Exploring the factors influencing the intention to purchase

second-hand clothes

A study about the intention and behaviour to buy second-hand

clothes among young Dutch and Flemish consumers with a

focus on the impact of second-hand fashion influencers.

Student name: Kato Van Roy

Student number: 624619

Supervisor: Elisabeth Timmermans

Master Media Studies – Media, Culture and Society

Erasmus school of History, Culture and Communication

Erasmus University Rotterdam

Master's Thesis

June 2022

ABSTRACT

The purpose of this paper was to investigate the intentions of young consumers to buy second-hand clothing. This topic is of importance because the fast fashion industry is causing great harm to the environment. The production of clothes has many negative consequences for people and the planet, such as clean water contamination, the creation of greenhouse gas emissions and hazardous working conditions. Many of the produced garments go to landfills when they are still wearable. A way to fight these negative consequences is to buy pre-owned clothing. This is more sustainable because it does not require the carbon dioxide emissions necessary for the production and transportation of new garments.

The second-hand clothing market is undergoing a rapid expansion, mainly driven by young consumers. It has been suggested that social media influencers are helping to destignatise pre-owned garments by talking about the value of used clothes. In this research the factors that influence the intention to buy second-hand clothes were explored, these factors were based on the theory of planned behaviour by Ajzen (1991). Furthermore, an investigation was conducted on whether the attitude towards second-hand fashion influencers has an impact on the attitude towards second-hand clothing and if this is related to the intention to buy pre-owned garments.

Survey results of 173 Dutch and Belgian young adults between 18 and 29 were collected in order to explore what drives people to buy second-hand clothes. Results revealed that many respondents intend to buy second-hand clothes. Their intention was significantly related to perceived behavioural control, subjective norms, attitude towards second-hand clothes and treasure hunting fun. The findings could not prove that attitude towards second-hand fashion influencers impacts the attitude towards second-hand clothes, and no significant effect was found using attitude towards second-hand clothes as a mediator between attitude towards second-hand fashion influencers and intention. However, a further exploration of the data revealed that people who follow second-hand fashion influencers have a more positive attitude towards second-hand and have a greater intention to buy used clothing than people who do not follow second-hand fashion influencers.

<u>KEYWORDS:</u> Second-hand clothes, fashion influencers, purchase intention, theory of planned behaviour, young adults

Table of contents

ABSTRACT	2
Introduction	4
Theoretical framework	6
Fast fashion and the throwaway culture	6
Second-hand clothes: What is it and how is it perceived? Why do people buy it? And who buys it?	8
Second-hand clothing purchase intention and behaviour Intention to buy second-hand clothes Perceived behavioural control Subjective norms Attitude towards second-hand clothes	11 11 13
Second-hand fashion influencers	
Conceptual framework	
Method	18
Sample and procedure	18
Measures	
Sample profile	25
Results	27
Correlations	27
Regression analyses	30
Further analysis	33
Discussion	34
Limitations and future research	37
Conclusion	39
References	41
Appendix	51
Survey in English	51

Introduction

Over the last 20 years, the production of clothing has doubled. This is a consequence of the new 'fast fashion' phenomenon, where there is a constant change of fashion trends which are being produced at a fast pace. This causes an increase in the clothing collections available each year, very often at low prices (Ellen Macarthur Foundation, 2017). As a result, people buy and discard clothes rapidly (Morgan & Birtwistle, 2009), even when the items are still wearable (Brooks, 2015). Almost 90 % of clothing goes to landfills or is burnt (EPRS, 2020), which makes the fashion industry as one of the world's largest polluting industries (Shrivastava et al., 2021). They contribute greatly to the annual global carbon emissions and are responsible for 1/5th of the world's clean water contamination (EPRS, 2020). The current fashion business depletes resources, pollutes the environment, and has significant societal consequences (Ellen MacArthur Foundation, 2017). Human resources get exploited in places with cheap labour costs (Shrivastava et al., 2021) where working circumstances are often dangerous (Brooks, 2015). The Rana Plaza building collapse in 2013 attracted international attention to the fashion industry's social consequences. It killed over a 1,000 people, many of whom were working for fast fashion brands (Ellen MacArthur Foundation, 2017).

Purchasing used clothing is a sustainable strategy to combat the fashion industry's negative consequences (Shrivastava et al., 2021). The industry's environmental effect can be greatly reduced by reusing clothing. Less clothing is disposed of in landfills, resulting in less pollution (Farrant et al., 2010). Depending on where the reuse occurs, the purchase of 100 second-hand items prevents the manufacturing of up to 85 new garments (Farrant et al., 2010).

Second-hand shopping has become a recent trend, especially popular amongst young consumers (Lestari & Asmarani, 2021; Widia et al., 2021; Xu et al., 2014). The global market for pre-owned clothes is predicted to expand at a pace of 15-20% every year (Yangzom, 2021). This growth can be partially explained by the change in consumers' attitudes towards sustainability and ownership and the desire to appear in different looks on a regular basis, driven by social media (Wigder, 2019). Thrift (popular term for second-hand shopping) hauls are frequently posted on sites such as YouTube, TikTok, and Instagram (Yangzom, 2021). Content regarding used clothing is popular, with sometimes millions of views (Ma & Riggio, 2021; Nguyen, 2021). In these posts influencers share information about second-hand garments by discussing how they choose, style, and alter pre-owned items (Ma & Riggio, 2021; Pavich, 2021). It has been suggested by qualitative research that these influencers are

contributing to the de-stigmatization of second-hand clothing by tackling the idea that second-hand is dirty and old. Negative emotions which are related to the purchase of used garments such as shame and disgust are altered because they are redefining second-hand as fashionable and valuable. Hereby they help to expand the second-hand clothing market (Valor et al., 2022). It has been proven by research that influencers can impact the buying behaviour of consumers (e.g. Chetioui et al., 2020; Immanuel & Bianda, 2021). Consequently, it can be argued that influencers could potentially impact the second-hand buying behaviour of consumers.

This paper examines the factors which are related to the intention to shop second-hand among Dutch and Belgian young adults using the theory of planned behaviour. Additionally, it explores whether influencers are impacting that intention. Xu et al. (2014) have already investigated the intentions to acquire second-hand clothing, however this has not yet been studied among Dutch and Belgian young adults. Moreover, Xu et al. (2014) did not analyse the impact of perceived behavioural control on second-hand buying intention, which is an important element in the theory of planned behaviour. Therefore, this work will generate fresh insight into this topic. Furthermore, while most research regarding second-hand clothing examines buyers' motivations for second-hand purchases (e.g. Ferraro et al., 2016; Turunen et al., 2018), there has been little quantitative analysis on the impact of influencers on the purchasing of second-hand clothing. Previous research has already suggested the use of influencers to nudge people into buying environmentally friendly clothing (Rausch & Kopplin, 2021), therefore this research will investigate whether this could work.

The target audience of 18- to 29-year-olds was chosen because young adults are driving the consumption of second-hand today (Lestari & Asmarani, 2021; Nguyen, 2021; Widia et al., 2021; Wang et al., 2022). They also spend the most time on applications where influencers are active such as YouTube, Instagram, and TikTok (Auxier & Anderson, 2021). The aim of this research is two-fold, firstly the factors that influence the intention to buy second-hand clothing among Belgian and Dutch young adults will be explored. Secondly, it will be investigated whether the attitude towards second-hand fashion influencers impacts the intention to buy second-hand clothing mediated by attitude towards second-hand clothes.

This thesis is socially relevant because it contributes to the research about a sustainable way of fashion consumption (Farrant et al., 2010). Research has suggested that people who are more aware of the impact of clothing on the environment are more inclined to buy used garments (Kim & Damhorst, 1999). However, a large portion of young adults still buys their clothing from fast fashion brands despite knowing the consequences of their

consumption. This indicates that although they are educated on the effects of buying fast fashion, it does not prevent them from purchasing clothes from these retailers. The perception that sustainable alternatives are ill-fitting and worthless reduces the appeal of these options (Pavich, 2021). Influencers talking about second-hand clothing are helping to show the value of pre-owned garments. The perception that second-hand is less stylish and valuable can be reduced by social media content about second-hand clothes (Pavich, 2021; Valor et al., 2022). Therefore, it is of importance to show that second-hand fashion influencers could potentially impact the attitude people have about second-hand garments, and to investigate whether this influences their intention to shop second-hand.

Theoretical framework

Fast fashion and the throwaway culture

Throughout the twentieth century, clothing became linked to the wearer's values, personality, and social standing (Le Zotte, 2017). People are increasingly becoming what they purchase, thereby putting a lot of psychological and financial pressure on the youth to participate in the consumption of fashion (Brooks, 2015). This consumption is possible because most Western consumers can now walk into retail stores like H&M and Zara to buy the latest popular styles at low prices. The rapid change of clothing trends where designs are transmitted around the world and turned into garments at a quick pace is called 'fast fashion' (Brooks, 2015).

This fast fashion phenomenon has caused a huge demand for low-cost textiles. Over time the production of garments was relocated from the costly West to the global South. Garments can remain affordable because low-wage workers in the global South farm the cotton, dye the materials, and sew the textiles required for new clothing production (Brooks, 2015). To evade environmental regulations and take advantage of inexpensive labour, Western clothing companies usually outsource manufacture to developing nations. Low income, long hours, and hazardous working conditions are all commonplace (EPRS, 2020).

The fashion industry does not only impact the economies of many developing countries, it also has detrimental effects on the environment. Fashion is the second-most polluting industry in the world and requires 1.5 trillion gallons of water per year. To put this into perspective, one t-shirt needs 2,700 gallons of water to create. This is enough water to last 2.5 years for one person (EPRS, 2020). Much cotton is grown in water-scarce environments, so it has devastating environmental costs (Brooks, 2015). Because of

dangerous chemical colouring and fabric treatment, as well as the use of pesticides to cultivate raw materials, the fashion sector is responsible for 20% of global clean water contamination (EPRS, 2020). Plastics, which are extensively used in synthetic fibres, end up in the oceans as micro-plastics, contaminating the food chain (EPRS, 2020). Moreover, people who grow cotton are put in danger because they use many pesticides that are bad for a person's health. The production of cotton utilizes more chemical products than food crops because clothing is not ingested, so there is less concern over the consumers' health (Brooks, 2015). In addition, the fashion sector contributes to 10% of yearly worldwide carbon emissions and is a major contributor to deforestation and soil degradation (EPRS, 2020).

In today's fast-fashion industry, the consumption of new garments is going much faster than the depletion of old garments. Consumers are under social pressure to believe that clothing which is still wearable has become obsolete and outdated. This drives people to buy new outfits on a frequent basis in order to retain their social position (Brooks, 2015). Textile waste is increasing because of the overconsumption of clothing and a throwaway culture, which is damaging to the environment (Lang & Armstrong, 2018). It is also visible in the numbers, almost 90% of all clothing is burned or ends up in landfills, while 30% of garments is overproduced and thrown away without ever being worn (EPRS, 2020).

Many people donate their used clothes to charity shops. These stores account for a small portion of the total second-hand clothing industry. While people associate donated clothes with local charitable retail, most second-hand clothes are actually being resold in the global South. An example was given in Brooks' (2015) book 'Clothing Poverty'. Brooks (2015) states that most charity shops work with commercial operators who pay the charity to use its name and take donations directly from donators. Gifted clothing is sorted and graded according to a system. The A-grade items are for example sold in Eastern Europe, B-grade clothing is exported to Africa and C-grade to countries in the Middle East (Brooks, 2015). To give an idea, in 2012, used clothing worth more than 50 million euros was sent to Mozambique, equivalent to 52 million tonnes of clothing, or 423 million shirts or 99 million pairs of trousers (Brooks, 2015). Used clothes travel again from West to South, which forges a dependence between the two. The imprint of colonialism remains on African countries because the clothing industry creates an absence of development in the garment sector. The import can displace local clothing manufacturers, making it harder for industries that need protection to thrive and compete, hereby preventing the growth of local markets (Brooks, 2015).

An upcoming trend to counter the negative consequences of clothing manufacturing is the consumption of second-hand clothing. It has been found that the reuse of clothes can help to drastically reduce the environmental impact of garments (Farrant et al., 2010). Second-hand clothing does not create the carbon dioxide emissions associated with the production, transportation, care, or disposal of new clothes since it does not use the energy necessary to manufacture and ship new items (Allwood et al., 2006). In the next paragraphs, second-hand clothing will be defined, as well as people's motivations to shop second-hand.

Second-hand clothes: What is it and how is it perceived? Why do people buy it? And who buys it?

Second-hand can be defined as objects that are "acquired after being used by another: not new" (Merriam-Webster, n.d.). Thus, second-hand clothes are items that were previously owned by someone else. This could also include garments that have never been worn but were purchased by another person before someone else acquired them. Within second-hand clothing, the concept of vintage fashion can be found. These are clothing items that were made in the period between the 1920s and 1980s (Cervellon et al., 2012). Some authors also define vintage as clothing produced at least 20 years before the current fashion trends (Carey et al., 2018) which would mean that all clothes manufactured before 2002 are considered vintage. Another popular term that is sometimes used to describe second-hand shopping is "thrift shopping" or "thrifting" (Bardhi, 2003). A thrift store is the same as a charity shop in the United Kingdom. These shops offer gently worn donated clothing with the proceeds going to a good cause (Montgomery & Mitchell, 2014). Other places where people can buy second-hand clothing is online (Kim et al., 2021), flea markets, from friends and relatives and in second-hand stores (Iran et al., 2019).

Throughout the twentieth century, second-hand clothes were identified as something negative and undesirable, only acceptable for the impoverished and countercultural groups in Western society (Brooks, 2015). In some places a stigma still surrounds second-hand shopping today. For example, in Indonesia it is still considered taboo by many people to wear second-hand (Lestari & Asmarani, 2021). Similarly, in a Portuguese study, being seen as a second-hand clothing purchaser was still a source of embarrassment for many respondents (Silva et al., 2021). Furthermore, comparative research has indicated that people from the US had a more favourable opinion about owning and buying second-hand clothes than people from China (Xu et al., 2014). However, a more recent study found that the old mentality and

prejudice against second-hand clothing is declining in China, and that young Chinese consumers are driven by treasure-hunting fun as their main motivation to buy second-hand garments (Wang et al., 2022).

Today young consumers are the driving force behind the expansion of the second-hand clothing market (Lestari & Asmarani, 2021; Nguyen, 2021; Wang et al., 2022; Widia et al., 2021). Since the early 1990s, the second-hand business has grown as a result of increased interest from investors, costumers and retailers (Turunen et al., 2018) but only in recent years, the market has expanded tremendously. It now holds over 40 billion in global market shares and is expected to grow annually at a rate of 15-20% (Yangzom, 2021). According to the thredUP (an online consignment and thrift store) resale report, second-hand saw a growth of 32% in 2021, which is the highest in five years. It is expected to be an 82-billion-dollar market in 2026 (ThredUP, 2022). This market expansion can be partially ascribed to influencers who post second-hand clothing hauls on social media. In addition to influencers who talk about the benefits of second-hand garments, general media and fashion media also helped to destigmatize second-hand clothing by talking about it in a positive way (Valor et al., 2022). It could be suggested that second-hand shopping, which was formerly associated with the poor, now appears to have grown into a gentrified consumer habit followed by many affluent consumers (Ronobir, 2020). Young people who are influenced by social media to appear in different outfits on a regular basis are buying second-hand to establish different original looks which allows them to show off their uniqueness and style (Pavich, 2021; Shrivastava et al., 2021, Wang et al., 2022).

Researchers distinguished several other reasons for buying second-hand clothing besides the desire to be unique. These include frugality, eco-consciousness, nostalgia proneness and the desire to be fashionable (Cervellon et al., 2012; Ferraro et al., 2016; Roux and Guiot, 2008). The most important factors to buy second-hand for young consumers in the research by Xu et al. (2014) proved to be the hedonic value and the uniqueness of the products that could be found. A more recent study by Wang et al. (2022) discovered that the main motivators for second-hand consumers were treasure- and vintage-seeking fun. Hence, the entertainment of the activity itself has become a key driver for people to go thrifting (Wang et al., 2022).

Second-hand clothing purchase intention and behaviour

Second-hand shopping is a sustainable way of consumption, as argued above. To determine the behaviour to purchase sustainable products, multiple studies have utilized the theory of planned behaviour (TPB) by Ajzen (1991). This theory posits that the intention to behave in a certain way will lead to the actual performance of that behaviour. If the subject has a strong intention, the likelihood that they will perform the behaviour is greater (Ajzen & Madden, 1986). The intention refers to how hard a person is willing to try and how great the effort will be to actually perform the behaviour (Ajzen, 1991). Hence, if people have a strong intention to perform a certain behaviour, in this case the purchasing of second-hand clothes, they will have a higher chance of actually buying second-hand clothes. Intention can be determined by three factors; attitudes toward the behaviour, subjective norms, and perceived behavioural control (Ajzen, 1991). In line with the theory of planned behaviour, these three factors determine intention, and intention determines behaviour. If one thinks positively about second-hand (positive attitude toward the behavior), is able to buy second-hand clothes (perceived behavioural control) and feels a social pressure to acquire second-hand clothes (subjective norms) the intention to purchase second-hand clothing will be stronger, and therefore the likelihood that they will buy second-hand garments is also greater.

This theory has been well supported by empirical evidence (Ajzen, 1991). Sustainable food consumption (Vermeir & Verbeke, 2008), green purchasing behaviour (Liobikiene et al., 2016; Yadav & Pathak, 2017), purchasing of sustainable housing (Judge et al., 2019), the purchasing of traditional handicraft fashion (Xue et al., 2022), buying of fair-trade products (De Leeuw et al., 2011) and organic food consumption (Al-Swidi et al., 2014) are part of the many examples of studies that use the TPB to investigate green or sustainable consumer behaviour. Second-hand clothing has also been studied within the context of TPB. For instance, Iran et al. (2019) looked at the intention to adopt collaborative fashion consumption in Tehran and Berlin using the TPB. The purchasing of second-hand clothing is a form of collaborative fashion consumption, next to exchanging, borrowing and the renting of clothes (Iran et al., 2019). Collaborative fashion consumption means that clothes are reused which decreases the need for new items and limits waste (Lang & Armstrong, 2018). It was found that all three factors, attitude, subjective norms, and perceived behavioural control, predicted the intention to participate in collaborative fashion consumption (Iran et al., 2019).

Intention to buy second-hand clothes

Ajzen (1991) argues that the intention to perform a behaviour will lead to the performance of that behaviour. People's intentions reveal how hard they are willing to attempt and how much work they are willing to put in to execute a behaviour. The stronger the intention, the more likely they will perform the behaviour (Ajzen, 1991). This is operationalised by asking whether people "intend to engage in the behaviour, expect to engage in the behaviour, are planning to engage in the behaviour, will try to engage in the behaviour, and indeed, whether they are willing to engage in the behaviour" (Ajzen, 2011, p 1122).

Many studies only investigate the intention to perform a behaviour, and not the actual behaviour (e.g. Chetioui et al., 2020; Judge et al., 2019; Xu et al., 2014). This might be a problem because research has indicated that ethical intentions hardly translate into ethical buying behaviour (Carrington et al., 2010). However, other scholars do find a significant effect between intention and behaviour. Iran et al. (2019) found that the intention to engage in collaborative fashion consumption is a predictor of the actual behaviour. The intention to buy traditional handicraft clothes is also positively related to the purchase behaviour (Xue et al., 2022). These same results are also found for green purchase behaviour (Yadav & Pathak, 2017) and for the buying behaviour of sustainable clothing (Rausch & Kopplin, 2021). To date, little is known about the link between the intention to buy second-hand clothing and the actual behaviour of purchasing used garments. This research has therefore included the investigation of whether second-hand purchase intention leads to second-hand purchase behaviour. The first hypothesis is the following:

H1. The intention to buy second-hand clothing will be positively associated with second-hand purchase behaviour.

Perceived behavioural control

Perceived behavioural control (PBC) is the first element predicting the intention to perform a behaviour. It refers to people's perception of how easy or difficult it will be to perform the behaviour (Ajzen, 1991). It has been found to be an important predictor of intention (Ajzen & Madden, 1986). According to the theory of planned behaviour, PBC also has a direct impact on the actual behaviour (Ajzen, 1991). The concept is heavily influenced by Bandura's concept of perceived self-efficacy. In his research he proved that people's

behaviour is greatly impacted by their confidence in their ability to perform it (Ajzen, 1991). When a person believes they lack the means or chances to act out the behaviour, they are less likely to perform the behaviour (Vermeir & Verbeke, 2008).

In the study about traditional handicraft fashion, results showed that perceived behavioural control was one of the biggest factors impacting the purchase intention of conventional fashion (Xue et al., 2022). Furthermore, Becker-Leifhold (2018) demonstrated that PBC had a significant influence on the intention to rent clothes. However, the research about collaborative fashion consumption by Iran et al. (2019) found no direct influence of PBC.

Xu et al. (2014) have applied a former version of the theory of planned behaviour to investigate the intention to buy second-hand clothing. The theory of reasoned action was developed in 1980 by Ajzen and Fishbein and came before TPB (Ajzen & Madden, 1986). TPB is an extension of the theory of reasoned action because they added the component of perceived behavioural control which proved to be a significant addition to predict intentions (Ajzen & Madden, 1986). Xu et al. (2014) thus only investigated subjective norms and attitude towards second-hand clothes to investigate the intention to purchase second-hand clothing. It was found that both these elements were associated with the intention to buy second-hand clothes among Chinese and North American students. Therefore, it would be worthwhile to investigate the intentions to buy second-hand clothing among Dutch and Belgian young adults with the extended theory of planned behaviour that also investigates PBC.

Borusiak et al. (2020) investigated second-hand products using PBC to understand if people have the knowledge and access to places where they sell second-hand products. In this research, it will also be investigated whether people have knowledge and access (in terms of location and time) to places where second-hand clothes are being sold. Following these findings, the second hypothesis, which was divided in two parts, is the following:

H2a. Perceived behavioural control will be positively associated with second-hand purchase behaviour.

H2b. Perceived behavioural control will be positively associated with the intention to buy second-hand clothing.

Subjective norms

Subjective norms is the second element that determines the intention to perform a behaviour (Ajzen, 1991). This refers to the perceived social pressure to act out or not act out the behaviour (Ajzen, 1991). Subjective norms are the outcome of normative belief, which is a person's impression of how others who matter to them would prefer that person to act in a certain scenario. Secondly, it is the outcome of the motivation to comply, which refers to a person's desire to comply with opinions of those important to that person (Ajzen, 1991). Often questions regarding subjective norms refer to the normative beliefs concerning the expectations of people like family and friends (Ajzen & Madden, 1985), or the phrasing "most people who are important to me would want me to ..." is used (e.g. Yadav & Pathak, 2017, p. 117).

Subjective norms have been proven to be a good predictor of intentions in research regarding green or sustainable consumption (e.g. Al-Swidi, et al., 2014; Judge et al., 2019). This factor was also associated with intention to participate in collaborative fashion consumption (Iran et al., 2019). In the case of second-hand shopping amongst Chinese and North American students, subjective norms were a predictor of second-hand purchase intent, more so in North American students than in Chinese students. This implies that it is more socially accepted to shop second-hand for American people (Xu et al., 2014). However, the old prejudice against second-hand clothes is declining in China, making it more popular amongst young people (Wang et al., 2022). The question remains whether second-hand shopping is also socially acceptable for Dutch and Belgian young adults, as it is still a source of embarrassment in many places (Lestari & Asmarani, 2021; Silva et al., 2021). Therefore, subjective norms will be investigated in the third hypothesis.

H3: Subjective norms will be positively associated with the intention to buy second-hand clothing.

Attitude towards second-hand clothes

The third element is attitude towards the behaviour. This implies the degree to which a person has an unfavourable or favourable opinion or evaluation of the behaviour (Ajzen, 1991). Attitudes emerge from people's beliefs about the object of the attitude. In general, beliefs about objects are formed by associating them with certain attributes, such as other

objects, characteristics, or events. When it comes to attitudes of a behaviour, each belief connects the behaviour to a specific outcome or some other attribute, such as the cost of engaging in that behaviour. The attitude towards the behaviour is automatically formed because these attributes connected to the behaviour already have a positive or negative connotation. Therefore, people learn to favour behaviours that are mostly associated with positive consequences, and to dislike behaviours that are believed to have mostly negative outcomes (Ajzen, 1991). This means that people's attitudes are shaped by their beliefs of the behaviour at hand. Positively viewed benefits and/or negatively viewed concerns are examples of these beliefs (Xu et al., 2014). In the research by Xu et al. (2014) about the purchase intention of second-hand clothing, they measured attitude by people's perceived benefits of second-hand clothing and perceived concerns. Attitude has proven to be a good predictor of purchase intention of second-hand clothing (e.g. Iran et al., 2019; Xu et al., 2014), the buying of second-hand products (Borusiak et al., 2020) or of sustainable purchase intentions in general (e.g. Yadav & Pathak, 2017). Rausch and Kopplin (2021) found that attitude towards sustainable clothes had the biggest impact on purchase intention. Therefore, the fourth hypothesis is the following:

H4. The attitude towards second-hand clothing will be positively associated with the intention to buy second-hand clothing.

Second-hand fashion influencers

Rausch and Kopplin (2021) have proposed to use celebrities or influencers to nudge people into purchasing environmentally friendly clothing. According to a qualitative study by Valor et al. (2022), influencers assist to de-stigmatize used clothing and hence contribute in market expansion. These findings are relevant to this study's focus on the impact social media influencers may have on the second-hand clothing consumption of young consumers.

Ordinary social media users can be divided into two groups: those who actively engage in digital communities by sharing their material called "content creators" and those who are passive observers called "content consumers" (Turri et al., 2013). A social media influencer (from now on called influencer) is a type of content creator (Arriagada & Ibáñez, 2020; Craig, 2019) who content consumers follow on their social networking sites (Johnstone & Lindh, 2022). These influencers have become famous by branding themselves experts on certain topics (e.g. fashion, beauty, food, ...) (Schouten et al., 2020). They produce social

media content to entertain audiences interested in these varying topics (Stoldt et al., 2019), and can also have an educational role by sharing information about certain subject matters (Yalcin, 2021). Brands often use them to promote their products (Schouten et al., 2020) because influencers can impact their followers' purchase behaviour (Chetioui et al., 2020). They are able to persuade their fans and to alter their minds or behaviour as a result of the information they share (SanMiguel, 2019).

Fashion influencers are personalities who create content related to fashion. They attract consumers with strong interest in stylish fashion items (Chetioui et al., 2020). Influencers who engage with second-hand clothing are similar to fashion influencers in that they generate fashion-related material (Pavich, 2021). One of the driving factors of the rise in popularity of second-hand could be ascribed to these influencers who talk about second-hand clothing on the internet (Ma & Riggio, 2021; Pavich, 2021). Ferraro et al. (2016) found that style plays a significant role in the consumption of second-hand clothing, as shown by immensely popular thrifting content on YouTube (e.g. Emma Chamberlain, 2020). These YouTube and TikTok thrift haul videos have introduced thrift shopping to a generation of teenagers, including those who can afford to buy new clothes and do not need to consume second-hand fashion for financial reasons (Nguyen, 2021). Second-hand fashion vloggers are mostly young women, they videorecord themselves browsing through racks of clothing at thrift stores in order to show off or style the outfits they found (Nguyen, 2021). By doing so, they help to challenge the idea that used clothing is unfashionable and less valuable (Valor et al., 2022).

Christiansen and Snepenger (2005) have introduced the term 'thrift mavens', which are individuals who have knowledge of the second-hand market and disseminate it to others. They encourage thrift shopping by sharing information. Lapolla and Kim (2015) have identified fashion design students as thrift mavens. They advocate for thrift shopping "by spreading positive word-of-mouth marketing to new customers, promoting selection and quality of merchandise, and contributing to customer service experiences such as upcycling and styling" (Lapolla & Kim, 2015, p 1-2). Similarly, some TikTok influencers have stated that they are tired of fast fashion and prefer to purchase at second-hand stores because of the abundance of unique and stylish items that cannot be bought anywhere else (Ma & Riggio, 2021). They boast about the great amount of second-hand clothing they purchased in "thrift with me" or "thrift haul" videos, receiving hundreds, thousands and sometimes even millions of views (Ma & Riggio, 2021; Nguyen, 2021). This is promoted to young viewers, who adopt this behaviour and also shop at thrift stores (Ma & Riggio, 2021). Thrift haul videos are also

popular on YouTube. An example is the famous YouTube channel of Ashley, called 'Bestdressed'. She often discusses how to create original looks, select, and adjust second-hand clothing, hereby advocating for thrift shopping (Pavich, 2021). Influencers who encourage the purchase of second-hand clothing are similar to thrift mavens. They are influencers like Ashley who advocate for second-hand shopping by sharing content about it (for example the styling, altering and finding of second-hand clothes) on their platform. The term "second-hand fashion influencers" will be used in this study to refer to the influencer thrift mavens.

The mediation of attitude towards second-hand clothes

A theory that can be used to explain the impact of influencers on their followers is the social learning theory by Bandura (1977), also called social cognitive theory (Bandura, 2010). It has been utilised in the marketing field to understand people's consumption behaviour (Moschis & Churchill, 1987). Bandura (1977) posits that human behaviour is learned observationally through modelling. People observe others, hereby forming an idea on how new behaviour is performed, later this information serves as a guide for action (Bandura, 1977). Proponents of this theory suggest that people derive their motivation, norms, attitudes and behaviour from socialisation agents through direct or indirect social interaction (Moschis & Churchill, 1987). These agents or role models can be anybody a person comes in contact with, such as classmates or family, but they can also be role models offered through books, films, or television (King & Multon, 1996). This approach has been used to study the impact favourite entertainers and favourite athletes have on adolescent consumers purchase intentions and behaviour (Martin & Bush, 2000). Furthermore, Makgosa (2010) found that the social learning theory can explain the influence of celebrities on consumer behaviour. Building on this finding, Lim et al. (2017) used this theory to explore the impact of influencers on purchase intention. They conclude that a favourable attitude towards the influencer would have a positive impact on the purchase intention of the products they endorse (Lim et al., 2017). Attitude towards the products they promote acts as a mediator between the attitude towards the influencer and purchase intention (Lim et al., 2017).

The impact of influencers on consumer behaviour has also been researched by others. Chetioui et al. (2020) and Immanuel and Bianda (2021) have investigated this for fashion influencers. Attitude towards fashion influencers impacts brand attitude and brand attitude impacts purchase intention. Brand attitude has been proven to be a mediator for purchase

intention in numerous studies (e.g. Chen et al., 2020; Chin et al., 2020; Immanuel & Bianda, 2021; Pradhan et al. 2016; Sallam and Wahid, 2012). This finding has not yet been researched for second-hand fashion influencers. In this research, brand attitude will be replaced by attitude towards second-hand clothes. Based on the social learning theory and these empirical findings, the following hypothesis can be formulated.

H5: The relation between attitude towards second-hand fashion influencers and the intention to buy second-hand clothing will be mediated by attitude towards second-hand clothes.

Conceptual framework

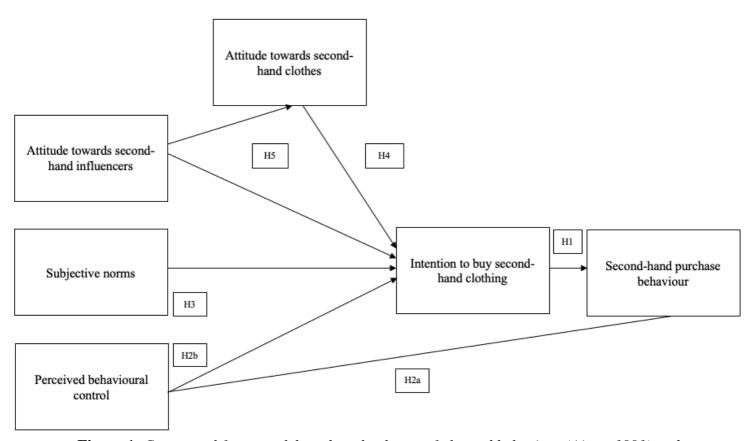


Figure 1. Conceptual framework based on the theory of planned behaviour (Ajzen, 1991) and the social learning theory (Bandura, 1977)

Method

Sample and procedure

Data were collected through a convenience sample of 173 Dutch and Flemish young adults between 18 and 29 years old. An online questionnaire was designed using Qualtrics software. This method is the ideal tool for this research because it has a comparative character and interest in people's thoughts and experiences (Matthews & Ross, 2010). Additionally, it is an effective approach to determine the opinions and preferences of a population (Babbie, 2017). Finally, a questionnaire can be used to collect data from a large number of persons or cases in an efficient manner (Matthews & Ross, 2010).

The survey was made in Dutch because this research investigates second-hand clothing purchase intention among Belgian and Dutch young adults. The questions underwent a forward and backward translation (Brislin, 1986). They were translated from English to Dutch and then translated back to English by an external person to make sure the English and Dutch items measured the same. A pilot study was conducted, the survey was first sent to eight respondents to check if the language was clear. Resulting from this, some scales were replaced by other scales from different research which measured the same concepts. These new scales appeared to be clearer and less repetitive.

Ethical considerations were carefully taken into account. It was made clear that the researcher was a master student at the Erasmus University of Rotterdam. Participants were informed about the nature of the study. Informed consent was requested at the start of the questionnaire, participants were assured that participation is voluntary and that they could end the survey at any given moment. Respondents were assured that the answers were anonymous. The contact details of the researcher were added at the start and end of the survey in case respondents had any questions. No participants contacted the researcher with questions. After providing informed consent, individuals were asked to complete demographic questions. Hereafter the survey questions designed to gather data for the analysis were asked. These variables will be discussed in more detail below.

The questionnaire was distributed through the social network of the researcher. It was shared on sites like Facebook, Instagram, and WhatsApp. More than ten friends and family members of the researcher also shared the survey on their social media platforms.

Additionally, the researcher made posters and flyers which were distributed on university campuses (Vrije Universiteit Brussel, Vrije Universiteit Amsterdam, Universiteit van

Amsterdam and Erasmus University Rotterdam). A promotion video was also made which was shared on Instagram and Facebook. A link to this video can be found in the appendix. Because the research's target audience is 18–29-year-olds, it could be argued that the use of other students as participants is justified. For instance, in their study of second-hand clothing consumption, Xu et al. (2014) researched students as well since this is the age group that is a major driver of the second-hand clothing sector (Xu et al., 2014). However, not only university students were included in the sampling. The survey was also shared among college students and people who are not studying. The data was collected in one week, starting from the 23rd of April 2022 until the 2nd of May 2022.

Measures

Second-hand purchase behaviour. In this research the variable second-hand purchase behaviour refers to the actual behaviour of buying second-hand clothes. To measure this, a five-point scale was adapted from Iran et al. (2019). The original scale measures the behaviour to engage in collaborative fashion consumption. The three items used were: "I bought some second-hand clothing from others (e.g. in a flea market) in the previous year.", "I bought some clothing from second-hand shops in the previous year." and "I bought some clothing from friends or relatives in the previous year."

A reliability test was performed to investigate how reliable the scale was. The three items had a Cronbach's α of .55. In factor analysis, deleting items is a "very common and expected part of the process" (Worthington & Whittaker, 2006, p. 822). When deleting the item "I bought some clothing from friends or relatives in the previous year", it brought the Cronbach's α up from .55 to .69. It has been argued that a value of .69 is reasonable, whereas .55 is not satisfactory (Taber, 2017). The scale with two items has a mean of 3.44 (SD = 2.74), which is between "nor agree, nor disagree" and "agree".

Researchers have suggested that a minimum of three items is sufficient (Hair et al., 2010). However, a study by Worthington and Whittaker (2006) suggests that a factor of two variables can be kept if they are highly correlated (r > .70) and relatively uncorrelated with other variables. The two items that were left had a correlation of .53 (p < .001), which was too low. However, because the Cronbach's α was too low if the three items were kept, it was decided to measure second-hand purchase behaviour with two items. A further elaboration on this will be provided in the discussion section.

Attitude towards second-hand fashion influencers. This variable refers to the attitude respondents have towards second-hand fashion influencers. The questions started off by giving a definition of what was meant with a second-hand fashion influencer. It was defined as someone who spreads information about second-hand fashion by sharing posts, videos, and other content on their platforms. This content can be about the styling, adjusting and finding of second-hand clothing. After the definition it was asked whether they follow any second-hand fashion influencers, if the answer was 'yes' they were asked which ones and on which platforms they are active. These questions are meant to broaden the understanding of second-hand fashion influencers. Attitude towards second-hand fashion influencers was measured using a scale with three items based on the questions about fashion influencers by Chetioui et al. (2020). This was a five-point scale with items such as "I do believe that second-hand fashion influencers present interesting contents". The Cronbach's α of this scale was .74, which can be described as good (Taber, 2017). The mean was 3.04 (SD = 2.31), which is close to "nor agree, nor disagree".

Intention to buy second-hand clothing. In this research, intention to buy second-hand clothing was used to investigate whether respondents had the intention to buy second-hand clothes. Intention to buy second-hand clothing was assessed using a scale taken from Borusiak et al. (2020) that measured the intention to buy second-hand products. It was a seven-point scale with two items. Two items are generally not accepted (Hair et al., 2010). However, the correlation between the two items was very high (r = 80, p < .001) which made it an acceptable scale (Worthington &Whittaker, 2006). Furthermore, this scale was based on prior research by Borusiak et al. (2020), therefore it was decided to include the two-item scale. The items were: "It is very likely that I will buy second-hand clothing in the future" and "Certainly I will buy second-hand clothing". This scale had a Cronbach's α of .87, which made this a reliable scale (Taber, 2017). The mean was 5.90 (SD = 2.80), which is close to "agree".

Subjective norms. In this research, the variable subjective norms was used to measure the social pressure people feel to purchase second-hand clothes. It was measured with three items. The scale was based on the research by Kim and Han (2010) which was about the intention to stay at green hotels using TPB. This seven-point scale contained three items, one of them being "Most people who are important to me think I should buy second-hand clothing". The Cronbach's α was .89, this indicating that it is a reliable scale (Taber, 2017). The mean was 4.03 (SD = 4.20), which is close to "nor agree, nor disagree".

Attitude towards second-hand clothes. This variable was used to assess people's attitude towards second-hand clothing. Attitude was measured by using a scale taken from Mohammad et al. (2020) which measured the attitude towards second-hand clothing. It was a five-point scale with three items, one example was "The thought of buying second-hand clothes is appealing to me". The Cronbach's α was .81., which made this a robust scale (Taber, 2017). The mean was 4.41 (SD = 3.41). This is between "agree" and "totally agree".

Perceived behavioural control. PBC investigates whether people perceive it to be easy or difficult to perform the behaviour of purchasing second-hand clothing. Perceived behavioural control was assessed using the seven-point scale by Borusiak et al. (2021) which measured the PBC to purchase second-hand clothing. It contained three items such as "I know where I can buy second-hand clothes". The Cronbach's α was .77 with a mean of 5.84 (SD = 2.99), which is close to "agree". A Cronbach's α of .77 indicates a relatively high reliability (Taber, 2017). An overview of all the items can be found in Table 1.

Table 1Factor analysis of dependent and independent variables

Items	M	SD	Cronbach's
			a
Second-hand purchase behaviour	3.44	1.37	.69
I bought some clothing from friends or relatives in the previous year. ^a	2.19	1.33	
I bought some second-hand clothing from others (e.g. in a flea market) in the previous year.	3.07	1.63	
I bought some clothing from second-hand shops in the previous year.	3.80	1.51	
Attitude towards second-hand fashion influencers	3.04	.77	.74
I do believe that second-hand fashion influencers serve as fashion models for me	2.72	1.12	
I do believe that second-hand fashion influencers present interesting contents	3.32	.90	
I do consider second-hand fashion influencers as a reliable source of information and discovery	3.08	.81	
Intention to buy second-hand clothing	5.90	1.40	.87

It is very likely that I will buy second-hand clothing in the	6.10	1.29	
future.	0.10	1.29	
Certainly I will buy second-hand clothing	5.69	1.66	
Subjective norms	3.80	1.45	.89
Most people who are important to me think I should buy	2.02	1.52	
second-hand clothing.	3.82	1.53	
Most people who are important to me would want me to	2.06	1 7 1	
purchase second-hand clothing.	3.86	1.51	
People whose opinions I value would prefer that I buy second-	4.40	1.59	
hand clothing.	4.40	1.39	
Attitude towards second-hand clothes	4.41	.62	.81
I am positive towards buying second-hand clothes.	4.47	.68	
The thought of buying second-hand clothes is appealing to me.	4.26	.88	
I think it is a good idea to buy second-hand clothes.	4.51	.58	
Perceived behavioural control	5.84	1.00	.77
I know where I can buy second-hand clothes.	5.22	1.46	
I am capable of buying second-hand clothes.	6.32	.87	
I have enough time to choose second-hand clothes when I have	5 90	1.23	
to buy something	5.89	1.23	

Notes: a = items that were deleted

Control variables

Motivations to buy second-hand. Economic motivation, hedonic motivation, uniqueness and environmental motivation were included as control variables in this research because the study by Xu et al. (2014) found that they have a significant association with the intention to purchase used clothes among young consumers. The scales were taken from a reliable and valid 8-factor scale which measured the motivations to buy used products by Guiot & Roux (2010). This scale has been widely used in research about second-hand clothing (e.g. Cervellon et al., 2012; Ferraro et al., 2016). Not all items were used from the original scale, only the items measuring economic, hedonic, environmental motivation and uniqueness. All 11 items measuring these four variables were entered into a factor analysis using Principal Component extraction with Verimax rotation based on Eigenvalues (>1.00), KMO = .85, χ^2 (N = 173, 55) = 911.97, p < .001. Three items were found with eigenvalues

above 1. The modification of the original scale might explain why only three items were found, rather than four. The resultant model explained 69.46% of the variance in the motivations to buy second-hand clothes.

The first factor found is a combination of the items measuring uniqueness and hedonic motivation. These variables are about finding things not everyone will have, coming across finds, discovering new clothes, treasure hunting and finding original clothing items. They all measure the enjoyment that goes along with finding new original things when you go second-hand shopping. A recent study by Wang et al. (2022) found that treasure hunting fun was the most important reason why young people purchase second-hand clothing today. They also based their research on the second-hand shopping motivation theory by Guiot and Roux (2010). The scale developed by Guiot and Roux (2010) could be updated taking into account that the second-hand purchase behaviour of people has changed over the last ten years as shown by Wang et al. (2022). Therefore this research has merged uniqueness and hedonic value to make this new variable called "Thrill of the hunt". The second variable found measures the economic motivation and the last variable measures the environmental reason. These variables and their descriptive statistics can be found in Table 2.

Thrill of the hunt is a combination of the items that measure uniqueness and hedonic value in the research by Guiot and Roux (2010). It is a five-point scale with six items. The Cronbach's α was .88 which means this is a reliable scale (Taber, 2017). The mean was 3.71 (SD = 5.32), this is close to "agree".

The economic motivation to buy second-hand clothes was assessed by using a scale by Guiot and Roux (2010) which measures the motivation to buy second-hand. It is a five-point scale with three items. One item is "One can have more clothes for the same amount of money if one buys second-hand". The Cronbach's α was .78 with a mean of 3.55 (SD = 2.57), meaning this is a good scale (Taber, 2017). The mean implies that most people answered "nor agree, nor disagree" and "agree".

The environmental motivation scale consists of two items from Guiot and Roux (2010). It is five-point scale measuring motivations to buy second-hand. An example is: "By shopping second-hand, I feel in a small way I'm fighting against waste". The Cronbach's alpha was .78 with a mean of 4.0 (SD = 1.63). According to Taber (2017) this scale would be described as good. The mean indicates that most people answered "agree". It has been argued that factors with less than three items are generally viewed as undesirable (Yong & Pearce, 2013). They have a correlation of .64 which is, according to Worthington and Whittaker

(2006) too low to be acceptable. Because this is a control variable and therefore not crucial in answering the research question, this scale was deleted in further analysis.

Table 2Factor analysis of motivations to buy second-hand

Items	M	SD	Loadings	Cronbach's
Thrill of the hunt	3.71	.89		.88
I hope to find second-hand clothes that not everyone	274	1 10	55	
will have	3.74	1.10	.55	
I love finding original clothes you don't see in the	2.04	1.06	56	
mainstream shops	3.94	1.06	.56	
I like strolling around these second-hand outlets	2.75	1 17	97	
because I always hope to come across a find	3.75	1.17	.87	
I go to such places to ferret around and discover	2.60	1 17	97	
something	3.69	1.17	.87	
I am often on the look-out for a find when going to	2.40	1 10	77	
some second-hand outlets	3.49	1.10	.77	
In some of these second-hand outlets, I feel a bit	2.66	1 12	75	
like I'm treasure hunting	3.66	1.12	.75	_
Economic motivation	3.55	.86		.78
I can afford more clothes because I pay less second-	2.40	1.04	92	
hand	3.40	1.04	.82	
One can have more clothes for the same amount of	2.75	00	0.5	
money if one buys second-hand	3.75	.99	.85	
I feel that I have lots of clothes for not much money	2.50	1.05	77	
by buying them second-hand	3.50	1.05	.77	
Environmental reason	3.96	.81		.78
I like shopping second-hand because I don't like	2.07	05	02	
seeing things thrown away that can still be of use	3.97	.95	.83	
By shopping second-hand, I feel in a small way I'm	2.05	05	07	
fighting against waste	3.95	.85	.87	

Sample profile

The initial sample consisted of 209 subjects who completed and returned the questionnaire. Thirty-six responses had to be deleted because they did not fit the sample profile. These respondents were below the minimum age of 18 or over the maximum age of 29. The survey ended for them after the first question. After data cleaning, 173 respondents were included in further analysis. An overview of the demographics can be found in Table 3. In this final sample, the percentage of women was 80.3 % and the male share was 17.9 %. Three people identified as non-binary (1.7 %). They were included for reliability testing but their gender was reported as a missing value in further analyses in order to include gender as a binary variable. The majority of the sample was Belgian (69.4 %), whereas almost one third (29.5 %) was Dutch. Two people indicated "other" but did not specify what nationality they had. Most people were 21 (19.1 %), 22 (23.1 %), 23 (15.6 %) and 24 (12.1 %). The mean age was 22.21. Ages ranged from 18 until 28, there were no 29-year-old respondents. Almost thirty percent of the respondents had finished high school (28.9%), 46.8 % had completed their bachelor and 22.5 % had a master's degree. Most people would spend 50 – 60 minutes on social media (15.6 %), 60 – 70 minutes (12.1 %) or more than 120 minutes (21.4 %). The mean was calculated by taking the median of each category to make the variable continuous. This resulted in a mean of 81.47 minutes a day.

The majority of respondents had never bought second-hand clothing with the intention to resell it (91.9 %). When participants were asked how many times they bought second-hand clothing, 41.6 % reported that they bought this once a month, 27.2 % stated that they bought it twice a year and 13.3 % never buys second-hand clothing. The mean was 3.63, which is somewhere between once a month and twice a year. Almost one in four participants followed second-hand clothing influencers (24.3%). Those who did were asked which influencers they followed and on which platforms they were active. Many people followed Emma Chamberlain and Bestdressed. Some other examples were: wearilive, Mina Le and Aimee Van Der Pijl. These are all influencers who make videos about thrift shopping. According to the respondents, they are mostly active on YouTube (18.5%) and Instagram (18.5%) followed by TikTok (5.8%).

Table 3

Demographics

Demographics/Characteristics	Specifications	Counts	Proportion (in%)	M	SD
Age	18 years	12	7.1	22.21	2.12
	19 years	7	4.1		
	20 years	10	5.9		
	21 years	33	19.4		
	22 years	40	23.5		
	23 years	24	14.1		
	24 years	21	12.4		
	25 years	11	6.5		
	26 years	5	2.9		
	27 years	5	2.9		
	28 years	2	1.2		
Gender	Male	31	18.2		
	Female	136	80.0		
	Non-binary	3	1.8		
Degree	High School	49	28.8		
	Vocational	2	1.2		
	Bachelor	80	47.1		
	Master	38	22.4		
	I would rather not say	1	.6		
Nationality	Belgian	117	68.8		
	Dutch	51	30.0		
How many minutes a day do you					
spent on social media?	0 - 10 minutes	1	.6	81.47	32.47

	10 - 20 minutes	3	1.8		
	20 - 30 minutes	3	1.8		
	30 - 40 minutes	8	4.7		
	40 - 50 minutes	11	6.5		
	50 - 60 minutes	27	15.9		
	60 - 70 minutes	21	12.4		
	70 - 80 minutes	16	9.4		
	80 - 90 minutes	12	7.1		
	90 - 100 minutes	10	5.9		
	100 - 110 minutes	8	4.7		
	110 - 120 minutes	14	8.2		
	More than 120 minutes	36	21.2		
How often do you buy second-hand clothes?	Once a week	3	3.7	3.63	1.21
	Every two weeks	19	11.0		
	Once a month	72	41.6		
	Twice a year	47	27.2		
	For special occasions	9	5.2		
	Never	23	13.3		

Results

Correlations

To construct an overview of the relations between the variables, a correlation matrix was created which can be found in Table 4. It shows that there is a significant correlation between purchase behaviour and all the other variables. This is also the case for the intention to buy second-hand clothes. There is a strong positive correlation between intention to buy second-hand and purchase behaviour (r = .73, p < .01). A significant relationship can also be found between intention to buy second-hand clothes and perceived behavioural control (r = .73).

.71, p < .01), subjective norms (r = .43, p < .01) and attitude towards second-hand clothes (r = .69, p < .01). Age is the variable that has the least significant correlations with other variables. It is also the only variable that has a negative effect. All correlations are in between -.30 and .30 which implies that there is a low correlation between the variables (Yong & Pearce, 2013). Attitude towards second-hand influencers is also significantly correlated with the other variables, but correlations are low. High significant correlations can be found between thrill of the hunt and purchase behaviour (r = .62, p < .01), intention to buy second-hand (r = .69, p < .01) and attitude towards second-hand clothes (r = .61, p < .01).

Table 4 *Correlation matrix*

	1.	2.	3.	4.	5.	6.	7.	8.	.9
1. Purchase behaviour									
2. Intention to buy second-hand	.73**								
3. Perceived behavioural control	.56**	.71**							
4. Subjective norms	.33**	.43**	.29**						
5. Attitude towards second-hand clothes	.56**	.69**	.67**	.41**					
6. Attitude towards second-hand fashion influencers	.28**	.28**	.19*	.25**	.16*				
7. Thrill of the hunt	.62**	.69**	.62**	.31**	.61**	.28**			
8. Economic motivation	.31**	.29**	.38**	.09**	.29**	.11	.38**		
9. Age	16*	17*	11	11	08	19*	22**	10	
10. Gender	.36**	.28**	.21**	.09	.16*	.25**	.18*	09	25**

^{**} *p* < .01 **p* < .05 *N* = 173

Regression analyses

In this first part, H1 and H2a will be discussed. The model as shown in Figure 1 cannot be investigated in its entirety. An elaborated discussion on this will be given in the limitation section.

The first hypothesis investigated the relation between intention to buy second-hand clothes and second-hand purchase behaviour. A hierarchical regression analysis was conducted with second-hand purchase behaviour as criterion. The control variables age, gender, economic motivation and thrill of the hunt were added in the first model. The first and second model were included to explore the R^2 change. An overview of the standardized betas from Model 1, 2 and 3 which explore second-hand purchase behaviour as dependent variable can be found in Table 5. Intention to buy second-hand clothes ($\beta = .52$, p < .001) proved to have a significant relation with purchase behaviour, as suggested in model 3 F(6,163) = 31.614, p < .001. H1 could thus be accepted.

PBC was not found to be significantly associated with second-hand purchase behaviour ($\beta = .00$, p = .995). H2a cannot be accepted.

Table 5 *Hierarchal regression analysis with second-hand purchase behaviour as dependent variable*

	Standardi	zed Betas	
	Model 1	Model 2	Model 3
Gender	.28***	.19***	.19***
Age	.02	.01	.01
Economic motivation	.13	.10	.10
Thrill of the hunt	.53***	.20**	.20**
Intention to buy second-hand clothes		.52***	.52***
Perceived behavioural control			.00
R^2	.46	.59	.59
F for change in R^2	35.27***	52.44***	.00

^{*}p < .050, **p < .010, ***p < .001

A second hierarchical regression was conducted to look at the predictors of intention to buy second-hand clothes, the results of this analysis can be found in Table 6. In Model 4, it can be seen that PBC (β = .31, p <.001), subjective norms (β = .15, p = .003) and attitude towards second-hand clothes (β = .22, p <.001) all predict the intention to buy second-hand clothes. Model 2 which added PBC to the control variables was significantly better than Model 1 Δ R^2 = .11, F (1, 164) = 48.62, p < .001. Model 3 which added attitude towards second-hand clothes was better than model 2 Δ R^2 = .03, F (1, 163) = 15.81, p < .001. Furthermore, Model 4 F(7,162) = 48.46, p < .001 which added subjective norms also improved the model significantly Δ R^2 = .02, F (1, 162) = 11.47, p < .001. Moreover, the control variable thrill of the hunt (β = .30, p <.001) is found to be an important predictor of intention. H2b, H3 and H4 can be accepted.

Table 6Hierarchal regression analysis with intention to buy second-hand clothes as dependent variable

	Standardized Betas					
	Model 1	Model 2	Model 3	Model 4		
Gender	.18**	.12*	.12*	.11*		
Age	.02	.00	.01	00		
Economic motivation	.06	03	01	01		
Thrill of the hunt	.64***	.41***	.37***	.30***		
Perceived behavioural control		.44***	.41***	.31***		
Subjective norms			.19***	.15**		
Attitude towards second-hand clothes				.22***		
R^2	.51***	.62***	.65***	.68**		
F for change in R^2	42.55***	48.62***	15.82***	11.47***		

^{*}p < .050, **p < .010, ***p < .001

PROCESS created by Hayes (2017). The outcome variable was intention to buy second-hand clothes. The predictor variable was attitude towards second-hand influencers and the mediator variable for the analysis was attitude towards second-hand clothes. Age, gender, thrill of the hunt and economic motivation were added as control variables. The standardized betas were studied. When analysing the effect of second-hand fashion influencers on the intention to buy second-hand clothes, it revealed no significant relationship between the two (β = .08, p = .107, 95% CI, -.034 to .339). The effect of second-hand fashion influencers on attitude towards second-hand clothes was also insignificant (β = -.03, p = .696, 95% CI, -.125 to .084). The effect of attitude towards second-hand clothes on intention to buy second-hand clothing was significant (β = .41, p = .000, 95% CI, .671 to 1.220). Hypothesis 5 could not be supported.

Table 7 *Results of simple mediation*

			95% confidence		
			inte		
	β	SE	Lower	Upper	- p
Attitude towards second-hand fashion influencers	03	05	13	.08	.696
=> Attitude towards second-hand clothes	03	.03	13	.00	.090
Attitude towards second-hand clothes	.41	1.4	.67	1.22	.000
=> Intention to buy second-hand clothes	.41	.14	.07	1.22	.000
Attitude towards second-hand fashion influencers	00	00	02	24	11
=> Intention to buy second-hand clothes	.08	.09	03	.34	.11

Hypothesis summary

	Hypotheses	Supported
H1	The intention to buy second-hand clothing will be positively	Yes
111	associated with second-hand purchase behaviour.	Tes
H2a	Perceived behavioural control will be positively associated with	No
112a	second-hand purchase behaviour.	110

H2b	Perceived behavioural control will be positively associated with the intention to buy second-hand clothing.	Yes
Н3	Subjective norms will be positively associated with the intention to buy second-hand clothing.	Yes
H4	The attitude towards second-hand clothing will be positively associated with the intention to buy second-hand clothing.	Yes
Н5	The relation between attitude towards second-hand fashion influencers and second-hand clothing purchase intent will be mediated by attitude towards second-hand clothes.	No

Further analysis

To further explore the impact second-hand fashion influencers have, multiple independent t-tests were conducted with the question asking whether they follow second-hand fashion influencers as the independent variable. The first test shows that people who follow second-hand fashion influencers (M = 4.62, SD = .42) have a more positive attitude towards second-hand clothing than those who do not follow second-hand fashion influencers (M =4.35, SD = .65), t(108.66) = -3.13, p = .002. Secondly, on average they (M = 6.14, SD = .73)score higher on PBC than people who answered no to the question (M = 5.74, SD = 1.05)t(171) = -2.28, p < .023. Thirdly, people who follow second-hand fashion influencers (M =4.06, SD = .70) have a higher average value on thrill of the hunt than people who do not follow second-hand fashion influencers (M = 3.60, SD = .91) t(90.05) = -3.13, p < .001. Additionally, their (M = 6.42, SD = .81) intention to buy second-hand clothing is stronger than that of those who do not follow second-hand fashion influencers (M = 5.73, SD = 1.50) t(129.87) = -3.77, p < .001. Furthermore, the followers of second-hand fashion influencers (M = 4.52, SD = 1.35) score higher on the variable measuring second-hand purchase behaviour than those who do not follow them (M = 3.57, SD = 1.74) t(88.33) = -3.70, p < .001. Finally, they (M = 3.83, SD = .96) purchase second-hand clothes more often than those who do not follow second-hand fashion influencers (M = 3.22, SD = 1.25) t(89.17) = -3.33, p = .001. All results can be found in Table 8.

Table 8 *T-tests with "do you follow second-hand fashion influencers?" as the independent variable*

	Follows second-hand fashion influencers		Does not follow second-hand fashion influencers				
	M	SD	M	SD	df	t	p
Attitude towards second-hand clothes	4.62	.42	4.35	.65	108.66	-3.13	.002
Perceived behavioural control	6.14	.73	5.74	1.05	171	-2.28	.023
Subjective norms	4.04	1.32	3.77	1.49	171	-1.03	.304
Thrill of the hunt	4.06	.70	3.60	.91	90.05	-3.13	< .001
Economic motivation	3.73	.97	3.49	.87	171	-1.60	.113
Intention to buy second-hand clothes	6.42	.81	5.73	1.50	129.87	-3.77	< .001
Second-hand purchase behaviour	4.52	1.35	3.57	1.74	88.33	-3.70	< .001
How often do you buy second-hand clothes?	3.83	.96	3.22	1.25	89.17	-3.33	.001

Discussion

In this section, a discussion will be provided about the implications of these findings on our understanding of the impact second-hand fashion influencers may have on Dutch and Belgian young adults' intention and behaviour to purchase second-hand clothing. As assumed in the first hypothesis, it can be confirmed that the intention to buy second-hand clothing is also associated with the actual buying behaviour. These variables were highly correlated with each other. Furthermore, when researching this with a hierarchical regression analysis, there was a clear improvement of the model when adding intention to the control variables. This implies that people who plan on buying second-hand clothes also buy second-hand clothes. The intention-behaviour gap, which has been previously found in research about ethical consumption (Carrington et al., 2010) cannot be found for second-hand shopping. Thus, the theory of planned behaviour by Ajzen (1991) can be used to investigate the actual behaviour of shopping second-hand.

However, the theory of planned behaviour also proposes that perceived behavioural control has a direct impact on the behaviour to shop for second-hand clothes. The first part of the second hypothesis could not be supported because this research found no significant relation between PBC and purchase behaviour. Despite the theory and previous empirical evidence (Ajzen, 1991; Xue et al., 2022), this study established a different result. These results indicate that individuals know where to purchase used clothes, have the time to buy them, and are financially capable of doing so, yet it is not strongly connected with their past purchase behaviour of second-hand clothes. On the other hand, perceived behavioural control was found to be significantly associated with the intention to buy pre-owned garments. Hence, this research found that many people are able to buy second-hand clothes which relates to their intention to buy second-hand clothing in the future. However, their past purchase behaviour is not significantly related to their capability of buying used clothes.

The strong relation between PBC and purchase intention implies that when people are able to buy second-hand clothes, know where to buy it and have enough time to buy it, they will most likely have a strong intention to purchase second-hand clothes. The further analysis showed that people who follow second-hand fashion influencers have a higher average score on PBC than people who do not follow them. Hence, this could imply the importance of influencers who talk about second-hand fashion. They can provide information on where to shop second-hand and give examples of online places that sell pre-owned garments, thereby contributing to the spread of second-hand shopping.

This research found that subjective norms also have a significant relation with the intention to buy second-hand clothing. This indicates that it is seen as socially acceptable to shop second-hand by most Dutch and Belgian respondents (Xu et al., 2014). This finding is different from that of Borusiak et al. (2020) who found that the variable subjective norms did not have a relation with the purchase intent of second-hand products. Their recommendation was to "show that second-hand buying is popular and practiced by many, including celebrities and influential bloggers" (Borusiak et al., 2020, p. 10). A potential reason as to why second-hand shopping is socially accepted in Belgium and in The Netherlands might be because more people, including fashion influencers, are talking about it in a positive way, which is helping to remove the social stigma that surrounds second-hand (Valor et al., 2022).

Attitude towards second-hand clothes is the third element provided by the theory of planned behaviour which predicts intention. The results indicate that people have a positive attitude towards second-hand clothing. On average people answered agree or totally agree to the questions which investigated peoples' attitudes. Second-hand clothes do not have a

positive connotation everywhere (e.g. Silva et al., 2021), but this research proves that young Belgian and Dutch consumers are rather positive towards second-hand clothing.

The next step was to explore whether influencers have an impact on those attitudes, and if attitude towards second-hand clothing mediates the relation between attitude towards second-hand fashion influencers and the intention to buy second-hand clothes. This hypothesis could not be supported. On the other hand, the further analysis showed that people who follow second-hand fashion influencers have a more positive attitude towards secondhand. This is in line with prior research suggesting that influencers are helping to give a positive connotation to pre-owned clothes, thereby impacting its popularity (Valor et al., 2022). Hence, the reason as to why this research could not support the mediation effect might be because of the design of this study. The use of attitude towards second-hand clothing as a mediator to investigate purchase intention is not widespread. Prior studies have used brand attitude as a mediator between attitude towards the influencer and purchase intention (e.g. Immanuel and Bianda, 2021). This might have caused the different outcomes. Moreover, a significant focus was put on the intentions to buy second-hand using TPB and the control variables impacting the purchase of second-hand garments. Further research might focus more on media theories and studies investigating the impact of influencers on buying behaviour. It could be interesting to use the Source Credibility Theory to research the influence of influencers. This theory poses that the impact the message from an influencer has on the consumer is related to factors such as the attractiveness of the influencer, trust and expertise (Shrivastava et al., 2021). These factors could be utilised in addition to the TPB and the control variables present in this research.

Furthermore, the result of this study indicate that other factors have a larger influential role than influencers on the purchase intention of second-hand clothes. Given the high r-squared value of the model with attitude, PBC, subjective norms and the control variables, it might be suggested that these have a greater impact. Results show that treasure hunting fun was a significant factor associated with purchase intention. Hence, people are greatly driven by the act itself, by being unique and expressing their styles (Wang et al., 2022). The results indicate that this is especially true for younger people. Being authentic and unique in one's style are considered important in some sub-cultures (Michael, 2013). By shopping second-hand, one can buy things nobody else has, which has proven to be a significant motivator for people to purchase second-hand. It might be that many people who filled in the survey belong to a group of people that value authenticity and therefore do not indicate or feel that they are influenced by others. These are speculations, and it should be interpreted with caution, but

further research might investigate where this drive for uniqueness comes from and how it is associated with second-hand clothing consumption.

The results of the further investigation that compared people who followed second-hand fashion influencers, and those who do not, found that people who follow these influencers have a more positive attitude towards second-hand clothes, have a greater intention to purchase second-hand, buy it more often and are more so driven by treasure hunting fun that those who do not follow second-hand fashion influencers. Hence, it could be argued that influencers are helping to give a positive meaning to second-hand clothes, as suggested in prior qualitative research (Valor et al., 2022).

In this research it was shown that second-hand clothing consumption is popular among Dutch and Belgian young adults. New insights have been provided regarding the impact of second-hand influencers on the intention to buy second-hand clothes. It could not be proven that influencers impact purchase intention through attitude towards second-hand clothing, possible explanations for that will be provided in the limitation section below.

Limitations and future research

There were several limitations in this study. Firstly, intention and behaviour to buy second-hand clothes were both measured with two item scales. The results of this study therefore need to be interpreted with caution because both purchase intention and behaviour were the dependent variables. All conclusions were drawn from hypotheses using these variables, which has important implications for the outcome of this study. In following research, it might be recommended to use scales with at least three items, as two item scales are generally viewed as unacceptable (Yong & Pearce, 2013). Different results might be obtained if more items were to be used. An adaptation of the scales by Rausch and Kopplin (2021) about sustainable clothing could potentially be utilised to investigate the intention and behaviour to buy second-hand clothing. They both have 4 items, which might result in more reliable results.

Secondly, because this is a cross-sectional research, it is not possible to assess what is the cause and effect of second-hand purchase intention and behaviour (Solem, 2015). It is thus not possible to know whether attitude, PBC and subjective norms are causing intention, and whether intention predicts behaviour. A possible future study could conduct an experiment where one group looks at content by influencers regarding second-hand clothing, while the other group watches a video about something else. Hereafter attitudes towards second-hand

can be investigated to see whether the group who watched the influencers talking about second-hand clothes are more positive towards pre-owned garments.

Thirdly, the researcher was not able to investigate the complete model as shown in Figure 1. This implies that it could not be studied whether there is an effect of attitude towards second-hand clothes, subjective norms and perceived behavioural control on purchase behaviour through second-hand purchase intention. The researcher only had access to IBM SPSS Software and limited knowledge on how to investigate models containing a mediation and two dependent variables. Future research might be able to reject or confirm the first and second hypothesis by testing the model in its entirety. This could be done using structural equation modeling which is a method that can be used to investigate complex relationships among variables (Hair et al., 2021). The results of this study could not find a significant relation between PBC and purchase behaviour, which is different from previous research (e.g. Xue et al., 2022). A test of the entire model could confirm the relation between PBC and behaviour.

Finally, there were some limitations regarding the sample. Age and gender were not equally distributed. The female overrepresentation is not surprising since women are more interested in fashion than men (Morgan & Birtwistle, 2009) and are thought to be more receptive to complete questionnaires for research (Johnstone & Lindh, 2022). Therefore, caution is required when making conclusions about gender and second-hand shopping. In future research, a random sampling method could be utilised to have a more representative sample.

Several questions still remain to be answered which could be researched in future studies. Further work could investigate the reasons why people do not purchase second-hand clothing. This has been explored in multiple other research regarding second-hand clothes which proved to be valuable in determining the barriers to shop second-hand (Wang, 2022; Xu et al., 2014). If this information were to be made clear, research could be used to change people's mindsets about second-hand clothing. These barriers like sanitation concerns and poverty association (Wang et al., 2022) could be countered by influencers who spread positive content about second-hand, thereby helping to dissociate second-hand with these negative connotations (Valor et al., 2022). Furthermore, it would be interesting to see whether people who spend more time on social media are more heavily influenced by second-hand fashion influencers. Additionally, research by ThredUP found that many young people feel pressured by social media to keep up with the latest trends (ThredUP, 2022). Future studies might therefore include social media use as a control variable to see whether people who

spend more time on social media purchase more second-hand clothes, or clothing in general. Results of this research also suggest that the younger a person is, the more positive their attitude is towards second-hand fashion influencers. Hence, it might be interesting to research what the outcome of this study would be with people younger than 18.

Conclusion

To date, little research has been conducted on second-hand fashion influencers and the purchase intention of second-hand garments among Dutch and Belgian young adults. Therefore, this study used an extended version of the theory of planned behaviour to investigate the factors impacting the intention and behaviour to buy second-hand clothes. A sample of 173 Dutch and Belgian respondents was gathered to explore the factors influencing the intention to buy second-hand clothes and whether second-hand fashion influencers have an impact on attitude and intention.

The theory of planned behaviour by Ajzen (1991) proposes that if one has a strong intention to perform a behaviour, one will also act out that behaviour. This premise has been supported in several studies (Iran et al., 2019; Xue et al., 2022); nevertheless, it has not been widely examined for the purchase of second-hand clothing. Therefore, this research has brought new insights in the field of the theory of planned behaviour and second-hand shopping. The results showed that attitude towards second-hand clothing, subjective norms, perceived behavioural control and treasure hunting fun all have significant relations with the intention to buy second-hand garments among Belgian and Dutch young adults. Furthermore, many purchase second-hand clothing, which is positive since people buy and discard garments at a quick pace (Brooks, 2015). By shopping second-hand, less clothing is produced, which impacts the total amount of garments going to waste (Farrant et al., 2010).

Furthermore, this research could not confirm that attitude towards second-hand fashion influencers can impact the purchase intention of young adults through attitude towards-second-hand clothes. However, further analysis showed that people who follow second-hand influencers have a more positive attitude towards second-hand, buy it more often and have a greater intention to purchase it.

In conclusion, second-hand shopping is no longer something that people in Belgium or the Netherlands shy away from. This investigation has shown that pre-owned garments are consumed by many young people, not necessarily because it is cheaper, but because it is socially accepted and fun to do so. It has also established that second-hand fashion influencers contribute to the strengthening of this tendency by making second-hand shopping a more desirable habit, supporting an environmentally positive change in people's consumption patterns.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-T
- Ajzen, I., & Madden, T. J. (1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of experimental social psychology*, 22(5), 453-474. https://doi.org/10.1016/0022-1031(86)90045-4
- Al-Swidi, A., Huque, S. M. R., Hafeez, M. H., & Shariff, M. N. M. (2014). The role of subjective norms in theory of planned behavior in the context of organic food consumption. *British Food Journal*, *116*(10), 1561-1580. https://doi.org/10.1108/BFJ-05-2013-0105
- Allwood, J., Laursen, S., de Rodriguez, C., & Bocken, N. (2006). Well dressed? The present and future sustainability of clothing and textiles in the United Kingdom. University of Cambridge Institute for Manufacturing, Cambridge University.
- Arriagada, A., & Ibáñez, F. (2020). "You need at least one picture daily, if not, you're dead": Content creators and platform evolution in the social media ecology. *Social Media+Society*, 6(3), 1-12. https://doi.org/10.1177/2056305120944624
- Auxier, B., & Anderson, M. (2021, April). *Social Media Use in 2021*. Pew Research Centre. https://www.pewresearch.org/internet/2021/04/07/social-media-use-in-2021/
- Babbie, E. R. (2017). *The practice of social research*. Cengage learning.
- Bandura, A. (1977). Social learning theory. Prentice-Hall.
- Bandura, A. (2014). Social-cognitive theory. In R. B. Ewen (Eds.), *An introduction to theories of personality* (pp. 341-360). Psychology Press. https://doi.org/10.4324/9781315793177
- Bardhi, F. (2003). Thrill of the hunt: Thrift shopping for pleasure. In P. A. Keller & D. W. Rook (Eds.), *Advances in consumer research Volume 30* (pp. 375-376).
- Becker-Leifhold, C. (2018). The role of values in collaborative fashion consumption A critical investigation through the lenses of the theory of planned behavior. *Journal of Cleaner Production*, 199, 781-791. https://doi.org/10.1016/j.jclepro.2018.06.296

- Borusiak, B., Szymkowiak, A., Horska, E., Raszka, N., & Zelichowska, E. (2020). Towards building sustainable consumption: A study of second-hand buying intentions. *Sustainability*, *12*(3), 875. https://doi.org/10. 3390/su12030875
- Brooks, A. (2019). *Clothing poverty: The hidden world of fast fashion and second-hand clothes.* Bloomsbury Publishing.
- Brislin, R. W. (1986). The wording and translation of research instruments. In W. J. Lonner & J. W. Berry (Eds.), *Field methods in cross-cultural research* (pp. 137–164). Sage Publications, Inc.
- Carey, L., Cervellon, M., McColl, J., Stewart, A., & Yuen, Y. C. Y. (2018). Vintage Fashion: A Cross-Cultural Perspective. In D. Ryding, C. E. Henninger, M. B. Cano (Eds.), *Vintage Luxury Fashion* (pp. 185-203). Springer International Publishing. https://doi.org/10.1007/978-3-319-71985-6_12
- Carrington, M. J., Neville, B. A., & Whitwell, G. J. (2010). Why ethical consumers don't walk their talk: Towards a framework for understanding the gap between the ethical purchase intentions and actual buying behaviour of ethically minded consumers. *Journal of Business Ethics*, 97(1), 139-158. https://doi.org/10.1007/s10551-010-0501-6
- Cervellon, M. C., Carey, L., & Harms, T. (2012). Something old, something used:

 Determinants of women's purchase of vintage fashion vs second-hand
 fashion. *International Journal of Retail and Distribution Management*, 40(12), 956-974.

 https://doi.org/10.1108/09590551211274946
- Chen, Y. S., Chang, T. W., Li, H. X., & Chen, Y. R. (2020). The influence of green brand affect on green purchase intentions: The mediation effects of green brand associations and green brand attitude. *International Journal of Environmental Research and Public Health*, 17(11), Article 4089. https://doi.org/10.3390/ijerph17114089
- Chetioui, Y., Benlafqih, H., & Lebdaoui, H. (2020). How fashion influencers contribute to consumers' purchase intention. *Journal of Fashion Marketing and Management*, 24(3), 361-380. https://doi.org/10.1108/JFMM-08-2019-0157
- Chin, P. N., Isa, S. M., & Alodin, Y. (2020). The impact of endorser and brand credibility on consumers' purchase intention: the mediating effect of attitude towards brand and brand

- credibility. *Journal of Marketing Communications*, 26(8), 896-912. https://doi.org/10.1080/13527266.2019.1604561
- Christiansen, T., & Snepenger, D. J. (2005). Information sources for thrift shopping: Is there a "thrift maven"? *Journal of Consumer Marketing*, 22(6), 323-331. https://doi.org/10.1108/07363760510623911
- Craig, D. (2019). Creator management in the social media entertainment industry. In M. Deuze, M. Prenger (Eds.), *Making Media: Production, Practices and Professions* (pp. 363-374). Amsterdam University Press.
- De Leeuw, A., Valois, P., & Houssemand, C. (2011). Predicting the intentions to buy fair-trade products: The role of attitude, social norm, perceived behavioral control, and moral norm. *OIDA International Journal of Sustainable Development*, 2(10), 77-84. Available at SSRN: https://ssrn.com/abstract=1977718
- de Lenne, O., & Vandenbosch, L. (2017). Media and sustainable apparel buying intention. *Journal of Fashion Marketing and Management*, 21(4), 483-498. https://doi.org/10.1108/JFMM-11-2016-0101
- De Veirman, M., Cauberghe, V., & Hudders, L. (2017). Marketing through instagram influencers: The impact of number of followers and product divergence on brand attitude. *International Journal of Advertising*, *36*(5), 798-828. https://doi.org/10.1080/02650487.2017.1348035
- Djafarova, E., & Rushworth, C. (2017). Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users. *Computers in human behavior*, 68, 1-7. https://doi.org/10.1016/j.chb.2016.11.009
- Ellen Macarthur Foundation. (2017). *A new textiles economy: Redesigning fashion's future*. https://emf.thirdlight.com/link/kccf8o3ldtmd-y7i1fx/@/preview/1?o
- Emma Chamberlain. (2020, July 26). *MASSIVE THRIFT HAUL* [Video]. YouTube. https://www.youtube.com/watch?v=GNOzdCFeC3E
- EPRS, European Parliamentary Research Service. (2020, September). What if fashion were good for the planet?

 https://www.europarl.europa.eu/RegData/etudes/ATAG/2020/656296/EPRS_ATA(2020) 656296_EN.pdf

- Farrant, L., Olsen, S. I., & Wangel, A. (2010). Environmental benefits from reusing clothes. *The International Journal of Life Cycle Assessment*, *15*(7), 726-736. https://doi.org/10.1007/s11367-010-0197-y
- Lapolla, K. & Kim, J., (2015) "Fashion Design Students as "Thrift Mavens": An Interpretive Approach to How Fashion Design Students Can Influence Thrift Shopping" *International Textile and Apparel Association Annual Conference Proceedings* 72(1), 1-2.
- Lim, X. J., Radzol, A. M., Cheah, J., & Wong, M. W. (2017). The impact of social media influencers on purchase intention and the mediation effect of customer attitude. *Asian Journal of Business Research*, 7(2), 19-36. https://doi.org/10.14707/ajbr.170035
- Ferraro, C., Sands, S., & Brace-Govan, J. (2016). The role of fashionability in second-hand shopping motivations. *Journal of Retailing and Consumer Services*, *32*, 262-268. https://doi.org/10.1016/j.jretconser.2016.07.006
- Guiot, D., & Roux, D. (2010). A second-hand shoppers' motivation scale: Antecedents, consequences, and implications for retailers. *Journal of Retailing*, 86(4), 355-371. https://doi.org/10.1016/j.jretai.2010.08.002
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate Data Analysis*. Prentice Hall.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Partial least squares structural equation modeling (PLS-SEM) using R: A workbook. Springer Nature.
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.
- Immanuel, D. M., & Bianda, H. S. A. (2021). The impact of using influencer on consumer purchase intention with attitude towards influencer and brand attitude as mediator. *Jurnal Aplikasi Manajemen*, 19(4), 766-781. https://doi.org/10.21776/ub.jam.2021.019.04.06.
- Iran, S., Geiger, S. M., & Schrader, U. (2019). Collaborative fashion consumption A cross-cultural study between Tehran and Berlin. *Journal of Cleaner Production*, *212*, 313-323. https://doi.org/10.1016/j.jclepro.2018.11.163

- Johnstone, L., & Lindh, C. (2022). Sustainably sustaining (online) fashion consumption: Using influencers to promote sustainable (un)planned behaviour in Europe's millennials. *Journal of Retailing and Consumer Services*, 64, Article 102775. https://doi.org/10.1016/j.jretconser.2021.102775
- Judge, M., Warren-Myers, G., & Paladino, A. (2019). Using the theory of planned behaviour to predict intentions to purchase sustainable housing. *Journal of Cleaner Production*, 215, 259-267. https://doi.org/10.1016/j.jclepro.2019.01.029
- Kim, H.-S., & Damhorst, M. L. (1999). Environmental attitude and commitment in relation to ad message credibility. *Journal of Fashion Marketing and Management*, *3*(1), 18–30. https://doi.org/10.1108/eb022545
- King, M. M., & Multon, K. D. (1996). The effects of television role models on the career aspirations of African American junior high school students. *Journal of Career Development*, 23(2), 111-125. https://doi.org/10.1177/089484539602300202
- Kim, Y., & Han, H. (2010). Intention to pay conventional-hotel prices at a green hotel—a modification of the theory of planned behavior. *Journal of Sustainable Tourism*, 18(8), 997-1014. https://doi.org/10.1080/09669582.2010.490300
- Kim, N. L., Woo, H., & Ramkumar, B. (2021). The role of product history in consumer response to online second-hand clothing retail service based on circular fashion. *Journal* of Retailing and Consumer Services, 60, Article 102457. https://doi.org/10.1016/j.jretconser.2021.102457
- Lang, C., & Joyner Armstrong, C. M. (2018). Collaborative consumption: The influence of fashion leadership, need for uniqueness, and materialism on female consumers' adoption of clothing renting and swapping. *Sustainable Production and Consumption*, *13*, 37-47. https://doi.org/10.1016/j.spc.2017.11.005
- Le Zotte, J. (2017). From goodwill to grunge: A history of secondhand styles and alternative economies. UNC Press Books.
- Lestari, F. A., & Asmarani, R. (2021). Thrifting Culture during the Covid-19 Pandemic and Its Impact on the Environment. *E3S Web of Conferences*, *317*, Article 01006. https://doi.org/10.1051/e3sconf/202131701006

- Liobikiene, G., Mandravickaite, J., & Bernatoniene, J. (2016). Theory of planned behavior approach to understand the green purchasing behavior in the EU: A cross-cultural study. *Ecological Economics*, 125, 38-46. https://doi.org/10.1016/j.ecolecon.2016.02.008
- Ma, C., & Riggio, G. (2021). An Examination of the Effects on Low-Income Communities by the "Takeover" of Thrift Store Clothing by Resellers. *Journal of Student Research*, 10(2).
- Makgosa, R. (2010). The influence of vicarious role models on purchase intentions of Botswana teenagers. *Young Consumers*, 11(4), 307-319. https://doi.org/10.1108/17473611011093934
- Martin, C. A., & Bush, A. J. (2000). Do role models influence teenagers' purchase intentions and behavior? *Journal of consumer marketing*, *17*(5), 441-453. https://doi.org/10.1108/07363760010341081
- Matthews, R., & Ross, E. (2010). Research methods: A practical guide for the social sciences. Pearson Education Ltd.
- Merriam-Webster. (n.d.). *Secondhand*. The Merriam-Webster.com dictionary. Retrieved 5 May 2022, from https://www.merriam-webster.com/dictionary/secondhand
- Michael, J. (2015). Its really not hip to be a hipster: Negotiating trends and authenticity in the cultural field. *Journal of Consumer Culture*, *15*(2), 163-182. https://doi.org/10.1177/1469540513493206
- Moschis, G. P., & Churchill Jr, G. A. (1978). Consumer socialization: A theoretical and empirical analysis. *Journal of marketing research*, 15(4), 599-609. https://doi.org/10.1177/002224377801500409
- Mohammad, J., Quoquab, F., & Mohamed Sadom, N. Z. (2020). Mindful consumption of second-hand clothing: the role of eWOM, attitude and consumer engagement. *Journal of Fashion Marketing and Management*, 25(3), 482-510. https://doi.org/10.1108/JFMM-05-2020-0080
- Montgomery, R. D., & Mitchell, M. (2014). Examining the demographic profiles of thrift store donors and thrift store shoppers. *Atlantic Marketing Journal*, *3*(1). https://digitalcommons.kennesaw.edu/amj/vol3/iss1/1

- Morgan, L. R., & Birtwistle, G. (2009). An investigation of young fashion consumers' disposal habits. *International Journal of Consumer Studies*, *33*(2), 190-198. https://doi.org/10.1111/j.1470-6431.2009.00756.x
- Nguyen, T. (2021, April 26). *Depop and thrift shopping are popular on TikTok. But is buying too much unethical?* Vox. Retrieved 3 May 2022, from https://www.vox.com/thegoods/22396051/thrift-store-hauls-ethics-depop
- O'Cass, A. (2004). Fashion clothing consumption: antecedents and consequences of fashion clothing involvement. *European journal of Marketing*, *38*(7), 869-882. https://doi.org/10.1108/03090560410539294
- Pavich, N. (2021). Goodwill hunting: YouTube user-generated content as a promotional tool for thrifted apparel. *Text special issues*, 25(62), 1-12.
- Pradhan, D., Duraipandian, I., & Sethi, D. (2016). Celebrity endorsement: How celebrity—brand—user personality congruence affects brand attitude and purchase intention. *Journal of Marketing Communications*, 22(5), 456-473. https://doi.org/10.1080/13527266.2014.914561
- Rausch, T. M., & Kopplin, C. S. (2021). Bridge the gap: Consumers' purchase intention and behavior regarding sustainable clothing. *Journal of Cleaner Production*, 278, Article 123882. https://doi.org/10.1016/j.jclepro.2020.123882
- Ronobir, R. J. K. (2020). The socioeconomic causes and effects of the gentrified thrifting experience. In M. H. Abdellatif, R. F. Ahmed, M. C. Barry, R. N. Curran, R. N. Yazdani, A. Kaushal, S. G. Infante, D. Saha (Eds.) *Across the spectrum of socioeconomics* (pp. 48–56). https://doi.org/10.5281/zenodo.3983108
- Roux, D., & Guiot, D. (2008). Measuring second-hand shopping motives, antecedents and consequences. *Recherche et Applications En Marketing (English Edition)*, 23(4), 63-91. https://doi.org/10.1177/205157070802300404
- Sallam, M. A. A., & Wahid, N. A. (2012). Endorser credibility effects on Yemeni male consumer's attitudes towards advertising, brand attitude and purchase intention: The mediating role of attitude toward brand. *International Business Research*, *5*(4). https://doi.org/10.5539/ibr.v5n4p55

- SanMiguel, P., Guercini, S., & Sádaba, T. (2019). The impact of attitudes towards influencers amongst millennial fashion buyers. *Studies in Communication Sciences*, *18*(2), 439-460. https://doi.org/10.24434/j.scoms.2018.02.016
- Schouten, A. P., Janssen, L., & Verspaget, M. (2020). Celebrity vs. Influencer endorsements in advertising: the role of identification, credibility, and Product-Endorser fit. *International Journal of Advertising*, *39*(2), 258-281. https://doi.org/10.1080/02650487.2019.1634898
- Scott, C. F., Bay-Cheng, L., Prince, M. A., Nochajski, T. H., & Collins, R. L. (2017). Time spent online: Latent profile analyses of emerging adults' social media use. *Computers in Human Behavior*, 75, 311-319. https://doi.org/10.1016/j.chb.2017.05.026
- Shrivastava, A., Jain, G., Kamble, S. S., & Belhadi, A. (2021). Sustainability through online renting clothing: Circular fashion fueled by instagram micro-celebrities. *Journal of Cleaner Production*, 278, Article 123772. https://doi.org/1016/j.jclepro.2020.123772
- Silva, S. C., Santos, A., Duarte, P., & Vlačić, B. (2021). The role of social embarrassment, sustainability, familiarity and perception of hygiene in second-hand clothing purchase experience. *International Journal of Retail and Distribution Management*, 49(6), 717-734. https://doi.org/10.1108/IJRDM-09-2020-0356
- Sokolova, K., & Kefi, H. (2020). Instagram and YouTube bloggers promote it, why should I buy? How credibility and parasocial interaction influence purchase intentions. *Journal of Retailing and Consumer Services*, *53*, Article 101742. https://doi.org/10.1016/j.jretconser.2019.01.011
- Solem, R. C. (2015). Limitation of a cross-sectional study. *American Journal of Orthodontics and Dentofacial Orthopedics*, 148(2), 205. https://doi.org/10.1016/j.ajodo.2015.05.006
- Stoldt, R., Wellman, M., Ekdale, B., & Tully, M. (2019). Professionalizing and profiting: The rise of intermediaries in the social media influencer industry. *Social Media+ Society*, *5*(1), 1-11. https://doi.org/10.1177/2056305119832587
- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in science education*, 48(6), 1273-1296. https://doi.org/10.1007/s11165-016-9602-2
- ThredUP. (May, 2022). 2022 Resale Report. https://www.thredup.com/resale/

- Turri, A. M., Smith, K. H., & Kemp, E. (2013). Developing affective brand commitment through social media. *Journal of Electronic Commerce Research*, *14*(3).
- Turunen, L. L. M., Leipämaa-Leskinen, H., & Sihvonen, J. (2018). Restructuring Secondhand Fashion from the Consumption Perspective. In D. Ryding, C. E. Henninger, M. B. Cano (Eds.), *Vintage Luxury Fashion* (pp. 11-27). Springer International Publishing. https://doi.org/10.1007/978-3-319-71985-6_2
- Valor, C., Ronda, L., & Abril, C. (2022). Understanding the expansion of circular markets: Building relational legitimacy to overcome the stigma of second-hand clothing. *Sustainable Production and Consumption*, *30*, 77-88. https://doi.org/10.1016/j.spc.2021.11.027
- Vermeir, I., & Verbeke, W. (2008). Sustainable food consumption among young adults in Belgium: Theory of planned behaviour and the role of confidence and values. *Ecological Economics*, 64(3), 542-553. https://doi.org/10.1016/j.ecolecon.2007.03.007
- Waarom koop je tweedehands kleding? (2022, March 24). [Video]. YouTube. https://www.youtube.com/watch?v=aI8P3n1mBL4
- Wang, B., Fu, Y., & Li, Y. (2022). Young consumers' motivations and barriers to the purchase of second-hand clothes: An empirical study of China. *Waste Management*, *143*, 157-167. https://doi.org/10.1016/j.wasman.2022.02.019
- Widia, W., Setyanto, R. P., & Laksana, R. D. (2021). The Psychographic and Demographic Profile of Online Thrift Shop Consumers in Tasikmalaya. *International sustainable Competitive Advantage*.
- Wigder, Z. D. (2020, April 23). Shoptalk Reveals 75 Ways Retail Will Change in the Next Decade. The Robin Report. Retrieved 18 June 2022, from https://www.therobinreport.com/shoptalk-reveals-75-ways-retail-will-change-in-the-next-decade/
- Worthington, R. L., & Whittaker, T. A. (2006). Scale development research: A content analysis and recommendations for best practices. *The counseling psychologist*, *34*(6), 806-838. https://doi.org/10.1177/0011000006288127
- Xu, Y., Chen, Y., Burman, R., & Zhao, H. (2014). Second-hand clothing consumption: A cross-cultural comparison between American and Chinese young

- consumers. *International Journal of Consumer Studies*, *38*(6), 670-677. https://doi.org/10.1111/ijcs.12139
- Xue, X., Caiguo, X., Yi, L., & Chenxia, M. (2022). Consumption of traditional handicraft fashion: Motivations, intentions and behaviours of Chinese consumers. *Cleaner and Responsible Consumption*, 4, Article 100046. https://doi.org/10.1016/j.clrc.2021.100046
- Yadav, R., & Pathak, G. S. (2017). Determinants of Consumers' Green Purchase Behavior in a Developing Nation: Applying and Extending the Theory of Planned Behavior. *Ecological Economics*, 134, 114-122. https://doi.org/10.1016/j.ecolecon.2016.12.019
- Yalcin, T., Nistor, C., & Pehlivan, E. (2021). Sustainability Influencers: Between Marketers and Educators. *Business Forum*, 28(1). https://ssrn.com/abstract=3800316
- Yangzom, D. (2021). From rag trade to thrifting: the cultural economy of secondhand clothing. In E. Paulicelli, V. Manlow, E. Wissinger (Eds.), *The Routledge Companion to Fashion Studies* (pp. 269-279). Routledge. https://doi.org/10.4324/9780429264405-28
- Yong, A. G., & Pearce, S. (2013). A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in quantitative methods for psychology*, *9*(2), 79-94.
- Zahid, N. M., Khan, J., & Tao, M. (2022). Exploring mindful consumption, ego involvement, and social norms influencing second-hand clothing purchase. *Current Psychology*, https://doi.org/10.1007/s12144-021-02657-9

Appendix

Link to second-hand promotion video:

Waarom koop je tweedehands kleding? (2022, March 24). [Video]. YouTube.

https://www.youtube.com/watch?v=aI8P3n1mBL4

Survey in English

Dear participant,

Thank you for participating in this survey!

My name is Kato Van Roy and I study at the Erasmus University Rotterdam. This research is part of my master's thesis and is about second-hand clothing shopping among Flemish and Dutch young adults (18-29 years).

Information about this survey:

- The results will be used for academic purposes only.
- The results are processed anonymously.
- There are no right or wrong answers to the questions.
- This survey takes about 5 minutes.
- Participation in this survey is voluntary and you have the right to stop at any time.

If you have any questions, please do not hesitate to contact me (katovanroy@student.eur.nl).

Before you proceed, I will ask for your consent for your voluntary participation in this survey

I consent to participate. Start the survey.

I do not consent to participate. Stop the survey.

How old are you?

Younger than 18
18
...

29
Older than 29
What gender do you identify with?
Man
Woman
Non-binary
Prefer not to say
What is your education level?
Primary school
Highschool
MBO/Vocational
Bachelor (at college / HBO or university)
Master (at college / HBO or university)
PhD
Prefer not to say
My nationality is
Belgian
Dutch
Other
How many minutes a day do you spent on social media?
0-10 minutes
10-20 minutes

20-30 minutes
30-40 minutes
40-50 minutes
50-60 minutes
60-70 minutes
70-80 minutes
80-90 minutes
90-100 minutes
100-110 minutes
110-120 minutes
More than 120 minutes
Do you sometimes buy second-hand clothing with the sole purpose to resell it?
Do you sometimes buy second-hand clothing with the sole purpose to resell it? Yes
Yes
Yes
Yes No
Yes No How often do you buy second-hand clothes?
Yes No How often do you buy second-hand clothes? More than twice a week
Yes No How often do you buy second-hand clothes? More than twice a week Once a week
Yes No How often do you buy second-hand clothes? More than twice a week Once a week Once every two weeks
Yes No How often do you buy second-hand clothes? More than twice a week Once a week Once every two weeks Once every month

Do you agree with the following statements?

I bought some clothing from friends or relatives in the previous year.

I bought some second-hand clothing from others (e.g. in a flea market) in the previous year.

I bought some clothing from second-hand shops in the previous year.

The following questions are about second-hand clothing influencers.

Second-hand fashion influencers are individuals who spread information about second-hand clothing by sharing posts, videos and other content on their platform. This content is about styling, customizing and finding second-hand clothing, among other things.

Do you follow second-hand clothing influencers?

If yes, which ones?

No

Yes, I follow these influencers ...

On which platforms are these second-hand fashion influencers mostly active?

YouTube

TikTok

Instagram

Other: ...

Indicate to what extent you agree with the following statements about second-hand clothing influencers:

I do believe that second-hand fashion influencers serve as fashion models for me.

I do believe that second-hand fashion influencers present interesting contents.

I do consider second-hand fashion influencers as a reliable source of information and discovery.

Please indicate to what extent you agree or disagree with the following statements:

It is very likely that I will buy second-hand clothing in the future.

Certainly, I will buy second-hand clothing.

Most people who are important to me think I should buy second-hand clothing.

Most people who are important to me would want me to purchase second-hand clothing.

People whose opinions I value would prefer that I buy second-hand clothing.

I know where I can buy second-hand clothes.

I am capable of buying second-hand clothes.

I have enough time to choose second-hand clothes when I have to buy something.

You are almost done, just a few more questions!

Please indicate to what extent you agree or disagree with the following statements:

I hope to find second-hand clothes that not everyone will have.

I love finding original clothes you don't see in the mainstream shops.

I like shopping second-hand because I don't like seeing things thrown away that can still be of use.

By shopping second-hand, I feel in a small way I'm fighting against waste.

I like strolling around these second-hand outlets because I always hope to come across a find.

I go to such places to ferret around and discover something.

I'm often on the look-out for a find when going to some second-hand outlets.

In some of these second-hand outlets, I feel a bit like I'm treasure hunting.

I can afford more clothes because I pay less second-hand.

One can have more clothes for the same amount of money if one buys second-hand.

I feel that I have lots of clothes for not much money by buying them second-hand.

Last questions!

Please indicate to what extent you agree or disagree with the following statements:

I am positive towards buying second-hand clothes.

The thought of buying second-hand clothes is appealing to me.

I think it is a good idea to buy second-hand clothes.