Involvement).....	61
Table 18. Multi-group Analysis Results (Risk Aversion).....	62

LIST OF FIGURES

<i>Figure 1.</i> Conceptual Framework of Consumer Adoption toward Fashion Subscription Retailing Services	6
<i>Figure 2.</i> Conceptual Framework of Consumer Adoption toward Fashion Subscription Retailing Services and hypotheses	41
<i>Figure 3.</i> Flow Chart of Data Analysis Steps	51

CHAPTER ONE

INTRODUCTION

Consumers are becoming more sophisticated (Olenski, 2017), requesting uniqueness, personalized and connected interactions (Salesforce Research, 2018), maximized value (Atkins & Kim, 2016), and an abundance of information when buying products available in the marketplace (Barker, 2018). Additionally, consumers are requesting a holistic consumer experience rather than a simple product focused experience (Gilmore & Pine, 2007). To succeed, businesses must satisfy the values that are important to their consumers (Williams, 2010) and offer additional services with the product (Jonsson, Stoopendahl, & Sundström, 2015) to meet consumers' ever changing needs. Baldwin, Forslid and Ito (2015) also stated that the focus of production has evolved from fabrication to adding services due to globalization changes. Vargo and Lusch (2004) discussed that markets are shifting to a more service centered format where businesses offer services rather than just products. Thus, it is crucial for companies to offer excellent services in addition to valuable products. As a response to the intense competition in the marketplace and changes in consumer preferences, nontraditional retailing models have been created to meet evolving consumer needs. Similar to the evolutions in the transportation, manufacturing, and communications industries, the evolution in the retailing industry has created new opportunities for innovative retailers (Randal Retail Group, 2018).

Many industries are evolving due to the advancement of technology, and fashion retailing is no exception (Randal Retail Group, 2018). For example, many fashion retailers are applying new cutting edge technologies such as geo-tracking, ibeacons, smart dressing rooms, and mobile coupons (Kahn, Inman & Verhoef, 2017). As a result, online retailers, specialty stores, and web-based retailing platforms are drawing consumers away from traditional brick and mortar stores

and interrupting the traditional shopping models (Kahn *et al.*, 2017). For example, physical stores are turning into showrooms for customers to shop online (e.g. Bonobos), and consumers are favoring the idea of renting clothes rather than buying them (e.g. Rent-the-Runway) (Kahn *et al.*, 2017). Moreover, the sharing service economy and the membership service economy are growing by focusing on developing long-term relationships rather than simply focusing on product sales (Tao & Xu, 2018).

Subscription retailing is one of the innovative evolutions of online shopping. Leading retailers such as Dollar Shave Club, Blue Apron meal kits, and Stitch Fix personal styling (Chen, Fenyo, Yang & Zhang, 2018) offer convenience and custom-made selections with regular deliveries that land directly at customers' doors (David, 2012). Chief industry analyst at NPD Group forecasted that subscription retailing would arise as a shopping medium that is distinct from e-commerce and point of sale stores (Pike 2016).

This fast-growing subscription retailing market has grown by more than 100 percent per year over the last five years, with the most successful retailer generating more than \$2.6 billion in sales in 2016 compared to \$57 million in 2011 (Chen *et al.*, 2018). A similar rapid growth of subscription retailers is also present in the fashion industry. For example, Stitch Fix, a leading fashion subscription retailer, grew by more than 1000 percent from 2014 to 2017 and made \$977 million in 2017 (Stitch Fix, 2018).

In the following section, the definitions and overviews of fashion subscription retailing services as well as perceived cognitive and affective values are described first, followed by a statement of problems and the purpose of research. The conceptual framework of this study is explained based on an adopted theory. This sections concludes with an explanation of the significance of this study.

Fashion Subscription Retailing Services

Fashion subscription models vary in terms of subscription fees, customization by personal stylists, and the ability to preview the items to be delivered (Ewen, 2017). Three main subscription models have been identified in the fashion industry (Tao and Xu, 2018). The first fashion subscription model charges a monthly subscription fee, sends regular curated boxes of fashion products, and usually requests a relatively long-term commitment from the customers. Customers can cancel the service at any time, but may need to pay a sign-up fee if they wish to resume their subscription. Activewear retailer Fabletics and menswear retailer Five Four Club both belong to this category. The second fashion subscription model provides personal styling services for a fixed styling fee for each box. Each customer has a personal stylist to help pick curated fashion items for each delivery. This model differs from the first in that it does not require a long-term subscription. Conveniently, the fixed styling fee for each delivery can be used toward the purchase of items in the curated box. Some of the companies that use this model allow customers to preview the items in the box, and some do not. Stitch Fix and Trunk Club are two popular companies that use this model. The last fashion subscription model neither charges a fixed styling fees nor provides personal styling services. One example of this model is Amazon's Prime Wardrobe, which allows Amazon Prime members to access the company's fashion offerings and try items on at home without any purchasing commitment. Consumers do not have a personal stylist to help them pick personalized clothing items, but a computer algorithm generates predictions and recommendations to assist customers in selecting products.

Statement of Problems

Fashion subscription retailing has existed for almost a decade and, due to social media, is no longer a stranger to consumers. Yet there remains much need for further academic research.

Subscription businesses are continually improving and have indefinite potential to impact how consumers shop (Kestenbaum, 2018), thereby creating a need for research to keep up with these developments. In addition, consumers' knowledge of the services, perception towards the services and user experience are not widely known and may vary greatly, which creates the need to discover what consumers actually know, think, and experience.

So far, only a few studies have examined the fashion subscription retailing model. One of the first academic research was conducted by Hölder and Svensson (2016). They investigated consumers' opinions toward fashion subscription retailing and the underlying reasons behind them. Tao and Xu (2018) used a qualitative research approach to identify the relative advantages and concerns that consumers held toward the service. They also found that consumers had different adoption intentions for using fashion subscription services to meet their fashion needs. Ramkumar and Woo (2018) identified six antecedents of consumers' attitudes towards fashion and beauty subscription boxes. One limitation of their study was that it lumped together fashion and beauty industries. This current research believes consumers would hold different attitudes and adoption behaviors towards fashion subscription boxes and beauty subscription boxes and thus focuses solely on fashion subscription retailing.

Furthermore, the fashion subscription retailing industry has become saturated (Vembar, 2018), and companies are in need of insights that will enable them to stay competitive and successful. This research would help companies understand consumer values that may influence their attitudes and adoption intentions so that they could better cater to their customers. Ultimately, the ability to better cater to customers' needs would enable companies to attract new customers and retain current customers.

Purpose of the Research

In general, this current study aims to better understand what factors influence customers' adoption intention toward fashion subscription retailing services. Specifically, this current study uses the Stimulus-Organism-Response (S-O-R) model (Mehrabian & Russell, 1974) to evaluate consumers' adoption intention of fashion subscription retailing services as a response to their perceived values. There are two main goals of this research. First, the study examines different cognitive and affective values (Stimulus) that influence consumers' attitudes (Organism), which further influence their adoption intentions (Response) toward fashion subscription retailing. Secondly, this study evaluates the influence of consumers' fashion involvement and risk aversion on their adoption process. Specifically, the following research questions were proposed:

RQ1: How do different cognitive and affective values toward fashion subscription retailing services influence consumers' attitudes and consequently influence their adoption intention?

RQ2: How do fashion involvement and risk aversion influence the relationship between different cognitive and affective values and consumers' attitudes toward fashion subscription retailing services?

Conceptual Framework

To examine the impact of perceived cognitive and affective values on consumers' attitude and adoption intention toward fashion subscription retailing services, a conceptual research framework was formed based on the Stimulus-Organism-Response (S-O-R) theory (Mehrabian & Russell, 1974). This framework is presented in Figure 1. Based on the literature, this research explores six cognitive values (monetary value, product variety, convenience, risk, customization, and ease of use) and one affective value (hedonic value) as Stimulus (S), all of which are specific to the fashion subscription retailing context. Consumer attitude reflects the Organism (O)

variable, which acts as a mediator between Stimulus (S) and Consumer Response (R), which is measured by adoption intention. The subscription retailing model is an innovative retailing format in the fashion industry, and a relatively new concept for consumers to adopt. Therefore, this study also examined how fashion involvement and risk aversion influence the relationships presented in the adapted S-O-R model. Specifically, both fashion involvement and risk aversion were tested as moderating variables on the relationship between Stimulus (perceived values) and Organism (consumer attitude).

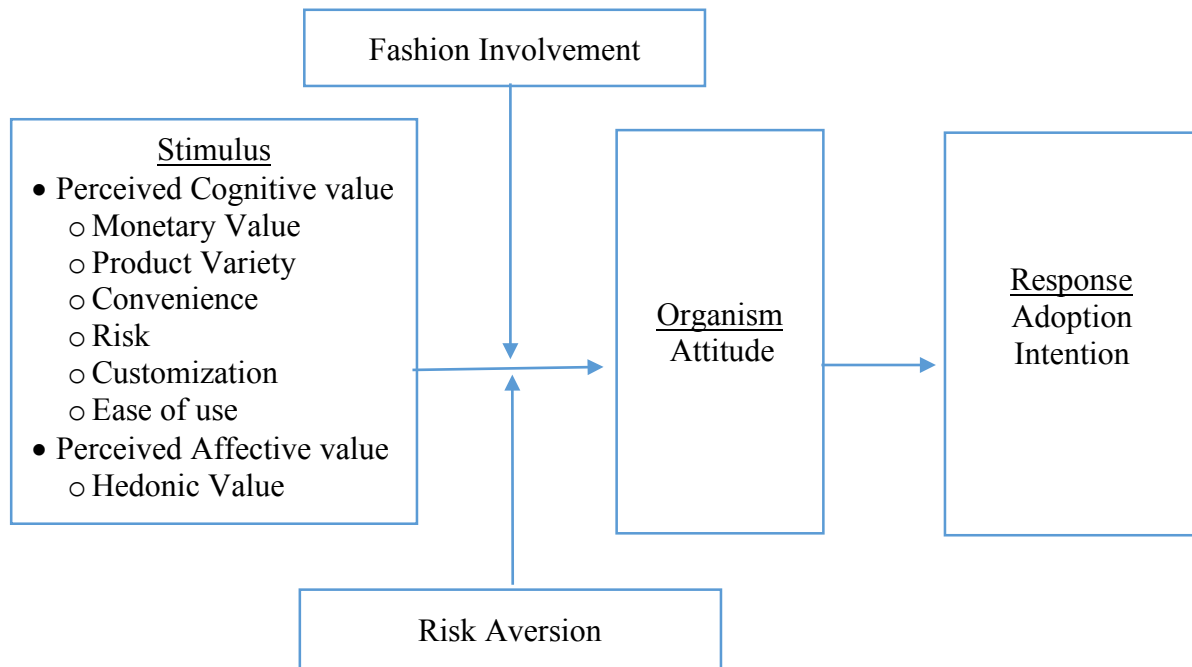


Figure 1. Conceptual Framework of Consumer Adoption toward Fashion Subscription Retailing Services.

Perceived Cognitive and Affective Values

When forming an attitude toward an object, individuals primarily use either affective cues (emotion) or cognitive cues (logic) (Haddock & Zanna, 1993), which both impact consumer attitudes (Keller, 2001; Morris, Woo, Geason & Kim, 2002; Petty, Wegener & Fabrigar, 1997).

Consumer responses to company advertisements often depend on which cue they primarily use (Moore, Harris & Chen, 1995). For example, consumers that primarily use affective cues would respond strongly to an emotionally moving advertisement (Moore et al., 1995). On the other hand, consumers that primarily use cognitive cues would not be as moved by an emotional message (Ruiz & Sicilia, 2004), and would instead respond more positively to an information-rich message (Geuens & De Pelsmacker, 1998).

Cognitive values are generated from perceived benefits and costs from a purchase through a specific retailer (Zeithaml, 1988). These values could also come from awareness, knowledge, or beliefs that may or may not have originated from previous shopping experiences (Fishbein, 1967). In this study, six cognitive values (monetary value, product variety, convenience, risk, customization, and ease of use) were identified specifically applicable to fashion subscription retailing services. Affective value was measured by perceived hedonic value.

Significance

This research contributes to both practical and academic knowledge related to the emerging phenomenon of fashion subscription retailing services. Fundamentally, this research provides a comprehensive analysis of how consumers' perceived cognitive and affective values may impact their adoption intention for fashion subscription retailing services. Further, this research provides empirical evidence on consumer behavior toward fashion subscription retailing utilizing the S-O-R model. This research also explores how fashion involvement and risk aversion impact consumer behavior in the fashion subscription retailing context.

From a practical perspective, this study is designed to provide managerial insights to the practitioners in their marketing and segmentation efforts. This research may help practitioners

understand and cater to consumers who are interested in fashion subscription retailing services, by identifying influential cognitive and affective values and personality traits. A better understanding of the drivers of consumer adoption towards fashion subscription retailing services is essential and has benefits for long term strategic planning.

CHAPTER TWO

LITERATURE REVIEW

Creating the proposed framework requires conducting an extensive literature review to thoroughly understand each variable. There are four main focuses of this literature review. The first portion of the literature review focuses on the fashion subscription retailing services. There are six sub-sections under this portion: the history of subscription retailing, development of fashion subscription retailing, benefits to the companies, benefits to the consumers, challenges of fashion subscription retailers and academic literature on fashion subscription retailing. The second portion of the literature review explores the Stimulus-Organism-Response (S-O-R) theory. The third portion of the literature review explores fashion involvement and the last portion examines the personality trait risk aversion. After the literature review is completed, a list of hypotheses was formulated.

Fashion Subscription Retailing

History of Subscription Retailing

Subscription services have been a common business model applied in several industries, such as gyms, telephone services, internet services, or insurance, which are all industries of high functionality where the consumer often needs only one supplier (Sharp *et al.*, 2002). With subscription services, customers either receive products directly at their homes or pick them up from relay shops or sales points with a prearranged frequency and fixed price (Mimoun *et al.*, 2015). Retailers have been using subscription services since 1955. An early example is Columbia House, who invited new customers to sign up to get eight records for a penny, leading to year-long contracts with significant product markups (Ewen, 2017). In some more recent subscription services, subscribers receive a gift box containing a mixture of products that follow a particular

theme (Proulx, 2016). The theme of the boxes differs based on the customer's interest, such as, beauty products, snacks, or items for fitness buffs or wine connoisseurs (Proulx, 2016).

Mimoun, Garnier, and Depledt (2015) state that the main value of subscription-based ecommerce is curation, or professionally hand-picked products that fit the tastes and expectations previously stated by the consumer in an evaluation questionnaire. This customized service not only satisfies customers' personalized requests, but also helps them explore original and unexpected products they otherwise wouldn't have thought about or dared to purchase (Mimoun, Garnier & Depledt, 2015). This is also the reason that subscription-based e-commerce retailer Birchbox uses "tryvertising" (Mumaw, 2011), which gives customers an opportunity to explore new products every month before purchasing. The efficacy of such a technique relies on consumers' involvement in the product category (Mumaw, 2011). In addition to curation and "tryvertising", subscription-based services also live off event sales by providing special offers to member subscribers for a limited period of time (Mimoun *et al.*, 2015).

Another important characteristic often seen in subscription retailing services is the element of surprise, often seen in the form of mystery boxes, which serves as an experience bonus for customers (Vanhamme & Snelders, 2003). These mystery boxes are particularly appropriate for products related with pleasure (wine, gadgets) or well-being (cosmetics) (Vanhamme & Snelders, 2003). Surprised participants will usually convert the consumption moment into an unforgettable experience that is extraordinary and satisfying (Vanhamme and Snelders, 2003), which in turn could result in repeated purchases and even brand loyalty. Therefore, if companies effectively utilize the element of surprise, they are able to increase revenue, develop customer loyalty, bring in new customers, and place their brand as a disruptor in the market (Roussin, 2016). Since consumers often control their own shopping experiences,

the subscription model provides e-retailers both the flexibility and data needed to offer customers what they really want (Roussin, 2016). However, not all retailers utilize the element of surprise. For example, some retailers will send a preview of the content for customers to view before shipping the package.

In recent years, the subscription industry has grown rapidly. It was reported that the visits to subscription box sites has increased nearly tenfold during the past four years, with 41.7 million visits in April 2018 alone (Cheng, 2018). In addition, according to a McKinsey study performed in February 2018, 15% of online consumers have signed up for one or more subscriptions on a recurring basis (Cheng, 2018). Following the success of beauty subscription service, Birchbox, the fashion industry also quickly implemented subscription services in the format of subscription boxes. The fashion subscription services were able to overcome many of the barriers that traditional online fashion retailers faced, and therefore took off and increased quickly across different sectors of the fashion industry.

Development of Fashion Subscription Retailing

The global fashion industry is undergoing a period of intense change and competition, and is faced with the challenges of global online marketplaces, slower growth, more startups, and harder to please consumers (Elmer, 2017). Online shopping alone has greatly disrupted brick and mortar retailers, causing an estimated 9,452 stores to close in 2017, which represented a 53% increase from the number of store closings during the Great Recession in 2008 (Clark, 2017). However, even online retailers face great challenges, such as lack of interaction with customers (Ahmad, 2002), high product return rates due to discrepancies between actual and perceived online product presentation (Luo *et al.*, 2012), low brand loyalty due to high switching rates

(Keaveney and Parthasarathy, 2001), and excessive inventory due to poor prediction and lack of consumer insights (Birtwistle *et al.*, 2003).

To overcome the challenges associated with the competitive retail environment, it is important for fashion companies to develop innovative strategies to better understand and serve their customers. Fashion subscription retailing rapidly emerged as an answer to the call by providing periodic deliveries of curated products at the customers' convenience. For example, the subscription business model allows companies to get in-depth customer data and provides the best fitting and customized products to decrease the product return. With the predicted number of customers, companies are able to better manage their inventory to avoid overstock. Additionally, with the close one-on-one interaction between the stylist and consumers, consumers may develop a stronger loyalty toward the fashion subscription companies.

While subscription services are not a novel idea, fashion subscription retailing represents a tremendous innovation to the fashion industry. On one hand, it is similar to traditional subscription services such as magazine or entertainment subscriptions in that the purchase is recurring and periodic (Rudolph *et al.*, 2017). On the other hand, fashion subscription services are more interactive and customizable. For example, customers can sometimes pick items by themselves for their personalized boxes, with or without the guidance from fee-based stylists (Ewen, 2017). Another unique characteristic is that customers can buy as much or as little as they want from the delivered goods and get free shipping both ways.

At the beginning, most of the subscription services in the fashion industry were specifically for men, as men in general expressed a stronger desire to dress more stylishly but didn't know how to do so (Mintel, 2016), and also reported not enjoying retail shopping experiences. By November of 2016, seven percent of men were using clothing subscription

services (Mintel, 2016). One of the most successful cases is Trunk Club, which was founded in 2009 and acquired by Nordstrom in 2014 with an estimated value of \$350 million (Indvik, 2014). The growth potential for menswear subscription services is very optimistic. Recently, subscription services for womenswear, such as Stitch Fix and Trunk Club, have become more popular. As a result, many traditional department stores, such as Neiman Marcus, and retailers that are not traditionally associated with fashion, such as Amazon, have also started adopting the subscription retailing model in their clothing departments in an attempt to better cater to their customers.

Benefits to Fashion Subscription Service Providers

While the actual subscription model can differ greatly from company to company, several common attributes are shared by all companies categorized as Fashion Subscription Service providers: subscription boxes, home try-on, free shipping both ways, and a certain level of customization. These attributes are strategic and effective because they provide great benefits to both consumers and companies.

As was mentioned earlier, online retailers face many challenges, which subscription retailing services are able to overcome to a certain extent (Sellbrite, 2018). For example, fashion subscription retailing services address the lack of communication and interaction between retailer and customers by introducing interactive communications between stylists and customers (Jorner, 2017). Stylists get to know their customers in depth during their styling process, by learning important pieces of information such as customers' work place environment, common places they visit, social activities, and so on. In addition, fashion subscription retailing services could also overcome the challenge of high product return rate (Winkler, 2018) and excessive inventory (Thomas, 2015) that often characterizes traditional online fashion retailing. Fashion

subscription companies can utilize their vast amounts of consumer data to predict the most suitable products for their customers individually, thereby decreasing return rates and extra inventory (Jorner, 2017). Another challenge that online retailers often face is low brand loyalty (Vishnoi, 2018) and high switching rates (Roesler, 2017). Fashion subscription retailers can address this issue by building deeper connections with their customers through styling and online feedback platform communications, which may lead to higher brand loyalty (Wassel, 2018). These characteristics of fashion subscription retailing are a big reason traditional fashion companies have begun to adopt this business model.

Benefits to Consumers

Not only is fashion subscription retailing directly beneficial for retailers, but consumers are also often intrigued by this new shopping format and sometimes prefer it over the traditional in-store and online shopping experience. From the customers' perspective, two main advantages of using subscription services are convenience and comfort (Longanecker, 2015). Like any type of online shopping, consumers can eliminate the time and hassle they would have spent driving to the mall and walking from store to store looking for the best products and the best prices. However, unlike traditional online shopping, fashion subscription retailing services also have stylists hand-pick clothing items for the customers, or have computer algorithms send recommendations based on customers' preferences and size, which further increases the efficiency of shopping. With fashion subscription retailing, online customers no longer need to browse various websites to find specific clothing items, they need only to wait for their box filled with custom selected products to arrive at their front door. Additionally, customers may end up saving money by using fashion subscription services, as these companies often offer free shipping both ways and special discounts. For example, Stitch Fix offers a 25% off discount if

customer keep everything in the box and their \$20 styling fee could be used towards any item purchased from the box. Caetero (2018) also states that customers would save money since they are not forced to keep items they don't love and customers completely avoid the temptation to buy a random sweater or new pair of shoes that may had seen had they been walking around at the mall.

In addition, fashion subscription services give the added benefit of being certain of the products that are bought. Typical online shopping has the shortcoming of not allowing customer to touch and examine cloth before buying, which leads to high level of product uncertainty for consumers. Chaudhuri (1998) finds that high levels of uncertainty in products is related to low levels of positive feelings during consumption, so this uncertainty that customers experience in the traditional online shopping can negatively impact their user experience. However, fashion subscription services allow customers to receive, examine, and try-on the products at home before purchasing. If the products do not meet expectations, customers can return them free of charge. This aspect of fashion subscription retailing greatly eliminates customer's perceived level of uncertainty regarding the products, which may lead to higher customer satisfaction.

One final benefit often seen in fashion subscription services is the high levels of satisfaction and enjoyment that customers experience in the whole process of receiving their clothes. For fashion subscription retailers who send mystery boxes (the box contents are not disclosed to customers prior to receiving the box) the excitement created by the mystery box often generates powerful feelings of enjoyment in customers and can act as a driving factor for customers to continue the subscription service (Ludin, n.d.).

Challenges for Fashion Subscription Retailers

While companies may theoretically benefit from using a fashion subscription retailing business model, there are still many challenges that they will need to overcome. For example, it may be easy to collect preference data from customers, but it is often difficult to analyze and interpret that data to provide accurate recommendations. Additionally, as was mentioned earlier, the market is quickly becoming oversaturated with the addition of new e-retailers and larger chains adopting the fashion subscription retailing model (Chang, 2018). With more than 2,000 subscription service providers in the United States alone (Ewen, 2017), it is even more challenging for companies to stand out and maintain competitive. In light of these challenges, Tarver (2015) pointed out that companies need to focus more on keeping existing customers rather than acquiring new customers. Thus, it is important for a fashion subscription brand to continually analyze its pricing, selections, customer preferences and other trends so that it can continue to provide a competitive offering in a highly saturated market (Ewen, 2017). To encourage customers to maintain subscriptions, companies need to continuously work on producing new content or refining software so it remains up-to-date and has obvious competitive advantages (Tunikova, 2018).

There is one vital challenge fashion subscription retailing service industry is facing- lack of social interactions. Like all online retailers, fashion subscription retailing services cannot provide a designated physical environment for consumers to shop or in-person interact with each other. Traditional brick and mortar stores offer places for entertainment, recreation and social interaction (Jukna, 2018). To some consumers, they consider shopping in stores as a therapy and they feel good simply by walking around (Marisa, 2018). They may even feel better if they get a good deal out of that shopping trip. To other consumers, brick and mortar stores and shopping

malls are places for social hangout (Jukna, 2018). They build up friendships by shopping together or shopping for each other. The physical store is an important medium for people to have social interactions. However, fashion subscription retailing services make people try-on cloth at home individually, which neglects the important benefit, social interaction, that physical stores provide. Without this key factor, some customers may opt-out from subscription services and go back to the traditional way of shopping.

Another challenge subscription companies may face is subscription fatigue. Subscription fatigue may occur when a customer feels emotionally overwhelmed due to having too many subscriptions, and/or feels nervous about not making the most of a service they repeatedly pay for (Tunikova, 2018). Pike (2016) points out that fashion subscription retailing service users may feel overwhelmed or even stressed after using the service for several months, which could lead to consumers unsubscribe. To overcome this phenomenon, companies should aim to exceed consumers' expectations to prove they are valuable and worth paying for (Tunikova, 2018). Finally, Eworld (2018) pointed out three common challenges that subscription box companies faced. First, these companies struggled to properly set prices for subscription boxes, as they felt the tension between providing affordable products and making a profit. Second, in-house fulfillment becomes even more difficult as companies increase in scale. Finally, maintaining excellent customer service is often difficult. Therefore, it is vital for fashion subscription services providers to gain deep consumers' insights to better serve consumers' needs and modify their companies' strategies to stay competitive in the business.

Academic Research on Fashion Subscription Retailing

Research on fashion subscription retailing services is limited. Current available research is generally exploratory in nature. Hölder and Svensson (2016) used quantitative methods to

investigate consumers' points of view towards fashion subscription retailing services and the underlying reasons behind those perspectives. Tao and Xu (2018) did an exploratory study on consumer perceptions on fashion subscription retailing service. Woo and Ramkumar (2018) conducted research to find the predictors of consumers who used fashion and beauty subscription-based online services. Ramkumar and Woo (2018) also worked on finding demographic characteristics of fashion and beauty subscribers. They also tested the relationship between consumers' use of fashion and beauty subscription services and five selected demographic and psychographic consumer variables.

Hölder and Svensson (2016) aimed to discover consumers' perspectives on fashion subscription retailing services and the underlying reasons for those perspectives from 202 respondents. They found that consumers were more interested in fashion subscription retailing services when the service could provide a few of their favorite brands. They also found the younger the participants, the higher interest in fashion subscription retailing services. The main reason participants were not interested in fashion subscription retailing services was because they wanted to choose their own clothes and they would only want to purchase clothing on their own timeline.

Tao and Xu's (2018) study utilized a focus group study approach following the innovation diffusion theory of Rogers (1995). The main purpose of their study was to explore how consumers perceive subscription services in the fashion industry. From the innovation adoption perspective, they explored consumers' knowledge, perception and intention to adopt fashion subscription retailing services to meet their apparel needs. There were several findings from their research. First of all, participants possessed varying degrees of knowledge about fashion subscription retailing but shared the following perception of relative advantages,

including convenience, personalization, consumer excitement, opportunities to try new styles, and opportunity to better manage their apparel budget. They also found out the main concerns focused on missing social shopping experiences and the hassle in the cancellation process. The overall adoption intention was high.

Ramkumar and Woo (2018) empirically tested six antecedents, including utilitarian motivations, hedonic motivations, fashion consciousness, consumer innovativeness, desire for unique products, and online transaction self-efficacy, as predictors of consumers' attitude toward and intention to use fashion/beauty subscription retailing services. The theory of reasoned action was used as a theoretical framework for their study. This study collected a sample size of 385 individuals utilizing an online survey. There were several key findings from their research. For example, they found that utilitarian and hedonic motivations, fashion consciousness, and online transaction self-efficacy indirectly influenced intention to use fashion and beauty subscription retailing services, and this was further mediated by attitude towards fashion and beauty subscription retailing services. They also discovered that subjective norm positively influenced intention to use fashion and beauty subscription retailing services.

Woo and Ramkumar (2018) again surveyed 385 American consumers to answer research questions: What consumer characteristics predict the use of subscription services? And how are subscription users different from non-users? They examined the relationship between consumers' use of fashion and beauty subscription services and five selected demographic and psychographic consumer variables – age, gender, e-retailer trust, fashion consciousness, and exploratory product acquisition. They found that fashion and beauty subscription target consumers were more likely to be female with high levels of e-retailer trust and fashion

consciousness. However, age and exploratory product acquisition tendencies of consumers did not show significant influence on the usage intention.

With the fast-growing speed of the fashion subscription retailing business model, there are many challenges faced by service providers. However, only a limited amount of research regarding this business model has been conducted by the industry practitioners and academic scholars. Within the existing academic research, not all studies focused on fashion subscription retailing services alone. The results from those studies conducted on fashion and beauty subscription retailing services may have been different if they only research on fashion subscription retailing services due to reasons like price point, frequency of delivery, and target market. It will be important to conduct research for each unique product category. Also, with the growing popularity of subscription services, the public audiences are more aware and become more educated regarding this business model. The results from this current study will provide valuable consumer insights for subscription retailers to further understand their customers and make necessary strategic business changes.

The S-O-R Framework

The Stimulus-Organism-Response (S-O-R) framework of environmental psychology was proposed by Mehrabian and Russell (1974). The S-O-R model could be traced back to the stimulus-response theory, which was the first theory to make a link between the environment and behavior in Psychology (Kawaf & Tagg, 2012). However, the stimulus-response theory was criticized by Lazarus (1998) who argued that this theory reduced humans to passive creatures that merely respond to environmental stimulus. Under this theory, customers are likened to machines reacting automatically to stimulus. Therefore, scholars developed the one missing link in this stimulus-response relation that made human beings differ from machines, which is

“organismic” reactions (Kawaf & Tagg, 2012). Then, the S-O-R was developed suggesting that when a person is exposed to external stimuli, “inner organism changes,” leading to behavioral responses (Mehrabian & Russell, 1974).

There are three components within the “S-O-R” framework: stimulus, organism, and response. Within the model, stimulus is an independent variable, organism is the mediator, and response is the dependent variable (Turley & Milliman, 2000; Yoo et al., 1998; Vieira, 2013). Therefore, stimulus will influence organism, and organism will influence response. Stimulus refers to the factors (such as environmental cues) that affect internal states of the individual and can be conceptualized as an influence that stimulates the individual (Mehrabian & Russell, 1974). The “organism” refers to the individual’s internal processes and structures that act as a mediator between the stimulus and the responses of the customers (Mehrabian & Russell, 1974). The last component of the “S-O-R” framework is “response,” which refers to the final decisions of consumers, which could be approach or avoidance behavior (Mehrabian & Russell, 1974).

The S-O-R model has been widely used in marketing studies on consumer behavior (Arora, 1982; Donovan & Rossiter, 1994; Wakefield & Blodgett, 1996). In the traditional retail environment, studies have found the influence of the buying environment on consumers’ expectations, cognition and emotion (Bitner, 1990; Booms & Bitner, 1982; Wakefield & Blodgett, 1996). In online environments, studies have also been done to investigate the relationship between online atmospheric cues (web site quality, e.g. navigation, color, and graphics) and consumer responses using S-O-R model (Kawaf & Tagg, 2012). For example, Richard and Chandra (2005) tested the relationship among web site navigational characteristics, user characteristics, internal states, consumer responses, and outcomes of online communication.

Stimulus (Cognitive and Affective Values)

Stimulus refers to the factors that affect an individual's internal states and could be conceptualized as an influence that stimulates the individual. Stimulus could be measured through novelty and complexity (Tai and Fung, 1997). There are two parts under Stimulus, with one regarding sense modality variables (e.g. color and temperature) and the other being information rate. In the shopping context, sense modality variables refer to physical features including color, store layout, lighting, music, and ambient factors (Aubert-Gamet, 1997). The stimulus could provide vast amounts of information to the customers through environmental cues (Tai & Fung, 1997). Iyer (1989) found that the task environment can perform as an external memory and offers a great amount of stimulus information in a shopping context.

Mehrabian and Russell (1974) proposed a second measurement of Stimulus, information rate, which refers to the load to overcome the difficulty in assessing the information the customer receives. Spies et al. (1997) stated that the higher the information rate, the newer or more unfamiliar the stimulus. Information rate has been identified as a general measure of environmental stimulation that is applicable across many and various social and physical situations. Mehrabian and Russell (1974) concluded four important aspects of information rate, including complexity, novelty, crowding and harmony. Novelty is how well an individual understands an environment and can predict what is going to happen (Mehrabian, 1977). Complexity is the number of elements, features, and changes in an environment (Russell & Mehrabian, 1977).

Regarding online retailing, online environmental stimulus was comprised of ambient factors (Mummalaneni, 2005), design factors (Kim, Kim & Lennon, 2006; Koo & Ju, 2010), albeit scant (Flavian & Guinaliu, 2005; Ku, 2011), product presentation (visual and verbal)

factors (Kim & Lennon, 2008), layout and functionality (Goode & harris, 2007), and links and menus on the website (Koo & Ju, 2010). Most of the studies within the online shopping context have identified web site quality related factors (e.g. navigation, color, and graphics) as stimulus (e.g. Richard & Chandra, 2005; Eroglu et al., 2001). And some studies included external factors (e.g. online retailer reputation) as joint effect of factors to be stimulus (e.g. Kim & Lennon, 2013).

Bitner (1992) proposed the idea of perceived servicescape that would form beliefs or attitude of service quality. She argued that services are generally high in experience and credence attributes, and have less intrinsic cues to help form beliefs about service quality especially in the first-time purchase situations. Bintner (1992) further stated that people would use their beliefs about the benefits (values) provided by the servicescapes that would help form consumer's beliefs about service quality. Fashion subscription retailing services focused on delivering a holistic experience of receiving a subscription box, trying the received curated products at home and returning unwanted products to their customers. Therefore, this study proposed perceived values as stimulus in the fashion subscription service context. Based on previous literature (e.g. Tao & Xu, 2018; Woo & Ramkumar, 2018; Ramkumar & Woo, 2018), perceived values of subscription can be cognitive oriented including monetary value, product variety, convenience, risk, customization, and ease of use; and affective oriented, including enjoyment, which is consumers' objective evaluation of the level of enjoyment of fashion subscription retailing service. By evaluating each of the factors, consumer may have different internal states reaction (e.g. like or dislike; satisfied or dissatisfied). In the following context, each factor will be separately explained.

Monetary Value:

When talk about perceived monetary value, it is inevitable to talk about perceived value. Perceived value has been a common topic in marketing research for a long time. Perceived value comes from the equity theory, which illustrated the trade-off between the quality that a customer receives, and the costs (e.g. financial, energy, time and thinking process cost, acquiring and using a product) (Oliver & DeSarbo, 1988; Kotler, 2000). Perceived value is the result of an overall evaluation of perceived benefits and sacrifices, and satisfaction represents the overall positive or negative feeling about the value of services provided by a supplier (Woodruff, 1997).

Cost saving benefit is one of the main benefits online shopping provides. As Ariste (2015) pointed out that online shopping could save customers' money from both company's perspective and customer's perspective. As for companies, since they don't need to pay the overhead to own and operate the physical business, which means companies could save those expensed on employees' salaries and taxes, and pass on the savings to customers. From customers' perspective, since they are shopping from home and save a car trip, consumers are able to save cost on gas or public transportation. Also, online stores give the opportunities for researching the best deals within a few minutes. Online shopping is also a great place for finding products that are from the past season (Montaldo, 2018). Companies could sell products longer by having them sit longer instead of destroying the profit margin. In return, customer could get significant savings from it if they do not need to buy the most current products (Montaldo, 2018). With the development of technology, there are many browser plug-ins which apply coupons directly on the checkout page, which helps consumers save money which out any extra searching effort (Montaldo, 2018). Therefore, cost saving value is a big advantage for online shopping.

The Tao & Xu (2018) study discovered that consumers are in favor of fashion subscription retailing services for several economic related reasons. First, customers were able to get a discount by keeping multiple items from the box. Second, customers believed that products picked by a professional stylist would be better quality and much nicer than they would be able to pick for themselves. Usually, not everyone could afford to have a personal stylist. But with fashion subscription retailing, customers could get personal styling service for a small amount of money (e.g. \$20 for Stitch Fix) or for free if they purchase any products from the subscription box. With the better quality and nicer looking, customers would be able to keep those clothing for longer period of time, which results in a better value for money spent. Customers would generate more positive attitude towards online shopping if they believe they could save money or get a product with good money value. In fashion subscription retailing, perceived value was examined from two aspects: cost saving value and good value for money (e.g. Tao & Xu, 2018; Woo & Ramkumar, 2018; Ramkumar & Woo, 2018). In this study, perceived monetary value will be measured from these two perspectives.

Product Variety:

Traditionally, it is a common belief that online stores provide more product choices than offline stores. E-commerce offers consumers benefits by providing more variety of products and services that they can choose from (Lim and Dubinsky, 2004; Prasad and Aryasri, 2009). Consumers can find all kinds of products which might be available only online from all over the world. Most companies have their own websites to offer products or services online, no matter whether they already have their front store or not. Many traditional retailers sell certain products only available online to reduce their retailing costs or to offer customers with more choices of sizes, colors, or features. Boccia Titanium, for instance, has stores in many states but not in

Connecticut. The company offers website to reach and to fulfill the need of Connecticut customers to order online. Similarly, Yves Rocher, a French company, does not have the front store in the U.S. It offers the website so that U.S. customers can just add products they want into the online shopping cart and the product will be shipped to their house. Alba, Lynch, Weitz, Janiszewski, Lutz, Sawyer and Wood (1997) stated that online stores could have more products for selection since they do not have inventory which physical stores do. Wolfenbarger and Gilly (2001) also pointed out that it is difficult for physical stores to stock less-popular products to meet the need of certain “niche” markets, which was not a problem for online stores.

Fashion subscription retailing services not only provide benefits that regular online stores provide, but also provide services and benefits that regular online stores do not provide. As pointed out in Tao & Xu’s (2018) research, participants value the service provided by the stylist or recommendations generated by the site. Customers also appreciated the access to a variety of clothing items and the ability to try new styles and new brands that they would otherwise not try. These benefits would be likely to leave positive impressions on customers and influence customers to come back to use the services again in the future. Therefore, product variety is included as a stimulus for fashion subscription retailing services adoption analysis.

Convenience:

Many literature on consumer convenience in a traditional retailing environment has revealed two factors of primary importance in delivering convenient service to customers: time-saving and effort minimization efforts (Etgar, 1978; Kotler and Zaltman, 1971; Seiders et al., 2000, 2005, 2007; Yale and Venkatesh, 1986). In particular, the marketing literature has emphasized the importance of desire for convenience and the value of time. Furthermore, Berry et al. (2002) and Seiders et al. (2007) have extensively reviewed the literature on consumer

convenience in a service economy and define “service convenience” as consumers’ time and effort perceptions related to buying or using a service. Empirical research shows that convenience of the internet is one of the impacts on consumers’ willingness to buy online (Wang et al., 2005). Online shopping is available for customers around the clock comparing to traditional store as it is open 24 hours a day, 7 days a week (Hofacker, 2001; Wang et al., 2005). Convenience is one of the most important benefits for consumer to use fashion subscription retailing services and it influences consumers’ attitudes towards a website (Tao & Xu, 2018). Moreover, online shopping sometimes offer good payment plans (Amin, 2009) and options for customers. Customers can decide their payment date and amount (Anonymous, 2009) in their own preference and convenience.

From Tao & Xu’s (2018) research on fashion subscription retailing services, they identified two perspectives about convenience: time saving and hassle free. Consumers could save time by not needing to drive to stores to search for clothing. Hassle free was due to the fact that fashion subscription retailing services allow consumers to return unwanted clothing for free. Convenience can be defined as consumers’ perceptions of the time and effort involved in using fashion subscription retailing services to make clothing purchases (Berry, Seiders & Grewal, 2002). Greater convenience means users could spend less time and effort to gain more utility value during usage (Gupta & Kim, 2007). Convenience could make users feels that the website or service is simple, intuitive, and user friendly.

Cameron (1999) stated that a number of factors make a website inconvenient from a user’s perspective. In some occasions, information may not be accessible since it is not in a logical place, or is hidden too deeply within the website. In other occasions, information may not be presented in a meaningful manner, or needed information is entirely absent. Convenience

value in fashion subscription retailing services not only considers the website, but also considers the ease of the trying clothes on at home and having a professional stylist pick the best clothing for the customer. As convenience is one of the most distinct factor of fashion subscription retailing, this study believes it is important to include convenience as an environmental factor in evaluating the stimulus of fashion subscription retailing services.

Risks:

In the marketing literature, perceived risk has been defined as consumers' perceptions of hesitation and the unfavorable consequences of buying product offerings (Cox, 1967; Dowling & Staelin, 1994). Perceived risk is an important concept to understand consumers' behavior since consumers are more likely to prevent mistakes than to increase efficacy in purchasing (Mitchell, 1999). Cox (1967) pointed out that risk is perceived in most purchase decisions since consumers are not always sure that all of their buying objectives will be achieved. Consumers' perceived risk may be distinctive depending on their knowledge, past experiences, and acceptable risk levels (Dowling & Staelin, 1994). Bhatnagar et al. (2000) debated that the likelihood of purchasing online decreases with increases in product risk.

Researchers have shown that consumers perceived financial, product performance, psychological, physical, social, safety and time risks when making purchases (Jacoby & Kaplan, 1972; Garner, 1986; Schiffman & Kanuk, 1994; Mitchell & Vassos, 1997; Weber & Hsee, 1998). Perceived risk in online shopping has been viewed as "the extent to which using the Internet to make purchases is perceived as risky in terms of credit card fraud, privacy of information and general uncertainty about the Internet environment" (Martin, Mortimer & Andrews, 2015). Also, Miyazaki and Fernandez (2001) found the loss of consumer information on line is an important type of risk. Regarding online shopping, the importance of perceived risk

continues to be recognized (Chen, 2010; Nepomuceno, Laroche & Richard, 2014). Perceived risk has been studied as a major factor affecting online shopping (Chiu, Wang, Fang & Huang, 2014). Perceived risk in the purchase process may lead to some unfavorable outcomes (Forsythe, Liu, Shannon & Gardner, 2006; Liao, Lin & Liu, 2010).

Research has revealed that perceived risk negatively influenced willingness to perform a risky behavior (Nichlaou & McKnight, 2006). More specifically, perceived risk reduced the willingness of consumers online shopping behavior (Barners, Bauer, Neumann & Huber, 2007). Specifically for fashion subscription retailing services, consumer perceived risks include personal and financial information leakage, troublesome canceling processes, and hidden costs (Tao & Xu, 2018). Perceived risk is a powerful tool in explaining consumer behavior (Mitchell, 1999). It is also very important factor for consumer to evaluate in forming a particular attitude toward a product or service. Therefore, this study believes perceived risk is important to be included as an environmental factor to evaluate the stimulus of fashion subscription retailing services.

Customization:

Customization refers to the ability of an e-retailer to customize products, services, and the transactional environment to individual customers (Srinivasan, Anderson & Ponnnavolu, 2002). Schrage (1999) said that the internet has entered the age that its value proposition is reliant on both the abilities to allow customization and the variety of content it provides, which means customization provided great potential for e-retailers. Customers like products and services that cater to their specific requirements, and hence, online retailers provide personalized products or services that satisfy customer preferences, even if it is costly to match each individual's personalized interest (Chin & Porage, 2001). Fashion subscription retailing services provide

customized services through personal stylists or recommendations provided by computer algorithms. Much research has examined the effect of customization along with other cognitive factors on consumer behavior in online shopping (Ho & Bodoff, 2014).

Customization is a strategic method for companies to offer additional benefits to customers. Kim et al. (2007) stated that customized websites assist consumers in creating their own page that stores purchases, preferences, and other essential information. Also, customization can decrease the likelihood that online customers will go other websites to search for additional information (Kim et al., 2007; Srinivasan, Anderson, & Ponnayolu, 2002). Customers could decrease time and complicated transaction procedures, so they could save time and complete the purchase transactions more easily (Srinivasan et al., 2002). E-retailers could gather and save information that customers provide (e.g. browsing history) to predicate customer's next visit, which offers customers a convenient shopping experience and a sense of exceptional attention (Cho & Fiorito, 2009). Those customers would be educated and assured in their purchases (Moynagh & Worsley, 2002).

There are several reasons why customization is expected to affect consumer attitude. Customization increases the possibility that customers will find something that they wish to buy (Srinivasan et al., 2002). Customization also generates the perception of increased choice by enabling a quick focus on what the customer really wants (Shostak, 1987). Also, customization can signify high quality and lead to a better real match between customer and product (Ostrom & Iacobucci, 1995). If companies are able to accurately tailor or predict what customers really want, it could help minimize the time customers spend searching for the right products. These advantages of customization would provide a good appeal to customer and increase the likelihood for customer to visit the site or use the service in the future. As customization is one

of the key benefit fashion subscription retailing services product, it is important to include it as an environmental factor in stimulus of fashion subscription retailing service adoption.

Ease of Use:

Perceived ease of use refers to the extent to which a user perceives a particular technology as easy to use (Davis, 1989). Perceived ease of use is one of the main structural variables of the technology acceptance model (TAM). TAM has been applied extensively in the study of consumer behavior related to the adoption and use of technology (Chua, Goh & Lee, 2012; Stafford, Stafford, & Schkade, 2004). Since fashion subscription retailing services are also considered a new way of selling clothing using online technology, perceived ease of use is important to analyze. Perceived ease of use has been heavily investigated as an important factor in understanding acceptance of information technology (Al-Gahtani & King, 1999), e-commerce (Jiang, Hsu, Klein & Lin, 2000), and mobile-commerce (Kwon & Chidambaram, 2000; Nysveen, Pedersen & Thorbjornsen, 2005). The effect of perceived ease of use was both considered as a direct and indirect (mediated by perceived usefulness) factor on attitude toward accepting technology (Chiu, Huang & Yen, 2010; Yu & Tao, 2009). In the fashion subscription retailing services context, perceived ease of use not only applies to the manipulation of the website interface, but also the whole service experience. This includes creating a style profile online, communicating with a stylist if necessary, understanding the purchasing procedure, trying clothes on at home, and returning unwanted items. Consumers are highly likely to evaluate how easy each of the above steps would be in forming their opinions about the fashion subscription retailing services. For example, Tao and Xu's (2018) research showed that participants found it complicated and burdensome to communicate with stylist through phone call and email, which could ultimately negatively impact attitudes and adoption intention toward fashion subscription

retailing services. Therefore, perceived ease of use is an important factor to be included as an environmental factor for stimulus of fashion subscription retailing service adoption.

Hedonic Value:

In shopping context, hedonic value is originated from the pleasure and enjoyment experienced in the shopping process (Holbrook & Hirschman, 1982). Therefore, in this study, perceived hedonic value is measured by perceived enjoyment. Derived from flow theory, perceived enjoyment refers to the extent to which using a given technology is perceived to be personally enjoyable in its own right – aside from any utilitarian benefits that are derived from using the technology (Lowry, Gaskin, Twyman, Hammer, & Roberts, 2013). Enjoyment is a form of intrinsic motivation that captures the pleasure and satisfaction derived from performing the behavior (e.g. the shopping process) (Davis, Bagozzi & Warshaw, 1992). Like shopping enjoyment is important off-line (Morris, 1987; Forman, 1991), it is equally important online where it can have a significant influence on attitude and intention towards online shopping (Jarvenpaa & Todd, 1997; Eighmey, 1997). Enjoyment as an affective value is very important for consumers who have a preference in using fashion subscription retailing services. Nadia Boujarwah, Co-Founder of subscription company Dia & Co. said that subscription companies need to focus on more than the utilitarian benefits (Kestenbaum, 2017). Nadia said although data is important, it is more important to figure out the psychographics of the customer and provide emotional care of their experience. The most powerful customer experience is rarely only functional. The product customer really love are the product provide more emotional benefits (Kestenbaum, 2017). For most people, the fun factor is one of the biggest advantage that subscription boxes provide (Livingston, 2018). Also, from Tao & Xu's (2018) focus group study, they found participants were especially in favor of the surprise and enjoyment value generated

from using fashion subscription retailing services. Consumers are able to receive a curated box every month (or depend on the delivery frequency set by the consumer). They could try on those cloths at home and styling with existing wardrobe then decide which one to keep. It feels like Christmas as many customer put in getting a subscription box (e.g. Sukhraj, 2018). Therefore, enjoyment is an important factor to examine to determine consumers' attitudes toward fashion subscription retailing services. People who believe fashion subscription retailing services could provide the delight feel might have a more favorable attitude toward fashion subscription retailing services.

Organism (Consumer Attitude)

Organism refers to the internal processes and structures of the individual that intervening between stimulus and the final response (Mehrabian & Russell, 1974). In Mehrabian and Russell's theory, there are three independent states in the organism condition of all emotional reactions: pleasure, arousal, and dominance. Pleasure refers to how good a consumer feels about the retail environment. While arousal is the level that a consumer feels excited or stimulated. Then finally, dominance is an affective state that relates to control in regards to the retail environment. Organism was further defined as consumers' affective and cognitive condition, and it consists of the entire processes that mediate between both stimulus and responses to customers by Loureiro and Ribeiro (2011). Cognitive position refers to "everything that goes in the consumers' minds concerning the acquisition, processing, retention, and retrieval of information" (Eroglu, Machleit & Davis, 2001). The affective state here shows the feelings and emotions expressed by consumers following the stimulus.

Attitude is defined as a learned predisposition to respond in a consistently favorable or unfavorable manner to an object, event, or stimulus (Fishbein & Ajzen, 1975). Attitude is a

multidimensional construct with cognitive, affective, and behavioral components (Fishbein & Ajzen, 1975). Attitude is also a sum of the evaluative reaction to a salient property of the service (Wu, 2003). Consumers' attitude's effect on consumers' purchasing behavior has been widely studied (e.g. Vermeir & Verkeke, 2006; Ajzen & Fishbein, 2005). More positive consumer attitude would lead to more favorable consumer purchasing behavior. Attitude attracts extensive research attention and plays a significant role in online applications (Gao & Koufaris, 2006; Liao & Cheung, 2002; Lin, 2007; Pavlou & Fygenson, 2006). Individuals with favorable attitudes toward fashion subscription retailing services will be more apt to adopt the services. In this study, organism will be measured by attitude.

Response (Adoption Intention)

According to the S-O-R model, after the exposure to stimulus and the development of consumer inner organism, a responsive behavior emerges. Response refers to the final decisions of consumers, which could be approach or avoidance behavior (Mehrabian & Russell, 1974). Sicilia et al. (2006) suggested that internal dimensions, towards websites can be forecasters of intent to visit the store, purchase intention, and overall brand engagement. Ling et al.'s (2010) study on shopping orientations theorized that response behavior, especially in the form of purchase intention is one of the main behavioral outcomes related to internal processing of information, also known as an aspect of affective state. Holbrook and Hirschman (1992) also found that behavioral responses, in regards to a brand, start with an external experience, which influences the internal state, ultimately leading to a consumer's behavioral response. Research has been conducted to address the different types of response. One popular type of response is based on approach-avoidance theory, where customers react to the servicescape by displaying one of two diametrically opposed forms of behavior – approach or avoidance (Aubert-Gamet,

1997). Approach behavior consists of all the positive behaviors of willing to stay, explore and purchase; however avoidance is the opposite. Another popular type of responses is behavioral intention. Behavioral intention means the intent to purchase (Ballantine & Fortin, 2009), repurchase, telling others to use, and brand loyalty (Jayawardhena & Wright, 2009) to the online retailer. This study identifies consumer adoption intention of fashion subscription retailing services as the response to the organism. The reason we adopted adoption intention instead of actual consumer purchase behavior as the response is because fashion subscription retailing service is still not as widely adopted by all online shoppers although it is getting more popular than before.

Moderating Effect

Moderating factors (e.g. hedonic motivation and personality traits) have been identified in the S-O-R model by previous research (e.g. Bitner, 1992). For example, Chang, Eckman and Yan (2011) used hedonic motivation examining the moderating effect on the relationship between retail environmental characteristics (stimulus) and consumers' emotional responses (organism). Eroglu, Machleit and Davis (2003) tested involvement and atmospheric responsiveness's moderating effect on the relationship between online environmental cues (stimulus) and internal states (organism). The results from both studies revolved significant effect of moderating factors on the relationship between stimulus and organism. This paper investigates two personality traits related moderating factors regarding their impact on the relationship between Stimulus and Organism. These two moderating variables are fashion involvement and risk aversion.

Fashion Involvement

To understand fashion involvement, the concept of product involvement must first be understood. Zaichkowsky (1985) defined product involvement as how relevant a product is to an individual's intrinsic needs, values, and interests. In the context of fashion industry, fashion involvement measures consumers' interest in clothing and fashion, which affects consumers' purchasing decisions and consumption behaviors (Naderi, 2013; Nam, Hamlin, Gam, Kang, Kim, Kumphai, Starr & Richards, 2007).

Fashion involvement has been a variable of interest for researchers to understand consumers' responses to clothing (Bhaduri & Stanforth, 2017). O'Cass and Choy (2008) found fashion involvement positively influenced consumers' perception of brand status and attitudes towards the brand, which in turn positively influenced consumers' willingness to purchase. Consumers who have higher fashion clothing involvement believe fashion is a vital part of their identity (O'Cass, 2004). These individuals also rely on social approval for their clothing choices to ensure that their fashion choices will be approved of by their current time period (Davis, 1994). High fashion involvement individuals have historically been viewed as drivers, influencers and legitimists of the fashion adoption process (Goldsmith & Emmert, 1991; Tigert, Ring & King, 1976; O'Cass, 2004). Their reactions to new styles can be critical to the ultimate success or failure of products (Goldsmith, Moore & Beaudoin, 1999). Moreover, fashion companies marketing strategy can integrate fashion leaders into their planning since fashion leaders represent a significant target market with high sales potential (Summers, 1970). Therefore, individuals who are high on fashion involvement may be more aware of, and more in favor of the innovative fashion retailing model than individuals who have low fashion involvement.

Fashion involvement has been heavily researched in consumer behavior in the fashion industry. O’Cass (2004) discovered that increased fashion involvement leads to greater perceived knowledge of fashion that positively influences consumer confidence in making decision. Chae, Black & Heitmeyer (2006) found a positive correlation between the level of fashion involvement and pre-purchase satisfaction and post purchase satisfaction. Michaelidou and Dibb (2009) found fashion involvement, risk, variety-seeking drive, and loyalty positively influence brand switching behavior, with high fashion involvement individuals being more likely to show brand switching behavior in their clothing purchase than low fashion involvement individuals. Diaz-Meneses’s (2010) research indicated that involvement with new fashion is more of a personal need than social need. It is addressed more from an emotional than a cognitive perspective. There are different ways for consumers to become interested in fashion according to their social-demographic characteristics. Based on consumers’ different levels of fashion involvement, advertisers will strategically emphasize different aspects of fashion items to attract consumers (Auty & Elliott, 1998), thus acknowledging the importance of understanding the role of consumers’ fashion involvement in shaping consumers’ perceived values.

Eroglu et al. (2003) tested and confirmed the moderating effect of fashion involvement on the relationship between stimulus and organism under an S-O-R model. Within the fashion subscription retailing context, based on the same environmental cues (cognitive value and affective value), high and low fashion involvement individuals may emphasize different values and form different attitudes towards fashion subscription retailing services. For example, for high fashion involvement consumers, the affective values (hedonic value) may carry a heavier weight in developing their attitudes (Holbrook & Hirschman, 1982) toward online shopping (Shih, 1998) than other values. Therefore, in this study the level of consumers’ fashion involvement is

hypothesized as a moderating role to examine the influence of fashion involvement on the relationship of consumers' cognitive and affective values (Stimulus) on consumer attitude (Organism) in fashion subscription retailing services.

Risk Aversion

Previous research found that when making a decision, individuals have a tendency to be attracted by or deterred by options that are perceived as more or less risky (Weber & Bottom, 1989; Weber & Milliman, 1997). Risk aversion refers to a consciousness that more risk is worse and that risk is unfavorable (Bell, 1995; Wiseman, Gomez-Mejia, & Fugate, 2000). Qualls and Puto (1989) defined risk aversion as a decision maker's preference for a guaranteed positive outcome over any other potential outcomes. Risk aversion has been perceived as an individual difference or predisposition (Mandrick & Bao, 2005). There is a close relationship between risk aversion and perceived risk as Matzler et al. (2008) pointed out. Matzler et al. stated the influence of risk aversion on a particular consumer's decision making may vary based on the different types of risks involved.

Risk adverse consumers feel uneasy in complex and novel buying situations and are reluctant to try new products or services (Kumar, Kesharwani & Das, 2016). They perceive them as risky because the performance of these unfamiliar products is uncertain and unknown in comparison with the established products and brands (Steenkamp, Hofstede & Wedel, 1999). Risk adverse consumers may reduce risk by choosing higher-priced brands, especially in the markets where objective quality information is deficient and intrinsic product information is less reliable (Zhou, Su & Bao, 2002). Consumers with high levels of risk aversion will not search for new information or take risks by trying new products or services when new purchases are made - they will simply stay loyal to previous or well-established brands (Matzler et al., 2008). It is

likely that risk-averse consumers are more likely to weigh distrust (negative values) than trust (positive values) when evaluating the risk associated with online shopping (Riquelme & Roman, 2014). A more risk averse individual would be less likely to form a positive attitude in a scenario that involves risk than would a less risk-averse individual.

There are two reasons why we adopted risk aversion as a moderating factor in the relationship between consumers perceived cognitive and affective values (Stimulus) and consumers' attitude (Organism) toward fashion subscription retailing services. First of all, according to Fiore and Kim (2007), personal traits could serve as moderators influencing the strength and direction of the relationship between the stimulus and consumers' responses (attitudes and behaviors) to the shopping environment. In this current study, one of the personal traits we identified is risk aversion. Secondly, fashion subscription retailing services is still a relatively new format of retailing with identified perceived risks. Individuals with high levels of risk aversion may still stick to their old way of shopping even if they could identify all the benefits that fashion subscription retailing services provide because there would still be risk involved. It is highly likely that certain values will be more important for high risk aversion individuals than for low risk aversion individuals. For example, if the perceived ease of use is high, they will have a low possibility of being exposed to complex procedures and they may feel safer and generate a more positive attitude. Additionally, if the perceived monetary value is high, there will be a lower risk of losing too much money, which in turn will provide security. Therefore, this research seeks to discover which factors are important influencers of attitudes toward fashion subscription retailing services for high and low risk aversion individuals.

Proposed Hypotheses

A research framework was developed for this study based on the S-O-R model (Figure 2). In the framework, stimulus consists of six perceived cognitive values and one perceived affective value of fashion subscription retailing services. Organism is represented by consumers' attitude towards fashion subscription retailing. Response is measured by consumers' adoption intention. Base on the previous literature on S-O-R and fashion subscription retailing, this study proposed the following hypotheses reflecting the proposed relationships.

H1: Consumers' cognitive and affective perceptions of fashion subscription retailing services will have a significant influence on their attitudes toward fashion subscription retailing services. Specifically, the influence of the following perceptions was proposed: monetary value (H1-1), product variety (H1-2), convenience (H1-3), risk (H1-4), customization (H1-5), ease of use (H1-6), and hedonic value (H1-7).

H2: Consumers' attitudes will have a significant influence on their adoption intention toward fashion subscription retailing services.

H3: Fashion involvement will have a moderating effect on the relationship between cognitive and affective values and consumers' attitudes toward fashion subscription retailing services.

H4: Risk aversion will have a moderating effect on the relationship between cognitive and affective values and consumers' attitudes toward fashion subscription retailing services.

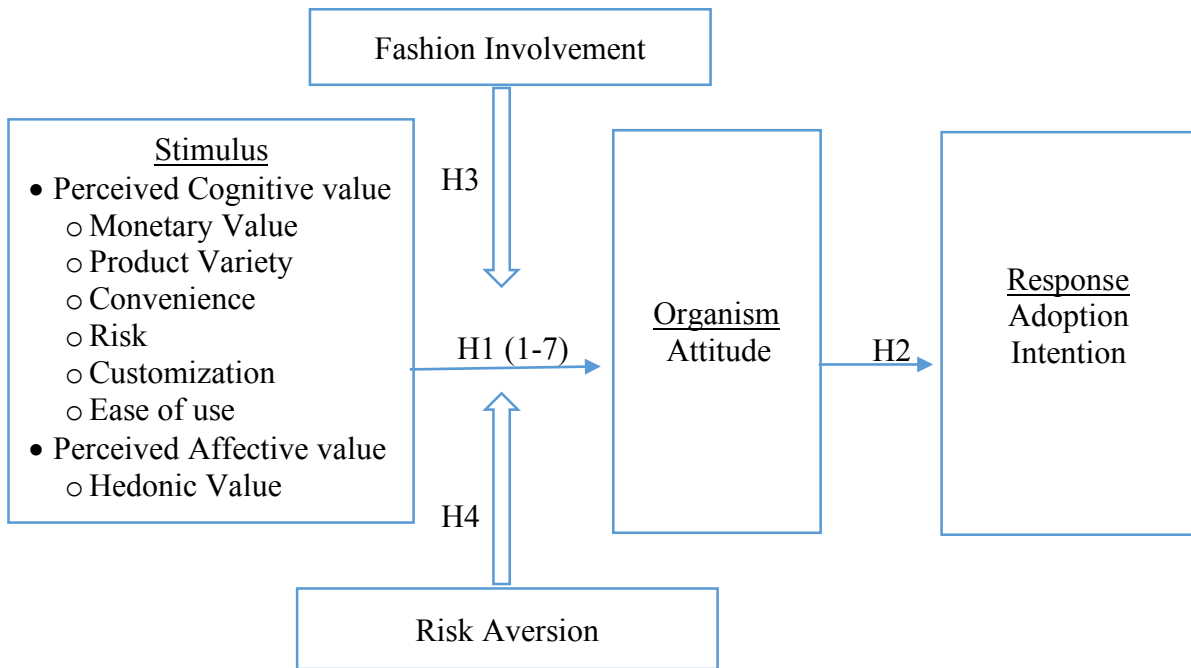


Figure 2. Conceptual Framework of Consumer Adoption toward Fashion Subscription Retailing Services and hypotheses.

CHAPTER THREE

METHODOLOGY

The purpose of the study is to gain consumer insights regarding fashion subscription retailing services. Specifically, consumers' adoption intention of fashion subscription retailing services using the S-O-R model was investigated. The research design is depicted in the conceptual framework presented in proposed relationships. To test the hypotheses proposed in the study, an online survey was deployed to capture consumers perceived cognitive and affective values, attitudes and adoption intentions, as well as their fashion involvement and risk aversion degrees. A structural equation modeling (SEM) and multi-group analyses were used to test the proposed hypotheses. The sampling and data collection, instrumentation, measures and data analysis procedures are presented in details in the following sections.

Sample and Data Collection

Prior to data collection, an approval was obtained from the Institutional Review Board at North Carolina State University. Data for this study were collected via an online survey through Qualtrics. A convenience sampling method was used to recruit male and female consumers from a large national consumer panel that Qualtrics maintains. Subjects were required to be between the ages of 25 and 55 to participate in the survey. The subjects had at least heard of fashion subscription retailing before taking the survey. The online survey took place in March 2019 and lasted for 14 days. The survey link was shared with the subjects who met the sampling criteria. The data collection process was terminated when the responses reached the assigned quantity, which was 300 for this study. An on-going monitor method was used to ensure the 300 surveys collected were valid. Questionnaires were excluded from the data pool if one or more of the following situations happened: 1) straight-lining answers to questions; 2) same or similar

answers to obviously contradictory questions (e.g., choosing “strongly agree” for both “Shopping is not a pleasant activity to me.” and “Going shopping is one of the enjoyable activities of my life.”); and 3) more than one third of the questions were not answered. The complete 300 questionnaires were retained for further data analysis.

Instrumentation

The questionnaire began with an introduction which included a statement of the purpose of the study, a definition of fashion subscription retailing, confirmation of having heard or used fashion subscription retailing services, and an informed consent statement. Next, the questionnaire addressed the focal variables followed by demographic variables and general shopping behavior questions. Specifically, the questionnaire captured respondent data on the following variables: monetary value, product variety, convenience, risk, customization, ease of use, enjoyment, attitude, intention to use fashion subscription retailing services, fashion involvement, and risk aversion. The respondents were asked to provide demographic information such as gender, age, education, household income, marital status and ethnicity. General shopping behavior questions were also asked to get a general knowledge of the participants (e.g. fashion subscription retailing services they have heard of and have used; satisfaction level of using fashion subscription retailing services and their original experience; frequency of online clothing shopping; and frequency of brick and mortar store clothing shopping).

Measures

All the questions besides demographic and general shopping behavior questions were measured on a seven-point Likert type scale (1 = Strongly Disagree, and 7 = Strongly Agree). Question wordings regarding consumers’ cognitive and affective values, consumer attitude, and consumer adoption intention were modified to better suit the fashion subscription retailing

services context. In general, as detailed below, some measurement questions were adopted from existing scales with modifications to make them specific to fashion subscription retailing services, and some measurement questions were developed based on the qualitative study conducted by Tao and Xu (2018). Multi- item constructs' reliability and validity were tested after data collection.

Monetary Value (MV)

This construct was used to capture the consumers' perceived value (e.g. worth of money and money saving) toward fashion subscription retailing services. Perceived value was measured through two dimensions, worth of money and money saving. There were five items in this construct. Measurement items one to three were adopted from Fang, George, Shao and Wen (2016). Two additional items were included based on the qualitative research finding regarding money saving benefits (MV4 and MV5) from the Tao and Xu (2018) study (Table 1).

Table 1. Items used to measure Monetary Value.

Item	Statements
MV1	The products offered by FSRS would be a good value for the money.
MV2	The price that I would pay for the product is good.
MV3	I would consider the products to be a good buy.
MV4	Purchases through FSRS will be cheaper than other purchasing options.
MV5	I would save money by using FSRS.

Product Variety (PV)

This construct was used to measure product variation and selection benefits provided by fashion subscription retailing services. There were four items under this measurement. The first three items were adopted from To, Liao, and Lin (2007). One additional item was included to better suit the fashion subscription model context (PV 4) (Table 2).

Table 2. Items used to measure Product Variety.

Item	Statements
PV1	FSRS could provide access to a variety of clothing items.
PV2	I could access a wide selection of each type of clothing items through FSRS.
PV3	I could access many brands through FSRS.
PV4	FSRS could provide an opportunity to try different fashion styles I would not otherwise try.

Convenience (CO)

Convenience represents consumers' perceptions of time and effort involved in using fashion subscription retailing services to make clothing purchases (Berry et al., 2002). Four items were used in measuring consumers' perceived convenience of fashion subscription services. Items within this scale were created based on Childers et al. (2001) existing scale and Tao & Xu (2018) qualitative research findings (Table 3).

Table 3. Items used to measure Convenience.

Item	Statements
CO1	Using FSRS would require less time in clothing shopping than traditional shopping methods.
CO2	Using FSRS would be a more convenient way to shop for clothing than traditional shopping methods.
CO3	FSRS can relieve some hassles of clothing shopping.
CO4	FSRS would reduce the number of times I go to clothing stores.

Risk (PR)

Perceived risk refers to consumers' perceptions of the unfavorable consequences associated with buying products offered by fashion subscription retailing services (Cox, 1967; Dowling & Staelin, 1994). Five items were used in measuring consumers' perceived risks in the fashion subscription service context. The first four items were adopted and simplified from Chiu, Wang, Fang & Huang (2012) existing scale. An additional item was added to better suit the fashion subscription context (PR5) (Table 4).

Table 4. Items used to measure Perceived Risk.

Item	Statements
PR1	I am afraid the products from FSRS would be of poor quality.
PR2	I am concerned that my personal and financial privacy would be leaked if I use FSRS.
PR3	I am afraid that there would be hidden costs when using FSRS.
PR4	I am afraid that FSRS would not deliver products on time.
PR5	I am afraid that canceling my FSRS subscription would be troublesome.

Customization (CU)

Customization refers to the ability of fashion subscription retailers to customize products, services, and the transactional environment to individual customer (Srinivasan et al., 2002).

There were four items in total (Table 5). The scale was adopted and modified from To, Liao, and Lin's (2007) study.

Table 5. Items used to measure Customization.

Item	Statements
CU1	Product recommendations from FSRS would be helpful.
CU2	Products provided by FSRS would be customized to my needs.
CU3	FSRS would make me feel that I am a unique customer.
CU4	FSRS would help me better style myself.

Ease of Use (PEOU)

Perceived ease of use is defined as the extent that a user perceives a technology to be easy to use (Davis, 1989). Perceived ease of use may include factors such as accessing websites or web-interface. This construct was used to measure how easy it was for consumers to understand how to use fashion subscription retailing services. The measurement for perceived ease of use was adopted and modified based on Gefen and Straub's (2000) study (Table 6).

There were five items in this scale.

Table 6. Items used to measure Perceived Ease of Use.

Item	Statements
PEOU1	The FSRS process is easy to understand.
PEOU2	It would be straight forward to build my style profile on a FSRS website.
PEOU3	The home try-on concept is easy to understand.
PEOU4	I think it would be easy to communicate with my online stylist.
PEOU5	Returning unwanted products would be complicated. (R)

Hedonic Value (HV)

Hedonic value is measured by perceived enjoyment. Perceived enjoyment refers to the extent to which using a technology is considered to be personally enjoyable in its own right – aside from any utilitarian benefits that are derived from using the technology (Lowry et al., 2013). This construct was used to measure the hedonic benefits in using fashion subscription retailing services. There were five items in this construct. The items were adopted and modified based on Lee and Chen’s (2009) study (Table 7). Wording for the five items was adapted to fit the study’s context.

Table 7. Items used to measure Hedonic Value.

Item	Statements
HV1	It is fun to try subscription clothing at home.
HV2	Waiting for the subscription box would be exciting.
HV3	Opening the subscription box would be exciting.
HV4	It would be exciting to communicate with a fashion stylist.

Attitude (ATT)

Attitude refers to a learned predisposition to respond in a consistently favorable or unfavorable manner to an object, event, or stimulus (Fishbein & Ajzen, 1975). It is a sum of the evaluative reaction to a salient property of the service (Wu, 2003). Attitude construct was created

to capture consumers' general attitude toward using fashion subscription retailing services (Table 8). There were five items in this construct.

Table 8. Items used to measure Attitude.

Item	Statements
ATT1	I think it is a good idea to use FSRS.
ATT2	I think it is fun to use FSRS.
ATT3	I think it is useful to use FSRS.
ATT4	I think it is worthwhile to use FSRS.
ATT5	I think it is beneficial to use FSRS.

Adoption Intention (AI)

The construct for adoption intention was adopted from Limayem, Khalifa and Frini's (2000) study to capture consumer intention to adopt fashion subscription retailing services for their clothing purchase (Table 9). The adoption intention of fashion subscription retailing services was measured by three items. Wording for the three items was slightly adapted to fit the study's context.

Table 9. Items used to measure Adoption Intention.

Item	Statements
AI1	I intend to use FSRS for apparel shopping in the near future.
AI2	It is unlikely that I will purchase through FSRS in the near future.
AI3	I would recommend FSRS to my friends in the near future.

Fashion Involvement (FI)

Fashion involvement refers to the extent that consumers views the fashion clothing shopping activity as a central part of their life, a meaningful and enchanting activity in their life (O'cass, 2004). The construct for fashion involvement was created based on O'Cass's (2000, 2004) study to determine the respondents' level of involvement with fashion clothing. There

were six items within this scale. The scale was extensively used in previous studies and had proven to be consistently reliable (O’cass, 2000, 2004, O’cass & Choy, 2008) (Table 10).

Table 10. Items used to measure Fashion Involvement.

Item	Statements
FI1	Fashion clothing means a lot to me.
FI2	Fashion clothing is significant to me.
FI3	For me personally fashion clothing is important.
FI4	I am interested in fashion clothing.
FI5	I pay a lot of attention to fashion clothing.
FI6	I am very much involved with fashion clothing.

Risk Aversion (RA)

Risk aversion refers to a decision maker’s preference for a guaranteed positive outcome over any other potential outcomes (Qualls & Puto, 1989). The construct for risk aversion was adopted from Mandrick and Bao (2005) study capturing participants’ comfortable level in taking risks (Table 11). This construct has been proved to be effective and adopted in other studies (Bao, Zhou & Su, 2003; Brashear, Kashyap, Musante & Douthu, 2009). There were three items in this scale.

Table 11. Items used to measure Risk Aversion.

Item	Statements
RA1	I do not feel comfortable about taking chances.
RA2	I prefer situations that have foreseeable outcomes.
RA3	Before I make a decision, I like to be absolutely sure how things will turn out.

Data Analysis

Description analysis was used to understand the demographic information and general shopping habits of the participants. A two-step approach was used to test the relationships in the proposed framework. A confirmatory factor analysis (CFA) was used to examine the validity of multi-item constructs, including monetary value, product variety, convenience, risk,

customization, ease of use, hedonic value, attitude, intention to use fashion subscription retailing services, fashion involvement, and risk aversion.

A structural equation modeling (SEM) was conducted to test the proposed hypotheses. Single group structural equation modeling was used to test H1 and H2 to assess the effects of cognitive and affective values (S) on attitude (O) and the effect of attitude (O) on adoption intention (R). To test the moderating effect of each moderating factor, the sample was divided into two sub-groups based on the median value of each moderator variable (fashion involvement and risk aversion). Then, the configuration invariance and measurement invariance were first checked for each group. The configuration invariance test fit the model for each group, leaving all factor loadings and item intercepts free to vary for each group. A good configuration score means the overall factor structure holds up similarly for both groups. Measurement invariance tests ensured the tested structure measured the same construct across the two groups. Model fit indices of the unconstrained model was used to test the configuration invariance, and the Chi-square difference was calculated to test the measurement invariance. When both invariance tests were satisfied, constraints were imposed and the Chi-square difference was calculated between the two sub-groups. Figure 3 depicts the data analyses employed for hypotheses testing.

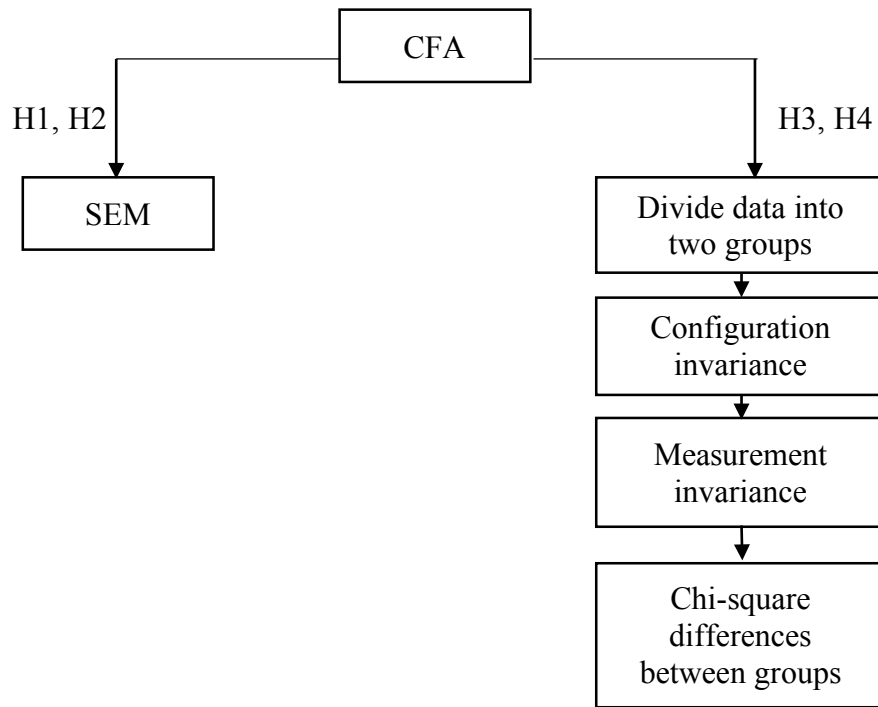


Figure 3. Flow Chart of Data Analysis Steps.

CHAPTER FOUR

RESULTS

Sample Profile

A total of 301 valid responses were received and retained for data analysis. Table 12 shows the participants' demographic information and general shopping habits. Participants' gender ratio was almost one to one, with 50.2% being male and 49.8% being female. In terms of participants' age, each ten years' group (from 25 years old to 55 years old) had approximately 100 participants, with respondents aged 25-35 (33.6%), 36-45 (33.2%), 46-55 (33.2%). Regarding participants' education, 39.9% of the respondents had some college or held a vocational degree. 24.3% of the respondents held a high school diploma and 24.3% of the respondents had a bachelor's degree. 8.6% of the participants had graduate degrees or above. More than half (55.5%) of the respondents earned less than \$50,000 a year. 21.3% of the participants earned under \$20,000 per year. 34.2% of the participants earned an annual income of \$20,000 to \$50,000. Participants who earned an annual income of \$50,000 to \$75,000 accounted for 20.6% of all the respondents, and the remaining 23.9% of respondents had annual incomes over \$75,000. The frequencies of participants' shopping for clothing online and for shopping in brick and mortar stores were similar. Most participants would do online clothing shopping either once a month (38.9%) or twice per year (34.2%), and most participants would shop for clothing in physical stores once a month (44.9%) or twice per year (29.2%). Most popular fashion subscription retailing services participants have heard of and/or have used are Amazon Prime box and Stitch Fix.

Table 12. Demographics and General Shopping Habit.

Variable	Value	Percent
Gender	Male	50.2
	Female	49.8
Age	25-30 years old	17.3
	31-35 years old	16.3
	36-40 years old	19.6
	41-45 years old	13.6
	46-50 years old	9.6
	51-55 years old	23.6
Education	Less than high school	3.0
	High school graduate	24.3
	Some college/vocational degree	39.9
	Bachelor's degree	24.3
	Master's degree or above	8.6
Annual household income	Less than \$20,000	21.3
	\$20,000-\$50,000	34.2
	\$50,000-\$75,000	20.6
	\$75,000-\$100,000	12.0
	\$100,000-\$150,000	6.3
	\$150,000-\$200,000	4.3
	\$200,000-\$300,000	1.3
	Over \$300,000	0
Frequency of online clothing shopping	Never	13.6
	Twice per year	34.2
	Monthly	38.9
	Weekly	10.0
	Daily	3.3
Frequency of brick and mortar store clothing shopping	Never	12.6
	Twice per year	29.2
	Monthly	44.9
	Weekly	12.6
	Daily	0.7
Fashion subscription retailing services participants have heard of	Stitch Fix	21.0
	Trunk Club	8.0
	Amazon Prime box	27.3
	Fabletics	15.8
	Five Four Club	3.0
	Gwynnie Bee	8.5
	Golden Tote	3.0
	Wantable	3.2
	Elizabeth & Clarke	3.8
	Others please indicate	1.7

Table 12 (Continued).

	None	4.8
Fashion subscription retailing services participants have used	Stitch Fix	8.8
	Trunk Club	2.1
	Amazon Prime box	14.9
	Fabletics	5.9
	Five Four Club	2.7
	Gwynnie Bee	2.7
	Golden Tote	1.9
	Wantable	3.5
	Elizabeth & Clarke	1.9
	Others please indicate	2.9
	No experience	52.9

Measurement Model

A confirmatory factor analysis (CFA) was conducted to verify the factor structure of latent variables. According to the criteria recommended by Hu and Bentler (1999), the results suggested that the measurement model is plausible and fits the data ($\chi^2=2131.273$, $df=934$, $\chi^2/df=2.28$, $p=.000$; $SRMR=.058$; $IFI=.906$; $CFI=.906$; $RMSEA=.065$). Next, the convergent validity and the discriminant validity of measurement constructs were tested. The corresponding standardized regression weights (λ) of each construct were significant with values ranging from .608 to .964 as shown in the Table 13. Also, Cronbach's alpha values of all constructs were greater than .70, composite reliability values were greater than .70, and average variance extracted values (AVE) were greater than .50, except for one construct (.47) which was marginally lower than .5. According to Fornell and Larcker (1981), when an AVE is less than .5, but composite reliability is higher than .6, the convergent validity of the construct is still considered adequate. Therefore, the results indicate that the measurement constructs were internally consistent, and the instruments substantially measured the constructs, implying convergent validity. According to Hu & Bentler (1999), the discriminant validity was achieved

for all constructs as the AVE of each construct was greater than the square of correlations (R^2) between the respective constructs (Table 14). A multi-collinearity problem was nonexistent according to Hu & Bentler (1999) as the correlations between all latent variables ranged from .008 to .848($< .9$).

A descriptive analysis was also conducted for all variables to understand the general statistical results of participants' responses for each variable (Table 15). The sample as a whole had relatively high scores for every variable. Specifically, on a seven point scale, the average perceived monetary value score was 4.50 (SD = 1.26), the average perceived product variety score was 5.38 (SD = 1.10), the average perceived convenience score was 5.25 (SD = 1.15), the average perceived risk score was 4.04 (SD = 1.14), the average perceived customization score was 5.11 (SD = 1.05), the average perceived ease of use score was 5.12 (SD = 1.02), the average perceived hedonic value score was 5.17 (SD = 1.18), the average attitude score was 4.98 (SD = 1.24), the average adoption intention score was 4.24 (SD = .59), the average fashion involvement score was 4.31 (SD = 1.76), and the average risk aversion score was 4.86 (SD = 1.22).

Table 13. Confirmatory Factor Analysis Results.

Construct	Item	λ Factor Loading	C.R.	Cronbach's α	AVE
Monetary Value (MV)	MV1	.858***	.909	.972	.714
	MV2	.865***			
	MV3	.843***			
	MV4	.835***			
	MV5	.837***			
Product Variety (PV)	PV1	.875***	.731	.914	.731
	PV2	.881***			
	PV3	.853***			
	PV4	.809***			
Convenience (CO)	CO1	.778***	.874	.872	.635
	CO2	.867***			
	CO3	.818***			
	CO4	.716***			
Perceived Risk (PR)	PR1	.716***	.916	.815	.473
	PR2	.720***			
	PR3	.745***			
	PR4	.608***			
	PR5	.638***			
Customization (CU)	CU1	.743***	.876	.874	.639
	CU2	.812***			
	CU3	.819***			
	CU4	.821***			
Perceived Ease of Use (PEOU)	PEOU1	.728***	.842	.841	.573
	PEOU2	.827***			
	PEOU3	.724***			
	PEOU4	.743***			
Hedonic Value (HV)	HV1	.784***	.897	.889	.687
	HV2	.916***			
	HV3	.904***			
	HV4	.692***			
Attitude (ATT)	ATT1	.889***	.947	.946	.781
	ATT2	.841***			
	ATT3	.851***			
	ATT4	.900***			
	ATT5	.934***			
Adoption Intention (AI)	AI1	.943***	.905	.896	.761
	AI2	.873***			
	AI3	.795***			
Fashion Involvement (FI)	FI1	.938***	.973	.973	.859
	FI2	.943***			
	FI3	.964***			
	FI4	.923***			

Table 13 (Continued).

	FI5	.910***			
	FI6	.881***			
Risk Aversion (RA)	RA2	.924***	.810	.797	.684
	RA3	.717***			

Notes: ***: $p < .001$

Table 14. AVE Values and Squared Correlation of Each Latent Variable.

	MV	PV	CO	PR	CU	PEOU	HV	ATT	AI	FI	RV
MV	.714										
PV	0.349	.731									
CO	0.410	0.472	.635								
PR	0.116	0.081	0.106	.473							
CU	0.482	0.465	0.573	0.194	.639						
PEOU	0.417	0.444	0.558	0.164	0.661	.573					
HV	0.358	0.381	0.426	0.099	0.666	0.486	.687				
ATT	0.671	0.338	0.542	0.159	0.578	0.521	0.612	.781			
AI	0.540	0.192	0.377	0.179	0.445	0.366	0.401	0.719	.761		
FI	0.275	0.076	0.120	0.035	0.252	0.238	0.308	0.338	0.340	.859	
RV	0.000	0.003	0.011	0.042	0.000	0.000	0.000	0.006	0.018	0.000	.684

Notes: The average variance extracted (AVE) are in boldface. The squared correlations (R²) of all constructs are on the off-diagonal

Table 15. Mean and Standard Deviation of Each Latent Variable.

Variables	M	SD
MV	4.501	1.265
PV	5.385	1.103
CO	5.253	1.150
PR	4.043	1.143
CU	5.107	1.049
PEOU	5.118	1.022
HV	5.171	1.185
ATT	4.980	1.242
AI	4.240	0.593
FI	4.306	1.759
RA	4.856	1.217

Structural Model

A structural equation modeling (SEM) was conducted to test the proposed hypotheses. The overall model fit was satisfactory ($\chi^2 = 1556.097$, $df=686$, $p=.000$, $\chi^2/df=2.27$) and the fit indices were within acceptable ranges (SRMR=.058, IFI=.905, CFI=.904, RMSEA=.069). The effect of consumers' cognitive and effective perceptions on their attitudes toward fashion subscription retailing are shown in Table 16. Perceived monetary value ($\beta=.506$, $p<.001$), convenience ($\beta=.231$, $p<.001$), and hedonic value ($\beta=.419$, $p<.001$) had positive effects on consumers' attitudes toward fashion subscription retailing, supporting H1-1, H1-3, H1-7. That is, those who perceived a high monetary value, hedonic value, or convenience value tended to show a more favorable attitude toward fashion subscription retailing. Perceived product variety ($\beta=-.145$, $p<.01$) and perceived risk ($\beta=-.087$, $p<.05$) had negative effects on the consumers' attitudes toward fashion subscription retailing services, supporting H1-2 and H1-6. That is, those who perceived fashion subscription retailing had a high degree of product variety or risk tend to show a less favorable attitude toward fashion subscription retailing services. However, no significant influence was revealed from the perceived customization ($\beta=.243$, n.s.) or ease of use ($\beta=.248$, n.s.), thus rejecting H1-4 and H1-5. That is, subjects' perceived customization and ease of use did not significantly affect their attitude toward fashion subscription retailing services. As hypothesized, consumers' attitude toward fashion subscription retailing services exerted a significant positive influence on their adoption intention toward the services ($\beta=.859$, $p<.001$), supporting H2. That is, those who held a more favorable attitude towards fashion subscription retailing services tended to show a greater intention to adopt the services.

Table 16. Path Coefficients between Latent Variables.

Hypothesis	Path	S.E.	C.R.	P	β	Result
H1-1	MV→ATT	.054	9.822	***	.506	Accept
H1-2	PV→ATT	.061	-2.928	.003**	-.145	Accept
H1-3	CO→ATT	.068	3.714	***	.231	Accept
H1-4	PR→ATT	.045	-2.271	.023*	-.087	Accept
H1-5	CU→ATT	.119	-1.167	.243	-.113	Reject
H1-6	PEOU→ATT	.092	1.155	.248	.084	Reject
H1-7	HV→ATT	.069	6.549	***	.419	Accept
H2	ATT→AI	.050	20.402	***	.859	Accept

Notes: *: $p < .05$, **: $p < .01$, ***: $p < .001$

Moderating Effects

Hypotheses H3 and H4 regarding moderating effects were examined using multi-group comparisons. Fashion involvement and risk aversion, as moderating variables, were included into the model for multi-group comparison analysis to examine the moderating effect on the relationship between perceived values and attitudes. For this purpose, the sample was divided into two sub-groups by using the median score of the value of the examined moderator variable, which was either fashion involvement or risk aversion. The median was 4.66 for fashion involvement, and 4.34 for risk aversion. As a result, in terms of risk aversion, 50.2% (N=151) of the subjects were classified into the low group and 49.8% (N=150) were classified into the high group. In the case of fashion involvement, to maintain an acceptable model fit, the highest scored participants (FI mean score higher than 6.0) and the lowest scored participants (FI mean score lower than 2.0) were removed as model fit outliers according to the procedure suggested by Aguinis, Gottfredson, and Joo (2013). After that, the median score was used to divide the remaining sample into two fashion involvement groups with 47.4% (N=93) of subjects classified into the low group and 52.6% (N=103) classified into the high group.

To test the effect of each moderating factor, configuration invariance and measurement invariance were first checked. Model fit indices of the unconstrained model were used to test the

configuration invariance, and the Chi-square difference between the two sub groups was calculated to test the measurement invariance (Moon, 2009). When both invariance tests were satisfied, constraints were imposed and the Chi-square difference was calculated between the models for the two sub-groups. This test imposed the null hypothesis that the moderating variable would not have any effect on the proposed main effects of perceived values on attitudes. Therefore, a significant result suggests the existence of a moderating effect of the moderating variable. Then, the Chi-square difference was calculated for each main effect to identify the main effects that were influenced by the moderating variable. In order to achieve a satisfying model fit, several items within the constructs were dropped. Specifically, for fashion involvement moderating effect testing, 15 items were removed. For risk aversion moderating effect testing, 10 items were removed.

Moderating Effects of Fashion Involvement

When examining the moderating effects of fashion involvement, the model fit indices suggest that the model configuration invariance ($\chi^2/df=1.63$ [$p=.000$], IFI=.904, CFI=.900, RMSEA=.057) and measurement invariance ($\Delta\chi^2=12.78$, $\Delta df=14$, $p=.544$) were met. As shown in Table 17, the comparison between the high fashion involvement group and the low fashion involvement group indicates a significant difference in terms of Chi-square for the structural models ($\Delta\chi^2=20.88$, $\Delta df=7$, $p<.01$), suggesting moderating effect from fashion involvement. Therefore, hypothesis H3 was supported. Two particular paths were discovered as having significant differences between the groups, namely perceived ease of use ($\Delta\chi^2=4.186$, $df=1$) and monetary value ($\Delta\chi^2=4.76$, $df=1$).

Table 17. Multi-group Analysis Results (Fashion Involvement).

Fashion Involvement							
High				Low			$\Delta\chi^2$ ($\Delta df=1$)
Path	S.E.	C.R.	β	S.E.	C.R.	β	
MV→ATT	.126	1.658	.204	.113	4.943***	.664	4.76*
PV→ATT	.160	-.847	-.130	.129	-.833	-.102	.025
CO→ATT	.212	2.541*	.423	.127	2.056*	.267	.500
PR→ATT	.069	-1.317	-.129	.151	-1.708	-.259	.130
CU→ATT	.244	-1.526	-.292	.268	.772	.146	2.352
PEOU→ATT	.195	1.867	.309	.226	-1.031	-.165	4.186*
HV→ATT	.138	2.385*	.312	.197	.141	.023	.739
$\Delta\chi^2$ = for all gammas set equal across subgroups (df=7):20.88***							

Notes: *: p<.05, **: p<.01, ***: p<.001.

Specifically, as shown in Table 16, for the high fashion involvement group, hedonic value (HV) showed a significant positive effect on consumers' attitudes. That is, the more hedonic value consumers perceive, the more positive attitudes consumers would hold. Convenience (CO) also showed a significant positive effect on consumers' attitudes. That means the more convenience value consumers perceive, the more positive attitudes consumers would hold toward fashion subscription retailing services. For the low fashion involvement group, similarly to the high fashion involvement group, convenience exerted significant positive influence on consumers' attitudes. However, no significant influence was found from hedonic value for the low involvement group. Instead, monetary value exerted significant influence on attitudes.

Moderating Effects of Risk Aversion

When examining the moderating effects of risk aversion, the model fit indices suggest that both model configuration invariance ($\chi^2/df=1.78$ [p=.000], IFI=.929, CFI=.928, RMSEA=.051) and measurement invariance ($\Delta\chi^2=26.24$, $\Delta df=19$, p=.124) were satisfied. As shown in Table 18, the comparison between the high risk aversion group and the low risk

aversion group indicates a significant difference in terms of Chi-square for the structural model ($\Delta\chi^2=17.27$, $\Delta df=7$, $p<.05$), suggesting moderating effects from risk aversion. Therefore, hypothesis H4 was supported.

Table 18. Multi-group Analysis Results (Risk Aversion).

Risk Aversion							
High				Low			$\Delta\chi^2$ ($\Delta df=1$)
Path	S.E.	C.R.	β	S.E.	C.R.	β	
MV→ATT	.080	7.061***	.502	.103	4.941***	.496	.232
PV→ATT	.078	-2.248*	-.141	.133	-1.295	-.139	.022
CO→ATT	.100	2.923*	.222	.133	2.041*	.247	.029
PR→ATT	.076	-.213	-.012	.079	-2.487*	-.198	2.616
CU→ATT	.194	2.125*	.300	.217	-2.347*	-.457	11.488**
PEOU→ATT	.09	-1.279	-.095	.230	2.446*	.463	9.407**
HV→ATT	.099	1.691	.155	.105	2.451*	.243	.411
$\Delta\chi^2=$ for all gammas set equal across subgroups ($df=7$):17.27***							

Notes: *: $p<.05$, **: $p<.01$, ***: $p<.001$.

As shown in Table 17, for the high risk aversion group, monetary value (MV), customization (CU), and convenience (CO) showed significant positive effects on consumers' attitudes. Additionally, product variety (PV) also showed a significant negative influence on consumers' attitudes. That means if consumers scored higher in product variety, they would have a lower score on attitude. For the low risk aversion group, similar to the high risk aversion group, monetary value (MV) and convenience (CO) exerted significant influences on attitudes. However, these two groups differed in that perceived ease of use (PEOU) and hedonic value (HV) were found to have a significant influence on attitudes for the low risk aversion group. Additionally, for the low risk aversion group, customization (CU) and perceived risk (PR) showed significant negative influences on consumers' attitudes.

However, while the influence of the perceived values on consumers' attitudes seemed different on several paths, the multi-group comparison analysis results only suggest a significant

difference between the groups on two paths, namely perceived ease of use (PEOU) ($\Delta\chi^2=9.407$, $df=1$) and customization (CU) ($\Delta\chi^2=11.488$, $df=1$). Specifically, perceived ease of use (PEOU) exerted a significant effect on consumers' attitudes in the low risk aversion group, but not in the high risk aversion group. Additionally, for the low risk aversion group, customization (CU) exerted a significant negative effect on consumers' attitudes, but in the high risk aversion group, it exerted a positive effect on consumers' attitudes.

CHAPTER FIVE

DISCUSSIONS AND IMPLICATIONS

This research seeks to answer two research questions. First, how do different cognitive and affective values toward fashion subscription retailing services influence consumers' attitudes and further influence their adoption intention? Second, how do fashion involvement and risk aversion influence the relationship between different cognitive and affective values and consumers' attitudes toward fashion subscription retailing services? The findings of the study provide insights into fashion subscription retailing services that can be applied in academia and the fashion industry. Academically, this research contributes to the emerging stream of consumer behavior literature that focuses on the growing area of fashion subscription retailing services. It serves as a starting point for quantitative research for fashion subscription retailing services. Additionally, the study's model demonstrated an empirical attempt to provide comprehensive knowledge of perceived cognitive and affective values, attitude, and adoption intention within the fashion context. This study captured the core perceived cognitive and affective values from the perspective of consumer perceptions. This current dissertation further contributes to the literature by developing new constructs to measure different perceived cognitive and affective values specific to the fashion subscription retailing context based on previous constructs and findings. This study also enriched the literature by including personality traits as moderating factors that influence the relationship between perceived values and consumers' attitudes.

The discussion and practical implications of this study's findings are organized into two general sections. The first section discusses the effects of different cognitive and affective values (Stimulus) on consumers' attitudes (Organism) as well as the effect of consumers' attitudes (Organism) on adoption intention of fashion subscription retailing services (Response). The

second section discusses the moderating factors' effects on the relationship between cognitive and affective values and consumers' attitudes.

Stimulus-Organism-Response (RQ1)

One of the most important findings from this research is that customer's perceptions of certain benefits of fashion subscription retailing services influences their attitudes towards the services, and ultimately those attitudes influences their intentions to start using the services. If the ultimate goal of fashion subscription retailing companies is to attract and retain customers, they need to work on eliciting positive attitudes from consumers by appealing to the specific needs fulfilled by salient benefits obtained from fashion subscription retailing services. In this study, all of the perceived benefits of fashion subscription retailing services except customization and perceived ease of use had a significant influence on attitudes towards the services.

Firstly, perceived monetary value positively influenced consumers' attitudes toward fashion subscription retailing services. The positive relationship between perceived monetary value and attitudes toward fashion subscription retailing services indicates that if consumers believed fashion subscription retailing would save them money and/or give them a good value for their money, they would hold a more favorable view of the service. Conversely, if consumers believed that fashion subscription retailing products would cost them more and/or were poor quality, they would hold a more negative view of the service. This finding means that for consumers who had a positive attitude of fashion subscription retailing services, perceived monetary value was an attractive benefit. This finding is consistent with previous studies that suggest the ability to save money or get great products through fashion subscription retailing services improves customers' views toward the services (e.g. Woo & Ramkumar, 2018).

Therefore, fashion subscription retailing companies should ensure that their products will save customers money or offer a good value.

This study also found that product variety negatively influenced consumers' attitudes toward fashion subscription retailing services. The results of this research suggest that consumers who believed fashion subscription retailing services provided less product variety had more positive attitudes toward fashion subscription retailing services. This result is surprising at a first look and seems contrary to findings of previous studies which suggest fashion subscription retailing services are appealing due to the opportunity for consumers to try new styles and brands (e.g. Tao & Xu, 2018). This result could be explained by the possibility that participants interpreted the questions that measured product variety in a manner that was different from the researcher's original intent. The original intent of the questions was supposed to measure how much the respondent felt fashion subscription retailing services could help them have access to a variety of styles and brands. However, it is possible that the respondents interpreted the questions as meaning how many clothing options the consumer would have to sort through before selecting final products. If this was the case, then respondents who had a high perceived product variation thought that they would have to sort through a large amount of clothing options, which could be a hassle (Munford 2014; Imprint Plus 2017) and negatively influence their attitudes toward fashion subscription retailing services. Again, if this assumption of how respondents interpreted the question is true, then respondents who had a low perceived product variation thought that they would benefit from fashion subscription retailing services because they would receive a small selection of clothes, which would reduce the hassle of having to sort through clothes. Therefore, future studies should develop a better construct for measuring product variety that reduces the possibility of misinterpretation.

This research also found that perceived convenience positively influenced consumers' attitudes toward fashion subscription retailing services. This positive relationship means that consumers who believed that fashion subscription retailing services were convenient had more favorable attitudes toward the services, which is consistent with existing literature (e.g. Berry et al., 2002). Perceived convenience was measured in terms of time saved for shopping in stores, relieved hassles inherent to clothing shopping, and reduced trips to clothing stores. The descriptive analysis of perceived convenience suggested that on average, the respondents perceived fashion subscription retailing services as convenient. Tao and Xu (2018) found consumers liked fashion subscription retailing services because they did not have to browse through clothing and instead could have clothing directly shipped to their doors with an easy, hassle free return process. This research built upon Tao and Xu (2018) study and further found the more consumers perceived fashion subscription retailing services as convenient, the more positive attitudes consumers held toward the services.

This study also found that perceived risk had a significant negative impact on consumers' attitudes toward fashion subscription retailing services. This means that if consumers perceived fashion subscription retailing services to be low risk, they would have a more positive view toward the services. Tao & Xu (2018) identified several potential concerns of risks of using fashion subscription retailing services, including poor quality products, personal and financial privacy leakage, hidden costs, products not arriving on time, and a troublesome cancellation process. There have been several fashion subscription retailing companies that have had customer service issues surrounding these risks, and as a result, negative customer reviews have created a fear in the general public that it is risky to use fashion subscription retailing services. These risks may not apply to all fashion subscription companies, but some individuals may have

generalized these fears and risks to all fashion subscription retailing companies and may be hesitant towards using any of them. Therefore, for fashion subscription retailing companies that have had poor reviews from customers in the past, they should make efforts to avoid future mistakes and resolve the issues with current customers. These fashion subscription companies may be able to reverse the negative stigma of risk that has surrounded them and may even gain more customer support if the general public sees how willingly they are to take responsibility for negative customer experiences. On the other hand, fashion subscription companies that do not have these issues, should emphasize in their marketing that customers do not need to fear any of those risks, thereby correcting any potential misconceptions the public may have about them.

Perceived hedonic value was also found having a significant positive influence on consumers' attitudes toward fashion subscription retailing services. This means that if consumers believed they could gain joy or excitement from using fashion subscription retailing services, they would have a more positive view toward the services. Tao and Xu's (2018) qualitative study discovered consumers found the following aspects of fashion subscription retailing services to have hedonic value: communicating with fashion stylists, anticipating the arrival of the subscription, opening the subscription box, and trying on clothes at home. The descriptive analysis performed shows quantitatively that on average, the respondents perceived fashion subscription retailing services as fun and enjoyable. While it was known that using fashion subscription retailing services could provide hedonic value, this research discovered that the hedonic value provided gives consumers positive views toward the services. Fashion subscription retailing companies can capitalize on this by advertising how fun it is to use their services.

It was surprising that perceived customization and ease of use had no significant influence on consumers' attitudes toward fashion subscription retailing services. As customization is one of the biggest advantages of fashion subscription retailing services (Livingston, 2019), a positive influence on consumer attitudes was expected. Additionally, it was expected perceived ease of use would have a positive influence on attitudes toward fashion subscription retailing services, because if the services were difficult to use, customers might have more negative attitudes toward the services. However, neither of these factors were found exerting significant influence on consumers' attitudes toward fashion subscription retailing services. While this result is not fully understood, it does not necessarily mean that these two factors do not have an influence on customers' attitudes toward fashion subscription retailing services. It is possible that analyzing all of the variables together in the SEM analysis caused the influences of perceived customization and perceived ease of use on customer attitudes to be overshadowed by the much greater influences of the other variables. If this assumption holds true, this would suggest that it might be more effective for fashion subscription retailing companies to focus their advertising on the other features that were shown to have more significant influences on attitudes toward fashion subscription retailing services.

Moderating Factors (RQ2)

After examining how perceived cognitive and affective values influenced consumers' attitudes toward fashion subscription retailing services, two personality related traits, fashion involvement and risk aversion, were examined in terms of their influence on the relationship between consumers' perceived values (Stimulus) and attitudes (Organism). This study found that both fashion involvement and risk aversion had significant moderating effects on the relationship between perceived values and attitudes. Since attitudes also influence adoption intention, these

moderating factors also ultimately influence adoption intention. This suggests that for different types of consumers, some perceived values are more important than others in determining their attitudes and adoption intention. Therefore, fashion subscription retailing service companies may need to develop different strategies, programs, and advertising based on their audience.

Fashion Involvement

The results of this research showed that regardless of fashion involvement level, convenience had a positive influence on attitudes toward fashion subscription retailing services. This suggests that fashion subscription retailing services should emphasize convenience in their advertising, as it will appeal to all individuals along the fashion involvement spectrum. The results also showed that there were some perceived values that only positively influenced one of the two fashion involvement groups. For high fashion involvement individuals, that value was perceived hedonic value, and for low fashion involvement individuals, that value was perceived monetary value.

When examining the high fashion involvement participants, it is not surprising that perceived hedonic value affected their attitudes toward fashion subscription retailing services. By definition, high fashion individuals believe fashion has great relevance to their identity (O’Cass, 2004) and they enjoy talking about and discovering new clothing. If using fashion subscription retailing services could provide them with exciting and fun fashion experiences, this would be satisfying a core need of the high fashion involvement group and positively influence their attitudes toward the services. Conversely, if using fashion subscription retailing services was not a fun process, it would remove a foundational source of joy from lives of the high fashion involvement individuals, and this would inevitably hurt their view of the services. In contrast, for the low fashion involvement group, perceived monetary value was a unique positive

influencer of their attitudes toward fashion subscription retailing services, since this group of consumers tend to be more utilitarian oriented (Gutman & Mills, 1982).

These results have various implications for fashion subscription retailing companies. First of all, different aspects of fashion subscription retailing should be emphasized when advertising to either the low fashion involvement group or the high fashion involvement group, since these two groups differ in their values. When targeting high fashion involvement consumers, fashion subscription companies should advertise how exciting it is to use their services as well as continually focus on improving the hedonic value of their services. Fashion subscription companies could advertise to high fashion involvement individuals where they would be most likely to see the advertisements, such as fashion magazines or Instagram (Buryan, 2016). Fashion subscription companies could improve the efficacy of their advertising efforts by working with different Instagram fashion influencers to attract more high fashion involvement individuals. For example, these companies could reach out to the Instagram fashion influencers and offer free subscriptions and gift boxes if they promote products and share their experiences on their Instagram accounts. Since the audience would mostly be high fashion involvement individuals, Instagram influencers should be encouraged to emphasize how convenient and exciting it was to use fashion subscription retailing services, since these are the two most important influencers for high fashion individuals. When targeting low fashion involvement individuals, companies should instead emphasize the monetary value and convenience of using fashion subscription retailing services, since this study found that this was the unique factor that appealed to this group.

Risk Aversion

The results of this study showed that there was a difference in the variables that influenced the attitudes of high and low risk aversion groups toward fashion subscription

retailing services, which suggests that risk aversion is indeed a statistically significant moderating factor. For high risk aversion individuals, monetary value, perceived value, convenience, and customization had significant influences on attitudes toward fashion subscription retailing services. For low risk aversion individuals, monetary value, convenience, perceived risk, customization, perceived ease of use, and hedonic value had significant influences on attitudes toward fashion subscription retailing services. For the high risk aversion group, perceived value was a unique factor, and for the low risk aversion group, perceived risk, perceived ease of use, and hedonic value were unique factors.

When examining the moderating effects of risk aversion, there was one significant unexpected result regarding the high risk aversion group. It was naturally assumed that for high risk averse individuals, perceived risk would be a negative influencer of attitudes toward fashion subscription retailing services since this group is highly concerned about risk (Kumar et al., 2016). However, the results of this study found that for high risk aversion individuals, perceived risk did not significantly influence attitudes toward fashion subscription retailing services. One possible explanation for this result is that when data was divided into the two groups, the sample sizes were relatively small, which could have led to these surprising results. Future studies could use larger sample sizes.

Based on the descriptive statistics which show that the average risk aversion level of this convenience sample was relatively high, individuals tend to be on the more risk averse side. Therefore, companies could benefit from catering to the needs of high risk aversion individuals. There are some specific implications for established fashion companies that want to adopt or are already incorporating subscription retailing into their business model because high risk aversion individuals already tend to shop at these established companies and can be easily contacted

through in store advertisements or email marketing through the company email list (Steenkamp et al., 1999; Zhou et al., 2002). For example, Nordstrom is a well established brand that acquired Trunk Club, the first fashion subscription company in the U.S. Nordstrom could make their relationship with Trunk Club more obvious to current Nordstrom customers, so that if these customers choose to use fashion subscription services in the future, they will be more likely to use Trunk Club instead of other fashion subscription companies. Although this would not necessarily attract new customers, it would certainly prevent future loss of customers to competition from other fashion subscription companies. Since Nordstrom is already a big company with an established customer base, their future depends more on maintaining their strong customer base instead of reaching out for new customers. As for current established companies that want to add fashion subscription services to their business model, when they advertise the transition, they should to emphasize the factors that this study found to be important, namely monetary value, product variety, convenience, and customization.

CHAPTER SIX

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

While this research offers a fresh perspective regarding the adoption intention of fashion subscription retailing services, it bears some limitations. First, the research employed a convenience sample collected by a data agency, so the results cannot be generalized to the entire population. Also, the sample size was relatively small for conducting multi-group comparison analyses, thus increasing the margin of error thereby threatening the validity of the study. Future studies could use a larger sample to verify the findings of this study. Second, some of the measuring constructs used in this study were developed by researchers based on relevant literature and a pilot focus group study, hence the validity and reliability of those constructs haven't been through robust scale validation tests and modification. When conducting the multi-group comparison analysis, several variable items were deleted to improve the model fit, which raises construct validity concerns. Therefore, future research could focus on refining the constructs developed in this study and developing valid scales to measure perceived cognitive and affective value constructs within the fashion subscription retailing context. Third, a common shortcoming of consumer behavior is the disconnection between intended and actual behavior. Although this study showed that improved attitudes toward fashion subscription retailing services increased adoption intention, there is no way to verify if the increased intention will lead to actual adoption. While it is good to measure adoption intention, it would be better to measure actual adoption behaviors. Future research could focus on collecting actual adoption behavior information to determine the relationship between adoption intention and adoption behavior, which would expand the scope of this study's results. Future research could also examine current users' experiences (e.g. frequency of purchase) and satisfaction level with certain fashion

subscription services to help companies continuously improve their services, as customer satisfaction will be critical for brands to thrive in this ever competitive fashion subscription industry (Ewen, 2017). Fourth, the potential confounding effects of demographic variables and their effects on fashion subscription retailing services adoption intention were not taken into account during the statistical analysis. Future research will need to consider the role of demographic variables on the independent variables in order to gain a comprehensive insight on the factors that shape consumers' attitudes and adoption intention toward fashion subscription retailing services. A final limitation to this research was that only two personality traits were examined as moderating factors. Since it is possible that other moderating factors exist, future research could examine other personality traits that might also influence the relationship between the perceived values and attitudes. Those personality traits could help companies better segment the market and better customize their advertising to specific customers.

REFERENCES

- Aguinis, H., Gottfredson, R. K., & Joo, H. (2013). Best-practice recommendations for defining, identifying, and handling outliers. *Organizational Research Methods, 16*(2), 270-301.
- Ahmad, S. (2002). Service failures and customer defection: a closer look at online shopping experiences, *Managing Service Quality: An International Journal, 12*(1), 19-29.
- Ajzen, I., & Fishbein, M. (2005). The influence of attitudes on behavior. *The handbook of attitudes, 173*(221), 31.
- Al-Gahtani, S. S., & King, M. (1999). Attitudes, satisfaction and usage: Factors contributing to each in the acceptance of information technology. *Behavior and Information Technology, 18*(4), 277-297.
- Alba, J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A., & Wood, S. (1997). Interactive home shopping: consumer, retailer, and manufacturer incentives to participate in electronic marketplaces. *The Journal of Marketing, 38*-53.
- Amin, S. (2009). Why do so many people shop online? Retrieved from <http://www.articlesbase.com/print/1335596>
- Ariste, M. (2015). The cost saving advantages of online shopping. Retrieved from <http://www.spreadthepurple.org/single-post/2015/07/27/The-Cost-Saving-Advantages-of-Online-Shopping>
- Arora, R. (1982). Validation of an sor model for situation, enduring, and response components of involvement. *Journal of Marketing Research, 19*(4), 505-516.
- Atkins, K. G., & Kim, Y. K. (2016). Smart apparel shopping: A multidimensional and gender-neutral measure. *Clothing and Textiles Research Journal, 34*(1), 3-19.

- Aubert-Gamet, V. (1997). Twisting servicescapes: diversion of the physical environment in a re-appropriation process. *International Journal of Service Industry Management*, 8(1), 26-41.
- Auty, S. and Elliott, R. (1998). Fashion involvement, self-monitoring, and the meaning of brands, *Journal of Product and Brand Management*, 7(2), 109-123.
- Bagozzi, R. P., Gopinath, M., & Nyer, P. U. (1999). The role of emotions in marketing. *Journal of the academy of marketing science*, 27(2), 184-206.
- Baldwin, R. E., Forslid, R. & Ito, T. (2015). Unveiling the evolving sources of value added in exports. *Institute of Developing Economics*.
- Ballantine, P., & Fortin, D. (2009). The effects of interactivity and product information on consumers' emotional responses to an online retail setting. *International Journal of Internet Marketing and Advertising*, 5(4), 260-271.
- Bao, Y., Zhou, K. Z., & Su, C. (2003). Face consciousness and risk aversion: do they affect consumer decision-making? *Psychology & Marketing*, 20(8), 733–754.
- Barker, S. (2018). 4 of the biggest factors that affect customer purchase decisions. Retrieved from <https://www.searchenginepeople.com/blog/4-biggest-factors-affect-customer-purchase-decisions.html>
- Barnes, S. J., Bauer, H. H., Neumann, M. M., & Huber, F. (2007). Segmenting cyberspace: a customer typology for the internet. *European journal of marketing*, 41(1/2), 71-93.
- Bell, D. E. (1995). Risk, return, and utility. *Management science*, 41(1), 23-30.
- Berry, L.L., Seiders, K. & Grewal, D. (2002). Understanding service convenience. *The Journal of Marketing*, 66(3), 1-17.

- Bhaduri, G., & Stanforth, N. (2017). To (or not to) label products as artisanal: effect of fashion involvement on customer perceived value. *Journal of Product & Brand Management*, 26(2), 177-189.
- Bhatnagar, A., Misra, S., & Rao, H. R. (2000). On risk, convenience, and Internet shopping behavior. *Communications of the ACM*, 43(11), 98-105.
- Bian, Q., & Forsythe, S. (2012). Purchase intention for luxury brands: A cross cultural comparison. *Journal of Business Research*, 65(10), 1443-1451.
- Birtwistle, G., Siddiqui, N., & Fiorito, S. S. (2003). Quick response: perceptions of UK fashion retailers. *International Journal of Retail & Distribution Management*, 31(2), 118-128.
- Bischof, S. F., Boettger, T. M., & Rudolph, T. (2018). The peril of surprises: how risk influences attitude towards product subscription models. *SSRN Electronic Journal*. Retrieved from https://www.researchgate.net/publication/325886308_The_Peril_of_Surprises_How_Risk_Influences_Attitude_Towards_Product_Subscription_Models
- Bitner, M. (1990). Evaluating service encounters: the effects of physical surroundings and employee responses. *The Journal of Marketing*, 54(2), 69-82.
- Bitner, M. J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. *The Journal of Marketing*, 56(2), 57-71.
- Brashear, T. G., Kashyap, V., Musante, M. D., & Donthu, D. (2009). A profile of the Internet shopper: Evidence from six countries. *Journal of Marketing Theory and Practice*, 17(3), 267-281.
- Buryan, M. (2016). Why Fashion Brands Are Thriving on Instagram. Retrieved from <https://www.socialbakers.com/blog/2626-why-fashion-brands-are-thriving-on-instagram>
- Cameron, M. (1999). Content that works on the web. *Target Marketing*, 1(11), 22-58.

- Cautero, R.M. (2018). Are Clothing Subscription Boxes Really Worth it?. Retrieved from <https://www.thebalance.com/are-clothing-subscription-boxes-worth-the-money-4173855>
- Chae, M.H., Black, C. & Heitmeyer, J. (2006). Pre-purchase and post-purchase satisfaction and fashion involvement of female tennis wear consumers. *International Journal of Consumer Studies (formerly called Journal of Consumer Studies and Home Economics)*, 30, 25–33.
- Chang, H. H., & Chen, S. W. (2008). The impact of online store environment cues on purchase intention trust and perceived risk as a mediator. *Online Information Review*, 32(6), 818-841.
- Chang, H. J., Eckman, M., & Yan, R. N. (2011). Application of the Stimulus-Organism-Response model to the retail environment: the role of hedonic motivation in impulse buying behavior. *The International Review of Retail, Distribution and Consumer Research*, 21(3), 233-249.
- Chen, T., Fenyó, K., Yang, S. & Zhang J. (2018). Thinking inside the subscription box: New research on e-commerce consumers. Retrieved from <https://www.mckinsey.com/industries/high-tech/our-insights/thinking-inside-the-subscription-box-new-research-on-ecommerce-consumers>
- Chen, Y. Y. (2012). Why do consumers go internet shopping again? Understanding the antecedents of repurchase intention. *Journal of Organizational Computing and Electronic Commerce*, 22(1), 38–63.
- Chen, C. F., & Tsai, M. H. (2008). Perceived value, satisfaction, and loyalty of TV travel product shopping: Involvement as a moderator. *Tourism management*, 29(6), 1166-1171.

- Cheng, A. (2018). The subscription box industry is getting more crowded than ever, Retrieved from <https://www.forbes.com/sites/andriacheng/2018/05/30/the-subscription-box-industry-is-getting-more-crowded-than-ever/#66c44a013a39>
- Childers, T. L., Carr, C. L., Peck, J., & Carson, S. (2001). Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of retailing*, 77(4), 511-535.
- Chin, D. N., & Porage, A. (2001). Acquiring User Preferences for Product Customization. Lecture Note in Computer Science, 2109, 95-104.
- Chiu, C. M., Huang, H. Y., & Yen, C. H. (2010). Antecedents of trust in online auctions. *Electronic Commerce Research and Applications*, 9, 148–159.
- Chiu, C. M., Wang, E. T., Fang, Y. H., & Huang, H. Y. (2014). Understanding customers' repeat purchase intentions in b2c e-commerce: the roles of utilitarian value, hedonic value and perceived risk. *Information Systems Journal*, 24(1), 85-114.
- Cho, H., & Fiorito, S. S. (2009). Acceptance of online customization for apparel shopping. *International Journal of Retail & Distribution Management*, 37(5), 389-407.
- Chua, A. Y. K., Goh, D. H.-L., & Lee, C. S. (2012). Mobile content contribution and retrieval: An exploratory study using the uses and gratifications paradigm. *Information Processing and Management*, 48, 13–22.
- Clark, E. (2017). Which Retailers Are Closing Stores in 2017. Retrieved from <http://wwd.com/business-news/financial/retail-store-closures-2017-macys-bcbg-american-apparel-wet-seal-abercrombie-limited-jc-penney-sears-10842214/>
- Cox, D.F. (1967). "Risk handling in consumer behavior - an intensive study of two cases ", in Cox, P.F. (Ed.), *Risk Taking and Information Handling in Consumer Behavior*, Graduate School of Business Administration, Harvard University, Boston, MA, 34-38.

- David, L. (2012). Men's E-commerce sites try subscription model to hook customers. Retrieved from <https://search.proquest.com/docview/1266070160/ABE44142C35E4C6CPQ/1?accountid=12725>
- Davis, F. (1994). *Fashion, Culture, and Identity*, University of Chicago Press, Chicago, IL.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1992). Extrinsic and intrinsic motivation to use computers in the workplace. *Journal of Applied Social Psychology*, 22(14), 1111-1132.
- Diaz-Meneses, G. (2010). The ethics of consumer involvement with fashion: a freedom under social pressure. *Textile Research Journal*, 80, 354–364.
- Donovan, R. & Rositer, J. (1982). Store atmosphere: an environmental psychology approach. *Journal of Retailing*, 58(1), 34-57.
- Donovan, R. J., & Rossiter, J. R. (1994). Store atmosphere and purchasing behavior. *Journal of Retailing*, 70(3), 283-294.
- Dowling, G.R. & Staelin, R. (1994). A model of perceived risk and intended risk-handling activity, *Journal of Consumer Research*, 21(1), 119-134.
- Eighmey, J. (1997). Profiling user responses to commercial web sites. *Journal of advertising research*, 37(3), 59-67.
- Elmer, E. (2017). Fashion Industry. Retrieved from <http://businessresearcher.sagepub.com/sbr-1863-101702-2766972/20170116/fashion-industry>
- Eroglu, S. A., Machleit, K. A., & Davis, L. M. (2001). Atmospheric qualities of online retailing: a conceptual model and implications. *Journal of Business research*, 54(2), 177-184.

- Eroglu, S. A., Machleit, K. A., & Davis, L. M. (2003). Empirical testing of a model of online store atmospherics and shopper responses. *Psychology & marketing*, 20(2), 139-150.
- Ewen, L. (2017). Why retailers are going all in on subscription services. Retrieved from <http://www.retaildive.com/news/why-retailers-are-going-all-in-on-subscription-services/445971/>
- Eworld (2018). Top 3 challenges facing subscription box companies. Retrieved from <https://eworldfulfillment.com/3-challenges-facing-subscription-box-companies/>
- Eroglu, S. A., Machleit, K. A., & Davis, L. M. (2003). Empirical testing of a model of online store atmospherics and shopper responses. *Psychology and Marketing*, 20(2), 139-150.
- Fang, J., George, B., Shao, Y., & Wen, C. (2016). Affective and cognitive factors influencing repeat buying in e-commerce. *Electronic Commerce Research and Applications*, 19, 44-55.
- Featherman, M. S., & Pavlou, P. A. (2003). Predicting e-services adoption: a perceived risk facets perspective. *International Journal of Human-Computer Studies*, 59(4), 451-474.
- Fishbein, M. (1967). Readings in attitude theory and measurement. New York: Wiley.
- Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention and behavior: An introduction to theory and research.
- Flavián, C., & Guinalíu, M. (2005). The influence of virtual communities on distribution strategies in the internet. *International Journal of Retail & Distribution Management*, 33(6), 405-425.
- Forman, A. M. (1991). The Depersonalization of Retailing: Its Impact on the'Lone. *Journal of Retailing*, 67(2), 226.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39–50.

- Forsythe, S., Liu, C., Shannon, D., & Gardner, L. C. (2006). Development of a scale to measure the perceived benefits and risks of online shopping. *Journal of interactive marketing, 20*(2), 55-75.
- Gao, Y., & Koufaris, M. (2006). Perceptual antecedents of user attitude in electronic commerce. *ACM SIGMIS Database: the DATABASE for Advances in Information Systems, 37*(2-3), 42-50.
- Garner, S.J. (1986). Perceived risk and information sources in services purchasing, *Mid-Atlantic Journal of Business, 24*, 49-58.
- Gefen, D., & Straub, D. W. (2000). The relative importance of perceived ease of use in IS adoption: A study of e-commerce adoption. *Journal of the association for Information Systems, 1*(1), 8.
- Geuens, M., & De Pelsmacker, P. (1998). Feelings evoked by warm, erotic, humorous or non-emotional print advertisements for alcoholic beverages. *Academy of Marketing Science Review, 1*, 1–31.
- Gilmore, J. H. & Pine, J. B. (2007). *Authenticity: What consumers really want?* Boston: Harvard Business Publishing.
- Goldsmith, R.E., & Emmert, J. (1991). Measuring product category involvement: A multitrait-multimethod study, *Journal of Business Research, 23*(4), 363-371.
- Goldsmith, R.E., Heitmeyer, J. & Freiden, J.B. (1991). Social values and fashion leadership. *Clothing and Textiles Research Journal, 10*, 37–45
- Goldsmith, R.E., Moore, M.A. & Beaudoin, P. (1999). Fashion innovativeness and self-concept: a replication. *Journal of Product and Brand Management, 8*, 7–18.

- Goode, M. M. H., & Harris, L. C. (2007). Online behavioural intentions: an empirical investigation of antecedents and moderators. *European Journal of Marketing*, 41(5/6), 512-536.
- Gupta, S. & Kim, H.-W. (2007). The moderating effect of transaction experience on the decision calculus in on-line repurchase. *International Journal of Electronic Commerce*, 12(1), 127-58.
- Gutman, J., & Mills, M. K. (1982). Fashion life-style, self-concept, shopping orientation, and store patronage-an integrative analysis. *Journal of Retailing*, 58(2), 64-86.
- Haddock, G., & Zanna, M. P. (1993). Predicting prejudicial attitudes: The importance of affect, cognition, and the feeling-belief dimension. *ACR North American Advances*.
- Handbook, A. F. (2009). American society of heating, refrigerating and air-conditioning engineers. Inc.: Atlanta, GA, USA.
- Hasan, B. (2010). Exploring gender differences in online shopping attitude. *Computers in Human Behavior*, 26(4), 597-601.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis. *Structural Equation Modeling*, 6, 1-55.
- Ho, S. Y., & Bodoff, D. (2014). The Effects of Web Personalization on User Attitude and Behavior: An Integration of the Elaboration Likelihood Model and Consumer Search Theory. *Mis Quarterly*, 38(2), 497-520.
- Holbrook, M. B., & Hirschman, E. C. (1982). The experiential aspects of consumption: Consumer fantasies, feelings, and fun. *Journal of Consumer Research*, 9(2), 132-140.
- Hölder, S., & Svensson, K. (2016). Subscription Services in the Fashion Industry: a Quantitative Approach on Consumers' Perspective.

- Hirschman, E. C., & Holbrook, M. B. (1992). Postmodern consumer research (Vol. 1). Sage.
- Houston, M. J. (1978). Conceptual and methodological perspectives on involvement. *Research frontiers in marketing: Dialogues and directions*. American Marketing Association, Chicago (1978), 184-187.
- Imprint Plus (2017). The Shopping Habits of Today's Consumers: Ecommerce vs. In-Store. Retrieved from <https://www.prnewswire.com/news-releases/the-shopping-habits-of-todays-consumers-ecommerce-vs-in-store-300535550.html>
- Indvik, L. (2014). Nordstrom Paid \$350 Million to Acquire Trunk Club. Retrieved from <https://fashionista.com/2014/08/nordstrom-trunk-club-350-million>
- Jacoby, J. & Kaplan, L. (1972). "The components of perceived risk" in Venkatesan, M. (Ed.), *Proceedings of 3rd Annual Conference, Association for Consumer Research*, pp. 382-93.
- Jarvenpaa, S. L., & Todd, P. A. (1997). Is there a future for retailing on the Internet. *Electronic marketing and the consumer*, 1(12), 139-154.
- Jayawardhena, C., & Wright, L. T. (2009). An empirical investigation into e-shopping excitement: antecedents and effects. *European Journal of Marketing*, 43(9/10), 1171-1187.
- Jiang, J. J., Hsu, M. K., Klein, G., & Lin, B. (2000). E-commerce user behavior model: An empirical study. *Human Systems Management*, 19(4), 265-276.
- Jin, S. V., & Ryu, E. (2018). Celebrity fashion brand endorsement in Facebook viral marketing and social commerce: Interactive effects of social identification, materialism, fashion involvement, and opinion leadership. *Journal of Fashion Marketing and Management: An International Journal*.

- Jonsson, P., Stoopendahl, P. & Sundström, M. (2015). *Köprevolutionen: hur den digitaliserade konsumenten transformerar handel, varumärken och marknadsföring*. (1. ed.) Stockholm: Liber.
- Jukna, L. (2018). Dead or destination? Shopping malls in the 21st century. Retrieved from <https://www.livingmap.com/smart-building/shopping-malls-in-the-21st-century/>
- Kahn, E. B., Inman, J., & Verhoef, P. (2017). Consumer response to the evolving retailing landscape. Retrieved from <http://www.journals.uchicago.edu/pb-assets/docs/journals/jacr-3.3-cfp-letter.pdf>
- Kawaf, F., & Tagg, S. (2012). Online shopping environments in fashion shopping: An SOR based review. *The Marketing Review*, 12(2), 161-180.
- Keaveney, S. M. & Parthasarathy, M. (2001). Customer switching behavior in online services: An exploratory study of the role of selected attitudinal, behavioral, and demographic factors. *Journal of the Academy of Marketing Science*, 29(4), 374-390.
- Keeney, R. L. (1999). The value of Internet commerce to the customer. *Management science*, 45(4), 533-542.
- Keller, K. L. (2001). *Building customer-based brand equity: A blueprint for creating strong brands* (pp. 3-27). Cambridge, MA: Marketing Science Institute.
- Kestenbaum, R. (2017). Subscription Businesses Are Exploding With Growth. Retrieved from <https://www.forbes.com/sites/richardkestenbaum/2017/08/10/subscription-businesses-are-exploding-with-growth/#1a4667666678>
- Kestenbaum, R. (2018). The Subscription Box Business Continues To Grow And Change. Retrieved from <https://www.forbes.com/sites/richardkestenbaum/2018/05/30/the-subscription-box-business-continues-to-grow-and-change/#11b300e32c3e>

- Kim, C., Zhao, W., & Yang, K. H. (2008). An empirical study on the integrated framework of e-CRM in online shopping: evaluating the relationships among perceived value, satisfaction, and trust based on customers' perspectives. *Journal of Electronic Commerce in Organizations (JECO)*, 6(3), 1-19.
- Kim, M., & Lennon, S. (2008). The effects of visual and verbal information on attitudes and purchase intentions in internet shopping. *Psychology and Marketing*, 25(2), 146-178.
- Kim, J., & Lennon, S. J. (2013). Effects of reputation and website quality on online consumers' emotion, perceived risk and purchase intention: Based on the stimulus-organism-response model. *Journal of Research in Interactive Marketing*, 7(1), 33-56.
- Kim, M., Kim, J. H., & Lennon, S. J. (2006). Online service attributes available on apparel retail web sites: an ES-QUAL approach. *Managing Service Quality*, 16(1), 51-77.
- Kim, J., Kim, M., & Kandampully, J. (2007). The Impact of Buying Environment Characteristics of Retail Websites. *The Service Industries Journal*, 27(7), 865-880.
- Kotler, P. (2000), *Marketing Management*, 10th ed., Prentice Hall, Englewood Cliffs, NJ.
- Koo, D.M., & Ju, S.-H. (2010). The interactional effects of atmospherics and perceptual curiosity on emotions and online shopping intention. *Computers in Human Behavior*, 26(3), 377-88.
- Kumar, M.M., Kesharwani, A., & Das, D. (2016). The relationship between risk aversion, brand trust, brand affect and loyalty: Evidence from the FMCG industry. *Journal of Indian Business Research*, 8(2), 78-97.
- Kwon, H. S., & Chidambaram, L. (2000). A test of the technology acceptance model: The case of cellular telephone adoption. In Proceedings of Hawaii International Conference on System Sciences, 34 (pp. 1–10). Maui, HI, USA: Computer Society Press.

- Lazarus, R. S. (1998). Fifty years of research and theory by RS Lazarus: an analysis of historical and perennial issues: Lawrence Erlbaum.
- Lee, H., Kim, J., & Fiore, A. (2010). Affective and Cognitive Online Shopping Experience: Effects of Image Interactivity Technology and Experimenting with Appearance. *Clothing and Textiles Research Journal*, 28(2), 140.
- Lee, J. G., Sadachar, A., & Manchiraju, S. (2017). Investigating Customer Loyalty to Apparel and Beauty Subscription Box Retailers.
- Lee, S. M., & Chen, L. (2010). The impact of flow on online consumer behavior. *Journal of Computer Information Systems*, 50(4), 1-10.
- Liao, C., Lin, H. N., & Liu, Y. P. (2010). Predicting the use of pirated software: A contingency model integrating perceived risk with the theory of planned behavior. *Journal of Business Ethics*, 91(2), 237-252.
- Liao, Z., & Cheung, M. T. (2002). Internet-based e-banking and consumer attitudes: an empirical study. *Information & Management*, 39(4), 283-295.
- Lim, H., & Dubinsky, A. J. (2004). Consumers' perceptions of e-shopping characteristics: an expectancy-value approach. *Journal of Services Marketing*, 18(7), 500-513.
- Limayem, M., Khalifa, M., & Frini, A. (2000). What makes consumers buy from Internet? A longitudinal study of online shopping. *IEEE Transactions on Systems, Man, and Cybernetics-Part A: Systems and Humans*, 30(4), 421-432.
- Lin, H. F. (2007). Predicting consumer intentions to shop online: An empirical test of competing theories. *Electronic Commerce Research and Applications*, 6(4), 433-442.

- Ling, K.C., Chai, L.T., & Piew, T.H. (2010). The effects of shopping orientations, online trust and prior online purchase experience toward customers' online purchase intention. *International Business Research*, 3(3), 63-76.
- Livingston, A. (2018). Are monthly subscription boxes worth it? – costs, pros & cons. Retrieved from: <https://www.moneycrashers.com/subscription-boxes-worth-costs-pros-cons/>
- Longanecker, C. (2015). Why you should use a subscription business model. Retrieved from <https://www.entrepreneur.com/article/243573>
- Loureiro, S., & Ribeiro, L. (2011). The effect of atmosphere on emotions and online shopping intention: Age differentiation. In Australian and New Zealand Marketing Academy Conference, Perth, Australia.
- Loureiro, S., & Ribeiro, L. (2011). The effect of atmosphere on emotions and online shopping intention: Age differentiation. In Australian and New Zealand Marketing Academy Conference, Perth, Australia.
- Lowry, P. B., Gaskin, J., Twyman, N., Hammer, B., & Roberts, T. (2012). Taking 'fun and games' seriously: Proposing the hedonic-motivation system adoption model (HMSAM).
- Ludin, J. (n.d.), The pros and cons of running a subscription service. Retrieved from <http://articles.bplans.com/the-pros-and-cons-of-running-a-subscription-service/>
- Luo, J., Ba, S., & Zhang, H. (2012). The effectiveness of online shopping characteristics and well-designed websites on satisfaction, *MIS Quarterly*, 36(4), 1131-1144.
- Lynch Jr, J. G., Marmorstein, H., & Weigold, M. F. (1988). Choices from sets including remembered brands: Use of recalled attributes and prior overall evaluations. *Journal of Consumer Research*, 15(2), 169-184.

- Mandrick, C. A., & Bao, Y. (2005). Exploring the concept and measurement of general risk aversion. *Advances in Consumer Research*, 32(1), 531–539.
- Matzler, K., Grabner, K.S. & Bidmon, S. (2008). Risk aversion and brand loyalty: the mediating role of brand trust and brand affect, *Journal of Product and Brand Management*, 17(3), 154-162.
- Marisa. (2018). Why shopping is therapy. Retrieved from <https://www.missmarisa.com.au/2018/09/17/why-shopping-is-therapy/>
- Mehrabian, A. (1977). A questionnaire measure of individual differences in stimulus screening and associated differences in arousability. *Environmental Psychology and Nonverbal Behavior*, 1(1), 89–103.
- Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. the MIT Press.
- Mehrabian, A. (1980). Basic dimensions for a general psychological theory. Cambridge, Mass.: Oelgeschlager.
- Michaelidou, N., & Dibb, S. (2009). Brand switching in clothing: the role of variety-seeking drive and product category-level characteristics. *International Journal of Consumer Studies*, 33, 322–326.
- Miller, N. (2000). Retail leasing in a web enabled world. *Journal of Real Estate Portfolio Management*, 6(2), 167-184.
- Mimoun, M. S. B., Garnier, M., & Depledt, D. (2015). My little box, oh my little box... a video-netnographic study on the expression of values in subscription-based E-commerce, *Journal of Applied Business Research*, 31(3), 1159.

- Mintel. (2016). Stitch fix adds men's clothing into the mix. Retrieved from <http://academic.mintel.com.prox.lib.ncsu.edu/display/801805/?highlight#hit1>
- Mitchell, V. W. (1999). Consumer perceived risk: conceptualisations and models. *European Journal of marketing*, 33(1/2), 163-195.
- Mitchell, V.W., & Vassos, V. (1997). Perceived risk and risk reduction in holiday purchases: a cross-cultural and gender analysis, *Journal of Euromarketing*, 6(3), 47-79.
- Miyazaki, A. D., & Fernandez, A. (2001). Consumer perceptions of privacy and security risks for online shopping. *Journal of Consumer affairs*, 35(1), 27-44.
- Moore, D. J., Harris, W. D., & Chen, H. C. (1995). Affect intensity: An individual difference response to advertising appeals. *Journal of Consumer Research*, 22(2), 154–164.
- Morris, B. (1987). As a favorite pastime, shopping ranks high with most Americans. *The Wall Street Journal*, 13, 41.
- Morris, J. D., Woo, C., Geason, J. A., & Kim, J. (2002). The power of affect: Predicting intention. *Journal of Advertising Research*, 42(3), 7-17.
- Montaldo, D. L. (2018). Is shopping online really cheaper? Retrieved from <https://www.thebalance.com/is-shopping-online-really-cheaper-939778>
- Moynagh, M., & Worsley, R. (2002). Tomorrow's consumer—the shifting balance of power. *Journal of Consumer Behaviour: An International Research Review*, 1(3), 293-301.
- Mumaw, S. (2011), *Chasing the Monster Idea: The Marketer's Almanac for Predicting Idea Epicness*. John Wiley and Sons, Hoboken, NJ.
- Mummalaneni, V. (2005). An empirical investigation of web site characteristics, consumer emotional states and on-line shopping behaviors. *Journal of Business Research*, 58(4), 526-532.

- Munford, M. (2014). Styloko confronts the paradox of choice in clothes shopping online.
Retrieved from <https://www.forbes.com/sites/montymunford/2014/10/17/the-problem-with-online-shopping-has-been-the-choice/#228f444e20b3>
- Naderi, I. (2013), Beyond the fad: a critical review of consumer fashion involvement, *International Journal of Consumer Studies*, 37(1), 84-104.
- Nam, J., Hamlin, R., Gam, H.J., Kang, J.H., Kim, J., Kumphai, P., Starr, C., & Richards, L. (2007). The fashion-conscious behaviours of mature female consumers, *International Journal of Consumer Studies*, 31(1), 102-108.
- Nepomuceno, M. V., Laroche, M., & Richard, M. O. (2014). How to reduce perceived risk when buying online: The interactions between intangibility, product knowledge, brand familiarity, privacy and security concerns. *Journal of Retailing and Consumer Services*, 21(4), 619-629.
- Nicolaou, A. I., & McKnight, D. H. (2006). Perceived information quality in data exchanges: Effects on risk, trust, and intention to use. *Information systems research*, 17(4), 332-351.
- Nysveen, H., Pedersen, P. E., & Thorbjørnsen, H. (2005). Intentions to use mobile services: Antecedents and cross-service comparisons. *Journal of the Academy of Marketing Science*, 33(3), 330–346.
- O'Cass, A. (2000). An assessment of consumers' product, purchase decision, advertising and consumption involvement in fashion clothing. *Journal of Economic Psychology*, 21, 546–576.
- O'Cass, A. (2004). Fashion clothing consumption: antecedents and consequences of fashion clothing involvement. *European Journal of Marketing*, 38, 869–882.

- O'Cass, A., & Choy, E. (2008). Studying Chinese generation Y consumers' involvement in fashion clothing and perceived brand status. *Journal of Product & Brand Management*, 17(5), 341-352.
- Olenski, S. (2017). The State of Trust Between Marketers And Consumers. Retrieved from <https://www.forbes.com/sites/steveolenski/2017/08/15/the-state-of-trust-between-marketers-and-consumers/#287e0b9e5aaf>
- Oliver, R. L., & DeSarbo, W. S. (1988). Response determinants in satisfaction judgments. *Journal of Consumer Research*, 14(4), 495-507.
- Ostrom, A., & Iacobucci, D. (1995). Consumer trade-offs and the evaluation of services. *The Journal of Marketing*, 17-28.
- Pavlou, P. A., & Fygenson, M. (2006). Understanding and predicting electronic commerce adoption: An extension of the theory of planned behavior. *MIS quarterly*, 115-143.
- Petty, R. E. (2018). Attitudes and persuasion: Classic and contemporary approaches. Routledge.
- Petty, R. E., Wegener, D. T., & Fabrigar, L. R. (1997). Attitudes and attitude change. *Annual Review of Psychology*, 48(1), 609-647.
- Pike, H. (2016). Will Subscription Services work for Fashion?. Retrieved from <https://www.businessoffashion.com/articles/intelligence/can-subscription-services-work-for-fashion>
- Pires, G., Stanton, J., & Eckford, A. (2004). Influences on the perceived risk of purchasing online. *Journal of Consumer Behaviour: An International Research Review*, 4(2), 118-131.
- Proulx, M. (2016). Thinking inside the box: online subscription services make their mark in retail. Retrieved from <https://www.highbeam.com/doc/1G1-469638899.html>

- Prasad, C. J., & Aryasri, A. R. (2009). Determinants of shopper behaviour in e-tailing: An empirical analysis. *Paradigm, 13*(1), 73-83.
- Qualls, W. J., & Puto, C. P. (1989). Organizational climate and decision framing: An integrated approach to analyzing industrial buying decisions. *Journal of Marketing Research, 26*(2), 179–192.
- Ramkumar, B., & Woo, H. (2018). Modeling consumers' intention to use fashion and beauty subscription-based online services (SOS). *Fashion and Textiles, 5*(1), 22.
- Randal Retail Group. (2018). Retail isn't Dead, It's Changing: 2018 Retail Trends Part 1. Retrieved from <http://www.randalretail.com/retail-isnt-dead-changing-2018-retail-trends/>.
- Razzaq, A., Ansari, N. Y., Razzaq, Z., & Awan, H. M. (2018). The Impact of Fashion Involvement and Pro-Environmental Attitude on Sustainable Clothing Consumption: The Moderating Role of Islamic Religiosity. *SAGE Open, 8*(2).
- Richard, M. O., & Chandra, R. (2005). A model of consumer web navigational behavior: conceptual development and application. *Journal of business Research, 58*(8), 1019-1029.
- Richardson, P. S., Dick, A. S., & Jain, A. K. (1994). Extrinsic and intrinsic cue effects on perceptions of store brand quality. *The Journal of Marketing, 58* (4), 28-36.
- Riquelme, I. P., & Román, S. (2014). The relationships among consumers' ethical ideology, risk aversion and ethically-based distrust of online retailers and the moderating role of consumers' need for personal interaction. *Ethics and Information Technology, 16*(2), 135-155.
- Roesler, P. (2017). Study Shows Keys to Customer Retention for Online and In-Store Retailers. Retrieved from <https://www.inc.com/peter-roesler/study-shows-keys-to-customer-retention-for-online-and-in-store-retailers.html>

- Rothschild, M. L. (1979). Marketing communications in nonbusiness situations or why it's so hard to sell brotherhood like soap. *The Journal of Marketing*, 11-20.
- Roussin, I. (2016). How subscription commerce is transforming retail. Retrieved from <http://www.mytotalretail.com/article/how-subscription-commerce-is-transforming-retail/>
- Rudolph, T., Bischof, S. F., Böttger, T., & Weiler, N. (2017). Disruption at the door: A taxonomy on subscription models in retailing, *Marketing Review St. Gallen*, 34(5), 18-25.
- Ruiz, S., & Sicilia, M. (2004). The impact of cognitive and/or affective processing styles on consumer response to advertising appeals. *Journal of Business Research*, 57(6), 657–664.
- Russell, J. A., & Mehrabian, A. (1977). Evidence for a three-factor theory of emotions. *Journal of Research in Personality*, 11, 273–294.
- Salesforce Research. (2018). Customer Expectations Hit All-Time Highs. Retrieved from <https://www.salesforce.com/research/customer-expectations/>
- Schiffman, L.G., & Kanuk, L.L. (1994). *Consumer Behavior*, Prentice-Hall, Englewood Cliffs, NJ.
- Schrage, M. (1999). The next step in customization. *Mc Technology Marketing Intelligence*, 8, 20-21.
- Sellbrite. (2018). 12 ecommerce tips to learn from subscription box services. Retrieved from <https://www.sellbrite.com/blog/ecommerce-tips-to-learn-from-subscription-box-services/>
- Sharp, B., Wright, M. and Goodhard, G. (2002). Purchase loyalty is polarised into either repertoire or subscription patterns, *Australasian Marketing Journal*, 10(3), 7-20.
- Shih, C. F. (1998). Telepresence and bricolage: a conceptual model of consumer experiences in virtual environments. In *1998 Winter Society for Consumer Psychology Conference Proceedings* (Vol. 231).

- Shostack, G. L. (1977). Breaking free from product marketing. *The Journal of Marketing*, 73-80.
- Sicilia, M., Ruiz, S., & Reynolds, N. (2006). Attitude formation online: How the consumer's need for cognition affects the relationship between attitude towards the website and attitude towards the brand. *International Journal of Market Research*, 2(48), 139-154.
- Stafford, T. F., Stafford M. R., & Schkade, L. (2004). Determining uses and gratifications for the Internet. *Decision Sciences*, 35(2), 259–288
- Steenkamp, J. B. E., Hofstede, F. T., & Wedel, M. (1999). A cross-national investigation into the individual and national cultural antecedents of consumer innovativeness. *The Journal of Marketing*, 55-69.
- Stitch Fix. (2018), Static Files March 2018. Retrieved from <https://investors.stitchfix.com/static-files/a578e8ff-5685-41f2-b6d5-ed03d7ee0f42>
- Sukhraj, R. (2018). The 23 most popular subscription boxes of 2018 consumers love. Retrieved from <https://www.impactbnd.com/blog/best-subscription-boxes>
- Summers, J.O. (1970). The identity of women's clothing fashion opinion leaders. *Journal of Marketing Research*, 7, 178–185.
- Sun, Y., & Guo, S. (2017). Predicting Fashion Involvement by Media Use, Social Comparison, and Lifestyle: An Interaction Model. *International Journal of Communication*, 11, 24.
- Sirdeshmukh, D., Singh, J., & Sabol, B. (2002). Consumer Trust, Value, and Loyalty in Relational Exchanges. *Journal of Marketing*, 66(1), 15-37.
- Tai, S. H., & Fung, A. M. (1997). Application of an environmental psychology model to in-store buying behaviour. *The International Review of Retail, Distribution and Consumer Research*, 7(4), 311-337.

- Tao, Q., & Xu, Y. (2018). Fashion subscription retailing: an exploratory study of consumer perceptions, *Journal of Fashion Marketing and Management: An International Journal*, 22(4), 494-508.
- Thomas, G. (2015). E-commerce Tips: How to Clear your Excess Inventory with More Effective Promotions. Retrieved from <https://blog.justuno.com/e-commerce-tips-how-to-clear-your-excess-inventory>
- Tigert, D., Ring, L., & King, C. (1976). Fashion involvement and buying behaviour: a methodological study, *Advances in Consumer Research*, 3, 46-52.
- To, P. L., Liao, C., & Lin, T. H. (2007). Shopping motivations on Internet: A study based on utilitarian and hedonic value. *Technovation*, 27(12), 774-787.
- Tunikova, O., (2018), Subscription Revenue Model From User And Marketer Perspectives. Retrieved from <https://stopad.io/blog/subscription-revenue-model-challenges>
- Turley, L. W., & Milliman, R. E. (2000). Atmospheric effects on shopping behavior: a review of the experimental evidence. *Journal of business research*, 49(2), 193-211.
- Vanhamme, J., & Snelders, D. (2003). What if you surprise your customers... Will they be more satisfied? Findings from a pilot experiment. *ACR North American Advances*, 30, 48-55.
- Vargo, S. & Lusch, R. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*. 68(1), 1-17.
- Vembar, K. (2018). Are subscription services viable for independent retailers? Retrieved from <https://www.retaildive.com/news/are-subscription-services-viable-for-independent-retailers/532785/>

- Vermeir, I., & Verbeke, W. (2006). Sustainable food consumption: Exploring the consumer “attitude–behavioral intention” gap. *Journal of Agricultural and Environmental ethics*, *19*(2), 169-194.
- Vieira, V. A. (2013). Stimulus–organism–response framework: A meta-analytic review in the store environment. *Journal of Business Research*, *66*(9), 1420-1426.
- Vishnoi, L. (2018). 7 Problems That Every E-commerce Faces and Their Solutions 2018. Retrieved from <https://acquire.io/blog/problems-solutions-ecommerce-faces/>
- Wakefield, K., & Blodgett, J. (1996). The effect of the servicescape on customers' behavioral intentions in leisure service settings. *Journal of Services Marketing*, *10*(6), 45-61.
- Ward, S. (2019). Target Marketing and Market Segmentation. Retrieved from <https://www.thebalancesmb.com/target-marketing-2948355>
- Wassel, B. (2018). Subscription Services: A Fruitful Source Of Customer Loyalty And Data. Retrieved from <https://www.retailtouchpoints.com/topics/omnichannel-cross-channel-strategies/subscription-services-a-fruitful-source-of-customer-loyalty-and-data>
- Weber, E. U., & Bottom, W. P. (1989). Axiomatic measures of perceived risk: Some tests and extensions. *Journal of Behavioral Decision Making*, *2*(2), 113-131.
- Weber, E. U., & Milliman, R. A. (1997). Perceived risk attitudes: Relating risk perception to risky choice. *Management science*, *43*(2), 123-144.
- Weber, E.U., & Hsee, C. (1998). Cross-cultural differences in risk perception, but similarities in attitudes towards perceived risk, *Management Science*, *44*(9), 1205-18.
- Williams, T. (2010). *Positioning for Professionals: How Professional Knowledge Firms Can Differentiate Their Way to Success*. [Online]. Hoboken: John Wiley & Sons, Inc.

- Winkler, N. (2018). Ecommerce Returns: Policy, Rates, Best Practices & Statistics (2018 Holiday Ed.) Retrieved from <https://www.shopify.com/enterprise/ecommerce-returns>
- Wiseman, R. M., Gomez-Mejia, L. R., & Fugate, M. (2000). Rethinking compensation risk. *Compensation in organizations*, 311-347.
- Woo, H., & Ramkumar, B. (2018). Who seeks a surprise box? Predictors of consumers' use of fashion and beauty subscription-based online services (SOS). *Journal of Retailing and Consumer Services*, 41, 121-130.
- Woodruff, R. B. (1997). Customer value: the next source for competitive advantage. *Journal Of The Academy Of Marketing Science*, 25(2), 139.
- Wu, S. I. (2003). The relationship between consumer characteristics and attitude toward online shopping. *Marketing Intelligence & Planning*, 21(1), 37-44.
- Wu, L. Y., Chen, K. Y., Chen, P. Y., & Cheng, S. L. (2014). Perceived value, transaction cost, and repurchase-intention in online shopping: A relational exchange perspective. *Journal of Business Research*, 67(1), 2768-2776.
- Yoo, C., Park, J., & MacInnis, D. J. (1998). Effects of store characteristics and in-store emotional experiences on store attitude. *Journal of Business Research*, 42(3), 253-263.
- Yu, C. S., & Tao, Y. H. (2009). Understanding business-level innovation technology adoption. *Technovation*, 29, 92-109.
- Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of consumer research*, 12(3), 341-352.
- Zeithaml, V. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2-22.

Zhou, K.Z., Su, C., & Bao, Y. (2002). A paradox of price-quality and market efficiency: a comparative study of the USA and China markets, *International Journal of Research in Marketing*, 19, 349-65.

APPENDICES

Appendix A:

Fashion Subscription Retailing Survey

This study is to investigate consumer behavior toward Fashion Subscription Retailing Services (FSRS).

Fashion subscription retailing service (FSRS): The service provides a subscribing customer with a box of clothing and accessories periodically (e.g. once a month). Those clothing and accessories are either hand-picked by a stylist or by the computer system based on customers' preferences. Customers can keep the products from the box or return the ones they don't like.

If you are **between the ages of 25 - 55 and have heard of or used FSRS**, please select 'Yes' below in order to proceed on to the survey. Otherwise, please select 'No.' Your completion of the survey implies your consent for the researchers to use the data for research purpose. The data you provided will be analyzed collectively. Your participation is completely voluntary and you can stop taking the survey at any time if you are not comfortable with the questions.

(The following questions are measured on a 7-point Likert-scale)

Monetary Value

MV1: The products offered by FSRS would be a good value for the money.

MV2: The price that I would pay for the product is good.

MV3: I would consider the products to be a good buy.

MV4: Purchases through FSRS will be cheaper than other purchasing options.

MV5: I would save money by using FSRS.

Product Variety

PV1: FSRS could provide access to a variety of clothing items.

PV2: I could access a wide selection of each type of clothing items through FSRS.

PV3: I could access many brands through FSRS.

PV4: FSRS could provide an opportunity to try different fashion styles I would not otherwise try.

Convenience

CO1: Using FSRS would require less time in clothing shopping than traditional shopping methods.

CO2: Using FSRS would be a more convenient way to shop for clothing than traditional shopping methods.

CO3: FSRS can relieve some hassles of clothing shopping.

CO4: FSRS would reduce the number of times I go to clothing stores.

Perceived risk

PR1: I am afraid the products from FSRS would be of poor quality.

PR2: I am concerned that my personal and financial privacy would be leaked if I use FSRS.

PR3: I am afraid that there would be hidden costs when using FSRS.

PR4: I am afraid that FSRS would not deliver products on time.

PR5: I am afraid that canceling my FSRS subscription would be troublesome.

Customization

CU1: Product recommendations from FSRS would be helpful.

CU2: Products provided by FSRS would be customized to my needs.

CU3: FSRS would make me feel that I am a unique customer.

CU4: FSRS would help me better style myself.

Perceived Ease of Use

PEOU1: The FSRS process is easy to understand.

PEOU2: It would be straight forward to build my style profile on a FSRS website.

PEOU3: The home try-on concept is easy to understand.

PEOU4: I think it would be easy to communicate with my online stylist.

PEOU5: Returning unwanted products would be complicated.

Hedonic Value

HV1: It is fun to try subscription clothing at home.

HV2: Waiting for the subscription box would be exciting.

HV3: Opening the subscription box would be exciting.

HV4: It would be exciting to communicate with a fashion stylist.

Attitude

ATT1: I think it is a good idea to use FSRS.

ATT2: I think it is fun to use FSRS.

ATT3: I think it is useful to use FSRS.

ATT4: I think it is worthwhile to use FSRS.

ATT5: I think it is beneficial to use FSRS.

Adoption Intention

AI1: I intend to use FSRS for apparel shopping in the near future.

AI2: It is unlikely that I will purchase through FSRS in the near future.

AI3: I would recommend FSRS to my friends in the near future.

Fashion Involvement

FI1: Fashion clothing means a lot to me.

FI2: Fashion clothing is significant to me.

FI3: For me personally fashion clothing is important.

FI4: I am interested in fashion clothing.

FI5: I pay a lot of attention to fashion clothing.

FI6: I am very much involved with fashion clothing.

Risk Aversion

RA1: I do not feel comfortable about taking chances.

RA2: I prefer situations that have foreseeable outcomes.

RA3: Before I make a decision, I like to be absolutely sure how things will turn out.

Demographic

Gender

1. Male
2. Female

Age

1. 25-30
2. 31-35
3. 36-40
4. 41-45
5. 46-50
6. 51-55

Education

1. Less than high school
2. High school graduate
3. Some college/ vocational degree
4. Bachelor's degree
5. Master's degree or above

Household income

1. Less than \$20,000
2. \$20,000 - \$50,000
3. \$50,000 - \$75,000
4. \$75,000 - \$100,000
5. \$100,000 - \$150,000
6. \$150,000 - \$200,000
7. \$200,000 - \$300,000
8. Over \$300,000

Frequency of online clothing shopping

1. Never
2. Twice per year
3. Monthly
4. Weekly
5. Daily

Frequency of brick and mortar store clothing shopping

1. Never
2. Twice per year
3. Monthly
4. Weekly
5. Daily

Please check all Fashion Subscription Retailing services you have heard of:

1. Stitch Fix
2. Trunk Club
3. Amazon Prime Wardrobe
4. Fabletics
5. Five Four Club
6. Gwynnie Bee
7. Golden Tote
8. Wantable
9. Elizabeth & Clarke
10. Others, please indicate _____
11. None

Please check all Fashion Subscription Retailing services you have used:

1. Stitch Fix

2. Trunk Club
3. Amazon Prime Wardrobe
4. Fabletics
5. Five Four Club
6. Gwynnie Bee
7. Golden Tote
8. Wantable
9. Elizabeth & Clarke
10. Others, please indicate _____
11. No experience