

Graduate School of Management

Master in Management Program

MASTER THESIS

PRODUCT RETURNS RELATED TO IMPULSIVE

BUYING IN E-COMMERCE

Master's Thesis by the 2<sup>nd</sup> year student

CEMS MIM

Valeriia Fedorova

Research advisor:

Doctor of Economics, Professor Vitally I. Cherenkov

St. Petersburg

2017

## **ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ ВЫПОЛНЕНИЯ ВЫПУСКНОЙ КВАЛИФИКАЦИОННОЙ РАБОТЫ**

Я, Федорова Валерия Анатольевна, студентка второго курса магистратуры направления «Менеджмент», заявляю, что в моей магистерской диссертации на тему «Возврат товара, связанный с импульсивным покупательским поведением в электронной коммерции», представленной в службу обеспечения программ магистратуры для последующей передачи в государственную аттестационную комиссию для публичной защиты, не содержится элементов плагиата.

Все прямые заимствования из печатных и электронных источников, а также из защищенных ранее выпускных квалификационных работ, кандидатских и докторских диссертаций имеют соответствующие ссылки.

Мне известно содержание п. 9.7.1 Правил обучения по основным образовательным программам высшего и среднего профессионального образования в СПбГУ о том, что «ВКР выполняется индивидуально каждым студентом под руководством назначенного ему научного руководителя», и п. 51 Устава федерального государственного бюджетного образовательного учреждения высшего профессионального образования «Санкт-Петербургский государственный университет» о том, что «студент подлежит отчислению из Санкт-Петербургского университета за представление курсовой или выпускной квалификационной работы, выполненной другим лицом (лицами)».

\_\_\_\_\_ (Подпись студента)

\_\_\_\_\_ (Дата)

## **STATEMENT ABOUT THE INDEPENDENT CHARACTER OF THE MASTER THESIS**

I, Valeriia Fedorova, second year master student, program «Management», state that my master thesis on the topic “Product returns related to impulsive buying in e-commerce”, which is presented to the Master Office to be submitted to the Official Defense Committee for the public defense, does not contain any elements of plagiarism.

All direct borrowings from printed and electronic sources, as well as from master theses, PhD and doctorate theses which were defended earlier, have appropriate references.

I am aware that according to paragraph 9.7.1. of Guidelines for instruction in major curriculum programs of higher and secondary professional education at St. Petersburg University «A master thesis must be completed by each of the degree candidates individually under the supervision of his or her advisor», and according to paragraph 51 of Charter of the Federal State Institution of Higher Professional Education Saint-Petersburg State University «a student can be expelled from St. Petersburg University for submitting of the course or graduation qualification work developed by other person (persons)».

\_\_\_\_\_ (Student's signature)

\_\_\_\_\_ (Date)

## АННОТАЦИЯ

Автор:	Федорова Валерия Анатольевна
Название магистерской диссертации:	«Возврат товара, связанный с импульсивным покупательским поведением в электронной коммерции»
Факультет:	Высшая Школа Менеджмента (Санкт-Петербургский Государственный Университет)
Направление подготовки:	38.04.02 «Менеджмент» (профиль: SEMS MIM)
Год:	2017
Научный руководитель:	доктор экономических наук, профессор Черенков В. И.
Описание цели, задач и основных результатов:	Цель исследования - изучить потребительское поведение возврата товара, связанное с импульсивными покупками в электронной коммерции. Для достижения этой цели были сформулированы несколько гипотез на основе анализа существующей литературы. Тестирование гипотез было проведено на основе многофакторной регрессионной модели. Эмпирическое исследование было основано на выборке из 153 потребителей поколения Y. Результаты исследований свидетельствуют о том, что использование кредитных карт и либеральная политика возврата положительно связаны с импульсивной покупательской тенденцией, которая, в свою очередь, может привести к негативной эмоциональной реакции после покупки. Отрицательные эмоции после покупки могут привести к возврату товара. Кроме того, было установлено, что причинно-следственная связь между импульсивной покупательской тенденцией и отрицательными эмоциями после покупки может быть смягчена подарками. Исследование показало, что послепокупочная коммуникация с клиентами интернет-магазинов отрицательно влияет на негативную эмоциональную реакцию после покупки.
Ключевые слова:	Импульсивное покупательское поведение, импульсивные покупки, возврат товара, электронная коммерция, кредитные карты, политика возврата

## ABSTRACT

Author:	Valeriia Fedorova
Master Thesis Title:	“Product returns related to impulsive buying in e-commerce ”
Faculty:	Graduate School of Management (St.-P. State University)
Major subject:	38.04.02 “Management” (specialization: CEMS MIM)
Year:	2017
Academic advisor’s name:	Doctor of Economics, Professor V. I. Cherenkov
Description of the goal, tasks, and main results:	<p>The purpose of the research was to investigate consumer product return behavior related to impulsive buying in the online retailing environment. To address this goal, several hypotheses were formulated based on the analysis of the extant literature. To verify the hypotheses data collected from a sample of 153 Russian Generation Y consumers was statistically analyzed. Research findings state that credit card use and perceived return policy leniency are positively related to impulsive buying tendency. There is evidence that impulsive buying tendency in its turn may result in post-purchase negative emotional response. Post-purchase negative emotions may lead to online product return behavior. Additionally, the causal relationship between impulse buying tendency and post-purchase negative emotions was found to be moderated by gifts. While there was no significant interactive effect found between impulsive buying and post-purchase communication with online stores’ customers, the study revealed that post-purchase communication negatively influences post-purchase negative emotional response.</p>
Keywords:	Online impulsive buying, impulsive buying tendency, product return, return policy, credit card use, post-purchase negative evaluation, e-commerce

## TABLE OF CONTENTS

<b>INTRODUCTION .....</b>	<b>7</b>
<b>CHAPTER I. LITERATURE REVIEW .....</b>	<b>11</b>
Impulsive buying definition.....	11
Impulsive buying tendency.....	14
Impulsive buying in the online environment.....	15
Credit card use as an antecedent of impulse buying.....	16
Buying decision process and post-purchase behavior.....	17
Return policy and perceived risk.....	18
Return policy and online product return behavior.....	19
Post-purchase negative emotions.....	21
Product return behavior as a response to negative emotions.....	22
Research gap.....	23
Hypotheses development.....	24
Conceptual model.....	28
<b>CHAPTER II. RESEARCH METHODOLOGY .....</b>	<b>29</b>
Research strategy.....	30
Data collection.....	30
Sampling procedure.....	31
Questionnaire structure.....	32
Measures.....	32
Mediation testing method.....	35
<b>CHAPTER III. DATA ANALYSIS .....</b>	<b>36</b>
Characteristics of the sample.....	36
Preliminary analyses.....	39
Hypotheses testing.....	41
Theoretical and practical implications.....	50
Limitations and future research directions.....	53
<b>CONCLUSION .....</b>	<b>55</b>
<b>REFERENCES .....</b>	<b>57</b>
<b>APPENDIX.....</b>	<b>61</b>

## INTRODUCTION

Impulsive buying recently defined as “individual’s desire for abrupt ownership of the product” (Bagdaiyan and Verma, 2014), is a pervasive shopping tendency inherent to consumerist culture and lifestyle. American shoppers alone have generated around \$4 billion worth of impulse purchases (Kacen and Lee, 2002). Research findings have indicated that impulse purchases may amount up to 60% of total purchases (Mattila and Wirtz, 2008). On the other hand, compulsive buying which involves impulse and excessive buying in a severe out of control form is considered a psychiatric disorder that affects only 1.1% of consumers (Lejoyeux et al., 1996).

Due to technological advances and massive e-commerce growth, online impulsive purchasing has become a widely spread phenomenon. According to the estimations, online impulsive buying accounts for 40% of all online consumer expenditure (Liu et al., 2013). The online shopping boom, that has taken over consumerist societies of the United States and Europe, has gradually come to the developing world. Online retailers have emerged as a new shopping destination for millions of consumers in Russia, who enjoy the benefits of convenient product delivery, accelerated purchase process and access to the endless choice of products. Shopping experience offered by online stores has lifted some of the limitations attributed to offline retailers (e.g. social pressure from sales assistants or other shoppers, limited opening hours, inconvenient store locations, the need to carry the products). Today e-commerce websites are argued to have created a more favorable environment for impulsive purchasing as opposed to brick-and-mortar stores (Eroglu et al., 2001). The importance of online impulse buying and its ability to generate sales was acknowledged by marketers. They attempt to tap into impulsive shopping tendency by employing limited promotions and offers, developing vivid and appealing website design, offering the next day delivery etc. Credit card payment and lenient return policy adopted by e-commerce retailers may also stimulate consumers to buy impulsively when shopping online.

Owing to online retailers’ efforts to ensure the security and safety of bank card payment transactions in order to reduce perceived risk associated with revealing personal information, credit cards have become one of the most widely used methods of payment for e-commerce transactions. In the US and Europe, credit/debit card is a payment method of choice. In Russia despite the long-standing consumer preference to make cash payments on delivery, with the growth of cross-border orders, bank card has become the most popular payment mode. Credit cards offer a convenient means of payment that instantly increases consumer money availability pushing cardholders to overspend. Individuals who frequently use credit cards are less conscious about the price and tend to purchase higher priced products. Credit card use has been identified as one of the antecedents of impulsive buying. Since the order payment is often made by a credit card, consumers may experience the urge to buy on impulse at e-retailers.

Facing peer pressure, e-commerce retailers often adopt lenient return policies despite tremendous costs associated with product returns. The return policy is considered an important tool for attracting customers and generating sales. When shopping online consumers have to deal with a higher risk compared to brick-and-mortar stores, as they are not able to see or touch a product before placing an order. Flexible product return conditions serve as a risk reliever that allows consumers to cancel their purchase decisions upon having received and inspected a product in real life. Lenient return policy compensates for consumers' inability to physically evaluate a product before making a purchase. Online shoppers place great importance on return policy and tend to review product return conditions prior to the purchase. Additionally, consumers may make judgments about the trustworthiness and quality of an online store based on its return policy. Thus, return policy is crucial in driving consumer purchase decisions. Consumers are likely to buy more when they perceive return policy as lenient. If a shopper is certain that he can painlessly return products and get a refund, he may experience the urge to buy impulsively while browsing the online store.

However, impulsive buying is often followed by powerful feelings of guilt and regret. When making an impulse purchase an individual is so consumed by positive emotions and desire for immediate gratification, that he does not reflect on such aspects as the utilitarian value of the product, budget constraints and the necessity of the purchase. Consumer research studies have demonstrated that impulse purchasing frequently results in a state of psychological pain and anxiety, particularly when consumers overspend when buying on impulse. When consumers come to the realization that their purchase decision was wrong because they actually did not need the product or its benefits did not meet their expectations or they cannot afford it, they experience negative emotions. The post-purchase negative emotional response is associated with low customer satisfaction which is argued to have a negative impact on brand loyalty, repurchase intention and word of mouth about the brand. Post-purchase negative reaction results in product return behavior. Thus, online impulsive buying may negatively influence e-commerce retailers' bottom line, especially considering the fact that most of them have a very lenient return policy.

Although return policy is a strategic tool for online retailers to increase sales, customer loyalty and repurchase intention, it may lead to product return behavior. Product return rate is estimated from 25 to 40% across different product categories, which is much higher than in brick-and-mortar stores (Dennis, 2017). E-commerce trend of fully refunded returns with free shipping, initiated by the industry's main players such as Amazon, has become a great issue for online retailers' profitability. Considering that shipping, return and exchange costs are handled by retailers and returned merchandise is often sold at markdown due to its defective condition, e-commerce margins are squeezed. Indeed, the majority of e-retailers have lower operating profit



with product return as a massive cost driver as opposed to their brick-and-mortar counterparts. Today, the major challenge of e-commerce business is to find an equilibrium between ensuring higher margins by cutting down product return costs without alienating consumers and curbing impulse buying as a result of adopting rigid return policies.

Despite managerial relevancy of the issue, extant research has paid limited attention to product return behavior in the e-commerce environment, considering that it is a relatively new research field and there is not much knowledge about it. The majority of the studies on this topic focused on operational and supply chain aspects of product return, analyzed how product return policy impacts e-retailers' profitability and how return policies can be optimized to deliver cost-efficient and timely returns. Online impulsive buying has been a topic of interest for marketing scholars, however, prior research has primarily investigated external and internal motivators of impulse buying. There is far less knowledge about the post-purchase phase of impulsive purchasing, which is critical as it is distinct from regular consumer behavior and is often accompanied by post-purchase regret, which can have negative consequences both for consumers and marketers. In this context, in order to tackle consumers' abusive practice of product returns it is crucial to understand online product return related to impulse buying from consumers' perspective.

Making a contribution towards the understanding of negative consumer behaviors in the e-commerce environment could be of value both from managerial and theoretical perspective. Therefore, *the purpose of this research* is to investigate consumer product return behavior related to impulsive buying in the online retailing environment. *The research question* of the current study is formulated as follows:

*RQ: How product returns related to impulsive buying can be reduced in the e-commerce environment?*

To address this question, the following *objectives* of the study were identified:

- To explore product return behavior in online environment and identify the factors that contribute to it;
- To analyze extant research and to identify a research gap;
- To develop a methodological approach and outline the scope of current study;
- To gather primary data from a sample of Russian consumers;
- To conduct statistical data analysis and verify formulated hypotheses;
- To retrieve the results of data analysis;

- To develop coping strategies for managing excessive product returns for e-commerce marketers.

This thesis consists of the introduction, three chapters, conclusion, reference list, and appendix. The first chapter lays a theoretical foundation and formulates the hypotheses for the current research. The second chapter is dedicated to discussing methodological approach employed in the study, more specifically it presents research strategy and design, data collection method and questionnaire structure. Finally, the third chapter focuses on data analysis and discussion of the results of the study. It is comprised of five major sections respondents' characteristics, descriptive statistics, model fit analysis, hypotheses testing, discussion and managerial implications.

## CHAPTER I. LITERATURE REVIEW

### Impulsive buying definition

The phenomenon of impulsive buying started to attract the attention of scholars in the field of consumer and marketing research over 60 years ago. This attention resulted in a considerable academic effort to develop a definition of impulsive buying: almost every researcher made an attempt to provide his own definition that perfectly captured the complex nature of the concept. As a consequence, over the course of the XX century, impulsive buying definition has undergone significant transformation.

In the early 50s, when the importance of impulsive purchasing was first brought to light in marketing literature, academics considered impulsive buying largely synonymous with unplanned purchasing, i.e. any purchase a consumer makes without advance planning (Clover, 1950). The next research phase is characterized by describing impulsive purchasing with a simplified formula: “Impulsive purchasing = unplanned purchasing + exposure to a stimulus” (Piron, 1991). Applebaum (1951) was the first to suggest that consumer’s exposure to external stimulus may lead to impulsive buying and developed the following definition: “buying that presumably was not planned by the customer before entering a store, but which resulted from a stimulus created by a sales promotional device in the store”.

A significant contribution to the extant research was made by Hawkins Stern, who developed a classification of impulsive buying, that is still one of the most cited papers in the area of impulsive buying research today. Stern (1962) identified four categories of impulsive buying:

- *Pure impulse buying*: a purchase that has not been planned in advance which goes beyond normal buying pattern.
- *Reminder impulse buying*: the central element of this type of impulsive purchasing is the previous experience a consumer has with a product or product knowledge that is recalled in store when seeing an item. It is described as a purchase that occurs when consumer upon seeing a product, remembers that the stock of this particular product at home is low and has to be refilled, or a shopper is reminded of an advertisement or some information about the product.
- *Suggestion impulse buying*: it takes place when a shopper coming across a product for the first time identifies a need for it without having prior knowledge about it.
- *Planned impulse buying*: it occurs when a consumer has planned part of the purchases before his visit to the store, while the purchase decisions about the other part of the products are made on the spot based on sales promotions offered by the store.

Stern’s framework is built around the notion that impulsive purchasing is an escape or novelty buy made without advance planning that is triggered in the store environment going

beyond consumer's shopping habits. Impulse purchases stem from exposure to an external stimulus such as coming across a product, discounts, special offers and other promotion activities at the store level.

The stance that was taken by scholars in early studies on impulsive buying was limited and subjective since they made an attempt to understand the phenomenon primarily from the retailer's perspective. They put the emphasis strictly on product attributes and did not take into account consumer traits. Initial definitions of the construct were rather simplistic: impulsive purchase is equal to unplanned purchase motivated by external stimuli that are controlled by marketers within the confines of the store.

The first study on impulsive buying to shift the focus from product cues to consumer's personal characteristics was conducted by Rook and Hoch (1985). They believed that it is consumers and not products who experience the need to buy impulsively, thus, to fully understand this particular type of buying behavior it is crucial to examine consumer's cognitive and emotional reaction. From this psychological perspective, impulsive buying cannot be accurately explained as just an unplanned purchase. Rook indicated that due to the fact that store layout helps consumers to recognize the need for a product, not all unplanned purchases can be considered impulsive. Today most researchers agree that all purchases made on impulse can be considered unplanned, while not all unplanned purchases can be labeled as impulsive (cited in Amos et al., 2014). A purchase is truly impulsive when a consumer being exposed to a product experiences a complex reaction which may come as far as an emotional conflict (Rook, 1987). Rook offered one of the most widely accepted definitions of impulsive buying that has been used in numerous studies:

“Impulsive buying occurs when a consumer experiences a sudden, often powerful and persistent urge to buy something immediately. The impulse to buy is hedonically complex and may stimulate emotional conflict. Also, impulse buying is prone to occur with diminished regard for its consequences” (Rook, 1987).

This opened a research stream that concentrates on the behavioral dimension of impulsive buying that explores internal motivators of impulsive behavior and the interaction of internal and external stimuli. A considerable number of consumer research scholars have reached a consensus about the complex hedonic nature of the construct. Beatty and Farrell (1998) stated that impulsive buying refers to unplanned spontaneous purchase that is strongly associated with feelings of excitement and pleasure along with a powerful urge to buy. Previous research indicated that this urge is so powerful that individuals have difficulty to control it (Hoch and Loewenstein, 1991; Rook and Fisher, 1995). Consumers describing their impulsive purchase episodes self-report that when seeing a product it becomes so desired that it is impossible to resist the temptation to buy it (Roberts and Manolis, 2012). Impulse buying temptations originate from consumer's craving for

instant gratification through consumption (Vohs and Faber, 2007). As the ultimate goal of a consumer in the act of impulse buying is immediate gratification and satisfaction, the concern for consequences is very low or nonexistent (Taute and McQuitty, 2004; Punj, 2011). Baumeister (2002) elaborated on this notion stating that when an individual engages in impulse buying, there is no careful evaluation of the options and consideration of long-term goals, values, decisions, and plans.

Sharma et al. (2010) also pointed to irrationality of impulse decision process due to its very short span, proposing one of the most precise definitions of the phenomenon to date: “a sudden, hedonically complex purchase behavior in which the rapidity of the impulse purchase precludes any thoughtful, deliberate consideration of alternative or future implications”.

Taking into account the multitude of studies and definitions of impulsive buying, it is very important to distinguish the term of impulsive buying from related concepts described in marketing literature. First of all, the urge to buy impulsively does not equal to impulsive buying. The urge to buy impulsively is tightly connected to impulsive behavior. However, when an individual faces the urge to buy impulsively, it does not necessarily mean that he is going to respond to it. A consumer may experience impulsive urges frequently, successfully resisting some of them, while yielding to others. In other words, the urge may or may not lead to the actual purchase. Secondly, impulsive buying and compulsive buying are two separate concepts. Compulsive buying is considered to be abnormal consumer behavior. The voluminous body of psychiatric research studying compulsive buying defines it as an uncontrolled, excessive buying behavior that can lead to psychological distress and adverse consequences in individuals’ lives and financial debt (Dittmar, 2005). The central element of compulsive buying disorder is its destructive influence which stems from an individual’s inability to control buying impulses.

Building on the extensive stream of previous research, we have identified the following distinctive characteristics of impulse buying:

- *Spontaneity and immediacy.* The decision time span, i.e. the time spent on making the decision to purchase a product after visual stimulation is very short. When seeing a product, a consumer experiences a sudden urge for immediate ownership of a product. During the episode of impulsive buying, a consumer reacts hastily to the impulse and spontaneously decides to buy a product.
- *Hedonic dimension.* Impulsive buying evokes intense feelings and emotions in consumers. It may be associated with a state of psychological disequilibrium, when an individual goes from feeling happy and excited yielding to the temptation of purchasing a product to eventually feeling guilty about it. The act of impulse buying is primarily driven by a

powerful desire for instant gratification via consumption as opposed to satisfying a specific need.

- *Low cognition.* Making an impulse purchase, a consumer tends to disregard future implications and costs incurred. The decision to purchase is made without reflection due to arousal and hedonic temptation. While planned rational purchase decision may be associated with a strong emotional reaction as well, there is a cognitive process behind it.
- *Exposure to a stimulus.* External stimuli have a direct influence on the occurrence of the impulse purchase. External stimuli may refer to the product per se, sensory stimuli, retail environment (store atmospherics, store layout) and marketer-controlled cues.

### **Impulsive buying tendency**

Impulsivity or impulsiveness refers to a spontaneous action made without reflection. The concept of impulsiveness has been studied in various disciplines of social science. Self-control failure stemming from an inability to resist powerful urges leads to impulsiveness. In general, impulsiveness is associated with the lack of behavioral control and immediate desire to yield to temptation. Extant research findings demonstrated that impulsive buying behavior is tightly connected with impulsiveness (Hoch and Loewenstein, 1991; Sharma et al., 2010). Consumer behavior literature actually provided evidence that individuals' impulsive buying proneness stems from their personal impulsiveness tendency, that is also found to be mutually related to other traits such as variety seeking (e.g. Olsen et al., 2016) and materialism (e.g. Podoshen and Andrzejewski, 2012). Therefore, consumer's impulsive buying trait or tendency is conventionally treated as a subtrait of general impulsiveness.

Early studies that explored purchase behavior from personal impulsiveness tendency perspective, developed lack of control scale that measured the inability to resist the impulse for instant gratification (Amos et al., 2013). Consumers who exhibit high lack of control scores are reckless and tend to make spontaneous decisions on impulse rather than sticking with a plan. Rook and Fisher developed the first measure of impulsive buying tendency. Some individuals are predisposed to buy on impulse since they have a higher impulsiveness tendency than other individuals. This group of consumers tends to be more spontaneous in making their purchase decisions and breaking normal shopping pattern. Besides, these individuals have low cognitive control when it comes to purchasing, there is not much cognitive process behind their decision to buy the product. Highly impulsive consumers also immediately respond to the urge to buy. Additionally, they experience powerful urges more frequently as opposed to consumers with lower impulsive buying tendency. Rook and Fisher's scale is aimed to assess impulsiveness tendency in the context of purchasing behavior (Rook and Fisher, 1995). The initial impulsive buying tendency

scale introduced by Rook and Fisher is still the most widely used measure of buying impulsiveness adopted in the majority of studies of this phenomenon. Later on consumer behavior scholars have introduced other buying impulsiveness scales (e.g. Beatty and Ferrell, 1998). They are most commonly referred to as impulsive buying tendency (IBT) in marketing literature. These scales basically measure to what extent an individual is predisposed to experiencing sudden buying urges and making spontaneous purchase decisions in response to these urges. These measures were empirically tested by a considerable number of researchers and indicated that people do vary in their level of impulsiveness. It is very important to note that while IBT assesses personal trait, it was also adopted to measure consumer's decision to act on impulse when shopping (e.g. Park et al.).

### **Impulsive buying in the online environment**

With technological advances and massive e-commerce growth, today online impulsive behavior has become a pervasive phenomenon. Online shopping has lifted the constraints of conventional shopping such as social pressure from sales assistants, inconvenient locations and limited opening hours. E-commerce websites are open 24/7, offer a wide variety of products and accelerated buying process, allowing consumers to spend less time on contemplating their choice. Thus, online retailers have created favorable conditions that encourage consumers to buy on impulse (Eroglu et al., 2001).

Madhavaram and Laverie's study that investigated impulsive buying in the online environment, indicated that 22% of participants who completed the questionnaire have bought on impulse when shopping online. The majority of this group of respondents have also made an impulsive purchase in the retail setting. The results of this study suggest that similar to impulsive buying in brick-and-mortar stores, online impulse purchase is predicted by exposure to stimuli that go beyond the product per se. Online store browsing, positive emotions, and mood are also found to have an impact on online impulsive buying behavior. Hence, online impulsive buying is very similar to regular impulsive purchasing (Madhavaram and Laverie, 2004). Nevertheless, we have to take into account that there are major differences between e-commerce and traditional retailers. Online shopping is accompanied by a higher level of risk, as consumers cannot physically inspect products before making a purchase. In contrast, in brick-and-mortar stores, shoppers can conduct a visual and sensory product evaluation. Online retailing is associated with higher uncertainty and perceived risk compared to conventional retailing. Consumers also tend to be reluctant to shop online due to bank card payment security and shipping and return concerns.

Over the last decade, online impulsive buying has started to attract the attention of scholars. One of the most widely accepted definitions of online impulsive buying is formulated as follows:

online impulsive buying is “a result of a purchaser’s immediate reaction to external stimuli that is often hedonically charged. An impulse buying episode signifies a change in purchaser’s intention to purchase that particular product before and after exposure to stimuli. The stimuli are not limited to just the product, and change in purchaser’s intention does not include a reminder item that is simply out of stock at home” (Madhavaram and Laverie, 2004).

The literature on impulsive buying in the online environment can be divided into two principal research directions. The first research direction focused on investigating how antecedents, that were found to predict impulsive purchasing in the conventional retailing environment, affect impulse buying behavior in the online setting. An extensive body of literature has studied the influence of marketer controlled stimuli such as price discounts, bonus packs and promotions on online impulsive buying behavior (Dawson and Kim, 2010; Xu and Huang, 2014). Kim and Eastin (2011) have conducted a study investigating hedonic consumption tendency and its influence on online impulsive buying. The second research stream examined the impact of website attributes on consumers’ impulsive buying tendency. Various studies investigated the relationship between e-commerce website quality on impulsive purchase intention (e.g. Shen and Khalifa, 2012).

### **Credit card use as an antecedent of impulse buying**

Previous research indicated that payment method affects the so-called pain of payment. According to Prelec and Loewenstein’s mental accounting model, cash payments are perceived differently by consumers compared to other payment methods such as bank cards, i.e. when consumers pay with cash, they experience greater pain of payment, even though the amount of money to be paid is equivalent (Prelec and Loewenstein, 1998). Extant research findings suggest that credit cards being a less vivid mode of payment feel different from cash payments. When consumers would like to purchase something and face limited availability of money they typically have a choice: to save money and postpone the purchase or to resort to credit and immediately buy the product. Credit cards, that can be easily obtained by most individuals, instantly increase consumers’ purchasing power and drive them to overspend and consequently encourage impulsive buying.

Individuals who are impulsive in their purchase decisions, tend to pay by credit cards when their emotional state is very unstable, i.e. they may be very excited or depressed. Credit cards become an instant solution for responding to impulsive buying urges and push consumers to disregard the consequences of purchase decisions. Highly impulsive consumers are likely to use credit cards since they allow them to experience immediate gratification through consumption. In contrast, consumers with high self-control level tend to carefully plan their purchases and respect

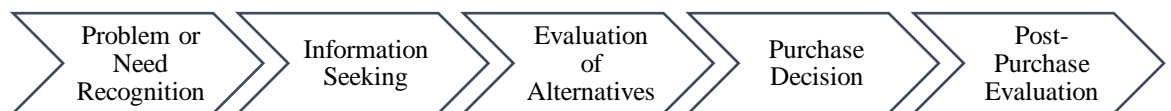


their budget constraints. The study by Roberts and Jones (2011) demonstrated that attitudes towards money, anxiety, and power are tightly connected with compulsive buying behavior and credit card use among American college students who are found to overspend for social status and peer pressure reasons.

### **Buying decision process and post-purchase behavior**

In 1968 Engel, Kollat and Blackwell introduced a model of consumer decision-making process, which is still relevant for consumer behavior research today and it has been widely adopted in a lengthy stream of literature (cited in Darley et al., 2010). The original Engel-Kollat-Blackwell model or EKB model has been widely discussed by the academic community and modified throughout the years, however, its essence remained unchanged. It consists of five stages, which are problem/need recognition, information search, evaluation of alternatives, purchase decision and post-purchase evaluation (Figure 1).

*Figure 1. Five stages of buying process (adopted from Darley et al., 2010).*



The first four stages of the model refer to consumer decision-making process, while the final stage is the outcome of the preceding stages. According to Kotler, when a consumer has a need, problem or recognition occurs. This need may be provoked by internal stimuli such as hunger or thirst, or external stimuli such as marketer controlled price discounts and sales promotions. Then during the stage of information search, a consumer may develop an interest in a product or service, or he may search for information regarding this product or service. The evaluation of alternatives stage implies that a consumer will contemplate his choice by comparing various alternative options in an attempt to grasp which of the product meets his needs best. The purchase decision is the next stage in the decision-making process when a consumer makes a mindful decision about purchasing a product. It is important to note that a consumer may reverse his decision due to opinion of other people (e.g. a relative or a friend that does not agree with consumer's positive product evaluation) or unforeseen events such as salary reduction.

Post-purchase evaluation is the closing stage of the decision process model. There are two scenarios on this stage: either a consumer is satisfied with his purchase or he is unsatisfied with the product. Customer satisfaction arises when product performance either corresponds to consumer expectations or exceeds them. In contrast, a consumer is dissatisfied with the purchase when the product falls short of his expectations. Consumer behavior in the post-purchase stage

typically is driven by the level of satisfaction. High customer satisfaction results in repurchase intention, while low customer satisfaction leads to product returns or negative product reviews in social media or e-commerce websites. Kotler also indicated that product use and disposal in the post-purchase phase has to be monitored. For instance, consumers may negatively evaluate the product but never return it to the store, they would rather keep it but never actually use it.

Building on this theoretical model and taking into account the nature of impulsive buying, we assume that impulsive buyers would skip the first three stages and go straight to the purchase decision stage. This pattern may lead to consumers experiencing negative emotions. Dealing with their feelings, consumers try to justify their impulsive behavior. If the product falls short of their expectations, consumers are also likely to regret their decision.

### **Return policy and perceived risk**

Today e-commerce is going through a phase of major no-hassle product return trend. Return policy has become an integral part of numerous online retailers' value offering. It also has a signaling effect on consumers who tend to make judgments about an online store's reputation and product quality based on return conditions. When deciding whether or not to purchase from an e-commerce website, consumers consider not only its product range and price points but product return procedure as well. As a consequence, leading e-commerce companies have adopted very lenient return conditions with full refunds and free return shipping. This trend has transformed consumer behavior in online retailing. Online shopping bears higher risk and uncertainty considering that consumers cannot physically inspect products before making an order. Liberal return policy compensates for this risk and acts as a purchase decision driver. Although consumer-generated content, specifically product reviews plays an important role in relieving the risk, it still remains higher compared to brick-and-mortar stores. Lenient product return conditions are an effective tool for tackling the issue of uncertainty related to online shopping and it may be considered as a risk reliever that has a potential to stimulate sales (Janakiraman et al., 2016).

No-hassle product returns are introduced by online retailers to allow shoppers to reverse purchase decisions they are not happy about without having to cover any additional fees. Basically, if online store customers are dissatisfied with product performance or they simply do not need it anymore, they are free to return their orders getting a full refund with no questions asked. On the contrary, online shoppers do not seem to be very enthusiastic about stricter return policies, which are perceived as a drawback. They are likely to avoid online stores with complicated return procedures which imply that consumers have to pay return shipping fees, extra fee for restocking, be compensated with store credit instead of a full refund and respect strict deadlines. Lenient return

policies have a positive effect on consumers and persuade them to buy products. It can also lead to increased trust, brand commitment and loyalty (Bower and Maxham, 2012).

The no-hassle return policy is crucial in purchase decision-making process. There is a wide range of online stores to choose from and consumers are likely to order from a store with liberal product returns, as it does not bear additional financial risks and helps with relieving perceived risk. When no additional fees are charged and barriers for returns are low, online shoppers tend to buy several sizes or colors of the same clothing piece, for instance, when they are not sure which one would suit them best. Thus, liberal return policy may trigger unnecessary ordering, which occurs as consumers realize that they can easily reverse their purchase decisions and buy more items than they have planned (Reinartz and Kumar, 2002).

Return policy has been prioritized by online retailers in an attempt to improve their customer service since online shoppers typically consider lenient return conditions as a prerequisite of store's reputation, customer service quality and perceived value (Parasuraman et al., 2005). Today e-commerce players rely on no-hassle return policy to successfully compete with their rivals. Due to ever intensifying peer pressure in the sector, e-retailers are forced to offer easy product returns. Regulatory legislation and fierce competition push online retailers to adopt lenient return conditions despite the fact that they impose high costs and squeeze profit margins (Lantz and Hjort, 2013). In this context, e-commerce players place great importance on how they communicate product return conditions as they are believed to have a signaling effect on consumers who evaluate intrinsic product attributes and service quality, and therefore, have a potential to promote sales (Wood, 2001). This is the reason behind e-retailers' large investments in marketing campaigns that amplify the message about easy product returns among existing and future customers to inform them and to boost their interest in ordering from the store (Petersen and Kumar, 2009). There is empirical evidence that more than 70% of online shoppers consider an online store's return policy prior to making a purchase (Su, 2008). High awareness of return policy, specifically refund procedure and return shipping, may clearly result in increased demand and sales. Bower and Maxham's research findings demonstrate that shoppers are likely to purchase more products in case free product returns are offered by an online store than when additional fees are charged (Bower and Maxham, 2012).

### **Return policy and online product return behavior**

Even though return policy plays an important role in decreasing the risk associated with online shopping and has a potential to enhance sales, it can also lead to excessive buying and multiply product returns and consequently the impose higher costs on online retailers (Li et al., 2013). Previous research has made an attempt to explore how return policy effects retailers' bottom

line. For instance, different return policy factors were studied and research findings suggest that lenient return policy has a positive impact on retailers' profits when certain conditions are in place (Batarfi, 2017). Nevertheless, only limited attention has been paid to product returns from consumer behavior perspective.

Research papers dedicated to examining product return behavior in offline retailing environment indicated that consumers have various reasons for product returns. In the study exploring product returns among mail order buyers, Foscht et al. (2013) introduced a classification of consumers based on their frequency of product returns. This classification has four groups of product returners: heavy returners, medium returners, light returners and occasional returners. Product returner groups differ not only in how frequently they engage in returns but in initial motives behind their purchases and their spending habits.

Wachter et al. (2012) developed another classification regarding consumers who exhibit product return behavior. It also distinguishes four groups of returners: the planned or unethical returner (customers who intentionally plan unethical returns), the eager returner (customers who consider product returns as a right decision and experience positive feeling when returning products) and the reluctant or educated returner (customers who perceive product return embarrassing and/or tend to experience guilt when returning products). Extant research demonstrated that demographic characteristics such as age, gender, and income level may partially explain product return behavior (Harris, 2010).

In this light, some consumers may have solid justification for returning products, which they bought or ordered online, while other consumers may be simply abusing lenient return policy. This phenomenon is called "fraudulent returns", which is defined as "the returning of a product broken by the customer after purchase or the returning of a non-faulty product after it had been used" (Harris, 2010). Lantz and Hjort (2013) have examined this type of product return behavior and found that apparel online stores also face the problem of fraudulent behavior, more specifically retail borrowing when consumers exploit lenient return policy and return products that they have used. Their research findings also demonstrated that liberal return policies reinforce retail borrowing.

Overall, return policies have become a strategic point for online retailers which are striving to strengthen their position in the market and ensure growth. Consumers tend to take advantage of no-hassle return conditions and may not always have a legitimate reason for returning their purchase. Various types of return behavior can be identified. On the one hand, product returns can be unintended, when a product is negatively evaluated by a consumer, i.e. he is just not happy with it. On the other hand, some customers can engage in product returns on purpose having this goal in mind before even making the purchase, which definitely has an unethical component to it. Thus,

the timing of product return decision is key to retailers, as they can control product return process in a timely manner. Online retailers can actually counteract consumer abusive return practices by efficiently managing returns through timely provision of information.

Moreover, product return procedure may be initiated by consumers or by retailers. The aspect of responsibility for initiating product return procedure in e-commerce can extend our understanding of this ever-transforming phenomenon. Who is primarily responsible for triggering online product returns? According to previous research implications, it is beneficial for e-retailers to develop strategies aimed at effective management of product return behavior (Powers and Jack, 2013). While e-commerce has zero power to exterminate opportunistic behavior at its core, but what online retailers can do is to identify customer groups who frequently resort to fraudulent returns and profile them based on their purchase history and demographic characteristics. Customer segmentation by product return behavior may be an effective tool in curbing excessive returns for e-commerce sector, which requires insights on what motivations stand behind product returns (Hjort and Lantz, 2012). Online stores can employ this information and design differentiated return service, which can actually become a competitive advantage. E-retailers can provide a better experience for existing customers and at the same time attract new ones by offering return policy that accommodates purchase and product return patterns of different customer segments (Powers and Jack, 2013).

### **Post-purchase negative emotions**

Despite the fact that post-purchase evaluation is an integral part of commonly accepted buyer decision process model, discussed earlier in this chapter, research has primarily focused on purchase decision stage rather than on post-purchase consumer behavior (Kang and Johnson, 2009). In the post-purchase evaluation stage, consumers realize if the product matches their expectations or not. If a product either meets or exceeds customer expectations they had prior to purchase, positive post-purchase evaluation arises. In contrast, if a product falls short of customer expectations he had before making a purchase decision, consumers are likely to have negative post-purchase evaluations (Lee and Cotte, 2009). The post-purchase evaluation may stem from product performance, but it is not the only factor that contributes to post-purchase evaluations. Post-purchase evaluation cannot be considered a purely rational process when a product is assessed based on its properties. Feelings, which do not have anything to do with product performance, play an important role in forming post-purchase evaluations, especially when it comes to impulsive buying (Kang and Johnson, 2009).

Although impulsive buying is frequently accompanied by strong positive emotions such as happiness or excitement, impulsive buyers often experience negative emotions such as guilt and

regret in the aftermath of an impulse purchase (Rook, 1987). Individuals who buy on impulse are prone to regret their purchase decisions since there was not much cognitive activity involved prior to making that decision (Kang and Johnson, 2009). During an episode of impulsive purchase positive feelings are so strong that they are typically not sustained in the post-purchase phase. As a result, impulsive buyers are having a hard time to feel satisfied with their purchase that does not match their high expectations. Consequently, impulsive buying behavior is associated with negative product evaluations (Gardner and Rook, 1988). After an impulse purchase episode, consumers are likely to experience negative emotions.

Post-purchase negative evaluations bear several implications regarding consumer behavior (Bui et al., 2011). When negative evaluation is associated not only with the product but with a brand, consumers may opt for other brands. Another scenario is keeping the product but never actually using it in attempt to leave behind the unpleasant purchase experience. When dealing with negative evaluations, consumers can complain about products not meeting their expectations to their friends and relatives or sales assistants. In an e-commerce environment where online retailers offer generous return policy, consumers enjoy hassle-free product returns or exchange products without providing a feasible reason. Online shoppers are able to easily return their purchase even though the product is in perfect condition, only because they experience guilt and regret in the aftermath of an impulse purchase. In this light, easy product returns adopted by online retailers provide an effective solution for consumers in case of post-purchase negative evaluation.

### **Product return behavior as a response to negative emotions**

Online retailers' product return rate is estimated to be between 25 and 40% across different product categories. The majority of the products are returned not because of the defects but because of negative product evaluations. Nevertheless, motivations of product return behavior in online retailing have not been studied extensively in previous research. Consumers typically assess their purchase based on product characteristics and performance, personal traits and store attributes (Kang and Johnson, 2009). The influence of product characteristics on post-purchase evaluations has been widely examined by the academic community. At the same time, personal consumer traits such as impulsive buying tendency, along with store attributes e.g. return policy leniency which seem to affect product return behavior in online setting, are limitedly explored in extant literature.

Individuals with high impulsive buying trait are typically less concerned about the consequences of their purchase decisions and are not involved in a great deal of cognitive process to evaluate product attributes (Rook, 1987). Furthermore, when impulsive shoppers are offered a lenient return policy, they are likely to engage in the act of impulsive buying. Credit card payment may spur consumer spending and push shoppers to buy on impulse since it instantly extends money

availability. These circumstances encourage impulse buying, knowing that they can easily return products and afford to spend more due to credit money, online shoppers may not use rational thinking to reflect on such issues as budget constraints. When online impulse buyers receive their online orders, they may come to realization that they do not have the funds to support their purchases or their expectations are unmet. Future financial realities may lead to rational reassessment of the purchase and product return behavior. Negative post-purchase emotions such as guilt or regret may encourage consumers with high impulsive buying trait to return e-commerce merchandise.

### **Research gap**

With tremendous e-commerce growth, online retailers have been booming over the past decade. In extant management, literature e-retailers have been studied extensively regarding their business model and practices. However, limited attention has been paid to online retailing from consumer behavior perspective. From what is observed online stores create a very appealing environment for impulse purchasing. Lenient return policies that have been adopted by the most reputable online retailers and have become an integral part of their value offering, on the one hand, has a potential to drive sales. On the other hand, it may fuel unnecessary ordering and increase product returns. Today product returns are a huge cost driver for online retailers, which erodes their margins. Despite the managerial relevance of the topic, product returns have been primarily investigated from operational and supply chain management perspectives. Several studies have examined the impact of return policy on profitability and proposed ways to optimize product return and logistics to cut costs associated with it. While researchers have examined the antecedents and effects of return policy, there is not enough knowledge about it from consumer's perspective: how it influences buying behavior, what are the reasons behind product return and how to mitigate it. We hope to shed light on product returns associated with online impulsive buying. In order to manage the problem of excessive product returns, it is crucial to know the characteristics of consumers who are prone to returns. Based on that information, online retailers can develop optimal return policies to curb excessive returns.

In addition, impulsive buying research has mainly focused on studying antecedents of impulsive buying (external, demographic, personal), attempting to understand what triggers impulse buying behavior in different settings. The post-purchase phase of impulsive buying has been limitedly studied. Most importantly, since impulse buying is known to frequently result in the negative emotional response, research should be conducted on extending the understanding of the post-purchase phase and providing insight on how to reduce negative response related to impulse buying.

## Hypotheses development

This section is dedicated to presenting the theoretical background of research hypotheses and the basis for the proposed conceptual model regarding product return behavior related to impulsive buying in the e-commerce environment.

Lenient return policies are regarded as a strategic tool in improving customer service in the online retailing environment. If consumers are not satisfied with their purchase, i.e. their expectations were not met, they may be willing to return the merchandise to the store. Return policy acts as a risk reliever considering that consumers are unable to physically inspect the product prior to making a purchase. Consumers tend to be reluctant to buy from an online retailer that does not have a liberal return policy in place. Hence, return policy is more important for online retailing as opposed to conventional stores (Yalabik et al., 2005). Research findings suggest that around 70% of online shoppers consider an online store's product return procedure prior to placing an order (Su, 2008). The return policy is crucial in consumer decision-making process as it stimulates purchase decision. When online shoppers are sure that they can effortlessly cancel their purchase decision in case the product would not live up to their expectations, they are likely to buy more. Customer awareness about product return conditions, more specifically refund policy and return shipping fee, may increase demand and drive sales. There is empirical evidence that consumers tend to buy more products in case free product returns are offered by an online store than when additional fees are charged (Bower and Maxham, 2012). In line with this argument, we assume that lenient return policy can stimulate consumers to buy on impulse. The first hypothesis is derived as follows:

*H1: Perceived return policy leniency is positively related to online impulsive buying behavior.*

Previous studies have made an attempt to understand how credit card use affects consumer expenditure, compulsive buying tendency, and price perceptions. Research findings indicate that credit card use leads to increased consumer expenditure (Feinberg, 1986). Individuals who frequently pay for their purchases by credit cards, tend to spend more compared to individuals who use other payment methods. Moreover, credit card holders are likely to go over their available credit amount (Pirog and Roberts, 2007). Besides, credit cards allow consumers to experience a lifestyle they otherwise could not afford (Cohen, 2007). Young consumers who tend to buy on impulse are prone to accumulate debt due to heavy credit card use when shopping for goods (Wang and Xiao, 2009). Additionally, credit card holders have a tendency to be less price conscious and as a consequence to buy products with higher price points (Roberts and Jones, 2001).



Extant research findings indicated that credit card use is positively related to compulsive buying behavior (Roberts and Jones, 2001), which is an intense form of impulsive buying. Credit card users are found to have a high level of compulsive buying tendency (Park and Burns, 2005). Credit cards instantly extend consumers' financial resources availability and increase the likelihood of impulse buying behavior. In the online retailing environment, the most popular payment method is by debit or credit card, thus the likelihood that consumers pay for online purchases is rather high. Considering established positive association between credit card use, we hypothesize that:

*H2: Credit card use has a positive effect on online impulsive buying behavior.*

Impulsive purchasing is characterized by diminished concern for the consequences. This careless approach may frequently result in overspending and negative emotional response in the post-purchase phase when consumers actually receive their orders (Kang and Johnson, 2009). The considerable body of research has tried to define an impulsive purchase and identify its characteristics. Solomon has distinguished three types of impulsive purchases: unplanned purchase that arises in unfamiliar store environment, or under time constraints, or when consumers are reminded about the need to buy some item; impulsive purchase when consumers cannot resist the temptation of instant gratification through consumption; compulsive buying that results from consumers' emotional distress, boredom or anxiety. The core difference between impulsive and compulsive buying is that impulsive purchase is about specific product and moment, while compulsive buying is about the continuous purchasing process (Solomon, 2008). Compulsive buying is a chronic form of impulsive buying that arises as a coping mechanism in the situation of negative feelings. The online retail setting is associated with higher level risk due to customer's inability to physically inspect the product prior to purchase and when they actually receive their order they may be disappointed with it (Lim et al., 2016). Building on these research findings, we assume that impulsive buying is positively related to post-purchase negative emotional response. Thus, the third hypothesis is derived as follows:

*H3: Online impulsive buying behavior is positively related to post-purchase negative emotional response.*

Product return becomes a great option for consumers when they are not happy with their purchase. If consumer expectations have not been met by the product, they are likely to return it to the retailer. Impulsive buyers have a tendency to be disappointed in the post-purchase phase

even if there is nothing wrong with the product and it is in perfect condition, as they are prone to experiencing negative feelings of guilt and regret after committing an impulse purchase (Rook, 1987; Bayley and Nancarrow, 1998; Beatty and Ferrell, 1998). Online shoppers with high impulsive buying tendency may be dissatisfied with their purchase decision due to feeling guilty about their impulsive behavior. One way of dealing with negative emotions in the post-purchase stage is to engage in product return. Impulsive buyers may try to forget their negative experience by returning undesired e-commerce products. According to this logic, the fourth hypothesis is derived as follows:

*H4: Post-purchase negative emotional response promotes product return behavior.*

Extant research findings demonstrate that relationship marketing activities have a positive impact on customer satisfaction and loyalty. Customer relationship marketing is aimed at building “long-term mutually satisfying relations with consumers as to earn and retain their long-term preferences” (Sharifi and Esfidani, 2014). From this definition, it is known that these relations begin when the purchase occurs. Once an order is placed, online retailers can initiate the relationship with a client. Communication as one of the tools in relationship marketing arsenal has a potential to minimize post-purchase negative evaluations. Customers tend to be happy with the purchase experience, owing to high level of personal contact and customer engagement, which results in customer satisfaction (Ndubisi, 2007). Furthermore, post-purchase communication can actually decrease post-purchase regret (Chen, 2011). Taking into account that consumers frequently experience the feelings of guilt and regret after an episode of an impulse purchase, reinforcing their choice might be an effective way to make them feel better. Previous research findings have shown that emails reinforcing consumer decision to reassure customers have a potential to positively influence post-purchase product evaluations and make them better (Nadeem, 2007).

Thus, we assume that post-purchase communication email campaigns an effective way to engage with impulse buyers and reduce the intensity of negative response by increasing trust and commitment. Besides, free gifts with a purchase are argued to increase customer satisfaction in the online retailing environment. Gift giving in e-commerce can be considered an effective tool to improving customer experience. Online shoppers are unable to see and touch the products before placing an order online. At the moment when products are delivered, a complimentary gift form an online store actually boost positive emotions and creates an overall pleasant online shopping experience, driving customer satisfaction in case customer expectations are met. When an online store customer expectations are not met, a gift that comes with his order smoothens out negative

emotions (Zhu et al., 2015). Building on previous research findings, we assume that post-purchase communication and gift giving mitigates negative response related to online impulse buying. The fifth hypothesis was formulated as follows:

*H5: Post-purchase communication and gift giving moderates the relationship between impulse buying and post-purchase negative emotional response.*

Liberal return policies have been widely adopted by e-commerce players. Most of the times online shoppers benefit from easy product return procedure enjoying full refund with no questions asked. As a result, online stores' customers are not very thorough in picking the right sizes/colors and product configurations in general. On the one hand, lenient return policy is an effective means of driving consumer purchase decision in online environment and consequently boosting sales volume. On the other hand, consumers are often taking advantage of liberal product return conditions, which spurs excessive ordering and leads to higher product returns and inflated costs associated with it (Li et al., 2013). A field experiment conducted in Sweden that observed consumer response to free shipping and returns in fashion e-commerce, demonstrated that lenient product return conditions increase sales and product returns simultaneously (Lantz and Hjort, 2013). In addition, research findings indicate that return policy awareness leads to product return behavior (Powers and Jack, 2013).

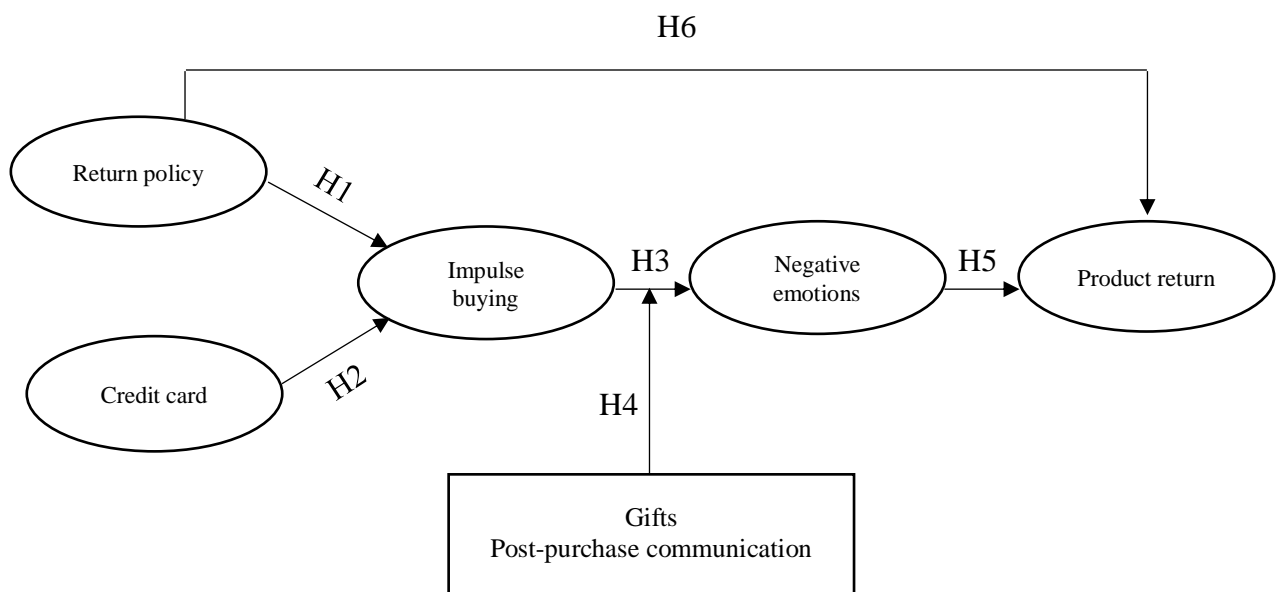
In this light, some consumers may abuse lenient return conditions and buy merchandise with no intention to keep it. Fraud related to product returns clearly has become a major issue for online retailers (Hjort and Lantz, 2012). It is argued that lenient return policy is likely to have an impact of product return frequency in e-commerce. Previous studies demonstrate that consideration for return policy is positively correlated with product return behavior in the context of fashion merchandise (Kang and Johnson, 2009). No-hassle product return conditions induce shoppers to be more reckless with their online orders. Perceived return policy leniency leads to increased sales volume but at the same time inflates product return rates. In contrast, if stricter return rules are in place, consumers are likely to be very careful and to put much thought into making the right choice to avoid having to return back undesired products. Based on this rationale, we hypothesize that:

*H6: Perceived return policy leniency spurs product return behavior.*

## Conceptual model

The conceptual model of the current study is presented in Figure 2. The model aims to explore the relationship between perceived return policy leniency, credit card use, impulsive buying, post-purchase negative emotions and product return behavior in online retailing. Credit card use and return policy leniency were expected to act as stimuli to impulse buying behavior. The association between impulse buying behavior and negative emotions is portrayed. Negative post-purchase emotions following impulse purchases were anticipated to lead to return behavior.

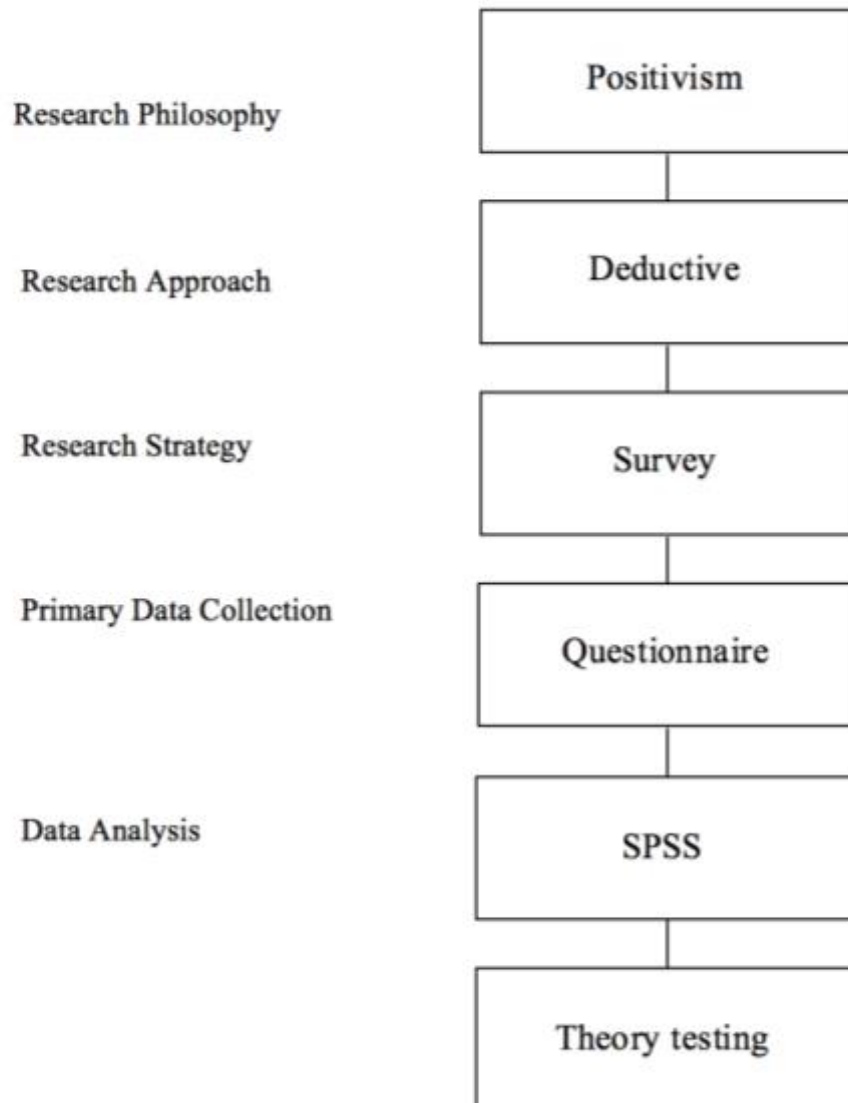
Figure 2. The conceptual model of the study.



## CHAPTER II. RESEARCH METHODOLOGY

This chapter presents the methodology of the current research. It starts with the overview of the methodological approach, research philosophy, research approach, research strategy and design, data collection method and questionnaire structure. The methodological approach of the current study is summarized in Figure 3.

Figure 3. The methodological approach of the study.



This paper employs positivist research philosophy, that implies objective observation and description of reality. Current study aims to observe social reality, collect primary data through a survey, conduct statistical data analysis and provide findings that can be generalized. Positivist paradigm contends that only knowledge acquired by observing the reality is valid. Positivist doctrine adheres to the view that the truth is determined by objective reality observation that is when the role of the researcher is to gather and analyze data not interfering with constructs under

study. Hypotheses formulated in this thesis were based on theories described in the extant literature. Hypotheses testing was executed through statistical analysis of collected data. Positivists believe that researchers are independent when observing the social world and human interests are irrelevant for the study. According to positivist doctrine, science and common sense should be distinguished and studies should not be biased by common sense (Easterby-Smith et al., 2015).

Current study adopts a deductive approach as it is considered the most suitable for positivist studies. We develop the hypotheses building on existing theories explaining impulsive buying and product return behavior described in marketing and consumer behavior literature. Data collection method was also selected in accordance with positivist paradigm. Hypotheses are supported or rejected by statistically analyzing the data. As the current study goal is to confirm or reject formulated hypotheses built upon existing theoretical foundation, and examine hypothetical causal relationships between constructs, the research design nature is conclusive. In order to explore these causal relationships, data was collected from a sample of Russian consumers using a self-administered questionnaire. The data drawn from the sample was statically analyzed. To test the reliability of scales and collected data and to examine relationships between variables the Statistical Program for Social Scientists (IBM SPSS) was used.

### **Research strategy**

Quantitative research strategy is deemed to be suitable for the purpose of the current study, which is to verify the hypotheses. Quantitative research strategy as the most appropriate for hypotheses testing through exploring casual relationships between constructs. Variables are quantifiable and therefore, can be measured and analyzed statistically. As it was stated earlier in this chapter, deductive approach and generalization are associated with positivist research. It is important to take into account that a researcher has to tackle bias and ensure the independence of observation. It seems that quantitative strategy addresses these issues in an effective manner and accommodates current study objectives. Primary data was collected using a survey method. The reason behind that is that surveys are widely employed in business research, since they allow to answer on “who, what, where, how much and how many” questions (Saunders et al., 2003). In addition, survey method is effective in collecting large volume of data from large population portions. Survey method was employed in a form of self-administered questionnaire.

### **Data collection**

Once the research problem is identified a researcher has to initiate data collection process. The choice of data collection method to be applied in the study is determined by the type of data. Academics distinguish two types of data: primary and secondary. The primary data refers to data

that has been collected for the first time and is tailored to research questions raised in a particular study, i.e. the character of primary data is original. On the contrary, secondary data has been already gathered and processed using statistical tools. It implies that the data and the results of data analysis can be relatively easily accessed by a researcher, since they are presented in extant literature. Obtaining secondary data does not bear the difficulties inherent to primary data collection. However, secondary data has to be used with caution, since the suitability and reliability of this type of data might be questionable when taken out of the context; the question of inconsistency with current research objectives and the problem under scrutiny may arise. In this light we deem primary data collection suitable for the current research.

### **Sampling procedure**

Non probability sampling technique was employed in the current study. The convenience sampling method refers to data, which is collected in an effective manner, taking into account different factors such as access, time and cost.

The data were collected from a convenience sample of 157 individuals aged between 18 to 35 years via a self-administered questionnaire that was published online. A mixed sample of millennials was considered appropriate in the context of this research for various reasons. First, young people aged 18-35 are the most active customers of online retailers, they are exposed to online shopping and have considerable experience with online retailing. Millennials are likely to have knowledge about several online stores and their return procedure. Compared to generation X consumers who are still reluctant to embrace e-commerce due to perceived risks associated with online payment process and inability to physically evaluate products prior to purchase, millennials place great importance on convenience and speed of the shopping process, as well as wider range of products and access to information and insights such as product ratings and reviews from other consumers.

Besides, being a truly digital generation, millennials are very online savvy and online shopping is an integral part of their lives. Secondly, Generation Y consumers today are young adults in their 20s and 30s representing a considerable proportion of the population who are getting their degrees and building their successful careers. Millennials' economic impact is already strong. Their purchasing power is growing very fast and they are projected to be the highest spending consumer group in the near future. Therefore, we concentrated on consumers younger than 35 years old and excluded other individuals from the survey compilation, since the probability that consumers older than 35 have had solid experience with online retailers and have returned products is rather low.

## Questionnaire structure

The questionnaire was composed mostly using measurement items that were developed and empirically validated in extant marketing literature (see Appendix 1). The items of the questionnaire evaluated the following variables of the study: credit card use, perceived leniency of return policy, impulsive buying, post-purchase emotional reaction and product return behavior. Additionally, the survey collected demographic characteristics of participants and their online shopping patterns.

In the preliminary part of the questionnaire participants were asked if they bought anything online over the previous six months. In case a participant did not made an online purchase in the last six must he was instructed to submit the form. Participants who had an experience of buying products online, continued through the preliminary section by indicating which websites they had ordered products from, how often they usually buy products via e commerce websites, which product categories they usually purchase online and what is their preferred method of payment for online purchases. Respondents were also asked to indicate how many credit cards (if any) they owned. Credit card holders were directed to the next section of the survey dedicated to credit card use. The rest of the respondents skipped this section and proceeded with the questions about online stores' return policy.

The purpose of the main part of the questionnaire (section two to six) was to assess the constructs under study. Each section was aimed to measure credit card use, perceived return policy leniency, impulsive buying, post purchase emotional reaction and product return behavior. The seventh section of the questionnaire collected the information on post-purchase communication and incentives that online shoppers typically receive when buying from online stores. The final section of the survey included questions on respondents' demographic characteristics. They were asked to indicate their gender, age, education level and monthly income.

## Measures

This study primarily relied on the multi-item scales that were verified and empirically tested by researchers in extant marketing literature, apart from the perceived return policy leniency scale that was developed specifically for this research. A 5-point Likert scale with a range from 1 = strongly disagree to 5 = strongly agree is applied to assess each item in the subsections two to six. The scales adopted in this study are summarized in the table below:

*Table 1. Multi-item scales.*

<i>Variable</i>	<i>Items</i>	<i>Source</i>
Credit card use	7 items	Roberts and Jones (2001)



Impulsive buying	6 items	Rook and Fisher (1995)
Negative emotions	11 items	Gardner and Rook (1995)
Return behavior	3 items	Chatvijit Cook and Yurchisin (2017)

#### *Credit card use*

Respondents' credit card use was measured adopting the scale that was developed by Roberts and Jones (Roberts and Jones, 2011). They studied the impact of credit card use on compulsive buying tendency among college students in the United States. To construct the scale for credit card use measurement, they conducted several focus groups with students who elaborated on how they manage their financial affairs, focusing on credit card use. The scale was comprised of twelve items and tested on a sample of 122 students has shown a high level of reliability of 0.81. A string of later studies in marketing literature has adopted this scale on different samples not only in the US and it proved to be reliable. For instance, Park has used the scale to evaluate credit card use of Korean fashion-oriented consumers (Park and Burns, 2005). The original credit card use scale was adapted to the current research context: repetitive items and the items that did not seem to be relevant for the study were eliminated. There is evidence that reduced scale of credit card use comprising seven items out of twelve still delivers reliable results (Saleh, 2012). The resulting credit card use scale included items such as "I am more impulsive when I shop with credit cards", "I spend more money when I use a credit card" and "I am less concerned with the price of a product when I use a credit card".

#### *Leniency of online retailers' return policy*

Perceived leniency of return policy scale was developed to fit the context of the current study. Essentially, the leniency of online retailers has three aspects: fully refunded product return, the shipping cost for returning products are handled by an online retailer and extensive time frame for product return. The resulting scale contained three items: "I would not incur any costs If I had to return a product to an online retailer", "I would easily get my money back if I had to return a product to an online retailer" and "I have plenty of time to decide if I want to keep the products once I receive them".

#### *Online impulsive buying*

The questionnaire included items to assess both impulsive buying behavior and impulsive buying tendency. To measure online impulse buying behavior a one-item scale was adopted, as suggested by Kacen and Lee (Kacen and Lee, 2002), since it is very understandable for respondents and does not bulk up the questionnaire. Impulsive buying behavior is a simple construct that can be effectively evaluated with one question: "How often do you typically buy

things online on impulse?”. The answer is measured on the Likert scale from 1-almost never to 5-always. To assess impulsive buying tendency in the online retailing environment the study relied on the scale proposed by Rook and Fisher, the most reliable and widely used impulsive buying tendency scale in consumer behavior literature (Rook and Fisher, 1995). The scale was modified to correspond with the context of the current study. The original scale comprised nine items and reported a good level of reliability (0.88). However, to better fit the model and to avoid a very lengthy questionnaire, the scale was reduced to 6 items. Six-item impulsive buying tendency scale has shown sufficient reliability coefficients in several studies (Nor et al., 2014). The examples of items are “I often buy things online spontaneously”, “I carefully plan most of my online purchases” (reverse coded) or “Sometimes I am a bit reckless about what I buy online”.

#### *Post-purchase emotional response*

An eleven-item scale constructed by Gardner and Rook (Gardner and Rook, 1988) was adapted to measure post-purchase emotional reaction. Although the original paper did not include reliability level of this scale, similar scales adopted in papers on post-purchase emotional response and satisfaction have demonstrated a high level of reliability. For instance, a similar scale was used in the context of fast fashion retailers and its reported reliability level was satisfactory (0.83) (Chatvijit Cook and Yurchisin, 2017). The scale comprised both positive such as excitement and pleasure, and negative emotions such as guilt and regret. The survey included statements on how consumers may feel after an online impulse purchase, for example, “After I buy something on impulse online, I feel guilty”. The respondents were asked to assign the value from 1-strongly disagree to 5-strongly agree to each of the statements. Positive post-purchase emotions were reverse coded so that lower value corresponded with a negative experience.

#### *Online product return behavior*

To evaluate consumers’ product return behavior in the online retailing environment the scale developed by Chatvijit Cook and Yurchisin (Chatvijit Cook and Yurchisin, 2017) was adopted. The scale included three items that were slightly modified considering current research context. Respondents were instructed to assign the value from 1-strongly disagree to 5-strongly agree to the statements regarding their product return patterns in the online retailing environment. The examples of items are “I frequently return products that I purchase online”, “I usually do not return products that I purchase from online stores”.

### **Mediation testing method**

Since the conceptual model of the current study contains mediation, we decided to adopt methodological approach developed by Baron and Kenny (1986). This is a several step approach that implies testing for mediation with several regression analyses examining the significance of relationships between variables at each step. During the first step, the hypothetical causal relationship is tested between variable X and Y. The second step is to run a single regression with variable X predicting mediator variable. The third step is to conduct a single regression analysis with a mediator predicting variable Y. If the above relationships are found to be significant, we assume that there is some form of mediation and proceed with the final step. To test for mediation multiple regression analyses is run with variable X and mediating variable predicting variable Y. If mediating variable is found to be statistically significant along with the predictor variable, we assume that there is partial mediation. If variable X is no longer significant in multiple regression, while mediator is, there is full mediation. This approach has been widely used in extant research and has proved to deliver valid results.

## **CHAPTER III. DATA ANALYSIS**

This chapter is dedicated to data analysis and discussion of the results of the study. It is comprised of five major sections respondents' characteristics, descriptive statistics, model fit analysis, hypotheses testing, discussion and managerial implications. The first section starts with the overview of the sample characteristics and participants' online shopping patterns. The next section presents the descriptive statistics of variables under study: perceived return policy leniency, credit card use, impulsive buying behavior, negative post-purchase emotions and product return behavior. Then we continue with the model fit, hypotheses testing and reporting of the results. Finally, the chapter is concluded with the discussion of the findings and practical implications for marketers.

### **Characteristics of the sample**

A total of 167 online questionnaire forms were submitted. 14 questionnaires were excluded from the analyses since they were completed by individuals who are over 35 years old (the focus of the study were generation Y consumers). The final sample comprised 153 valid questionnaires. The data was collected by sending out the online survey to the followers of popular online stores' official pages in Russian social network. The electronic link to the survey was sent out to 1000 users of the social network. The response rate amounts to 15.3%.

Demographic characteristics of the sample are presented in Table 2. Descriptive analysis of collected data revealed that women represent the overwhelming majority of the sample: 74.5% of valid questionnaires were filled out by female online shoppers. The remaining part (25.5%) of the sample are male online shoppers. This skewness may be attributable to the population of the social network; its female user base is actually larger than its male user base. Besides, considering the topic of the questionnaire which is dedicated to online shopping behavior, no wonder that the sample is skewed towards women. Female consumers are known to be more passionate about shopping and they are, in general, more prone to impulsive buying behavior compared to men. The largest age group is 22-25 years old with 34% of the total number of respondents followed by the group of 26-30 years old with 28.8%. The youngest respondents aged between 18 and 21 years and senior age group between 31 and 25 years represent 17% and 20.3% of the sample respectively. The majority of respondents' monthly income ranges from 20000 to 40000 RUB (29.4%) followed by over 80000 RUB (20.9%). The monthly income of 20.3% of participants is 40000-60000 RUB, 15% of the sample has a monthly income of 60000-80000 RUB. Finally, the lowest income group is presented by 14.4% of respondents. The vast majority of participants have a university degree (79.1%) and the remaining part of the sample is represented by students.

Table 2. Demographics of the sample.

<i>Variable</i>	<i>Frequency</i>	<i>Percentage</i>
<b>Gender</b>		
Male	39	25.5%
Female	114	74.5%
<b>Age</b>		
18-21	26	17%
22-25	52	34%
26-30	44	28.8%
31-35	31	20.3%
<b>Income (monthly)</b>		
Less than 20000 RUB	22	14.4%
20000-40000 RUB	45	29.4%
40000-60000 RUB	31	20.3%
60000-80000 RUB	23	15%
Over 80000 RUB	32	20.9%
<b>Education level</b>		
University	121	79.1%
Student	32	20.9%
Total	153	

Additionally, information regarding respondents' online shopping habits was collected. It is reported in table 3. Respondents indicated that they mostly purchased products from the US-based online retailer Amazon (49%), British online fashion and beauty store Asos (39.2%), Russian online fashion retailer Lamoda (32%) and Russian e-retailer Ozon (26.1%) followed by American shopping website eBay (19.6%), official brand websites e.g. Inditex group brands (17.6%), Chinese online retailing platform AliExpress (14.4%), Russian-based online fashion retailer Wildeberries and Italian online fashion outlet Yoox (13.7%), Russian e-retailer Ulmart (13%) and British online beauty and personal care store Feelunique (10.4%).

As for product categories purchased online, 67.3% respondents indicated that they typically buy apparel and accessories making it the most popular product category in e-commerce. The second most bought online product category is books/music/video with 58.8% followed by consumer electronics and beauty and health with 41.8% and 41.2% respectively. One fifth of participants (20.9%) stated that they typically purchase sports and recreation products form online

stores, home and garden product category is usually ordered online by 17.6% of the sample. Jewelry and watches product category was indicated by 15.7% of respondents and furniture, appliances and equipment products are typically purchased from online retailers by 12.4% of the sample. The least popular product categories for online shopping are office supplies and groceries with 8.5% and 7.8% respectively. When it comes to online shopping frequency, high number of respondents place online orders at least once a month (38.6%), followed by two or three times a month (27.5%). One-fifth of the sample indicated that they usually purchase products from e-commerce websites two or three times a year. Some participants engage in online shopping once a week (9.8%). Finally, only 3.9% of the sample makes an online purchase once a year. The payment method of choice is debit card for the vast majority of respondents accounting for 59.5% followed by credit card with 32.7% of the sample. The least used payment methods are cash on delivery and PayPal with 6.5% and 1.3% respectively. The overwhelming majority of respondents do not own credit cards (56.2%) while 26.1% of the sample holds one credit card and rather high number (17.6%) of respondents hold two or three credit cards. Considering that credit card holders are primarily represented by the older group of millennials aged between 31 and 35 years, we assume that younger respondents avoid credit use due to the lack of stable revenue and negative perceptions about consumer credit in general. From this analysis we can see that the respondents have been exposed to online shopping and have extensive experience with online stores to adequately fill out the questionnaire. We can also conclude that generation Y consumers are comfortable with online bank card payments despite Russian consumers' reluctance to reveal their bank card credentials due to security reasons and general trend for cash on delivery on the Russian e-commerce market.

*Table 3. Online shopping behavior of the sample.*

Variable	Frequency	Percentage*
<b>Online stores patronized</b>		
Amazon	75	49%
Asos	60	39.2%
Lamoda	49	32%
Ozon	40	26.1%
eBay	30	19.6%
Official brand online store	27	17.6%
AliExpress	22	14.4%
Yandex.Market	22	14.4%

Wilberries	21	13.7%
Yoox	21	13.7%
Ulmart	20	13%
Feelunique	16	10.4%
<b>Products typically purchased online</b>		
Apparel & accessories	103	67.3%
Books/music/video	90	58.8%
Consumer electronics	64	41.8%
Health & beauty	63	41.2%
Sports & recreation	32	20.9%
Home & garden	27	17.6%
Jewelry & watches	24	15.7%
Furniture, appliances & equipment	19	12.4%
Office supplies	13	8.5%
Groceries	12	7.8%
<b>Online shopping frequency</b>		
Once a month	59	38.6%
2 or 3 times a month	42	27.5%
2 or 3 times a year	31	20.3%
Once a week	15	9.8%
Once a year	6	3.9%
<b>Preferred payment method</b>		
Debit card	91	59.5%
Credit card	50	32.7%
Cash on delivery	10	6.5%
PayPal	2	1.3%
<b>Credit cards owned</b>		
0	86	56.2%
1	40	26.1%
2 or 3	27	17.6%

---

\*If the percentage exceeds 100%, several response options could have been chosen.

### **Preliminary analyses**

Although in order to measure variables the study primarily relies on multi-item scales developed and empirically validated in previous research, the reliability of scales had to be

verified. Considering that these scales were built by Western scholars and they were, for the most part, tested in developed countries, we had to make sure that these scales are applicable to Russian consumers as well. Additionally, the perceived leniency of return policy has been developed specifically for the purpose of the current study and has never been empirically verified. To test scale reliability, Cronbach's alpha was calculated. Cronbach's alpha is a widely adopted coefficient to measure the reliability of psychometrically developed scales (Aaker, 2007). Cronbach's alpha was also used to test the internal consistency of scales. Cronbach's alpha value can range from 0 to 1, where 0 refers to completely unreliable scale and 1 indicates a completely reliable scale. The majority of studies in A-list marketing journals suggest that the minimum coefficient value is 0.70 for latent variable scales.

Preliminary reliability analysis showed that the majority of scales have a good level of reliability well above the threshold of 0.70. However, credit card use scale initially indicated a somewhat questionable Cronbach's alpha coefficient (0.612). In order to tackle this issue, it was decided to carry out confirmatory factor analysis, which was also adopted for the goodness of fit estimation of the model proposed in the current study.

Since we collected the measures of latent variables through a questionnaire, we used confirmatory factor analysis to test for construct distinctiveness. Amos software was used to build the model and to examine loading coefficients of each item of the scales. This procedure revealed poor factor loadings in the credit card use scale, the one that exhibited low reliability level in the initial reliability testing. Post-purchase negative emotional response scale has also indicated low factor loadings of some items. These items with low loading coefficients were excluded from both scales and from further statistical analysis. Chi-square difference tests indicated that a five-factor model (perceived leniency of return policy, credit card use, impulse buying, post-purchase negative emotional response and product return behavior) demonstrated good fit to the data (chi-square/df 2.329; CFI 0.895; IFI 0.897; LISREL GFI 0.801).

After CFA another reliability test was conducted to verify credit card use and post-purchase negative emotional response (where the items were eliminated). Both scales have demonstrated a high level of reliability. Table 4 presents the reliability coefficients of all the scales adopted in the current study (for SPSS output see Appendix 2).

*Table 4. Reliability of scales.*

<i>Variable</i>	<i># of items</i>	<i>Reliability</i>
Credit card use	3*	0.884



Return policy leniency	3	0.926
Impulsive buying	6	0.936
Post-purchase negative emotional response	7*	0.877
Product return behavior	3	0.848

\*The number of items after some items were eliminated from the scale.

Prior to performing multiple regression analyses, Pearson's product-moment correlation for the main study constructs was run to make sure that there is a considerable correlation between the variables of the model and it makes sense to execute regression analyses. The correlation matrix was also used to screen the data for multicollinearity. Correlation coefficients for study variables are reported in table 5 (for SPSS output see Appendix 3). Pearson's correlation revealed high correlation coefficients among variables under study, justifying regression analyses for verifying the direction of dependence among variables. According to proposed conceptual model, there are two independent variables that are not supposed to be correlated with each other, otherwise, multicollinearity issue would arise and regression analysis would not be accurate. There was a small positive correlation detected between credit card use and return policy leniency  $r = 0.277$ ,  $p < 0.01$ . These dynamics are in line with the conceptual model and formulated hypotheses.

*Table 5. Pearson's correlations for main study variables.*

	Return policy leniency	Credit card use	Impulsive buying	Post-purchase negative emotions
Credit card use	.277*			
Impulsive buying	.679*	.469*		
Post-purchase negative emotions	.642*	.520*	.610*	
Product return	.626*	.525*	.591*	.648*

\* $p < 0.0005$

### **Hypotheses testing**

In order to test all the hypotheses of the current study, a series of single and multiple regressions were conducted. The data was first tested for assumptions. The assumption of linearity

was met as assessed by partial regression plots and a plot of studentized residuals against the predicted values. The data met the assumption of independent residuals (Durbin-Watson statistic close to the value of 2). The scatterplot of standardized predicted values indicated that the assumption of homoscedasticity was not violated. The histogram of standardized residuals demonstrated that the distribution of errors was close to normal. The P-P plot of standardized residuals contained points that were distributed very close to the line. The data also satisfied the assumption of collinearity as indicated by tolerance values greater than 0.1.

The first dependent variable analyzed in the current study was impulsive buying tendency. A multiple regression was run to test the effects of credit card use and perceived return policy leniency on impulsive buying tendency (Hypotheses 1 and 2).

The model itself proved to significantly predict impulsive buying tendency,  $F(3, 149) = 52.974, p < 0.0005, \text{adj. } R^2 = 0.506$ . The model accounted for approximately 51% of the variance in the dependent variable. Regression coefficients and standard errors are summarized in table 6 (for SPSS output see Appendix 4). The first hypothesis stated that credit card use has a positive effect on impulsive buying tendency. Linear regression revealed that credit card use is positively related to impulsive buying tendency ( $\beta = 0.190, p = 0.004$ ). Hence, the first hypothesis developed in the current study is supported. The second hypothesis claimed that impulsive buying tendency is positively influenced by perceived return policy leniency. Multiple regression indicated that there is a statistically significant relationship between perceived return policy leniency and impulsive buying tendency ( $\beta = 0.574, p < 0.0005$ ). Thus, the second hypothesis is supported as well. Additionally, gender was identified as a significant predictor of impulsive buying ( $\beta = 0.166, p = 0.004$ ).

*Table 6. Multiple regression analyses predicting impulsive buying.*

<i>Variable</i>	<i>B</i>	<i>SE B</i>	<i>β</i>
(Constant)	.335	.366	
Credit card use	.309	.106	.190**
Return policy leniency	.531	.060	.574***
Gender	.447	.164	.166**

\*\*\* $p < 0.0005$

\*\* $p < 0.01$

The second dependent variable of the current study is the post-purchase negative emotional response. To test for mediation, we adopted the approach developed by Baron and Kenny (1985), which implies performing several regression analyses. According to our conceptual model, credit card use and perceived return policy leniency act as predictors of post-purchase negative emotions,

while impulsive buying acts as a mediator. We first run the regression to test the effect of credit card use and perceived return policy leniency on the post-purchase negative emotional response. Multiple regression model established the statistically significant association of credit card use and perceived return policy leniency with the post-purchase negative response,  $F(2,150) = 67.009$ ,  $p < 0.0005$ ,  $\text{adj. } R^2 = 0.465$ . The model explained roughly 47% of the variance in the dependent variable. The coefficients and standard errors are presented in table 7 (for SPSS output see Appendix 5). All variables added significantly to the prediction: both credit card use ( $\beta = 0.277$ ,  $p < 0.0005$ ) and return policy leniency ( $\beta = 0.510$ ,  $p < 0.0005$ ) are identified as predictors of negative post-purchase emotions.

*Table 7. Multiple regression predicting post-purchase negative emotions (Model 1).*

<i>Variable</i>	<i>B</i>	<i>SE B</i>	<i>β</i>
(Constant)	.618	.293	
Credit card use	.406	.099	.277***
Return policy leniency	.423	.056	.510***

\*\*\* $p < 0.0005$

The next stage in mediation analysis was to test the effect of impulsive buying tendency on the post-purchase negative response. According to the third hypothesis, impulsive buying tendency may be positively related to post-purchase negative emotional response. The multiple regression was performed to predict the post-purchase negative emotional response from impulsive buying tendency and demographic variables such as gender and income. The linear regression model demonstrated that post-purchase negative emotional response is statistically significantly predicted by impulsive buying tendency  $F(4,148) = 28.929$ ,  $p < 0.0005$ ,  $\text{adj. } R^2 = 0.424$ . The model accounted for roughly 42% of the variance in post-purchase negative emotional response. Regression coefficients and standard errors are reported in table 8 (for SPSS output see Appendix 6). Multiple regression established the relationship between impulsive buying and post-purchase negative response, ( $\beta = 0.601$ ,  $p < 0.0005$ ). Thus, there is evidence that allows us to reject the null hypothesis and conclude that the third hypothesis is supported.

*Table 8. Multiple regression analyses predicting post-purchase negative emotions (Model 2).*

<i>Variable</i>	<i>B</i>	<i>SE B</i>	<i>β</i>
(Constant)	.773	.453	
Impulsive buying	.539	.057	.601***
Gender	-.337	.165	-.131*
Age	.066	.019	.265**

Income	-0.197	.063	-.241**
--------	--------	------	---------

\*\*\*p < 0.0005  
\*\*p < 0.01  
\*p < 0.05

The findings of the regression analyses confirm that the relationship among credit card use, perceived return policy leniency (independent variable) impulsive buying tendency (mediator) and post-purchase negative response (dependent variable) do exist. Since there were these statistically significant relationships, we assume that some form of mediation takes place. To verify the mediation effect of impulsive buying tendency on the post-purchase negative emotional response, a multiple regression was performed. The multiple regression model statistically significantly predicted post-purchase negative emotions,  $F(3, 149) = 51.015, p < .0005, \text{adj. } R^2 = .497$ . It explained approximately 50% of the variance in post-purchase negative emotions. The results of multiple regression analyses are summarized in table 9 (for SPSS output see Appendix 7). Both the predictors (credit card use and perceived return policy leniency) and the mediator (impulsive buying) were proven to influence post-purchase negative response. These results suggest that there is partial mediation.

Table 9. Multiple regression analyses predicting post-purchase negative emotions (Model 3).

Variable	B	SE B	$\beta$
(Constant)	.529	.286	
Impulsive buying	.234	.072	.261*
Credit card use	.334	.098	.228*
Return policy leniency	.296	.067	.356*

\*p < 0.0005

#### Moderation analyses

Finally, to investigate whether established in the study relationship between impulsive buying tendency and the post-purchase negative emotional response is moderated by gift giving and post-purchase communication (Hypothesis 4). In order to do that hierarchical regression was performed. We first ran the hierarchical regression with gifts as a moderator variable. The results are summarized in table 10 (for SPSS output see Appendix 8). The model proved to statistically significantly predict post-purchase emotional response,  $F(6, 146) = 52.121, p < 0.0005, \text{adj. } R^2 = 0.669$ . It explained roughly 67% of the variance in the dependent variable, which is the negative post-purchase emotional reaction. Hierarchical regression indicated that the relationship between impulsive buying tendency and post-purchase negative emotions is moderated by gifts from online retailers, i.e. the interactive effect proved to be significant,  $\beta = -0.603, p < 0.0005$ . From the regression analyses, we can see that impulsive buying tendency is a predictor of post-purchase

negative emotions and that the strength of the relationship between impulsive buying tendency and the negative emotional response is moderated by free gifts. The moderating effect of gifts is evident since R square increased when the moderator was entered into the regression. There is evidence that gifts from online retailers weaken the link between impulsive buying tendency and post-purchase negative emotions.

*Table 10. Multiple regression analysis (Moderator gifts).*

<i>Variable</i>	<i>B</i>	<i>SE B</i>	<i>β</i>
(Constant)	1.611	.402	
Impulsive buying	.499	.071	.556***
Moderator 1	-.480	.105	-.603***
Gifts	.285	.355	.126
Gender	-.325	.125	-.126*
Age	.050	.014	.201**
Income	-.170	.049	-.207**

\*\*\* $p < 0.0005$

\*\* $p < 0.01$

\* $p < 0.05$

We then proceeded with the second hierarchical regression with post-purchase communication as a moderating variable. The results of multiple regression analysis are reported in table 11 (for SPSS output see Appendix 9). The model itself was found to be significant,  $F(4, 148) = 37.007$ ,  $p < 0.0005$ ,  $adj. R^2 = 0.487$ , accounting for around 49% of variance in the dependent variable. While the direct effect of post-purchase communication on post-purchase negative emotions was significant,  $\beta = -0.292$ ,  $p < 0.0005$ , the interactive effect of impulsive buying tendency and post-purchase communication with online stores' customers was not significant. Therefore, there is no evidence of moderation effect of post-purchase communication. The fourth hypothesis formulated in the current study is partially supported.

*Table 11. Multiple regression analysis (Moderator post-purchase communication).*

<i>Variable</i>	<i>B</i>	<i>SE B</i>	<i>β</i>
(Constant)	1.467	.449	
Impulse buying	.499	.068	.557***
Moderator 2	-.048	.051	-.077
PPC	-.658	.177	-.292***
Age	.030	.014	.120*

\*p < 0.05  
 \*\*\*p < 0.0005

Since the direct effect of post-purchase communication on post-purchase negative emotions was found to be statistically significant, another hierarchical regression was executed to assess combined impact of post-purchase communication and interactive effect of impulse buying and gifts. The regression coefficients and standard errors are presented in table 12 (for SPSS output see Appendix 10). The model statistically significantly predicted post-purchase negative emotions,  $F(4, 148) = 68.947, p < 0.0005, \text{adj. } R^2 = 0.641$ , explaining approximately 64% of the variance in the dependent variable. The interactive effect between impulsive buying tendency and gifts was still significant,  $\beta = -0.485, p < 0.0005$ , while post-purchase communication effect was not significant.

*Table 12. Multiple regression analysis (predictors: moderators: gifts and post-purchase communication).*

<i>Variable</i>	<i>B</i>	<i>SE B</i>	<i>β</i>
(Constant)	2.586	.195	
Impulse buying	.465	.046	.518***
Moderator 1	-.386	.047	-.485***
PPC	-.160	.137	-.071
Gender	-.276	.128	-.107*

\*\*\*p < 0.0005  
 \*p < 0.05

The third dependent variable of the current study is product return behavior. To test for mediation, we first had to make sure that the relationships between independent variables, mediator variables, and dependent variable were statistically significant. According to the conceptual model of the current study, credit card use and perceived return policy leniency act as predictors of product return behavior, while impulsive buying tendency and post-purchase negative emotional response mediate this relationship.

The first multiple regression was run to assess the effects of credit card use and perceived return policy leniency on product return behavior. The model was proven to significantly predict product return behavior,  $F(2, 150), p < 0.0005, \text{adj. } R^2 = 0.417$ . Approximately 42% of the variance in product return behavior was explained by the model. Multiple regression coefficients are reported in table 13 (for SPSS output see Appendix 11). Both credit card use,  $\beta = 0.227, p = 0.001$  and perceived return policy leniency,  $\beta = 0.519, p < 0.0005$  were significant predictors of product return behavior.

Table 13. Multiple regression analysis predicting product return (Model 1).

Variable	B	SE B	$\beta$
(Constant)	-.208	.322	
Credit card use	.359	.109	.227**
Return policy leniency	.451	.060	.519***

\*\*\* $p < 0.0005$

\*\* $p < 0.01$

The next step was to examine the hypothetical association of post-purchase negative emotional response with product return behavior by performing a single linear regression (Hypothesis 5). The linear regression model statistically significantly predicted product return behavior  $F(1, 151) = 109.072, p < .0005, \text{adj. } R^2 = .416$ . Regression coefficients and standard errors can be found in table 14 (for SPSS output see Appendix 12). The findings suggest that post-purchase negative response is positively related to product return behavior,  $\beta = 0.648, p < 0.0005$ . Thus, the fifth hypothesis of the study is supported.

Table 14. Regression analysis predicting product return (Model 2).

Variable	B	SE B	$\beta$
(Constant)	.335	.248	
Post-purchase negative emotions	.722	.069	.648***

\*\*\* $p < 0.0005$

Based on the above single and multiple regression results, we conclude that there were statistically significant associations among predictors, mediators, and dependent variable. Under these conditions, we can assume that there may be some form of mediation. Hence, the final phase of mediation testing was initiated. In order to find out whether the relationship between product return behavior (dependent variable) and perceived return policy leniency and credit card use (independent variables) is mediated by impulsive buying tendency and post-purchase negative emotional response, multiple regression was run. The multiple regression model proved to be statistically significant in predicting product return behavior,  $F(4, 148) = 42.371, p < .0005, \text{adj. } R^2 = 0.521$ . Regression coefficients and standard errors can be found in table 15 (for SPSS output see Appendix 13). Both the predictors and mediators added statistically significantly to the prediction,  $p < .05$ . Therefore, there is empirical evidence of partial mediation.

Table 15. Multiple regression analysis predicting product return (Model 3).

Variable	B	SE B	$\beta$
(Constant)	-.597	.314	

Post-purchase negative emotions	.341	.089	.306**
Impulsive buying	.161	.081	.161*
Credit card use	.292	.111	.179**
Return policy leniency	.218	.078	.235**

\*\*p < 0.01

\*p < 0.05

To test the hypothetical relationship between perceived return policy leniency and product return behavior a single regression was executed (Hypothesis 6). The model was significant and indicated that perceived return policy leniency has a positive impact on online product return behavior,  $F(1, 151) = 93.523$ ,  $p < 0.0005$ ,  $adj. R^2 = 0.378$ . The model accounted for around 38% of the variance in product return behavior. Regression coefficients and standard errors can be found in table 16 (for SPSS output see Appendix 14). The regression analysis results showed that online product return behavior is positively influenced by perceived return policy leniency,  $\beta = 0.618$ ,  $p < 0.0005$ . Hence, there is empirical evidence of the positive association between return policy leniency and online product returns. The sixth hypothesis is supported.

Table 16. Regression analysis predicting product return (Model 4).

Variable	B	SE B	$\beta$
(Constant)	.623	.207	
Return policy leniency	.537	.056	.618***

\*\*\*p < 0.0005

#### Post-hoc analysis

Since gender was found to have a statistically significant effect on impulsive buying tendency during hypotheses testing, we decided to conduct a post-hoc analysis. Descriptive statistics for impulsive buying tendency are reported in table 17 (for SPSS output see Appendix 15). On average, female respondents scored considerably higher in impulsive buying tendency compared to male respondents. In other words, women tend to be more impulsive with their purchases than men, which seemed very feasible.

Table 17. Descriptive statistics for impulsive buying by gender.

Variable	Mean	Std. Deviation
<b>Impulsive buying</b>		
Males	2.795	1.250
Females	3.442	1.219



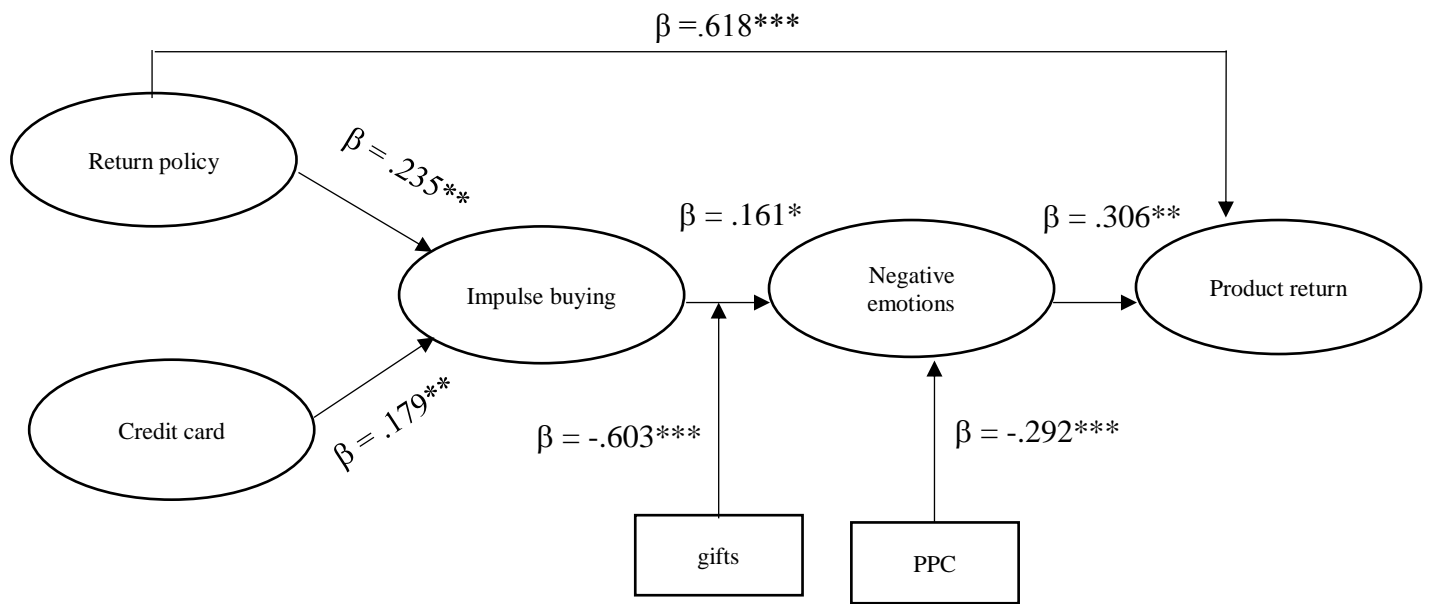
To test whether the difference in impulsive buying tendency scores between female and male consumers was statistically significant, ANOVA was performed. The data met the assumption of homogeneity of variances with Levene's statistic of 0.547. Impulsive buying tendency score was statistically different between males and females,  $F(1, 151) = 8.076, p = 0.005$ . Thus, there is empirical evidence that female consumers are more impulsive in their purchase decisions than male consumers.

The results of hypotheses testing are summarized in the table below:

*Table 18. The results of hypotheses testing.*

	<i>Hypothesis</i>	<i>Results</i>
H1	Perceived return policy leniency is positively related to online impulsive buying behavior.	<b><i>Supported</i></b>
H2	Credit card use has a positive effect on online impulsive buying behavior.	<b><i>Supported</i></b>
H3	Online impulsive buying behavior is positively related to post-purchase negative emotional response.	<b><i>Supported</i></b>
H4	Post-purchase communication and gift giving moderates the relationship between impulse buying and post-purchase negative emotional response.	<b><i>Partially supported</i></b>
H5	Post-purchase negative emotional response promotes product return behavior.	<b><i>Supported</i></b>
H6	Perceived return policy leniency spurs product return behavior.	<b><i>Supported</i></b>

Figure 4. The results of hypotheses testing on the conceptual model.



### Theoretical and practical implications

The current study provides insight for both academicians and practitioners. Theoretically, the results of the current study contribute to a greater understanding of consumer behavior in e-commerce environment in general. More specifically, the current study extends the knowledge base pertaining to the impulsive buying behavior in online retailing. Furthermore, this research contributes to the field by providing a complete picture of the post-purchase phase of impulsive buying purchase behavior in the online setting. In addition, the findings suggest that emotional response in the post-purchase stage of consumer behavior lead to disposition decisions regarding e-commerce merchandise. Current paper made an attempt to extend the understanding of online purchase behavior from acquisition to disposal. The author also has successfully attempted to examine product returns in online retailing from a different angle, that is from consumer's perspective and enriched consumer behavior literature on this issue. Finally, our research has shed light on the behavior of Russian consumers and has empirically tested marketing scales that were developed in previous literature and mostly tested in developed countries. The scales adopted in the current study have proven to be applicable not only to Western countries but to a developing country as well. This paper has extended the knowledge about Russian consumers' behavior in the online retailing environment and proposed a conceptual model specifically developed for e-commerce impulse buying and product return behavior.

As for *managerial implications*, our findings may be used by online retailers. The results of the current study clearly demonstrate that credit card use and perceived return policy leniency are predictors of impulsive buying tendency. Online retailers have created an environment that

drives impulsive buying and impulsive buying is frequently followed by the negative emotional response, which in its turn triggers product return behavior. Considering that product returns are a major cost driver that erodes e-retailers' profit margins, it is necessary to develop strategies for tackling excessive product returns associated with impulsive buying.

The results of the study suggest that online shoppers who perceive product return conditions as lenient are likely to buy on impulse. E-commerce sector can benefit from these findings and make informed decisions when developing their marketing strategies. On the one hand, liberal return policies are crucial for driving purchase decisions, since they compensate for the higher perceived risk of online shopping related to customer's inability to physically inspect products prior to purchase. Additionally, return policy has a signaling effect on consumers, who judge about stores' reputation and product quality based on return policy conditions. Therefore, the trend of no-hassle return policies cannot be reversed and e-commerce business cannot simply adopt stricter product return policies without jeopardizing their sales, as today consumers are accustomed to an easy return procedure.

On the other hand, online retailers have control over how they choose to communicate their product return conditions. For instance, if no-hassle return policy becomes an element of online retailers' marketing strategy, i.e. the message about easy product returns is very evidently conveyed, return policy is an integral part of value offering and it is often one of the first things online shoppers see on the webpage (see Appendix 16). Following the rationale of the current study, this approach may stimulate impulsive buyers to make purchase decisions that they are very likely to regret later and as a consequence, they may engage in product return. A better approach regarding return policy communication is a subtle message placed on the store's front page that informs online shoppers about favorable return conditions but does not stress it excessively (see Appendix 17). Another option is not placing any information about return conditions on the front page, which implies that customers have to search for product return conditions on purpose in case they are particularly interested in this information. Not integrating a no-hassle return policy in the value offering and making it an element of marketing strategy may help online retailers to avoid unnecessary ordering as well as product returns stemming from impulsive buying.

Another direction that online retailers can follow using our research findings to curb product return behavior is to identify customers who are likely to frequently engage in product returns in the aftermath of impulsive purchases. Online stores' customers who tend to pay for their online orders by credit cards are likely to act on impulse regarding their purchase decisions. Besides, women are found to be more impulsive when shopping online compared to men. It does not cost e-retailers anything to profile these clients based on the history of their purchases by selecting female shoppers who frequently pay by credit cards. They can develop a customized

approach for these customers in order to prevent them from buying on impulse and return e-commerce merchandise. For instance, online stores' can adopt an email marketing strategy that implies sending out fewer email letters with promotions and offers.

Impulse buying behavior can result in post-purchase negative evaluation in the online retailing environment, leading to customer dissatisfaction. Participants of the study returned products to online stores after they experienced negative post-purchase emotions. Online retailers have to understand the reasons behind online product returns related to impulsive buying to prevent customer dissatisfaction and to tackle the issue of excessive product returns. Consumers' negative feelings from previous-purchase disappointment may lead to reluctance to repurchase products from e-retailers. E-commerce marketers have to be aware of this issue and find marketing strategies to increase customers' satisfaction after impulsive buying episodes. The findings of the current study suggest one method that may be effective in reducing post-purchase negative reaction and consequently preventing excessive product returns. Gift giving proved to moderate the association between impulsive buying and post-purchase negative emotional response. In other words, impulse buying does not always result in post-purchase negative evaluations and gift giving helps to weaken the strength of this relationship. The respondents of the study who received gifts with their orders from online retailers were less likely to experience feelings of guilt and regret in the aftermath of an impulsive purchase.

E-commerce marketers can use this information not only to increase customer satisfaction but to minimize product returns related to impulsive buying. Based on the customer database and purchase history marketers can identify clients that are likely to be impulsive and experience negative emotions and employ gift-giving strategy to create a positive purchase experience and increase customer satisfaction. If the customer is happy after his impulse purchase or at least not as unhappy if he could have been without a gift from an online store, he may be less likely to reverse his purchase decision by returning products bought on impulse. Additionally, the current study revealed that post-purchase communication with online stores' customers reduces post-purchase negative emotions and since negative emotions may lead to product returns in the online environment, these findings cannot be underestimated by marketers. Online retailers can develop marketing programs for post-purchase email communications to build long-term relationships with customers, creating positive purchase experience and increasing customer satisfaction. The main purpose of such email letters, especially in case of impulsive purchases, is emphasizing the excitement after the purchase and reinforcing customers that they have made the right choice. Reassuring customers about their purchase decisions is very effective in preventing impulsive buyers from experiencing guilt or regret after the purchase. In order to successfully convey this message, it is crucial to avoid impersonal mailouts (see Appendix 18) and to try to connect with

the customer on a personal level (see Appendix 19). It is also important to channel the brand voice and identity of an online store, making the post-purchase phase very positive and upbeat. The layout of the letter should be visually stimulating (Appendix). This can obviously go beyond simple thanking customers for their purchase email letters. For example, e-commerce marketers can launch campaigns on social media and ask customers to share their purchase experience (see Appendix 20). Furthermore, marketers can also engage with customers by asking them to leave a product review providing a monetary incentive such as a discount voucher for the next purchase. These measures can help online retailers to drive positive post-purchase emotions and increase customer satisfaction, which can result in lower product returns associated with online impulsive buying.

### **Limitations and future research directions**

This study as any research paper had a number of limitations that can be covered in the future research. The sample of the current study was considerably skewed towards female consumers. It will be beneficial to draw and examine a more balanced sample since e-commerce websites sell goods both to men and women. Future research could conduct an in-depth comparison of female and male online purchase behavior and to explore the differences in impulsive buying and product return behavior associated with demographic characteristics, the income level for instance. Besides, the current thesis sample was rather small and research can benefit from investigating the relationships among credit card use, perceived return policy leniency, impulsive buying, post-purchase negative emotional response and product return behavior using a larger sample. Additionally, the proposed model was only empirically tested on Russian consumers and future studies may apply the developed model to other countries and see whether it is applicable to a wider range of countries and nationalities and whether the results of the current research can be generalized beyond the Russian market.

The data for this thesis was drawn from a convenience sample. Although the respondents have clearly had an extensive experience with online retailing to adequately complete questionnaires, the responses of individuals from a non-convenient sample would offer important insight for e-commerce sector. Moreover, respondents were asked about their online shopping patterns and tendencies towards impulsive buying, post-purchase negative emotions, and product returns. Scholars can examine the actual emotional reactions and return behavior in a field study with an experimental design to extend the understanding of post-purchase consumer behavior in the online retailing setting. Besides, future research can focus on conducting a follow-up study with individuals who ordered products from e-retailers to investigate their post-purchase emotional responses and actual product return behavior.

Another research avenue can investigate how product return behavior related to impulsive buying differs in the online retailing environment and in brick-and-mortar stores. While current study focused on e-commerce setting, product return behavior related to impulsive buying can differ in across retail channels. Future researchers could examine the differences between pre-purchase and post-purchase both in online and offline environments to develop managerial recommendations for curbing product returns and reducing costs associated with them.

In addition, the effect of culture on the post-purchase emotions stemming from impulsive buying can be studied. There is empirical evidence that collectivist and individualist societies differ in impulsive buying behavior. Since collectivist cultures put great value on self-control, consumers from these countries may be less likely to engage in impulsive buying and therefore may be more prone to feeling guilty afterward. Meanwhile, individualist countries cultivate hedonic consumption and consider shopping to be a leisure activity. Consumers from such countries may buy impulsively more frequently and experience strong positive emotions in the aftermath of self-indulgence. Exploring cultural aspect of impulsive buying and its post-purchase phase may extend the understanding of consumers across the globe and allow retailers to develop strategies tailored to different markets.

## CONCLUSION

With proliferation of Internet and tremendous growth of e-commerce, online impulsive buying has become a pervasive phenomenon. Lifting some of the conventional shopping restraints such as social pressure from sales assistants, limited opening hours and inconvenient locations, online stores have created an environment that fuels impulsive purchasing. Meanwhile, the trend of liberal return policies in e-commerce can lead to excessive products returns, which have become a major cost driver for online retailers that erodes their profitability.

The purpose of this research was to investigate consumer product return behavior related to impulsive buying in the online retailing environment. We investigated product returns from consumer's perspective and made an attempt to better understand the phenomenon of online product returns from the consumer's perspective through the prism of impulsive buying.

The research question of this thesis: How product returns related to impulsive buying can be reduced in the e-commerce environment?

To answer this question, the factors that may influence online product returns have been identified and the conceptual model was developed. Hypothetical relationships among credit card use, the perceived leniency of return policy, impulsive buying, post-purchase negative emotional response and product return behavior were investigated.

Current study adopts a quantitative strategy. Questionnaire method of data collection was employed. Primary data was collected from a convenience sample of 153 Russian consumers. The series of single and multiple regressions were performed to test the hypotheses developed in the study.

Research findings clearly state that credit card use and perceived return policy leniency are positively related to impulsive buying tendency. There is evidence that impulsive buying tendency in its turn may result in the post-purchase negative emotional response. The hypothesis that predicted that post-purchase negative emotions may lead to product return behavior in the online retailing environment was supported as well in the current study. Additionally, the interaction effect of impulsive buying tendency and gifts from online retailers was found to be significant, in other words, there is empirical evidence that the causal relationship between impulse buying tendency and post-purchase negative emotions is moderated by gifts. While there was no significant interactive effect found between impulsive buying and post-purchase communication with online stores' customers, it was found that post-purchase communication negatively influences post-purchase negative emotional response.

Regarding theoretical contribution of the current paper, it has extended the knowledge about consumer behavior in e-commerce and more specifically increased the understanding of online product return behavior from consumer's point of view. This study also has enriched

marketing literature on impulsive buying and its post-purchase phase which has been limitedly studied in previous research.

The results of the current research can be also used by online retailers to tackle the issue of excessive product returns associated with impulsive buying. Online retailers should carefully communicate their return policies and develop strategies to reduce product returns that are not related to product defects. They can do so by identifying online shoppers that may engage in product return due to negative post-purchase evaluations based on their purchase history. To minimize negative emotional reaction in the aftermath of an impulsive purchase e-commerce marketers can send gifts to target customers and adopt post-purchase email communication programs, which have a potential to create an overall positive shopping experience and increase customer satisfaction. As a result of curbing negative emotions, they may prevent product returns related to impulsive buying.



## REFERENCES

- Aaker, David A. 2007. *Marketing research*. Hoboken, NJ, John Wiley & Sons, Inc.
- Amos, Clinton, et al. 2014. "A meta-Analysis of consumer impulse buying." *Journal of Retailing and Consumer Services* 21 (2): 86–97. doi: 10.1016/j.jretconser.2013.11.004.
- Applebaum, William. 1951. "Studying Customer Behavior in Retail Stores." *Journal of Marketing*, 16 (2): 172. doi:10.2307/1247625.
- Badgaiyan, Anant Jyoti, and Anshul Verma. 2015. "Does urge to buy impulsively differ from impulsive buying behaviour? Assessing the impact of situational factors." *Journal of Retailing and Consumer Services* 22: 145–157. doi:10.1016/j.jretconser.2014.10.002.
- Baron, Reuben M., and David A. Kenny. 1986. "The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations." *Journal of Personality and Social Psychology* 51 (6):1173-182. doi:10.1037//0022-3514.51.6.1173.
- Batarfi, Raaid, et al. 2017. "A profit maximization for a reverse logistics dual-Channel supply chain with a return policy." *Computers & Industrial Engineering* 106: 58–82. doi:10.1016/j.cie.2017.01.024.
- Baumeister, Roy F. 2002. "Yielding to Temptation: Self-Control Failure, Impulsive Purchasing, and Consumer Behavior." *Journal of Consumer Research* 28 (4): 670–676. doi:10.1086/338209.
- Bayley, Geoff, and Clive Nancarrow. 1998. "Impulse purchasing: a qualitative exploration of the phenomenon." *Qualitative Market Research: An International Journal* 1 (2): 99–114. doi:10.1108/13522759810214271.
- Beatty, Sharon E., and M. Elizabeth Ferrell. 1998. "Impulse buying: Modeling its precursors." *Journal of Retailing* 74 (2): 161–167. doi:10.1016/s0022-4359(98)90009-4.
- Bower, Amanda B, and James G Maxham. 2012. "Return Shipping Policies of Online Retailers: Normative Assumptions and the Long-Term Consequences of Fee and Free Returns." *Journal of Marketing* 76 (5): 110–124. doi:10.1509/jm.10.0419.
- Bui, My, et al. 2011. "Modeling regret effects on consumer post-purchase decisions." *European Journal of Marketing* 45 (7/8): 1068–1090. doi:10.1108/03090561111137615.
- Chatvijit Cook, Sasikarn, and Jennifer Yurchisin. 2017. "Fast fashion environments: consumer's heaven or retailer's nightmare." *International Journal of Retail & Distribution Management* 45 (2): 143–157. doi:10.1108/IJRDM-03-2016-0027.
- Clover, Vernon T. 1950. "Relative Importance of Impulse-Buying in Retail Stores." *Journal of Marketing* 15 (1): 66. doi:10.2307/1247083.
- Cohen, Maurie J. 2007. "Consumer credit, household financial management, and sustainable consumption." *International Journal of Consumer Studies* 31 (1): 57-65. doi:10.1111/j.1470-6431.2005.00485.x.
- Darley, William K., et al. 2010. "Toward an integrated framework for online consumer behavior and decision making process: A review." *Psychology and Marketing* 27 (2): 94–116. doi:10.1002/mar.20322.
- Dawson, Sandy, and Minjeong Kim. 2010. "Cues on apparel web sites that trigger impulse purchases." *Journal of Fashion Marketing and Management: An International Journal* 14 (2): 230–246. doi:10.1108/13612021011046084.
- Dennis, Steve. 2017. "Many Unhappy Returns: E-Commerce's Achilles Heel." *Forbes*, Forbes Magazine, [www.forbes.com/sites/stevendennis/2017/08/09/many-unhappy-returns-e-commerces-achilles-heel/](http://www.forbes.com/sites/stevendennis/2017/08/09/many-unhappy-returns-e-commerces-achilles-heel/). Accessed 26 Aug. 2017.
- Dittmar, Helga. 2005. "Compulsive buying - a growing concern? An examination of gender, age, and endorsement of materialistic values as predictors." *British Journal of Psychology* 96 (4): 467–491. doi:10.1348/000712605x53533.
- Easterby-Smith, Mark, et al. 2015. *Management and Business Research*. Sage Publications.
- Eroglu, Sevgin A., Karen A. Machleit, and Lenita M. Davis. 2001. "Atmospheric qualities of online retailing." *Journal of Business Research* 54 (2): 177-84. doi:10.1016/s0148-2963(99)00087-9.

- Feinberg, Richard A. 1986. "Credit Cards as Spending Facilitating Stimuli: A Conditioning Interpretation." *Journal of Consumer Research* 13 (3): 348. doi:10.1086/209074.
- Foscht, Thomas, Karin Ernstreiter, Cesar Maloles, Indrajit Sinha, and Bernhard Swoboda. 2013. "Retaining or returning?" *International Journal of Retail & Distribution Management* 41 (2): 113-34. doi:10.1108/09590551311304310.
- Gardner, Meryl Paula, and Dennis W. Rook. 1988. "Effects of impulse purchases on consumers' affective states." *Advances in Consumer Research* 15: 127-130.
- Harris, Lloyd C. 2010. "Fraudulent consumer returns: exploiting retailers return policies." *European Journal of Marketing* 44 (6): 730-747. doi:10.1108/30905661080001358.
- Hjort, Klas, and Björn Lantz. 2012. "(R)e-tail borrowing of party dresses: an experimental study." *International Journal of Retail & Distribution Management* 40 (12): 997-1012. doi:10.1108/09590551211274964.
- Hoch, Stephen J., and George F. Loewenstein. 1991. "Time-Inconsistent Preferences and Consumer Self-Control." *Journal of Consumer Research* 17 (4): 492. doi:10.1086/208573.
- Janakiraman, Narayan, Holly A. Syrdal, and Ryan Freling. 2016. "The Effect of Return Policy Leniency on Consumer Purchase and Return Decisions: A Meta-analytic Review." *Journal of Retailing* 92 (2): 226-35. doi:10.1016/j.jretai.2015.11.002.
- Kacen, Jacqueline J., and Julie Anne Lee. 2002. "The Influence of Culture on Consumer Impulsive Buying Behavior." *Journal of Consumer Psychology* 12 (2): 163-176. doi:10.1207/s15327663jcp1202\_08.
- Kang, Minjeong, and Kim Johnson. 2009. "Identifying characteristics of consumers who frequently return apparel." *Journal of Fashion Marketing and Management: An International Journal* 13 (1): 37-48. doi:10.1108/13612020910939860.
- Kim, Sojung, and Matthew S. Eastin. 2011. "Hedonic Tendencies and the Online Consumer: An Investigation of the Online Shopping Process." *Journal of Internet Commerce* 10 (1): 68-90. doi:10.1080/15332861.2011.558458.
- Lantz, Björn, and Klas Hjort. 2013. "Real e-Customer behavioural responses to free delivery and free returns." *Electronic Commerce Research* 13 (2): 183-198. doi:10.1007/s10660-013-9125-0.
- Lee, Seung Hwan, and June Cotte. 2009. "Post-Purchase Consumer Regret: Conceptualization and Development of the PPCR Scale." *Advance in Consumer Research* 36: 456-462.
- Lesjoyeux, M., J. Ades, V. Tassain, and J. Solomon. 1996. "Phenomenology and psychopathology of uncontrolled buying." *American Journal of Psychiatry* 153 (12): 1524-529. doi:10.1176/ajp.153.12.1524.
- Li, Yongjian, Lei Xu, and Dahui Li. 2013. "Examining relationships between the return policy, product quality, and pricing strategy in online direct selling." *International Journal of Production Economics* 144 (2): 451-60. doi:10.1016/j.ijpe.2013.03.013.
- Lim, Se Hun, Sukho Lee, and Dan J. Kim. 2016. "Is Online Consumers' Impulsive Buying Beneficial for E-Commerce Companies? An Empirical Investigation of Online Consumers' Past Impulsive Buying Behaviors." *Information Systems Management* 34 (1): 85-100. doi:10.1080/10580530.2017.1254458.
- Liu, Yong, Hongxiu Li, and Feng Hu. 2013. "Website attributes in urging online impulse purchase: An empirical investigation on consumer perceptions." *Decision Support Systems* 55 (3): 829-37. doi:10.1016/j.dss.2013.04.001.
- Mattila, Anna S., and Jochen Wirtz. 2008. "The role of store environmental stimulation and social factors on impulse purchasing." *Journal of Services Marketing* 22 (7): 562-567. doi:10.1108/08876040810909686.
- Nadeem, Mohammed M. 2007. "Post-Purchase dissonance: The wisdom of the 'repeat' purchases." *Journal of Global Business Issues* 1 (2): 183-193. doi:10.13140/RG.2.1.1573.0803 .
- Ndubisi, Nelson Oly. 2007. "Relationship marketing and customer loyalty." *Marketing Intelligence & Planning* 25 (1): 98-106. doi:10.1108/02634500710722425.

- Olsen, Svein Ottar, Ana Alina Tudoran, Pirjo Honkanen, and Bas Verplanken. 2015. "Differences and Similarities between Impulse Buying and Variety Seeking: A Personality-based Perspective." *Psychology & Marketing* 33 (1): 36-47. doi:10.1002/mar.20853.
- Omar, Nor Asiah, Ruzita Abdul Rahim, Che Aniza Che Wel, and Syed Shah Alam. 2014. "Compulsive buying and credit card misuse among credit card holders: The roles of self-esteem, materialism, impulsive buying and budget constraint." *Intangible Capital* 10 (1): 52-74. doi:10.3926/ic.446.
- Parasuraman, A., Valarie A. Zeithaml, and Arvind Malhotra. 2005. "E-S-Qual." *Journal of Service Research* 7 (3): 213-33. doi:10.1177/1094670504271156.
- Park, Eun Joo, Eun Young Kim, Venessa Martin Funches, and William Foxx. 2012. "Apparel product attributes, web browsing, and e-impulse buying on shopping websites." *Journal of Business Research* 65 (11): 1583-589. doi:10.1016/j.jbusres.2011.02.043.
- Park, Hye-Jung, and Leslie Davis Burns. 2005. "Fashion orientation, credit card use, and compulsive buying." *Journal of Consumer Marketing* 22 (3): 135-141. doi:10.1108/07363760510595959.
- Petersen, J. Andrew, and V Kumar. 2009. "Are Product Returns a Necessary Evil? Antecedents and Consequences." *Journal of Marketing* 73 (3): 35-51., doi:10.1509/jmkg.73.3.35.
- Pirog, Stephen, and James Roberts. 2007. "Personality and Credit Card Misuse Among College Students: The Mediating Role of Impulsiveness." *The Journal of Marketing Theory and Practice* 15 (1): 65-77. doi:10.2753/mtp1069-6679150105.
- Piron, Francis. 1991. "Defining Impulse Purchasing." *Advances in Consumer Research* 18 (1): 509-514.
- Podoshen, Jeffrey S., and Susan A. Andrzejewski. 2012. "An Examination of the Relationships Between Materialism, Conspicuous Consumption, Impulse Buying, and Brand Loyalty." *The Journal of Marketing Theory and Practice* 20 (3): 319-334. doi:10.2753/mtp1069-6679200306.
- Powers, Thomas L., and Eric P. Jack. 2013. "The Influence of Cognitive Dissonance on Retail Product Returns." *Psychology & Marketing* 30 (8): 724-735. doi:10.1002/mar.20640.
- Prelec, Drazen, and George Loewenstein. 1998. "The Red and the Black: Mental Accounting of Savings and Debt." *Marketing Science* 17 (1): 4-28. doi:10.1287/mksc.17.1.4.
- Punj, Girish. 2011. "Impulse buying and variety seeking: Similarities and differences." *Journal of Business Research* 64 (7): 745-748. doi:10.1016/j.jbusres.2010.07.007.
- Reinartz, Werner, and V. Kumar. 2017. "The Mismanagement of Customer Loyalty." *Harvard Business Review*, hbr.org/2002/07/the-mismanagement-of-customer-loyalty. Accessed 25 Aug. 2017.
- Roberts, James A., and Eli Jones. 2001. "Money Attitudes, Credit Card Use, and Compulsive Buying among American College Students." *Journal of Consumer Affairs* 35 (2): 213-240. doi:10.1111/j.1745-6606.2001.tb00111.x.
- Roberts, James A., and Chris Manolis. 2012. "Cooking Up a Recipe for Self-Control: The Three Ingredients of Self-Control and its Impact on Impulse Buying." *The Journal of Marketing Theory and Practice* 20 (2): 173-188. doi:10.2753/mtp1069-6679200204.
- Rook, Dennis W. 1987. "The Buying Impulse." *Journal of Consumer Research* 14 (2): 189. doi:10.1086/209105.
- Rook, Dennis W., and Robert J. Fisher. 1995. "Normative Influences on Impulsive Buying Behavior." *Journal of Consumer Research* 22 (3): p. 305. doi:10.1086/209452.
- Rook, Dennis W., and Steven J. Hoch. 1985. "Consuming impulses." *Advances in Consumer Research* 12: 23-27.
- Saleh, Mahmoud Abdul El-Hamid. 2012. "An Investigation of the Relationship between Unplanned Buying and Post-Purchase Regret." *International Journal of Marketing Studies* 4 (4): 106-120. doi:10.5539/ijms.v4n4p106.
- Saunders, Mark, Philip Lewis, and Adrian Thornhill. 2003. *Research methods for business students*. England: Prentice Hall.

- Sharifi, Seyed Shahin, and Mohammad Rahim Esfidani. 2014. "The impacts of relationship marketing on cognitive dissonance, satisfaction, and loyalty." *International Journal of Retail & Distribution Management* 42 (6): 553–575. doi:10.1108/ijrdm-05-2013-0109.
- Sharma, Piyush, Bharadhwaj Sivakumaran, and Roger Marshall. 2010. "Impulse buying and variety seeking: A trait-correlates perspective." *Journal of Business Research* 63 (3): 276-83. doi:10.1016/j.jbusres.2009.03.013.
- Shen, Kathy Ning, and Mohamed Khalifa. 2012. "System design effects on online impulse buying." *Internet Research* 22 (4): 396–425. doi:10.1108/10662241211250962.
- Stern, Hawkins. 1962. "The Significance of Impulse Buying Today." *Journal of Marketing* 26 (2): 59., doi:10.2307/1248439.
- Su, Xuanming. 2008. "Consumer Returns Policies and Supply Chain Performance." *SSRN Electronic Journal* 11: 596-612. doi:10.2139/ssrn.1020451.
- Taute, Harry, and Shaun Mcquitty. 2004. "Feeling Good! Doing Good! An Exploratory Look at the Impulsive Purchase of the Social Good." *Journal of Marketing Theory and Practice* 12 (2): 16–27. doi:10.1080/10696679.2004.11658516.
- Vohs, Kathleen D., and Ronald J. Faber. 2007. "Spent Resources: Self-Regulatory Resource Availability Affects Impulse Buying." *Journal of Consumer Research* 33 (4): 537–547. doi:10.1086/510228.
- Wachter, Kathy, Scott J. Vitell, Ruth K. Shelton, and Kyungae Park. 2011. "Exploring consumer orientation toward returns: unethical dimensions." *Business Ethics: A European Review* 21 (1): 115-28. doi:10.1111/j.1467-8608.2011.01639.x.
- Wang, Jeff, and Jing J. Xiao. 2009. "Buying behavior, social support and credit card indebtedness of college students." *International Journal of Consumer Studies* 33 (1): 2–10. doi:10.1111/j.1470-6431.2008.00719.x.
- Wood, Stacy L. 2001. "Remote Purchase Environments: The Influence of Return Policy Leniency on Two-Stage Decision Processes." *Journal of Marketing Research* 38 (2): 157–169. doi:10.1509/jmkr.38.2.157.18847.
- Xu, Yin, and Jin-Song Huang. 2014. "Effects of Price Discounts and Bonus Packs on Online Impulse Buying." *Social Behavior and Personality: an international journal* 42 (8): 1293–1302. doi:10.2224/sbp.2014.42.8.1293.
- Yalabik, Baris, Nicholas C. Petruzzi, and Dilip Chhajed. 2005. "An integrated product returns model with logistics and marketing coordination." *European Journal of Operational Research* 161 (1): 162-82. doi:10.1016/j.ejor.2003.07.006.
- Zhu, Dong Hong, Ya Ping Chang, and An Chang. 2015. "Effects of free gifts with purchase on online purchase satisfaction." *Internet Research* 25 (5): 690-706. doi:10.1108/intr-12-2013-0257.

## APPENDIX

### Appendix 1. Questionnaire

Did you buy anything online over the past 6 months? \*

- Yes  
 No

Which online stores do you typically use? \*

- Amazon  
 eBay  
 Asos  
 Ozon  
 Lamoda (Zalando)  
 Alibaba  
 Ulmart  
 Wildberries  
 DNS  
 Yoox  
 Feelunique  
 Lookfantastic
- 
- Yandex.Market  
 Official Brand Online Store  
 Other: \_\_\_\_\_

How often do you shop online? \*

- Once a week  
 2 or 3 times a month

- Once a month
- 2 or 3 times a year
- Once a year

**Which products do you typically buy online? \***

- Apparel & accessories
- Jewellery & watches
- Health & beauty
- Groceries
- Books/music/video
- Electronics
- Furniture, appliances & equipment
- Home & garden
- Sports & recreation
- Office supplies
- Other: \_\_\_\_\_

**How do you typically pay for your online purchases? \***

- Credit card
- Debit card
- Cash on delivery
- PayPal
- Other: \_\_\_\_\_

How many credit cards do you own? \*

- 1
- 2 or 3
- more than 3
- I don't own a credit card

## Credit card habits

I frequently use the available credit on one credit card to make payment on another credit card. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I always pay off my credit cards at the end of each month. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I am seldom delinquent in making payments on credit cards. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I am more impulsive when I shop with credit cards. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I spend more money when I use a credit card. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I often make minimum payments on my credit card bills. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I am less concerned with the price of a product when I use a credit card. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

## Online retailers' return policy

I wouldn't incur any costs if I had to return a product to an online store. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I would easily get my money back if I had to return a product to an online store. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree



I have plenty of time to decide if I want to keep the products once I receive them. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

## Shopping habits

How often do you buy things online on impulse? \*

	1	2	3	4	5	
Almost never	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Always

I often buy things spontaneously online. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

"Just do it" describes the way I buy things online. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I often buy things online without thinking. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

Sometimes I feel like buying things online on the spur of the moment. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I carefully plan most of my online purchases. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

Sometimes I am a bit reckless about what I buy online. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

## Post-purchase phase

After I buy something on impulse online, I feel anxious. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

After I buy something on impulse online, I feel guilty. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

After I buy something on impulse online, I feel frustrated. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

After I buy something on impulse online, I feel depressed. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

After I buy something on impulse online, I feel miserable. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

After I buy something on impulse online, I feel regret. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

After I buy something on impulse online, I feel angry. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

After I buy something on impulse online, I feel content. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

After I buy something on impulse online, I feel carefree. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

After I buy something on impulse online, I feel carefree. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

After I buy something on impulse online, I feel excited. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

After I buy something on impulse online, I feel pleasure. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

## Product return habits

I frequently return products that I purchase online. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I have returned most of the products that I have purchased from online stores. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

I usually do not return products that I purchase from online stores. \*

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

## Incentives

Do you typically get free gifts when ordering online? \*

- Yes
- No
- I don't know

Do you typically get "thank you for your order" emails from online stores? \*

- Yes
- No
- I don't know

## Demographics

Gender: \*

- Male
- Female

Age: \*

- 18-21
- 22-25
- 26-30

- 31-35
- Over 35

**Education: \***

- Bachelor's degree
- Master's degree
- Student
- High School
- Other: \_\_\_\_\_

**Monthly income: \***

- less than 20 000 rub
- 20 000 – 40 000 rub
- 40 000 – 60 000 rub
- 60 000 - 80 000 rub
- Over 80 000 rub

**Appendix 2. Reliability analyses SPSS outputs**

**1) Credit card use scale**

Reliability statistics	
Cronbach's alpha	N of items
,884	3

**2) Perceived return policy leniency**

Reliability statistics	
Cronbach's alpha	N of items
,926	3

**3) Impulsive buying tendency**

Reliability statistics	
Cronbach's alpha	N of items
,936	6

**4) Post-purchase negative emotional response**

Reliability statistics	
Cronbach's alpha	N of items
,877	7

**5) Product return behavior**

Reliability statistics	
Cronbach's alpha	N of items
,848	3

**Appendix 3. Pearson's correlation matrix SPSS output**

**Correlations**

		CREDIT_S UM	POLICY_SU M	IMPULSE_SU M	NEGAT_SU M	RETURN_SU M
CREDIT_S UM	Pearson correlation	1	,277**	,469**	,520**	,525**
	Sig. (2-tailed)		,000	,000	,000	,000
	N	153	153	153	153	153
POLICY_S UM	Pearson correlation	,277**	1	,679**	,642**	,626**
	Sig. (2-tailed)	,000		,000	,000	,000
	N	153	153	153	153	153
IMPULSE_ SUM	Pearson correlation	,469**	,679**	1	,610**	,591**
	Sig. (2-tailed)	,000	,000		,000	,000
	N	153	153	153	153	153
NEGAT_SU M	Pearson correlation	,520**	,642**	,610**	1	,648**
	Sig. (2-tailed)	,000	,000	,000		,000
	N	153	153	153	153	153

RETURN_S	Pearson correlation	,525**	,626**	,591**	,648**	1
UM	Sig. (2-tailed)	,000	,000	,000	,000	
	N	153	153	153	153	153

\*\* . Correlation is significant at the 0.01 level (2-tailed).

#### Appendix 4. Multiple regression results predicting impulsive buying tendency

##### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,718 <sup>a</sup>	,516	,506	,88164

A. Predictors: (Constant), POLICY\_SUM, GENDER, CREDIT\_SUM

B. Dependent Variable: IMPULSE\_SUM

##### ANOVA<sup>a</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	123,527	3	41,176	52,974	,000 <sup>b</sup>
	Residual	115,816	149	,777		
	Total	239,342	152			

A. Dependent Variable: IMPULSE\_SUM

B. Predictors: (Constant), POLICY\_SUM, GENDER, CREDIT\_SUM

##### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	,067	,332		,201	,841
	GENDER	,477	,164	,166	2,904	,004
	CREDIT_SUM	,309	,106	,190	2,925	,004
	POLICY_SUM	,531	,060	,574	8,816	,000

a. Dependent Variable: IMPULSE\_SUM



**Appendix 5. Multiple regression results predicting post-purchase negative emotions (Model 1)**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,687 <sup>a</sup>	,472	,465	,82310

A. Predictors: (Constant), POLICY\_SUM, CREDIT\_SUM

B. Dependent Variable: NEGAT\_SUM

**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	90,797	2	45,399	67,009	,000 <sup>b</sup>
	Residual	101,624	150	,677		
	Total	192,421	152			

A. Dependent Variable: NEGAT\_SUM

B. Predictors: (Constant), POLICY\_SUM, CREDIT\_SUM

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	,618	,293		2,107	,037
	CREDIT_SUM	,406	,099	,277	4,108	,000
	POLICY_SUM	,423	,056	,510	7,555	,000

A. Dependent Variable: NEGAT\_SUM

**Appendix 6. Multiple regression results predicting post-purchase negative emotions (Model 2)**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,662 <sup>a</sup>	,439	,424	,85420

A. Predictors: (Constant), INCOME, IMPULSE\_SUM, GENDER, AGE

B. Dependent Variable: NEGAT\_SUM

**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	84,433	4	21,108	28,929	,000 <sup>b</sup>
	Residual	107,988	148	,730		
	Total	192,421	152			

A. Dependent Variable: NEGAT\_SUM

B. Predictors: (Constant), INCOME, IMPULSE\_SUM, GENDER, AGE

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	,773	,453		1,708	,090
	IMPULSE_SUM	,539	,057	,601	9,414	,000
	GENDER	-,337	,165	-,131	-2,048	,042
	AGE	,066	,019	,265	3,522	,001
	INCOME	-,197	,063	-,241	-3,154	,002

A. Dependent Variable: NEGAT\_SUM

**Appendix 7. Multiple regression results predicting post-purchase negative emotions (Model 3)**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,712 <sup>a</sup>	,507	,497	,79816

A. Predictors: (Constant), POLICY\_SUM, CREDIT\_SUM, IMPULSE\_SUM

B. Dependent Variable: NEGAT\_SUM

**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
-------	--	----------------	----	-------------	---	------

1	Regression	97,499	3	32,500	51,015	,000 <sup>b</sup>
	Residual	94,922	149	,637		
	Total	192,421	152			

A. Dependent Variable: NEGAT\_SUM

B. Predictors: (Constant), POLICY\_SUM, CREDIT\_SUM, IMPULSE\_SUM

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	,529	,286		1,850	,066
	IMPULSE_SUM	,234	,072	,261	3,244	,001
	CREDIT_SUM	,334	,098	,228	3,400	,001
	POLICY_SUM	,296	,067	,356	4,402	,000

A. Dependent Variable: NEGAT\_SUM

### Appendix 8. Multiple regression results testing for moderation effect of gifts

#### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,826 <sup>a</sup>	,682	,669	,64767

A. Predictors: (Constant), INCOME, MOD1, GENDER, IMPULSE\_SUM, AGE, GIFTS

B. Dependent Variable: NEGAT\_SUM

#### ANOVA<sup>a</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	131,178	6	21,863	52,121	,000 <sup>b</sup>
	Residual	61,243	146	,419		
	Total	192,421	152			

A. Dependent Variable: NEGAT\_SUM

B. Predictors: (Constant), INCOME, MOD1, GENDER, IMPULSE\_SUM, AGE, GIFTS

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1,611	,402		4,004	,000
IMPULSE_SUM	,499	,071	,556	7,030	,000
MOD1	-,480	,105	-,603	-4,577	,000
GIFTS	,285	,355	,126	,803	,424
GENDER	-,325	,125	-,126	-2,593	,010
AGE	,050	,014	,201	3,501	,001
INCOME	-,170	,049	-,207	-3,470	,001

A. Dependent Variable: NEGAT\_SUM

### Appendix 9. Multiple regression results testing for moderation effect of post-purchase communication

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,707 <sup>a</sup>	,500	,487	,80623

A. Predictors: (Constant), AGE, MOD2, IMPULSE\_SUM, PPC

B. Dependent Variable: NEGAT\_SUM

**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	96,220	4	24,055	37,007	,000 <sup>b</sup>
	Residual	96,201	148	,650		
	Total	192,421	152			

A. Dependent Variable: NEGAT\_SUM

B. Predictors: (Constant), AGE, MOD2, IMPULSE\_SUM, PPC

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.
-------	-----------------------------	---------------------------	---	------

		B	Std. Error	Beta		
1	(Constant)	1,467	,449		3,266	,001
	IMPULSE_SUM	,499	,068	,557	7,334	,000
	MOD2	-,048	,051	-,077	-,940	,349
	PPC	-,658	,177	-,292	-3,711	,000
	AGE	,030	,014	,120	2,057	,041

A. Dependent Variable: NEGAT\_SUM

**Appendix 10. Multiple regression results testing for moderation effect of gifts and direct effect of post-purchase communication**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,807 <sup>a</sup>	,651	,641	,67383

A. Predictors: (Constant), GENDER, MOD1, IMPULSE\_SUM, PPC

B. Dependent Variable: NEGAT\_SUM

**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	125,222	4	31,305	68,947	,000 <sup>b</sup>
	Residual	67,200	148	,454		
	Total	192,421	152			

A. Dependent Variable: NEGAT\_SUM

B. Predictors: (Constant), GENDER, MOD1, IMPULSE\_SUM, PPC

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,586	,195		13,295	,000
	IMPULSE_SUM	,465	,046	,518	10,005	,000
	MOD1	-,386	,047	-,485	-8,131	,000
	PPC	-,160	,137	-,071	-1,173	,243
	GENDER	-,276	,128	-,107	-2,154	,033

A. Dependent Variable: NEGAT\_SUM

**Appendix 11. Multiple regression results predicting product return behavior (Model 1)**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,651 <sup>a</sup>	,424	,417	,89349

**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	88,265	2	44,133	55,282	,000 <sup>b</sup>
	Residual	119,748	150	,798		
	Total	208,013	152			

A. Dependent Variable: RETURN\_SUM

B. Predictors: (Constant), CREDIT\_SUM, POLICY\_SUM

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,208	,322		-,646	,519
	POLICY_SUM	,451	,060	,519	7,536	,000
	CREDIT_SUM	,359	,109	,227	3,302	,001

**Appendix 12. Multiple regression results predicting product return behavior (Model 2)**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,648 <sup>a</sup>	,419	,416	,95896

A. Predictors: (Constant), NEGAT\_SUM

B. Dependent Variable: RETURN\_SUM

**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	100,303	1	100,303	109,072	,000 <sup>b</sup>
	Residual	138,860	151	,920		
	Total	239,163	152			

A. Dependent Variable: RETURN\_SUM

B. Predictors: (Constant), NEGAT\_SUM

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	,335	,248		1,349	,179
	NEGAT_SUM	,722	,069	,648	10,444	,000

A. Dependent Variable: RETURN\_SUM

**Appendix 13. Multiple regression results predicting product return behavior (Model 3)**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,731 <sup>a</sup>	,534	,521	,86793

A. Predictors: (Constant), POLICY\_SUM, CREDIT\_SUM, NEGAT\_SUM, IMPULSE\_SUM

B. Dependent Variable: RETURN\_SUM

**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	100,303	1	100,303	109,072	,000 <sup>b</sup>
	Residual	138,860	151	,920		
	Total	239,163	152			

A. Dependent Variable: RETURN\_SUM

B. Predictors: (Constant), NEGAT\_SUM

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,597	,314		-1,899	,060
	NEGAT_SUM	,341	,089	,306	3,823	,000
	IMPULSE_SUM	,161	,081	,161	1,977	,045
	CREDIT_SUM	,292	,111	,179	2,628	,009
	POLICY_SUM	,218	,078	,235	2,806	,006

A. Dependent Variable: RETURN\_SUM

**Appendix 14. Single regression results predicting post-purchase negative emotions**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,618 <sup>a</sup>	,382	,378	,92233

**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	79,559	1	79,559	93,523	,000 <sup>b</sup>
	Residual	128,454	151	,851		
	Total	208,013	152			

A. Dependent Variable: RETURN\_SUM

B. Predictors: (Constant), POLICY\_SUM

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	,623	,207		3,009	,003
	POLICY_SUM	,537	,056	,618	9,671	,000

A. Dependent Variable: RETURN\_SUM



**Appendix 15. ANOVA results for differences in impulsive tendency scores between GENDERS**

**Descriptives**

IMPULSE\_SUM

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
,0	39	2,7949	1,25042	,20023	2,3895	3,2002	1,00	4,50
1,0	114	3,4415	1,21850	,11412	3,2154	3,6676	1,00	4,83
Total	153	3,2767	1,25484	,10145	3,0763	3,4771	1,00	4,83

**Test of Homogeneity of Variances**

IMPULSE\_SUM

Levene Statistic	Df1	Df2	Sig.
,364	1	151	,547

**ANOVA**

IMPULSE\_SUM

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	12,151	1	12,151	8,076	,005
Within Groups	227,191	151	1,505		
Total	239,342	152			

## Appendix 16. Return policy as an integral part of e-commerce marketing strategy example

The image shows a banner from the Macy's website. At the top left is the Macy's logo (a red star followed by the word 'macy's'). To its right is a search bar with the placeholder text 'Search or enter web ID' and a magnifying glass icon. Further right is a 'My Bag (0)' link with a shopping bag icon containing a red star. Below the search bar is a black navigation bar with white text for categories: WOMEN, MEN, HOME, BED & BATH, SHOES, HANDBAGS, BEAUTY, KIDS, JUNIORS, JEWELRY, WATCHES, ACTIVE, BRANDS. Below this is a secondary navigation bar with 'MACY'S PRESENTS: THE EDIT' and links for 'The Gift Guide', 'Lists', 'Deals & Promotions', 'Gift Cards', and 'Wedding Registry'. The main banner features a woman in a floral top and jeans on the left. On the right, the text reads 'YOU ASKED, WE DELIVERED!' in large white letters. Below this, 'GET FREE SHIPPING EVERY DAY' is written in white, with three red arrows pointing to it. A smaller line of text explains: 'with \$50 purchase, \$10.95 Flat-Fee Shipping with purchase under \$80. No code, no end date. Contiguous U.S. only.' A red-bordered box contains the text '+ ENJOY FREE RETURNS BY MAIL!' followed by 'Just print a pre-addressed shipping label and send it back to us. You can also take your return to any Macy's store. Contiguous U.S. only.' Below the box is a 'START SHOPPING' button. At the bottom, it says 'PLUS, FREE SHIPPING ON ALL BEAUTY ORDERS!' and 'All year long. No code needed. Contiguous U.S. only.'

## Appendix 17. Return policy as a subtle signal example

The image shows a banner from the Shoppop website. At the top left, it says 'Shop Men's' followed by flags for France, UK, and US, and 'EN' and '\$USD' with dropdown arrows. In the center, a red-bordered box contains the text 'FREE express international delivery + EASY returns'. To the right, there are links for 'Sign In / Register' with a dropdown arrow, a heart icon, and a shopping bag icon with '0'. Below the navigation is the 'shoppop' logo. Underneath is a horizontal menu with categories: WHAT'S NEW, FALL CHECKLIST, DESIGNERS, CLOTHING, SHOES, BAGS, ACCESSORIES, SALE, and a search bar. The main banner features a woman's face on the left, a circular logo with 'YOURS TRULY' and 'shopbop REWARDS', and a 'Shopbop Loyalty Program REWARDS ARE COMING SOON!' text with a 'Join Now' link. Below this is another banner for 'The Jewelry Box' featuring a woman wearing jewelry and the text 'HEAVY METAL' and 'Lend instant cool factor to any outfit with these'.

## Appendix 18. Impersonal post-purchase email example.

COCCINELLE

**Gentile**



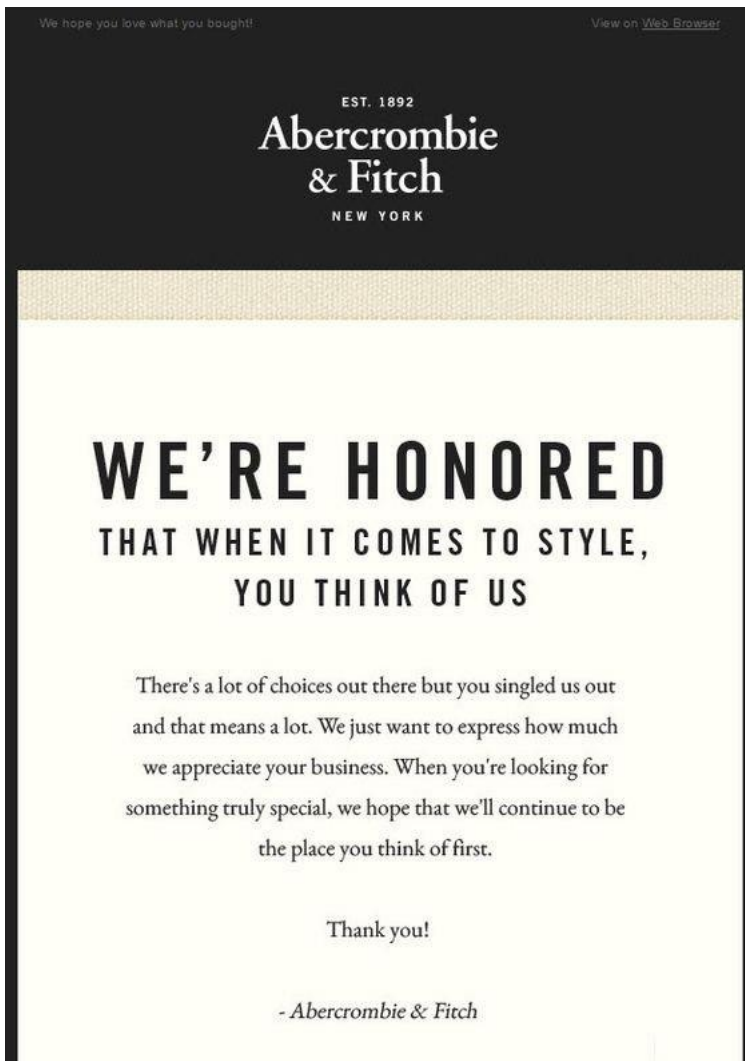
Ti ringraziamo per aver acquistato su Coccinelle Online Store  
Riceverai un'email di conferma quando l'ordine sarà spedito. Potrai controllare la Tua spedizione con un link all'interno di questa mail o accedendo al [mio account](#).  
Qui di seguito il riepilogo del Tuo ordine:

Per qualunque dubbio potrai contattare il nostro Servizio Clienti [customercare@shop.coccinelle.com](mailto:customercare@shop.coccinelle.com)

Fermo restando quanto previsto al punto 14 delle Condizioni Generali di Vendita [Condizioni Generali di Vendita](#), se desideri informazioni sulla possibilità di aderire alla Piattaforma ODR Europea per la risoluzione alternativa delle controversie che dovessero sorgere in relazione agli acquisti eseguiti sul nostro sito, ovvero intendi avviare una nuova procedura di risoluzione alternativa tramite la Piattaforma ODR Europea, accedi al seguente link: <http://ec.europa.eu/odr>

Il tuo ordine **#100016225** (inoltrato il giorno 05 marzo 2017 16.53.16 CET)

## Appendix 19. Personal post-purchase e-commerce email examples




## Appendix 20. Customer engagement example


*Fall Look*  
**#SWEEPSTAKES**

Enter for a chance to win a Sephora shopping spree. Between 9/1 and 9/30, upload a photo of your fall look, tag a product, and include **#Sweepstakes**.


[SEE OFFICIAL RULES AND ENTRY DETAILS >](#)



**Featured**




4 ❤️




**Urban Decay Heat**  
in Makeup In Life

**Mul010**  
VIEW PROFILE

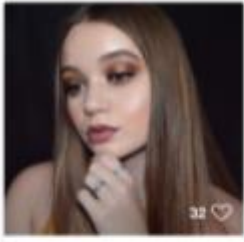


10 ❤️




**#Sweepstakes**  
in Beauty

**Missur**  
VIEW PROFILE




32 ❤️




**DOTS | #Sweepstakes**  
in Makeup In Life

**Mienrch**  
VIEW PROFILE



107 ❤️



**trophy wife**  
in Highlighters

**crystylexo19**  
VIEW PROFILE