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Factors Influencing Intention Towards Second-Hand Purchasing Decisions of a Consumer In Finland

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Abstract:

The main purpose of this study is to identify the key factors influencing consumers' purchasing behaviour towards second-hand products in Finland. For this, six dependent variables were combined from the Theory of Planned Behaviour, Value-Belief-Norm Theory, and Self-Perception Theory (attitude, subjective norm, perceived behavioural control, perceived moral obligation, environmental concern, and economic motivation).

An online survey was conducted for one week to gather sufficient data for this study. The data analysis was conducted using the statistical software SPSS (version 30). Cronbach alpha test was done to test the reliability, validity was tested by conducting a convergent validity test, and a multiple linear regression analysis was conducted to test the proposed hypothesis and to examine the findings.

The findings showed that attitude, subjective norm, and economic motivation are the major factors that influence the purchase intention towards the second-hand products in Finland. The result concludes that perceived behavioural control, environmental concern, and perceived moral obligation do not directly affect the purchase intention towards the second-hand products. However, this conclusion is completely based on the context of second-hand purchase behaviour in Finland.

Keywords: second-hand products, consumer buying behaviour, purchase intention, Finland, sustainable consumption, second-hand purchasing, circular consumption.

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1 Introduction

The rise of second-hand marketing has attracted significant attention in recent years amid growing environmental concerns, economic fluctuations, and a shift in consumer behaviour. Second-hand buying and selling have been conducted throughout the centuries, and in early modern times, second-hand buying wasn't practiced only by the poor; it was common across all classes for clothes, furniture, and luxury goods (Damme& Vermoesen, 2009). The idea of buying and selling used goods dates to the ancient bartering system (Y Hristova, 2019). According to Guiot & Roux (2010), over the past 20 years, second-hand shopping has been flourishing, with many consumers choosing it for reasons beyond just saving money. Different variations of second-hand products can be found selling worldwide directly or through intermediaries. The types of second-hand products include clothes, electronics (tv, mobile phones, laptops, and computers), vehicles, and furniture (Kawulur et al., 2022). People are choosing second-hand purchasing because they are finding unique items and bargaining, which traditional stores can't offer. This helps benefit the environment by extending the product lifecycle. There lie different factors, such as price, brand, and quality, when deciding whether to buy or not a second-hand product by a customer (Baqal & Abdulkhaleq, 2018). The projection made by Threadup 2023, the global second-hand market will reach to 351 billion dollars by 2029, which is a clear indication of the shift in consumers' consumption patterns. The concept of responsible consumption and its measures have expanded from its initial environmental concerns to much wider categories (Borusiak et al., 2019). Beyond the environmental concerns, other factors such as price sensitivity, convenience, and uniqueness of the product may also play an equal role in the purchasing decision.

Although second-hand consumption has gained increasing attention, there are limited studies on second-hand purchasing and the factors influencing the decision, and it remains a relatively new research area with limited theoretical development. The existing studies on the second-hand consumption mainly focused on specific business cases or products like clothing (Karhunen, 2024; Kiukkanen, 2021). Guiot and Roux

(2010) state that second-hand shopping remains relatively unstudied, even as it raises crucial issues, including the repeated circulation of used objects among consumers, revealing interesting consumer behaviour. Historically, only a few studies have been conducted on second-hand shopping, despite its long tradition in Europe and its expansion across many markets (Guiot & Roux 2020, p. 384). A study conducted in China by Borusiak et al. (2020) revealed that people's intention to buy second-hand clothing was influenced by perceived benefits such as enjoyment, savings, environmental impacts, concerns, and social influences. A key gap exists in understanding how second-hand buying behaviour aligns with or fails to align with environmental concerns. Are consumers who buy used products really concerned about the environment, or is sustainability only a secondary justification for economically motivated purchases? According to Rulikova (2019) and Raszka and Borusiak (2020), 'the motivation for the people to buy second-hand products may be the poor financial condition of the buyer or the opportunity to buy a product of fine quality in a relatively low price'. But mostly people are aware of the environmental concerns while buying second-hand goods, and they are well known that they contribute positively to the environment by buying second-hand products, while sometimes there lie some unknown factors that motivate people to buy second-hand goods (Borusiak et al., 2021, p.78). Buying second-hand goods was seen as an activity performed by those who have a low-income level, but now even wealthy people are choosing to buy second-hand goods because they care for the environment. This big change in buying habits shows the need for close research on second-hand shopping and environmental concerns (Gilal et al., 2024, p.1). Many factors, such as socio-economic, technology, and fashion trends, influence the decision of consumers to buy used goods, which is a good topic for researchers and policymakers. Although the previous studies have examined some of these factors, there is still a lack of comprehensive and up-to-date research that considers rapidly changing second-hand purchasing engagement of the consumer (Kuuppole et al.,2025).

This thesis aims to address this gap by investigating the key factors and ranking that enable consumers to buy second-hand products. Specifically, it will explore whether environmental consciousness serves as the primary driver for second-hand purchasing

decisions or whether other factors, such as economic considerations, convenience, or social signalling, are more influential. In other words, are consumers who buy used products really concerned about the environment? Or is sustainability only a simple justification for the other motivational factors, such as saving money or convenience, or social trends? The theory of planned behaviour and its components, such as attitude towards the behaviour, subjective norms, and perceived behavioural control, will be used to explain why consumers choose to engage in second-hand purchasing. Other factors, such as environmental concern, economic motivation, and social influence, will be incorporated from the Value-belief norm theory and the self-perception theory.

The preliminary research question: ‘‘**What are the major factors that motivate people’s intention to buy second-hand products in Finland?’’**

2 Literature Review

2.1 Second-Hand Products and Second-Hand Buying

Second-hand products/goods are those goods that are already used, which are sold at lower prices because of depreciation from previous ownership and attract buyers due to financial affordability (Baqal & Abdulkhaleq, 2018). The second-hand products are perceived as inferior to the new products, and the condition of second-hand products varies depending on how they are used by their previous owner. According to Calvo-Porral et al (2023), 'more people are buying second-hand products because it is cheaper, economic pressure drives consumers towards the second-hand product, enabling access to goods which would remain financially inaccessible in their new condition'**.** Calvo-Porral et al (2023) define second-hand purchasing as the purchase of used products that have been previously owned by other individuals. The introduction of the new trading formats and rise of the internet, social media, and environmental protection have led to a progressive rise of second-hand good markets, and in the last 40 years, it has become a worldwide phenomenon worth billions of dollars (Yulia Hristova, 2019). To show the hugeness of the second-hand market, Yulia Hristova cites (ThreadUp, 2018), mentioning that the amount of second-hand goods was expected to increase from 24 billion to 51 billion dollars from 218 to 2023. The second-hand goods markets have grown from their medieval roots in poverty-driven clothing exchange into a global multi-sector industry fuelled by affordability, demand, and resourcefulness. Although it has a lower release value, it offers a wide variety and accessibility, and it is projected to surpass the new goods market in the future (Yulia Hristova, 2019).

Environmental Concerns refer to an individual's concern regarding human-induced harm to the environment and its protection; this encompasses cognitive, emotional, and behavioural dimensions (Fransson &Gärling, 1999; Franzen & Vogl, 2013). According to the United Nations, sustainability means meeting today's needs without harming future generations' ability to meet theirs, focusing on environmental and resource conservation. Sustainability can be attained by ethical or green consumption (Kushwa et al., 2019). Klooster et al. (2023) performed research on the impact of second-hand clothing on the environment and lifecycle. They chose four second-hand clothing items,

including a sweater, a t-shirt, a dress, and trousers. The consumers were divided into three categories, namely primary, primary conscious users, and secondary users. The users were further divided into three subcategories, including average, fashionable, and attached buyers. The data was analysed with the help of information provided by the garment factory on the average transportation time of delivery, electricity consumption, and carbon emission for a single clothing item. The result showed that buying second-hand clothing has 42% lower impact on climate change and energy consumption. Similarly, it showed 42 to 53% improvement in the freshwater ecosystem. They also found that consumers who rarely buy second-hand items have a higher negative impact on the environment.

People buy second-hand goods because they are affordable, allowing them to save money by bargaining for a fair price and stretching their budget (Guiot & Roux, 2010; Ferraro et al., 2016). For low-income consumers, buying second-hand goods is a practical way to save money and reduce financial stress because used items are often cheaper than new ones (Ferraro et al., 2016). People intend to buy second-hand goods to save money, find a fair price, and enjoy the satisfaction of getting more for less. This allows people with low income to afford more items and avoid financial strain and indulge in other experiences like vacation or frequent replacement (Guoit & Roux, 2010). Secondhand buying provides many benefits, such as protection against environmental sustainability, unique and original products, economic advantages, pleasure in hunting for unique items, and profitability (Kawulur et al., 2022).

In 2005, Bardhi and Arnould (2005) conducted a study to determine why people buy second-hand products. They found two main reasons: saving money (economic motives) and enjoyment (hedonic motives) drive this behaviour. They also identified other related factors like planning and purchasing carefully, bargain hunting, reusing products to extend their life, buying a few products, and reusing and recycling. An ethical consumer avoids those products that harm health, the environment, or animals and supports fair and sustainable practices. Being ethical while consuming may include choosing public transport instead of private vehicles (Pyke & Regan, 2015), buying in second-hand stores, and buying locally made clothes, which helps in waste reduction and reduces

environmental impact. Second-hand shopping is an ethical practice because reusing items prevents the negative effects of new production (Freestone & McGoldrick, 2007, p. 446 & 447). People tend to buy ethical products to feel good about their health, self-image, and helping others, but barriers like price, access, and information prevent consistent ethical consumption (Burke et al., 2014, p.4). Sustainable consumption means making purchasing choices that balance personal preference with social responsibility. Over the last 40 years, the concept of sustainable consumption has shifted from only environmental concerns to include other social factors (Borusiak et al.,2020). There are two types of sustainable consumption, weak or mainstream consumption (seyfang, 2011), which promotes high consumption levels, risking overall environmental harm if buying grows too fast, and strong sustainable consumption reduces total consumption itself by seeking well-being through non-material means and avoiding rebound effects (Kleschin et al., 2015). Sustainable consumption refers to improving the quality of life while reducing the environmental harm by using resources efficiently, minimising the waste and pollution, promoting social fairness and economic growth, and addressing global issues like climate change, poverty, and overconsumption through balanced environmental, social, and financial sustainability (Borusiak et al., 2020).

During the literature review of previous work, theories such as the Theory of Planned Behaviour, Social Influence theory, Value Belief Norm theory, and Self Perception Theory, and their respective variables such as attitude, subjective norms, economic motivation, and social influence were found to have a significant effect on second-hand purchase intention. Below we have listed the research that was conducted between 2010 and 2025 using similar theories such as the Theory of Planned Behaviour, Social Influence Theory, Self-Perception Theory, and Value Belief Norm theory. These research papers have been searched using the keywords second-hand shopping, second-hand shopping intention, theory of planned behaviour, social influence, & second-hand shopping, second-hand shopping intention, and self-perception theory, second-hand shopping, and second-hand shopping intention and value belief norm theory from various databases such as Tritonia and Google Scholar.

Table 1: Review of Previous Research

No.	Authors	Theory	Sampling and Country	Findings
1	Sharma et al. (2025)	Theory of Planned Behaviour (extended)	222 young adults (18-30 years) in India	Environmental concern was the most significant predictor of a positive attitude towards second-hand clothing. Attitude had the strongest influence on purchase intention
2	Frahm et al. (2025)	Consumer Motivation & Barriers Framework	864 participants across Denmark	Motivations such as economy and sustainability are prominent across all product categories, but the relative importance varies, such as treasure hunting is a strong motivation for fashion.
3	Yang et al. (2024)	Valu- Belief-Norm Theory	405 valid responses from Malaysian consumers	The study showed that biospheric and altruistic values indirectly influence the intention to purchase second-hand clothing through the causal chain of beliefs and personal norms
4	Ross & Hahn (2017)	Theory of Planned Behaviour	Two-wave panel study with 168 consumers	This study found that engaging in second-hand consumption has a positive effect on future altruistic

				values, attitudes, subjective norms, and personal norms
5	Nguyen et al. (2025)	Theory of Planned Behaviour & Value Belief Norm Theory	Data were collected from 587 Vietnamese consumers through a direct survey	Perceived Behavioural Control has a stronger impact on second-hand purchasing intention than attitude, subjective norms, and personal norm.
6	Guiot & Roux (2010)	Exploratory factor analysis	1954 French consumers	Identified saving money, fair prices, and social influences as core motivations for second-hand consumption.
7	Nika Hein (2022)	Value Belief Norm Theory	177 respondents from Germany	The result highlighted that the relation between values, beliefs, and personal norms has a positive influence on recycled products purchase intention, and perceived risk has a negative influence on the purchase intention of recycled products.
8	Koay et al. (2025)	Theory of planned behaviour, Norm activation model, and social influence theory	558 surveys collected from prolific	Theory of Planned Behaviour ranked highest in both in-sample and out-of-sample prediction for second-hand clothing purchase intention in comparison to other mentioned theories.

9	Kim et al. (2020)	Social Identity Theory	850 survey data from consumers in Korea	The result showed that the emotional and social value was the greatest in motivating the intention to purchase second-hand products.

2.2 History of the Second-Hand Market in Finland

Historically, the second-hand market in Finland was widely influenced by the Jewish Communities in Helsinki during the late 19th and 20th centuries, which is recent in comparison to central and southern Europe (Ekholm 2022). The auction was considered the central hub for exchanging second-hand goods, but this was also limited to the elites and social class only who sought quality goods at a lower price (Abbas 2024). According to Ekholm (2019), the Jewish community in Finland started selling used clothes from Russian Soldiers at a second-hand market called Narinkka located in Helsinki. There still lies a place called Narinkkatori next to the Kamppi shopping mall in Helsinki. According to Ekholm (2022), besides the Jewish community, the Finnish Salvation Army also has a long history in second-hand trade. They started their Christmas Kettle (Julupata) tradition in Helsinki in 1906. In 19th-century Helsinki second-hand market was part of the informal economy, which included stolen items and narcotics (Ekholm 2022). The second-hand industry has a long history in the Nordic regions. Before industrialization, people used to buy used goods mainly because they needed them at an affordable price (Ekholm 2022; Abbas 2024).

Today, more than a hundred years later, Finland's second-hand market includes municipality-owned recycling stores, second-hand shops operated by nonprofit organisations like SPR kirpiss, thrift stores, flea markets, and vintage stores. Although there are no accurate statistics on the total value of the second-hand market, according to the Finnish Commerce Federation (2025), the total value of the Finnish circular trade is already 1.4 billion euros. According to PostNord International (2025), clothes and footwear remained the most popular second-hand categories, followed by home

electronics, books, and media. Approximately 66% of Finnish nationals are engaged on purchasing second-hand products in the past year, marking Finland as a leader in circular trade (Posti.fi). Saving money is the strongest motive for buying second-hand products through online stores (Finnish Commerce Federation). Approximately 47% of Finnish nationals said they engage in second-hand shopping because it was cheaper, and 22% agreed with the sustainability concern to engage in second-hand shopping (Postnord).

2.3 Theory of Planned Behaviour (TBP)

The theory of planned behaviour is a key social-psychological model proposed by Ajzen in 1985, which has since received immense attention and recognition. This theory incorporates the factors such as perceived benefits, costs, and the post-purchase outcomes before making a purchase decision (Kian Yeik Koay et al., 2024). The theory of planned behaviour is the extended version of the theory of reasoned action, which explains that if there is complete control over behaviour by a person, then behavioural intention is only sufficient to predict the behaviour (I. Ajzen, 1991). In the context of second-hand shopping, attitude may reflect beliefs about the sustainability, affordability, or quality; subjective norms may involve peer influence or social trend, and perceived behavioural control may relate to convenience and ease of access of the second-hand products. This theory has already been used in various behavioural studies such as second-hand children's clothes, green purchase, reduction in car use and areas of sustainability to analyse the behaviour of consumers (Rodrigues et al.,2023).

Isac Ajzen (1991) explains that performance of behaviour is a joint function of intentions and perceived behaviour control, perceived behaviour control plays an important role in theory of planned behaviour, and it is called as the people's perception of ease or difficulty of performing the behaviour of interest. The theory of reasoned action (Fishbein & Ajzen, 1975) points that the most important factor of behaviour is behavioural intention where the theory of planned behaviour adds perceived control over saying that one may not have the complete volitional control (Montano & Kasprzyk, 2008).

2.4 Value-Belief-Norm Theory (VBN)

The value belief norm theory was developed and introduced by Stern et al in 1999 in the context of social movement support. This theory explains how people's values and beliefs shape their action, it highlights the values like caring for others and nature affect the beliefs about the environment which then influence personal morals and finally behaviours (Nika Hein, 2022). This theory mainly focuses on the pro-environmental behaviour. This theory can reflect personal values such as concern for nature, beliefs about environmental conditions, and a sense of moral obligations, which influence individual actions. Schwartz's norm activation theory emphasis that pro environmental behaviours arise from personal moral norms (AC), activated by awareness of consequences and ascription of responsibility (AR)with empirical support linking these constructs to various environmental actions, this framework integrates personal values, new ecological paradigm, worldwide shaping environmental beliefs and situation specific norms (Stern et al., 1999).

In this model, two main values matter, such as biospheric values (caring about nature and the environment) and altruistic values (caring for other people's well-being). According to Nika Hein (2022) much research has already shown that these two values are related, but they differ, and the biospheric values are usually much stronger motivators to buy eco-friendly or second-hand products. Both values increase the environmental concern to protect the planet.

2.5 Self-Perception Theory

This theory suggests that people figure out why they do something by looking at their own behaviours, for example, a person regularly buying second-hand products may believe that he really cares for the environment, although it was not their initial reason for purchasing second hand products. Chaiken & Baldwin (1981) found that the self-perception process operates most effectively when an individual lacks a clearly pre-existing attitude about a behaviour or object, when attitude is weak, ambiguous or non-existent, people rely on observing their own behaviour as a primary source of information about their feelings. This theory will help explain why people might say they bought second-hand products. According to Daryl J. Bem (1972), self-perception theory

proposed that individuals understand their own internal states such as attitudes and emotions by self-observation of own behaviour and situational cues much like an outside observer world, the theory is influenced by Skinner's behavioural analysis which connects philosophical questions about self-knowledge with the empirical psychology, examining how people infer their inner states when internal cues are not so clear.

This theory gives us a way to understand why people choose to buy second-hand products. Researchers have found several reasons why people shop for used items and all the reasons connect well with the self-perception theory in a meaningful way. Guiot & Roux (2010) explain that people buy second-hand products to find good value and save money. When someone constantly chooses the used products over new, expensive one he/she might observe this behaviour as a smart move and think of himself as a smart shopper. Secondly, the growing number of consumers is very motivated by environmental concerns, and they buy pre-owned items to reduce waste and help the planet. When they observe these eco-friendly actions of themselves, they see themselves as an environmentally friendly person, which ultimately strengthens their commitment to sustainable living (Ferraro & Brace-Govan, 2016). Third is that many people enjoy buying second-hand products only for fun; they love the excitement of hunting for hidden treasures, finding the unique pieces, or experiencing nostalgia through the old item (Bardhi & Arnould, 2005). In all these cases, the act of buying second hand product is not just a simple action because, according to (Roux & Korchia, 2006) these kinds of buying behaviour reinforce their self-concept as someone who values individuality and does not follow the social trends.

3 Conceptual Framework

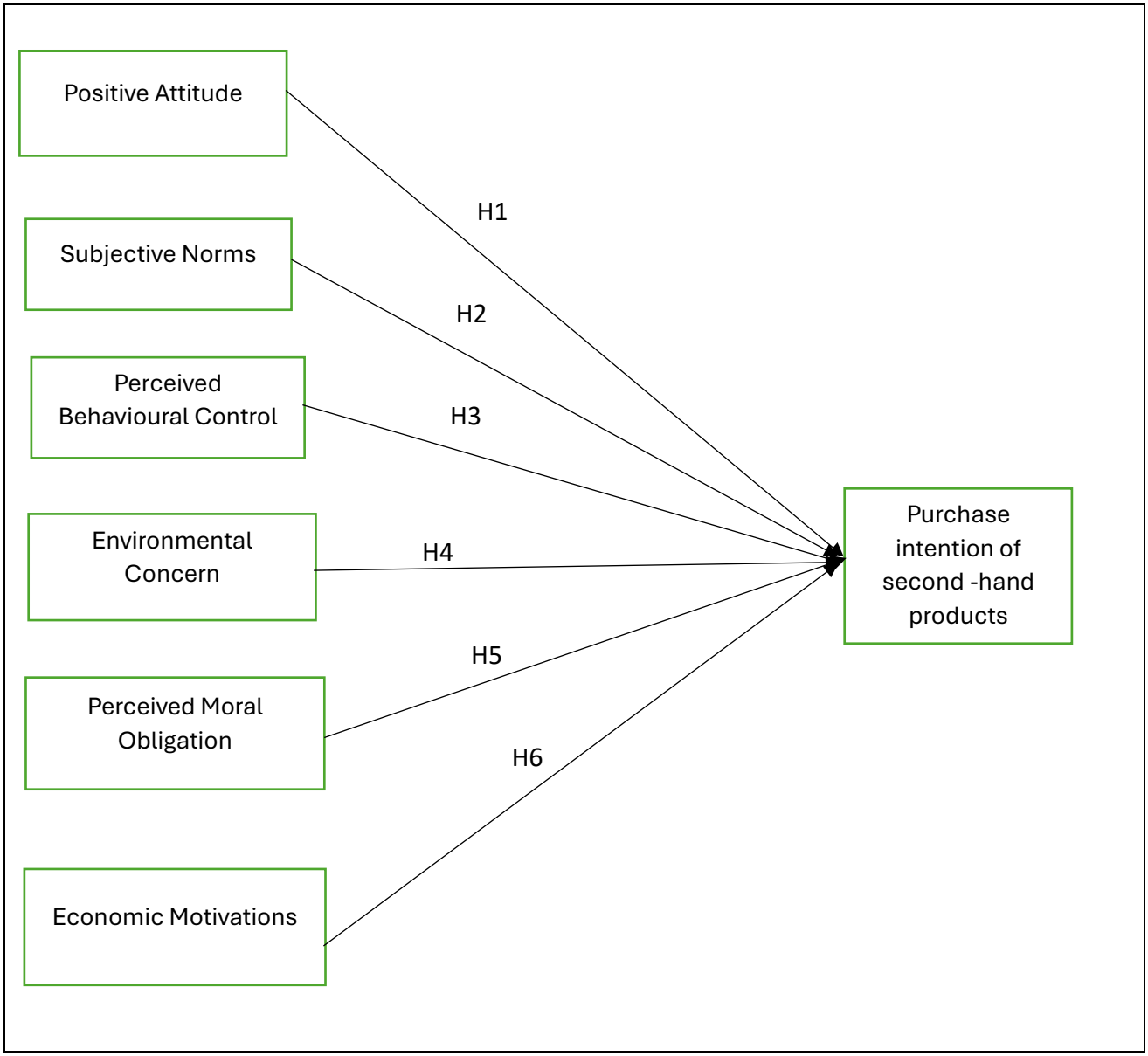
The above-mentioned theories and models have been widely used for research on the intention of customers to buy second-hand products. According to Rodrigues et al. (2023), the theory of planned behaviour has been widely used to examine the behaviour of customers on green purchases, reduction in car use, and purchase of children's second-hand clothing. Wicaksono et al. (2024) also applied the extension of the Theory of Planned Behaviour to find that attitude, subjective norms, and perceived behavioural control positively influenced the intention to purchase second-hand products. TBP VBN theory was used by Nguyen et al. (2025) to measure the intention of people to use recycled products. Thus, our research model will use the TBP and VBN theory along with the social influence theory and the Self Perception Theory to determine what affects the second-hand purchasing intention of people.

The intention to buy second-hand products is positively affected by a positive attitude to perform second-hand shopping and visiting a second-hand shop (Borusiak et al.,2020). Attitude directly affects the second-hand clothes purchasing decision (Herjanto et al.,2023). Similarly, subjective norms have a positive effect on consumers' intention towards the purchase of any products (Azzahra & Purwanegara, 2024). The research conducted by Bouriask et al. (2020) showed that subjective norm impacted negatively on second-hand buying decision, while it showed a moderate effect on the second-hand purchase intention in the research conducted by Purwanto and Isyanto (2020). Perceived behavioural control has a significant positive impact on the second-hand purchasing intention of a person (Koay et al.,2022). The study conducted by Hwang et al. (2015) revealed that moral obligation positively affected the intention of consumers to purchase second-hand apparel in the USA. Similarly, the study conducted by Styven & Mariani (2020) and Akgun & Mezde (2024) showed that one of the three major antecedents of consumer economic motivation, bargaining power price orientation, was one to influence the second-hand purchasing intention, and bargaining power and price orientation influenced the intention positively.

So, variables such as Attitude, behavioural control, and subjective norms have been derived from the theory of Planned Behaviour. Similarly, Environmental concern

(biospheric value) has been derived from Value Belief Norm Theory, and lastly, economic motivation and perceived moral obligation have been derived from Self Perception theory. Thus, we have developed our proposed research model as follows:

Figure 1: Proposed Research Model



3.1 Intention Towards Second-Hand Shopping

Chew (2006) defined behavioural intention as the strength of an individual's intention to perform a behaviour. According to Ajzen (1991), intention is the motivational factor that

indicates how hard people are willing to try and how much effort they are planning to exert to perform the behaviour. Ajzen (1991) also stated that ‘‘behavioural intention can find expression in behaviour only if the behaviour in question is under volitional control’’ (p. 181), which means that when a person's intention to engage in a behaviour is higher than its performance might be stronger. According to Qi Zhou et al. (2025), ‘‘purchase intention and behaviour can be accurately predicted through three primary factors such as attitude, perceived behavioural control and subjective norms’’ (p.03). Many researchers have analysed intention to purchase second-hand products differently (Wijayanti et al.,2024). Mirabi et al. (2015) considered purchase intention as a complex process, while Armstrong & Kotler (2018) stated that purchase intention can occur before the actual purchase is made. Thus, purchase intention is consumers' willingness to purchase a certain product under certain circumstances (Wijayanti et al.,2024).

3.2 Attitude Toward Second-Hand Shopping

Attitudes represent the degree to which a person has a favourable or unfavourable evaluation or appraisal of the behaviour in question (Tornikoski & Maalaoui, 2019; Argyriou & Melewar,2011). In TPB, attitude is determined by behavioural beliefs about the outcomes of performing the behaviour and evaluations of these outcomes (Tornikoski & Maalaoui, 2019). Attitude is considered the most direct predictor of intention in many TPB applications, though its strength varies across contexts. Rodrigues and de Sousa (2023) found that attitudes were the strongest predictor of second-hand purchase intention for children's products. Sharma et al. (2025) confirmed that attitude had the strongest influence on purchase intention within their extended TPB model of second-hand fashion consumption, explaining substantial variance in consumer intentions.

According to the Theory of Planned Behaviour (Ajzen, 1991), intention is a function of three determinants, with attitude being the primary personal factor. When an individual holds a positive evaluation of an action, believing it is good, wise, or enjoyable, as found by Rodrigues and de Sousa (2023), they are more likely to form a conscious plan to

engage in that action. A recent study done by Sharma et al. (2025) reveals that when someone has a positive attitude towards second-hand shopping, they don't see it as a strange action anymore; instead, they see it as a cool and smart move, thus the idea of buying second-hand items feels normal and desirable, and they are more likely to do it. Thus, we propose the following hypothesis as our first hypothesis:

Hypothesis H1: Positive attitude towards second-hand shopping has a positive effect on intention to purchase a second-hand product.

3.3 Subjective Norms

Subjective norms refer to the perceived social pressure to perform or not to perform a behaviour (Borusiak et al.,2020). It comprises two components: perceptions of what important others think one should do and perceptions of what important others do (Borusiak et al., 2020). In second-hand shopping, this includes perceptions of family approval, peer influence, and broader social trends toward sustainable consumption. Social Influence Theory expands this concept beyond simple normative pressure to include how social networks, opinion leaders, and digital communities shape consumption patterns through both direct influence and observational learning (Goldsmith & Goldsmith, 2011). A recent study in an emerging market context found that subjective norms were among the strongest predictors of purchase intention for both general and luxury second-hand fashion products, highlighting the critical role of social acceptance in normalizing second-hand consumption (Nguyen et al., 2026).

While the TPB traditionally links subjective norms directly to intention, there is a strong theoretical and logical basis for its influence on attitude, particularly in a consumption context heavily shaped by social trends. As Goldsmith & Goldsmith (2011) suggest through Social Influence Theory, when people see their close and important ones buying second-hand products, it makes them feel buying second-hand items is normal and acceptable. This is especially important for the young consumers because they are more influenced by the social trends or heavily influenced by what their friends or family do (Sharma et al., 2025). Research conducted in China by Liang & Xu (2018) showed that

people started buying second-hand clothes by observing others doing so. Subjective norms play an important role in deciding on whether to purchase second-hand products because the words of a family member or friend will have a greater impact on the decision (Hasan et al., 2004). Thus, the second hypothesis is proposed as follows:

Hypothesis H2: Subjective norms have a positive effect on intention toward second-hand shopping.

3.4 Perceived Behavioural Control (PBC)

When talking about the perceived behavioural control, second-hand shopping is all about how much a person believes that they can perform a behaviour (Ajzen, 2020). In other words, the more a person feels confident and comfortable to buy second hand products, the stronger their intention to buy them (Koay et al., 2023). Ajzen (1991), in his Theory of Planned Behaviour, says that people need to feel capable of doing something before they form the intention to do it. In the theory of planned behaviour (Ajzen 1991;2020), perceived behaviour control plays an important role in shaping both intentions and actions. A positive attitude and social pressure can lead to a strong intention to perform a behaviour, but a person only shows confidence to perform that behaviour if they believe that they have control over the situation.

People are likely to carry out certain behaviour when they feel that they feel capable and they have proper resources and support (Ajzen 2020). Perceived behavioural control, a key part of TPB, means that only having a positive attitude is not enough to act; they need to feel how much control they have over performing a behaviour. In the case of second-hand buying, perceived behavioural control means people need both knowledge about what and why they should buy and access, as if they have enough time and a nearby location to perform the second-hand buying behaviour (Borusiak et al., 2020).

The recent research confirms that PBC remains a significant predictor of second-hand purchase intentions even when accounting for economic and environmental motivations (Sharma et al., 2025). The relationship of perceived behavioural control on second-hand purchasing intention was shown by Chaturvedi et al.2020 on second-hand clothing

intention of consumers, and Koay et al. (2024) and Kien et al. (2024) also validated this by confirming perceived behavioural control acted positively for the second-hand clothing purchases. Thus, the third hypothesis is proposed as follows:

Hypothesis H3: Perceived behavioural control positively influences the intention to buy second-hand products.

3.5 Environmental Concern:

People concerned with the environment show a positive attitude towards purchasing second-hand products (Kawulur et al.,2022). Environmental Concern (Biospheric Value) represents an individual's affective and cognitive orientation toward environmental issues, encompassing awareness of problems, emotional involvement, and perceived personal relevance (Sari et al., 2025). Fransson and Garling (1999) conceptualize environmental concern as having cognitive and conative dimensions. In the VBN chain, environmental concern serves as a fundamental belief that triggers awareness of consequences. For second-hand shopping, this concern specifically relates to beliefs about waste reduction, resource conservation, and mitigating the environmental impact of production and consumption. Recent empirical studies have demonstrated that environmental concern significantly influences both general second-hand purchase intentions and broader circular fashion behaviours (Sari et al.,2025; Nguyen et al., 2026). Sharma et al. (2025) found that environmental concern emerged as the most significant predictor of a positive attitude towards second-hand clothing, followed by mindful consumption.

Fransson and Garling (1999) describe environmental concern as having two cognitive and affective dimensions. When an individual is concerned about environmental problems (e.g., waste resource depletion), they are more likely to become aware of the adverse consequences of not engaging in pro-environmental behaviours, which is Awareness of Consequences. This refers to whether the individual is aware enough about the negative impact on others and the environment because they are not engaged in pro-social behaviour (Gomes et al.,2022). Joanes (2019) found that when people are

aware of these issues, they tend to shop less and even they end up shopping at second-hand stores. Bourisk et al. (2020) found that when people start being aware of the environment, it directly affects their intention to buy second-hand products. Thus, hypothesis four is proposed as follows:

Hypothesis H4: Environmental concern has a positive effect on intention to buy second-hand products.

3.6 Perceived Moral Obligation:

Moral obligation is described by Usyal et al (2022, p.447) as " motivational force towards a certain action that later could end in a decision to perform a behaviour.'' Perceived Moral Obligation is a personal internal state concerned with the extent to which a person feels a sense of responsibility to act or behave morally when he/she is stuck in an ethical dilemma (Haines et al., 2007). According to Uysal et al. (2022) Peoples social and political attitudes are based on their moral concerns. In Schwartz's Norm Activation Model and its extension in VBN Theory, moral norms are activated by awareness of adverse consequences and ascription of responsibility (Borusiak et al.,2020). For second-hand shopping, this involves feeling personally obligated to reduce waste, extend product lifecycles, and contribute to circular economy principles. (Shaw & Shiu, 2002) provided foundational evidence for the value of incorporating ethical obligation into behavioural prediction models, demonstrating its usefulness in understanding ethical consumer choice beyond traditional TPB variables. Research combining TPB with the Norm Activation model has shown that moral considerations strongly enhance the explanatory power of models predicting second-hand clothing purchases (D'souza et al., 2026).

The concept of moral obligation involves how consumers perceive a behaviour as moral (Koay et al., 2024). According to Zhang et al. (2020), for behaviour with clear ethical implications like sustainable consumption, moral considerations can be as powerful, or even more powerful, than purely rational or economic considerations in shaping what people plan to do. Shaw and Shiu (2002) confirmed that ethical obligation contributes significantly to the prediction of intention within ethical consumer contexts, supporting

the extension of TPB to incorporate moral dimensions. Thus, the fifth hypothesis is proposed as follows:

Hypothesis H5: Perceived moral obligation has a positive effect on intention to purchase second-hand products.

3.7 Economic Motivation:

Financial/Economic Motivation refers to the drive to obtain financial benefits through second-hand shopping, including cost savings, access to higher quality goods at lower prices, budget stretching, and bargain hunting enjoyment (Bardhi and Arnould 2005). Guiot and Roux (2010) identified economic motivation as a primary dimension in their second-hand shoppers' motivation scale, encompassing both practical financial necessity and the hedonic pleasure of finding good deals. Bardhi and Arnould (2005) further distinguished between necessity-driven economic motivation (for low-income consumers) and opportunity-driven economic motivation (for bargain seeking across income levels). Recent research consistently identifies perceived economic benefits as one of the strongest predictors of purchase intention across both general and luxury second-hand fashion segments, emphasizing the enduring importance of affordability as a consumption driver (Nguyen et al., 2026). Studies in diverse geographical contexts, from Indonesia to Vietnam, confirm that economic benefit remains a primary motivator for second-hand clothing purchases (D'souza et al., 2026& Nguyen et al., 2026).

An attitude, as defined in the TPB, is formed by beliefs about the outcomes of a behaviour, so when a consumer is motivated by economic concerns, they hold a strong belief that second-hand shopping will lead to the positive outcome of saving money or finding bargains (Guiot & Roux, 2010). Because this outcome (financial gain) is positively valued, the consumer links the behaviour with a favourable outcome. Over time, repeated positive associations between "second-hand shopping" and "financial benefit" shape an overall positive evaluative judgment of the behaviour. Whether the motivation stems from necessity or the thrill of the hunt (Bardhi & Arnould, 2005), the consistent link to a desirable result fosters a favourable attitude. This pathway is robust across

different market segments–research confirms that perceived economic benefits positively influence purchase intentions for both general and luxury second-hand fashion products, though the effect may be slightly more pronounced for general second-hand items (Nguyen et al., 2026). Thus, the sixth and the last hypothesis is proposed as follows:

Hypothesis H6: Economic motivation has a positive effect on intention to do second-hand shopping.

3.8 Summary of Proposed Hypothesis

The summary of our proposed hypothesis is presented in the table below:

Table 2: Summary of Proposed Hypothesis

H1	A positive attitude towards second-hand shopping has a positive effect on intention to purchase a second-hand product.
H2	Subjective norms have a positive effect on intention toward second-hand shopping.
H3	Perceived behavioural control positively influences the intention to buy second-hand products.
H4	Environmental concern has a positive effect on intention to buy second-hand products.
H5	Perceived moral obligation has a positive effect on intention to purchase second-hand products.
H6	Hypothesis H6: Economic motivation has a positive effect on intention to do second-hand shopping.

4 Methodology

Research methodology refers to the systematic, scientific approach used to analyse and solve a research problem. As Kothari (2004) explains, it encompasses the entire sequence of steps and techniques a researcher employs throughout their investigation. The current study follows this structured approach by implementing the following key methodological steps: research design, sampling and data collection, pre-testing construct measurement, and the assessment of construct reliability.

4.1 Research Design

The major stage that comes after the formulation of the research problem is designing research plans. Research design is the master plan that frames the methods and procedures, from which the required information is collected and analysed (Zikmund, Carr, & Griffin, 2013). Qualitative, quantitative, and mixed methods are three categories of research methods that are employed generally for resolving research problems.

A research approach about finding out and understanding the meaning people ascribe to a research problem and attempting to 'interpret or solve it' can be understood as a qualitative research method (Creswell& Creswell, 2017). It involves the collective study of empirical research materials, including folklore, individual experiences, cultural texts, documents or historical evidence, that describe the chronological development of the problem and its influence(Denzin, Lincoln, & Giardina, 2006). In fact, it is the study of text, interviews or audio-visual materials as a data source rather than statistics.

If the hypotheses derived from objective theories are to be tested by examining the interrelationships among variables, such an approach is termed quantitative research. In this approach, statistical scales are the key analyzers of the variables used to draw a conclusion, often in a sophisticated and standardized format. This is somewhat adapted as a deductive approach in which the likeness of the truth is sought with some acceptable marginal error, following standardized tests that are usually carried out in a laboratory (Creswell & Creswell 2017).

On the other hand, involving qualitative and quantitative data collectively to address and answer a research problem is called a mixed-method approach. Philosophical ideas are combined with theoretical frameworks, assuming integral analysis may result in better insight into the research problem(Creswell & Creswell, 2017). The complexity of the research increases with the use of mixed approaches, as they are to be analyzed individually, and the interlink between qualitative and quantitative analysis is difficult to establish. Since hypotheses drawn from motivating factors affect people's buying of secondhand products, quantitative research methods are favorable here. To carry out the research method, 'survey through internet-based questionnaires' was employed due to the lack of reliability in secondary data sources.

Surveys can be grouped into factual, exploratory, and inferential. A factual survey aims to gather objective data from individuals, where these responses are typically verifiable or dichotomous (e.g., right/wrong, yes/no). On the other hand, if the survey undergoes a better understanding of the problem rather than drawing results from it, such a survey is called an exploratory survey. In most cases, the survey is done for future research purposes. Similarly, inferential survey aims at the establishment of the interrelationship between presumptions and variables and identifying what causes effect of others by separating the 'dependent and independent variables.' Academics conducting management research particularly follow this method of survey(Easterby-Smith et al., 2008)

In business and market research where more than one variable is involved, a distinction between dependent and independent variables is compulsory. A variable that requires other variables to be predicted or defined is called a dependent variable. A variable that does not depend upon other variables for its measurement but affects the outcome of the dependent variable in some way is called an independent variable (Zikmund et al., 2000). In the following research attitude, subjective norm, perceived behavioral control, moral obligation, economic concern, and environmental concern are independent variables, whereas intention to purchase second-hand products is the dependent variable.

4.2 Sampling and Data Collection

If the characteristics of a larger domain of population can be deduced by taking a smaller subgroup, such that the estimation is quicker and less expensive with a clear accuracy, the process is defined as sampling. But the selection of the group must be scientific and should include all the representatives of the larger domain called the population (McDaniel & Gates, 2016).

Choosing the right sampling method during sampling plan development will effectively address the research's motivation within the available time and financial constraints. Of all the categories of sampling methods chosen worldwide by researchers, the probability sampling method and the non-probability sampling method are the most widely used and scientifically sound alternatives of the method (McDaniel & Gates, 2016).

In the probability of sampling method, each member belonging to the population carries a definite and non-zero chance during selection. On the other hand, in the non-probability sampling method, specific members of the population domain are targeted, who are easily approachable, so that research can be carried out in less time with low financial expenditure(McDaniel & Gates, 2016).

As the research purpose is completely academic, a non-probability sampling method was chosen. The other important factors that favored the non-probability sampling method were time constraints and a lack of adequate financial resources. The population for the survey was chosen from the people living in Finland who use second-hand products or have the potential to purchase second-hand products. The target population was chosen as those who are residing in Finland, as the research title particularly refers to. By definition, target population refers to the possible no of people who could take part in your survey (Zikmund et al., 2000).

4.3 Construct Measurement

To enable a standardized and sophisticated method of data collection, a structured questionnaire was developed for this thesis. The instruments were designed to measure the key variables influencing consumer intention to purchase second-hand products.

The questionnaire was divided into two main sections. The first section comprises demographic information (e.g., age, gender), and the second section measures the core construction of the research model: Attitude, Subjective Norm, Perceived Behavioral Control, Environmental Concern, Moral Obligation, and Economic Motivation.

All the items in the second section were measured using a five-point Likert scale ranging from 1(strongly Disagree) to 5 (Strongly Agree). The items were adapted from prior validated studies to ensure reliability and validity. The specific items, corresponding constructs, hypotheses, and sources are presented in the table below:

Table 3: Construct Measurement

Construct	**Item code**	**Measurement Item**	**Source**
Attitude	ATT1	Buying second-hand products is a smart idea	Rodrigues et al. (2023)
	ATT2	Second-hand products are cheaper.	
	ATT3	I feel satisfied when I buy second-hand products.	
	ATT4	Second-hand products are generally well maintained.	
Subjective Norm/Social Influence	SN1	People who are important to me think that I should buy second-hand products.	Rodrigues et al. (2023)
	SN2	People whom I respect and admire, I should buy second-hand products.	
	SN3	I find my family and relatives using secondhand products.	
	SN4	People I know generally have positive opinions about second-hand products.	

Perceived Behavioral Control	PBC1	Second-hand products are easily available	Rodrigues et al. (2023)
	PBC2	I am well informed about how to use a second-hand product	
	PBC3	There are many well-trusted shops and platforms to buy second-hand products.	
	PBC4	I am confident that genuine products can be purchased second-hand.	
Environmental Concern	EC1	I am inspired with environmental concerns to buy second-hand products.	Rodrigues et al. (2023)
	EC2	Second-hand products help preserve the environment.	
	EC3	Second-hand products are less likely to harm the ecosystem.	
	EC4	Using second-hand products helps reduce waste and conserve natural resources.	
Moral Obligation	MO1	I feel morally obliged to buy second-hand products	Guiot & Roux (2010)
	MO2	My conscience tells me to buy second-hand products	
	MO3	I should choose second-hand products when they are of good quality.	
	MO4	My principles insist I choose second-hand products over the new ones.	

Economic Motivation	ECOM1	I prefer to buy second-hand products as they have a reasonable price.	Yang et al. (2024)
	ECOM2	Since I can bargain while buying a second-hand product, I prefer to buy it.	
	ECOM3	Paying less for a second-hand product saves me money.	
	ECOM4	Buying second-hand products boosts the country's economy	
Intention To Purchase	ITP1	I intend to purchase a second-hand product of my choice soon	(Chen and Deng 2016; Wang, 2010)
	ITP2	The likelihood of going second-hand shopping is high for me	
	ITP3	I plan to go second-hand shopping very soon.	Yan et al. (2024)

4.4 Sample Characteristics

We were able to collect 147 valid survey data from a week-long survey distribution through social media platforms such as Facebook Messenger, WhatsApp, and Gmail. All the valid response represents sample from the target population. The respondents' ages vary from below 18 to 40 years old, with a mean age of 28 years. Most of the respondents were male, with 53.1%, and female, of 46.9%. The responses collected consisted of a large proportion of employed participants (56.5%), with the second-largest proportion being students (25.9%), while self-employed made up 6.1%, and 11.6% were unemployed. 25.2% of the total participants earned less than 500 euros, while 21.1% earned 500-1000 euros, and the largest proportion of the collected data, 31.3%, earned 1001-2000 euros in a month. All the respondents were living in Finland,

while 27.9% were Finnish nationals and the other 72,1% were other nationalities living in Finland. The largest proportion of the collected responses said their highest level of study was a master's; 46.9%. 43.5% had a bachelor's degree, 8.8% completed high school, and the remaining 0.7% had a PhD. The summary of the sample collected is presented on the table below.

Table 4: Sample Description

Sample description		**Frequency**	**Percentage**
Age	Less than 18	3	2.0%
	18-30	93	63.3%
	31-40	49	33.3%
	40 Above	2	1.4%
Gender	Male	78	53.1%
	Female	69	46.9%
Nationality	Finland	41	27.9%
	Others	106	72.1%
Do you live in Finland?	Yes	147	100%
Employment Status	Employed	83	56.5%
	Unemployed	17	11.6%
	Self Employed	9	6.1%
	Student	38	25.9%
	Retired	0	0
Monthly Income	Less than 500	37	25.2%
	500-1000	33	22.4%
	1001-2000	46	31.3%
	More than 2000	31	21.1%
Highest Education	High School	13	8.8%
	Bachelors	64	43.5%
	Masters	69	46.9%
	PhD	1	0.7%
Purchase Frequency	Once in a week	11	7.5%
	Once in a month	48	32.7%
	Once in three months	43	29.3%
	Once in a year	45	30.6%

4.5 Methods of Data Analysis

This section explains how the collected data is analysed in this research. Following the quantitative data analysis in this research, all the collected data were put into the IBM Statistical Product and Service Solution (SPSS) version 30 to run the data and conduct an analysis. Additionally, MS Excel has been used extensively alongside SPSS for data analysis. The result obtained is presented in the various tables with supporting interpretations.

Reliability testing is done to check if the measurement items are consistent. Validity testing is done to make sure the research measures what it is supposed to measure. In addition, correlation analysis and multiple linear regression analysis have been conducted to study the relationship between the variables and to determine whether the results are statistically significant.

5 Data Analysis

The previous chapters introduced the study, reviewed the literature and theories, and the conceptual framework, along with the research methodologies incorporated in this research. Now, this chapter deals with the analysis, presentation, and interpretation of the collected data and their outcomes. Before the data were imported to SPSS version 30, all the data were thoroughly checked after the final collection in MS Excel and sorted according to the homogeneous components. SPSS 30 was finally used to further analyse the data. The questionnaire had 6 independent variables (Attitude, Subjective Norms, Perceived Behavioural Control, Environmental concern, Moral obligation, and Econmic Motivation) and a single dependent variable (buying intention).

At first, construct reliability and validity testing were done to measure the accuracy. Cronbach's alpha coefficient was used to measure the internal consistency of reliability and to measure the validity of the research construct. Convergent validity is conducted as suggested by Campbell and Fiske (1959).

In the second stage, the hypothesis testing was done using a multiple linear regression analysis assessing buying intention as a dependent variable and attitude, subjective norms, perceived behavioural control, environmental concern, moral obligation, and economic motivation as independent variables. The value derived from the linear regression analysis helped the author to conclude which variables positively influenced the buying behaviour of consumers towards the second-hand products in the context of Finland.

5.1 Measurement Model Analysis

One method to generate useful and trustworthy research findings is adopting a novel approach to assessing the reliability and validity of the research (Roberts et al.,2006). As explained by Easterby-Smith et al. (2021, p.645) ''A measurement model is the relationship between a set of observed variables and the construct that they are

intended to measure.'' Reliability and Validity testing were done to measure the selected variables and constructs.

5.1.1 Item reliability

According to Joope 200, cited by Nahid Golafshani (2003, p.598) ''The extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability, and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable (p. 1).'' The three types of reliability identified in quantitative research by Golafshani (2003) are: whether a measurement yields the same result when repeated; whether a measurement remains consistent over time; and whether measurements taken during the same period are similar. The measuring instrument is considered reliable when it produces the same or comparably the same result when it is measured repeatedly (Shodiya and Adekunle, 2022).

A reliability test is conducted to assess the internal consistency of measurement items (Yan et al., 2024) and to maintain consistency in measuring the respective research construct (Bryman and Bell, 2011). In this research, the threshold of 0.70 is considered to measure the reliability as prescribed by Easterby-Smith et al. (2015)

Table 5: Reliability measurement of constructs

Construct	**Measurement Items**	**Cronbach alpha**
Attitude	ATT1 ATT2 ATT3 ATT4	.712
Subjective Norm	SN1 SN2 SN3 SN4	.761

Perceived Behavioural Control	PBC1 PBC2 PBC3 PBC4	.719
Environmental Concern	EC1 EC2 EC3 EC4	.779
Moral Obligation	MO1 MO2 MO3 MO4	.841
Economic Motivation	ECOM1 ECOM2 ECOM3 ECOM4	.735
Intention to Purchase	ITP1 ITP2 ITP3	.700

Table 3 presents the reliability measurements (Cronbach's alpha) for 26 measurement items across 7 constructs; the alpha values range from 0.700 to 0.841. The higher the value of Cronbach's alpha, the greater the covariance and correlations (Yan et al.,2024). Among all constructs, Moral Obligation has the highest alpha value of 0.841, indicating that MO1, MO2, MO3, and MO4 exhibit greater covariance and correlation. All the research constructs have a value greater than 0.7, which suggests that all the constructs have an acceptable level of reliability and consistency.

According to the table, the lowest alpha measuring construct is Intention to purchase (0,700), which might be because it has only three measurement items. Thus, all the listed

items on each construct possess a satisfactory level of internal consistency and item reliability as considered by Easterby-Smith et al. (2015).

5.1.2 Validity of the Constructs

Validity in quantitative research is defined as:

‘‘Validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are. In other words, does the research instrument allow you to hit "the bull’s eye" of your research object? Researchers generally determine validity by asking a series of questions and will often look for the answers in the research of others.’’ (Joope 2000, as cited in Golafshani 2003, p.599).

The validity of research is determined by the help of Convergent Validity and Discriminant Validity (Campbell and Fiske, 1959). Thus, this research follows the same concept of convergent validity proposed by Campbell and Fiske (1959).

Convergent Validity is one of the topics related to construct validity. It states that the tests having the same or similar constructs should be highly correlated (Lan Chin and Yao, 2024). Convergent validity shows the extent to which multiple items measure a common construct (Carlson and Herdman, 2012). Convergent validity is measured by the average variance extracted (AVE) >0.50 (Fornell & Larcker, 1981).

Table 6: Convergent Validity

Construct	**Measurement Items**	**Composite Reliability (CR)**	**Average Variance Extracted (AVE)**
Attitude	ATT1 ATT2 ATT3 ATT4 (Excluded)	0.707	0.531
Subjective Norms	SN1 SN2 SN3 (Excluded)	.835	0.649

	SN4		
Perceived Behavioural Control	PBC1 PBC2 PBC3 PBC4	0.701	0.523
Environmental Concern	EC1 EC2 EC3 EC4(excluded)	0.734	0.501
Moral Obligation	MO1 MO2 MO3 MO4	0.719	0.545
Economic Motivation	ECOM1 ECOM2 ECOM3 ECOM4	0.723	0.594
Intention to Purchase	ITP1 ITP2 ITP3	0.796	0.616

Table 4 depicts the summary of Composite Reliability and Average Variance Extracted for all the constructs. Initially, Subjective Norm and Environmental Concern were measured with all 4 items, but during the measurement model, Items SN3 from Subjective Norm, ATT4 from Attitude and EC3 from Environmental Concern were excluded due to inadequate contributions to composite reliability and average variance extracted. After removing these items, the construct met acceptable validity levels. As presented in the table, the composite reliability and AVE meet the acceptable criteria of CR > 0.7 and AVE > 0.5 (Hari et al., 1998). Thus, all constructs have met the criteria; hence, convergent

validity is established based on the CR and AVE. The calculation table of CR and AVE is in Appendix 1.

Composite Reliability and Average Variance Extracted (AVE) values were calculated using the following formula:

$$CR = \frac{(\sum \lambda_{\mathrm{i}})^2}{(\sum \lambda_{\mathrm{i}})^2 + \sum \theta_{\mathrm{i}}}$$

$$AVE = \frac{\sum \lambda_i^2}{n}$$

- λ_i : standardized factor loadings
- $\Theta_{i:}$ error variance for each indicator

5.1.3 Correlation Analysis

Correlation Analysis is a statistical tool to measure the strength and direction of the relationship between two or more variables (Franzese and Aluliano, 2019). Correlation doesn't show the cause-and-effect relationship between the dependent and independent variables; it only shows the direction or strength possessed by two variables in the form of positive or negative (Zaid, 2015).

The table below presents the correlation matrix between constructs and variables, assessed using Pearson's coefficient.

Table 7: Correlation Table

Correlations							
	ATT	SN	PBC	EC	MO	ECOM	ITP
ATT	1						
SN	,536**	1					
PBC	,497**	,529**	1				

EC	,427**	,367**	,570**	1			
MO	,511**	,513**	,516**	,536**	1		
ECOM	,461**	,276**	,467**	,564**	,527**	1	
ITP	,513**	,444**	,339**	,396**	,504**	,517**	1
** Correlation is significant at the 0.01 level (2-tailed).							

The author aims to evaluate the correlations among Attitude (ATT), Subjective Norm (SN), Perceived Behavioural Control (PBC), Environmental Concern (EC), Moral Obligations (MO), Economic Concern (ECOM), and Intention to Purchase (ITP) among respondents. The correlation matrix shows that the relationships between all the variables are positive and statistically significant at 0,01 level, which is an indication of a coherent and interrelated theoretical structure.

Attitude (ATT) demonstrates a strong relationship with Moral Obligation (MO; r= 0,511) and Intention to Purchase (ITP; r=0,513), indicating that more favourable attitudes are associated with higher motivation and stronger behaviour intention. ATT is also showing a moderate relation with PBC; r=0,497 and SN; r=0,563.

Social Norms (SN) is also demonstrating a strong relationship with Moral Obligation with r=0,513, and a relatively stronger relationship with ATT with r= 0,563. However, Social Norms have a weaker relation with Economic Motivation (ECOM), which indicates that social influence is less influential in shaping economic motivation compared to other constructs.

Perceived Behavioural Control (PBC) is most strongly associated with Environmental concern (EC; r=0,507) and shows a moderate link with MO and ECOM, with values of r=0,516 and r=0,467 respectively. Economic Concern (EC) is also showing a strong correlation with ECOM and Moral Obligation. Moral Obligation (MO) is strongly interrelated with EC, PBC, SN, and ATT.

Finally, talking about the dependent variable Intention to Purchase (ITP), it shows its strong correlation with ECOM with r value of 0,217, ATT with r value of 0,513 and MO with r value of 0,504 this indicates that behavioural intention is primarily motivated by attitude, moral obligation and economic motivation. Subjective Norm; r=0,444 and EC; r= 0,396 shows the moderate relationship with ATT, while it has the weakest relationship with PBC, with r= 0,339. Thus, PBC is less influential compared to attitude and other motivational drivers in this context.

5.1.4 Regression Analysis and Hypothesis Testing

Regression Analysis is a statistical tool for the investigation of the relationships between variables (Sykes, 1993). In regression analysis, a researcher tries to ascertain the effect of one variable to other (Sykes, 1993). Regression analysis is one of the most used statistical tools for identifying and evaluating the relationship between dependent and independent variables (Zaid, 2015).

The multiple linear regression analysis is performed in this study, taking Intention to buy (ITP) as a dependent variable and Attitude (ATT), Subjective Norm (SN), Perceived Behavioural Control (PBC), Environmental Concern (EC), Moral Obligation (MO), and Economic Motivation (ECOM) as independent variables. The outcome of the analysis is in Table 6 and Appendix 3.

According to Sheth et al. (1991), each consumption value is independent of others in the theory of consumption value, and when the variables are very highly related to each other, it makes the result more complex to interpret (Kraha et al., 2012). In other words, when using multiple regression analysis, it creates challenges for researchers (Stevens, 2002). Thus, the multicollinearity was checked, which is presented in Appendix 4.

Multicollinearity means the linear relationship between independent variables that are closely correlated with one another in a linear combination (Shrestha, 2020). In this study, the multicollinearity among the several variables was further examined using collinearity diagnostics, including eigenvalues, condition index, and variance proportions (Shrestha, 2020). The commonly accepted guidelines are Variance Inflation Factor VIF>5

(Shrestha, 2020). The Variance Inflation factor values for all the independent variables ranged from 1,45 to 2,08. Thus, we conclude that multicollinearity does not pose a serious problem in our study.

Similarly, the model summary indicates that the regression model explained a moderate proportion of variance in the dependent variables with an R^2 = 0,430 and adjusted R^2 = 0,406. The ANOVA result showed that the overall regression model was significantly fit with F= 17,634 and P< 0,001 which is less than 5, thus the exploratory power of the proposed model has been proved.

Table 8: Multiple Linear Regression and Variance Inflation Factor

Coefficients a								
Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1,155	,279		4,140	<,001		
	ATT	,206	,078	,223	2,631	,009	,575	1,740
	SN	,189	,076	,210	2,467	,015	,571	1,751
	PBC	-,121	,080	-,134	-1,509	,134	,521	1,921
	EC	,032	,082	,035	,392	,695	,532	1,879
	MO	,136	,072	,170	1,906	,059	,521	1,920
	ECOM	,285	,079	,310	3,632	<,001	,568	1,760
a Dependent Variable: ITP								

The result of the hypothesis testing has been concluded based on multiple linear regression analysis as follows:

Hypothesis 1(H1): Hypothesis 1 stated that a positive attitude (ATT) towards second-hand shopping has a positive effect on intention to purchase a second-hand product. Based on the result of the multiple linear regression analysis for ATT, its standardized coefficient beta is 0,223 (which is positive), t-value is 2,631 and its p-value is 0,009 (which is less than 0,05; P-Value > 0,05). This proved that a positive attitude has a positive and significant impact on the intention to purchase second-hand products. Hence, Hypothesis 1 is accepted.

Hypothesis 2 (H2): Hypothesis 2 stated that Subjective norms (SN) have a positive effect on intention toward second-hand shopping. Based on the result obtained from the multiple linear regression analysis for SN, the standardised coefficient beta is 0,210 (which is positive), the t-value is 2,467 and the p-value is 0,015, which is less than 0,05 (p-value>0,05). To be significant, it must be p-value<0,05, thus it proved that Subjective Norms has a positive and significant impact on the intention of people to purchase second-hand products. Hence, Hypothesis 2 is accepted.

Hypothesis 3 (H3): According to hypothesis 3, perceived behavioural control (PBC) positively influences the intention to buy second-hand products. Based on the result of the multilinear regression analysis, the standardized coefficient beta is -0,134 (which is negative), the t-value is -1,509 and the p-value is 0,134 which is higher than 0,05. This indicates that the Perceived Behavioural Control has a negative and non-significant impact on the intention of people to purchase the second-hand products. PBC is statistically significant in explaining the intention of people to purchase second-hand products. Hence, hypothesis 3 is not accepted

Hypothesis 4 (H4): Hypothesis 4 stated that Environmental Concern (EC) has a positive effect on intention to buy second-hand products. The result from the multilinear regression analysis shows that the standardised coefficient beta is 0,082 (which is positive), the t-value is 0,392 and the p-value is 0,695 which is greater than 0,05. Thus, we can conclude that the economic motivation has a positive but non-significant impact on the second-hand purchase intention of consumers. Thus, Hypothesis 4 is not accepted.

Hypothesis 5 (H5): Hypothesis 5 stated that Perceived moral obligation (MO) has a positive effect on intention to purchase second-hand products. The result obtained from the multilinear regression analysis for MO shows its standardized coefficient beta is 0,170 which is positive, the t-value is 1,906 and the p-value is 0,059 which is greater than 0,05. Thus, the conclusion can be made that the perceived moral obligation is not statistically significant in explaining the purchase intention of people. Hence, Hypothesis 5 is rejected.

Hypothesis 6 (H6): Hypothesis 5 stated that Economic motivation (ECOM) has a positive effect on intention to do second-hand shopping. The result of the regression analysis shows that the standardised coefficient beta is 0,310 which is positive, the t-value is 3,632 and the p-value is 0,001 which is less than 0,05. To show the significant impact, the p-value must be smaller than 0,05. Thus, the statement given on hypothesis 6 shows the positive and significant impact on the intention to purchase second-hand products. Hence, Hypothesis 6 is accepted.

5.1.5 The Summary of Hypothesis Findings

The six different hypotheses have been formulated, incorporating Positive Attitude (ATT), Subjective Norms (SN), Perceived Behavioural Control (PBC), Environmental Concern (EC), Perceived Moral Obligation (MO), and Economic Motivation (ECOM) as independent variables and Intention to Purchase (ITP) as a dependent variable to identify which variable affects consumers intention to purchase second hand products in Finland. The significance level is tested, implying a multiple linear regression analysis using the statistical package tool SPSS version 30. The following table shows the summary of hypothesis findings:

Table 9: Summary of Hypothesis findings

Proposed Hypothesis	Hypothesized Effect	Findings
H1: A Positive Attitude (ATT) towards second-hand shopping has a positive effect on intention to purchase a second-hand product.	Positive	Accepted
H2: Subjective Norms (SN) have a positive effect on intention toward second-hand shopping.	Positive	Accepted

H3: Perceived Behavioural Control (PBC) positively influences the intention to buy second-hand products.	Negative	Rejected
H4: Environmental Concern (EC) has a positive effect on intention to buy second-hand products.	Positive	Rejected
H5: Perceived moral obligation (MO) has a positive effect on intention to purchase second-hand products.	Positive	Rejected
H6: Economic motivation (ECOM) has a positive effect on intention to do second-hand shopping.	Positive	Accepted

6 Discussion and Conclusion

This research aims to identify the major variables that drive the buying behaviour of people towards second-hand shopping in the context of Finland. The conceptual model was developed based on the prior literature on the Theory of Planned Behaviour, Value Belief Norm theory, and self-perception theory. The main contribution of our research model is that it brings together different variables from different theories, where the earlier research often incorporated a single theory, such as TBP or VBN. However, the real-life decisions are more complex; thus, this model combines multiple theories and their variables to give a clear and complete understanding of consumer behaviour. This model not only combines different theoretical perspectives but also shows how motivations can develop and can be influenced by the context.

Since the main objective of the study was to determine the driving factors for the people's intention to buy second-hand products in Finland, our research question stated: What are the primary factors that motivate consumers' intention to buy second-hand products in Finland? And our study is followed by six hypotheses explaining the relationship between constructs in the research model. This research successfully examined the factors influencing purchase intention, including Attitude, Subjective Norms, Perceived Behavioural Control, Environmental Concern, Moral Obligation, and Economic Motivation.

An online questionnaire was designed to collect information about consumer demographics, preferences, and their values for consumption. The result of the collected data indicates that there exists a higher level of internal consistency among the measurement items. Similarly, the correlation analysis and multiple linear regression analysis were performed to identify the relationship between variables, for hypothesis testing and verifying them. Intention to Purchase (ITP) was a dependent variable reflecting the customer's buying behaviour and Attitude (ATT), Subjective Norms (SN), Perceived Behavioural control (PBC), Environmental Concern (EC), Perceived Moral Obligation (MO), and Economic Benefit (ECOM) were independent variables. The following points can be highlighted as a conclusion based on quantitative analysis:

First, the result of the multiple linear regression analysis confirmed that out of six proposed hypotheses, only three of them were accepted. The analysis confirms that not all the variables influence the intention of people to buy second-hand products. The result indicates that Positive Attitude (ATT), Subjective Norms (SN), and Economic Motivation are the factors that influence the buying behaviour towards the second-hand products in the Finnish context. According to Kuupole et al (2024), People buy second-hand products because of their financial background. Some people tend to save money, while others tend to buy second-hand clothes for efficiency. The study conducted by Borusiak et al. (2020) revealed that constructs such as Attitude, Subjective Norms, and Perceived Behavioural Control negatively influence the purchase intention of used products. Thus, our study also supports the findings of Borusiak et al. (2020). The claim made by Vicamara et al. (2023) is that subjective norms positively affect the purchasing intention of second-hand clothing, which is also proved through statistical analysis of our study. This result also supports the claim made by Guiot and Roux (2010) that people are encouraged to buy second-hand products because of rational and economic reasons.

Second, the study also reveals that Perceived Behavioural Control (PBC), Environmental Concern (EC), and Perceived Moral Obligation (MO) do not directly affect the second-hand purchasing intention. This study contradicts the prior study conducted by Koay et al. (2023), which says that behavioural control, environmental concern, and Moral obligation positively affect the intention of people to purchase second-hand products. This supports the claim made by Sang and Peng (2025) that perceived value and perceived behavioural control are not positively associated with second-hand purchasing intention. The study conducted by Robyn Hobbs (2016) claims that the major factors that influence the second-hand purchasing decision are social, economic, and environmental. Our study is also supported by this claim on social and economic grounds, but it does not support it in terms of environmental grounds.

Based on the above discussion and comparison with the prior similar studies, the following conclusion can be drawn:

- Among six variables presented in the model, only Attitude, Subjective Norms, and Economic Motivation positively affect the purchasing intention of people towards second-hand products.
- This study contradicts the many prior studies conducted by Koay et al. (2023), while it also supports the study conducted by Borusiak et al (2020) & Vicamara et al. (2023).
- The perceived moral obligation, environmental concern, and Perceived Behavioural control were not found to be significant in affecting the second-hand purchase intention

7 Contribution and Implementation

This study makes an important contribution to the existing knowledge on consumer behaviour towards second-hand purchasing intention. First, the study contributes to the behavioural theories, such as the theory of planned behaviour, value-belief norm theory, and self-perception theory, through the inclusion of their variables. The variables considered from these theories in the study provide a comprehensive understanding of factors that influence people's intention to purchase second-hand products. The result confirms that Attitude, subjective norms, and economic motivation have a significant effect on purchase intention, showing that an individual is more likely to purchase second-hand products when they have positive feelings towards those items, when they are encouraged by family and relatives, and when they feel saving money and receiving good value for second-hand items. Methodologically, the result of this study is obtained by using reliable measurement scales such as Cronbach's alpha analysis, which indicates that there is a strong correlation between the constructs as the value of alpha is greater 0,70. Similarly, the use of correlation and regression also strengthened the study's validity, providing a clear understanding of the relationships among variables.

This study also makes an essential contribution by providing practical guidance for businesses and policymakers involved in the second-hand market. The main idea produced through the study is that second-hand businesses should focus on highlighting the economic advantages, cost savings, and low prices because economic motivation is the most influential factor towards second-hand products purchasing intention. In addition, improving attitudes towards second-hand products is an essential milestone. This can be done through improving product quality, accurate product description, cleanliness maintenance, and return/exchange offer, which improves trust towards the second-hand products. Similarly, social influence can also be used as a strategy because, from the study, it is proven that subjective norm influences the customer's intention towards second-hand purchasing.

Policymakers can use the findings of this study to design an awareness campaign to promote the benefits of second-hand purchasing in terms of financial savings and waste reduction. Thus, through the findings of this study, the strategies can be made and

implemented, which can increase the consumer engagement in second-hand purchasing and acceptance of second-hand products, and normalise the second-hand consumption practices and encourage the second-hand market in the long run.

8 Limitations of the Study

There are several limitations of this study that need to be considered before interpreting the results. First, the study used the non-probability sampling method because of time limitations and limited financial resources. The study focused on the respondents who were easily available through social media and online platforms rather than randomly selecting participants from the entire population. Therefore, the result may not fully represent the views of the entire population in Finland. Similarly, the data were collected through online platforms, which may limit the diversity of respondents and the generalizability of the findings.

Second, the study entirely relied on a self-administered survey using the five-point Likert scale to measure respondents to measure respondent's opinions. Although this method is widely used, it may lead to response bias. And the online questionnaire distribution procedure might exclude the person who has limited internet access or who is less active on social media.

Another limitation of this study is that it is only focused on the people living in Finland of different nationalities, which limits the ability to generalise the findings to only Finnish nationals and another country or cultural context. The behaviour of consumers towards second-hand shopping might widely vary in other regions due to cultural, economic, environmental awareness, and market developments. The study is not focused on any single item of second-hand products, such as clothing, branded apparel, electronics, etc.; thus, the results cannot be interpreted or generalised for a single product.

The other limitation is that it studies only six independent variables to predict the purchase intention. Although these variables were derived from the well-established theories, there may be other factors, for example, product quality, price, trust, brand preference, and convenience, which could play a significant role in purchase intention.

The cross-sectional research design is another limitation of this study because the data were collected at one specific time, so this study could not consider the change in customer behaviour over time.

The following points summarise the limitations of the study:

- The study used non-probability sampling, and it focused on the relatively small sample size from Finland; thus, the generalizability of the findings to other countries and regions is limited.
- The study relied on a cross-sectional online survey and included selected variables it may not fully cover all those factors influencing second-hand purchase intention.

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Appendices

Appendix 1: Calculation of Composite Reliability and Average Variance Extracted (AVE)

Variables	Factor loadings	square of factor loading	1-square of factor loading	CR (Composite reliability)	AVE (Average Varience Extracted)
A1	0.772	0.596	0.404	0.707	0.531
A2	0.744	0.554	0.446		
A3	0.667	0.445	0.555		
SN1	0.900	0.809	0.191	0.734	0.649
SN2	0.903	0.815	0.185		
SN4	0.569	0.323	0.677		
PBC1	0.599	0.359	0.641	0.701	0.523
PBC2	0.712	0.507	0.493		
PBC3	0.808	0.652	0.348		
PBC4	0.770	0.593	0.407		
EC1	0.789	0.623	0.377	0.734	0.501
EC2	0.676	0.458	0.542		
EC3	0.761	0.579	0.421		
MO1	0.787	0.620	0.380	0.719	0.545
MO2	0.813	0.661	0.339		
MO3	0.534	0.285	0.715		
MO4	0.783	0.613	0.387		
ECOM1	0.695	0.483	0.571	0.723	0.594
ECOM2	0.780	0.608	0.392		
ECOM3	0.689	0.475	0.525		
ECOM4	0.736	0.542	0.458		
IU1	0.900	0.809	0.191	0.796	0.616
IU2	0.903	0.815	0.185		
IU3	0.474	0.225	0.775		

Appendix 2: Correlation Table

Correlations								
		ATT	SN	PBC	EC	MO	ECOM	ITP
ATT	Pearson Correlation	1	,536**	,497**	,427**	,511**	,461**	,513**
	Sig. (2-tailed)		<,001	<,001	<,001	<,001	<,001	<,001
	N	147	147	147	147	147	147	147
SN	Pearson Correlation	,536**	1	,529**	,367**	,513**	,276**	,444**
	Sig. (2-tailed)	<,001		<,001	<,001	<,001	<,001	<,001
	N	147	147	147	147	147	147	147
PBC	Pearson Correlation	,497**	,529**	1	,570**	,516**	,467**	,339**

	Sig. (2-tailed)	<,001	<,001		<,001	<,001	<,001	<,001
	N	147	147	147	147	147	147	147
EC	Pearson Correlation	,427**	,367**	,570**	1	,536**	,564**	,396**
	Sig. (2-tailed)	<,001	<,001	<,001		<,001	<,001	<,001
	N	147	147	147	147	147	147	147
MO	Pearson Correlation	,511**	,513**	,516**	,536**	1	,527**	,504**
	Sig. (2-tailed)	<,001	<,001	<,001	<,001		<,001	<,001
	N	147	147	147	147	147	147	147
ECOM	Pearson Correlation	,461**	,276**	,467**	,564**	,527**	1	,517**
	Sig. (2-tailed)	<,001	<,001	<,001	<,001	<,001		<,001
	N	147	147	147	147	147	147	147
ITP	Pearson Correlation	,513**	,444**	,339**	,396**	,504**	,517**	1
	Sig. (2-tailed)	<,001	<,001	<,001	<,001	<,001	<,001	
	N	147	147	147	147	147	147	147
** Correlation is significant at the 0.01 level (2-tailed).								

Appendix 3: Regression Analysis

Variables Entered/Removed a			
Model	Variables Entered	Variables Removed	Method
1	ECOM, PBC, SN, ATT, MO, ECb	.	Enter
a Dependent Variable: ITP			
b All requested variables entered.			

Model Summary b					
Model	R	R Square	Adjusted R-Square	Std. Error of the Estimate	Durbin-Watson
1	,649a	,421	,397	,572	2,134
a Predictors: (Constant), ECOM, SN, EC, ATT, MO, PBC					
b Dependent Variable: ITP					

ANOVA a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33,335	6	5,556	16,993	<,001b
	Residual	45,773	140	,327		
	Total	79,108	146			
a Dependent Variable: ITP						
b Predictors: (Constant), ECOM, SN, EC, ATT, MO, PBC						

Coefficients a								
Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1,155	,279		4,140	<,001		
	ATT	,206	,078	,223	2,631	,009	,575	1,740
	SN	,189	,076	,210	2,467	,015	,571	1,751
	PBC	-,121	,080	-,134	-1,509	,134	,521	1,921
	EC	,032	,082	,035	,392	,695	,532	1,879
	MO	,136	,072	,170	1,906	,059	,521	1,920
	ECOM	,285	,079	,310	3,632	<,001	,568	1,760
a Dependent Variable: ITP								

Appendix 4: Collinearity Statistics

Collinearity Diagnostics a										
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions						
				(Constant)	ATT	SN	PBC	EC	MO	ECOM
1	1	6,836	1,000	,00	,00	,00	,00	,00	,00	,00
	2	,043	12,639	,02	,03	,41	,00	,06	,00	,18
	3	,035	13,977	,23	,02	,01	,01	,00	,68	,00
	4	,028	15,698	,04	,32	,00	,50	,08	,02	,04
	5	,024	16,993	,36	,46	,10	,18	,01	,10	,03
	6	,018	19,464	,11	,16	,36	,01	,10	,11	,75
	7	,017	20,205	,24	,02	,12	,30	,75	,10	,01
a Dependent Variable: ITP										

Appendix 5: Rotated Component Matrix

Rotated Component Matrix						
	Component					
	1	2	3	4	5	6
ATT1				0.772		
ATT2				0.744		
ATT3				0.667		

SN1	0.900					
SN2	0.903					
SN4	0.569					
PBC1			0.599			
PBC2			0.712			
PBC3			0.808			
PBC4			0.770			
EC1						0.789
EC2						0.676
EC4						0.761
MO1		0.787				
MO2		0.813				
MO3		0.534				
MO4		0.783				
ECOM1					0.695	
ECOM2					0.780	
ECOM3					0.689	
ECOM4					0.736	
ITP1	0.900					
ITP2	0.903					
ITP3	0.474					
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.						
a. Rotation converged in 7 iterations.						

Appendix 6: Survey Questionnaire

Consumer Survey on Factors Influencing Second-Hand Purchasing Intention

Dear
Recipients/participants,

This survey is a part of the research which I am conducting to complete my master degree in business at University of Vaasa. The main purpose of this survey is to study the factors that influences people's intention to purchase the second hand products in Finland .
The questionnaire takes about 5 -10minutes to fill.
Your participation is greatly valued and will help this research to be successful. We greatly appreciate your cooperation and thank you for your invaluable time. If you have any questions or comments concerning this questionnaire, please contact us at the following:

Researcher: Manzil Kafle
Phone: +358465898328
x5147882@student.uwasa.fi

UNIVERSITY OF VAASA, FINLAND

* Indicates required question

1. Your Email *

2. Your age *

Mark only one oval.

- ◯ less than 18
- ◯ 18-30
- ◯ 31-40
- ◯ 40 above

3. Your gender *

Mark only one oval.

- Male
- Female
- Prefer not to say

4. Your Nationality *

Mark only one oval.

- Finland
- Other

5. Do you live in Finland? *

Mark only one oval.

- Yes
- No

6. Your employment status *

Mark only one oval.

- Employed
- Unemployed
- Self employed
- Student
- Retired

7. Your monthly income *

Mark only one oval.

- less than 500€
- 500€ to 1000€
- 1001€ to 2000€
- more than 2000€

8. Your Highest education *

Mark only one oval.

- High School
- Bachelor
- Masters
- PhD
- Other: ___

9. How often you purchase second hand products *

Mark only one oval.

- once in a week
- Once in a month
- Once in three months
- Once in a year

Section B

Please indicate the degree to which you disagree or agree with the following statements:
(1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

10. *

Mark only one oval per row.

	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
Buying second hand product is a smart idea.					
Second hand products are cheaper.					
I feel satisfied when I buy second hand products.					
Second hand products are generally well maintained.					

11. *

Mark only one oval per row.

	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
People who are important to me think that I should buy second hand products.					
People who I respect and admire that I should buy second hand products.					
I find my family and relatives using second hand products.					
People I know generally have positive opinions about second hand products.					

12.

Mark only one oval per row.

	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
Second hand products are easily available.					
I am well informed to buy second hand products.					
There are many well trusted shops and platforms to buy second hand products.					
I am confident that genuine products can be purchased second-hand					

13. *

Mark only one oval per row.

	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
I am inspired with environmental concerns to buy second hand products.					
Second hand products help to preserve environment.					
Second hand products are less likely to harm ecosystem.					
Using second-hand products helps reduce waste and conserve natural resources.					

14. *

Mark only one oval per row.

	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
I am morally obliged to buy second hand products.					
My consciousness tells me to buy second hand products.					
I should choose second-hand products when they are of good quality					
My principles insist me to choose second hand products over the new ones.					

15. *

Mark only one oval per row.

	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
I prefer to buy second-hand products as they have reasonable price.					
Since I can bargain while buying a second hand product, I prefer to buy it.					
Paying less for a second hand product saves my money.					
Buying Second hand products boosts Country's economy.					

16. *

Mark only one oval per row.

	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
I intend to purchase a second-hand product of my choice soon					
The likelihood of going second-hand shoping is high for me					
I plan to go for second-hand shopping in the near future					

THANKS FOR YOUR PARTICIPATION