



**UNIVERSITY OF GOTHENBURG**  
**SCHOOL OF BUSINESS, ECONOMICS AND LAW**

## **Luxury, Fashion, and Idols**

Applying an extended theory of planned behavior to  
examine barriers toward sustainable fashion  
consumption in Japan

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# Table of Contents

<b>Abstract</b>	<b>3</b>
<b>1. Introduction</b>	<b>4</b>
<b>2. Literature Review &amp; Theoretical Framework</b>	<b>6</b>
2.1 Sustainable Fashion Consumption	6
2.1.1 Barriers to Sustainable Fashion Consumption	6
2.1.2 Barriers to SFC in Japan	7
2.2 Theory of Planned Behavior	8
2.2.1 Attitudes	8
2.2.2 Subjective Norms	10
2.2.3 Perceived Behavior Control	10
2.3 Additions to the TPB	11
2.3.1 Luxury Orientation	12
2.3.2 Fashion Involvement	13
2.3.3 Idol Attachment	13
<b>3. Methodology and Data Collection</b>	<b>14</b>
3.1 Population and Sample	15
3.2 Measurements	15
3.3 Data Collection	18
3.4 Data Quality	19
3.5 Data Analysis	20
<b>4. Results and Analysis</b>	<b>21</b>
4.1 General Results	21
4.2 Confirmatory Factor Analysis (CFA)	23
4.3 Multiple Linear Regression (MLR)	26
<b>5. Discussion</b>	<b>28</b>
<b>6. Conclusion</b>	<b>32</b>
6.1 Implications	33
6.2 Limitations and Future Research	34
<b>Acknowledgements</b>	<b>35</b>
<b>Appendix</b>	<b>36</b>
<b>References</b>	<b>37</b>

## Luxury, Fashion, and Idols

### Applying an extended theory of planned behavior to examine barriers toward sustainable fashion consumption in Japan

Florian Konstantin Gold & Allegra-Scarlett Nefertari Verena Irmgard Marie Terner

#### *Abstract*

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**Purpose:** This study aimed to apply an extended theory of planned behavior (TPB) to sustainable fashion consumption (SFC) in Japan, and test the importance of sociocultural barriers to purchase intentions.

**Methodology:** As only a few studies have examined SFC in Japan and have not used the TPB framework, this study adds to the body of literature, and proposes luxury orientation, fashion involvement, and idol attachment as barriers toward sustainable fashion (SF) purchase intentions in Japan. To assess this model, a survey among 166 Japanese private university students was carried out, and a multiple linear regression analysis was used to test the hypotheses.

**Findings:** Our results confirm the importance of attitudes and perceived behavior control in predicting SF purchase intentions, however not subjective norms, contradicting previous findings and theoretical assumptions. This was interpreted by a missing SF discourse in Japan and a lesser influence of norms on the younger generation. Luxury orientation, fashion involvement, and idol attachment could not be confirmed as barriers to SF purchase intentions, which was explained by the connecting aspects of luxury, fashionability, and sustainability.

**Originality/Value:** This research contributes to previous literature studying SFC and bridges the gap of investigating SF intentions in the context of Japan using an extended TPB model, adding factors that have not yet been applied. Our findings provide knowledge for sustainable fashion brands aiming to build strategies to establish themselves successfully in the Japanese market.

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**Keywords:** Fashion, Luxury, Idols, Japan, Consumption, Sustainability, Theory of Planned Behavior, Barriers, Sustainable Fashion

## 勿体無い (mottainai)

– the Japanese concept of respecting resources and a sense of regret over waste

# 1. Introduction

Following the old Japanese principle of *mottainai*, it is considered essential to respect resources and recognize their inherent value while not discarding something unnecessarily (Hasegawa, 1983). However, contemporary developments paint a different picture in Japan, and, although the concept may be rooted in Japanese culture, it diminished in value in today's society (Crossley-Baxter, 2020).

In a current study about fashion by the Japanese Consumer Affairs Agency (CAA), about 59 percent of Japanese were not aware of the term 'sustainable fashion' (SF) and only 12 percent stated that they understand the meaning of it (CAA, 2022b). Meanwhile, the fashion industry is a major contributor to environmental harm due to high CO<sub>2</sub> emissions, water consumption, toxic waste, and plastics (Young, 2020). With an estimated 18.6 million tonnes of apparel waste in 2020, as well as the industry with the second highest carbon footprint through its production, it accounts for the second-largest waste-generating industry (Young, 2020).

Gigantic fast-fashion businesses, referring to inexpensive clothing produced rapidly by mass-market retailers in response to the latest trends, further contribute to this problem. Japanese fast-fashion retailer Uniqlo Co. generated global revenue of around 843 billion Japanese yen (USD 6.2 billion) in 2021, being the subsidiary of Fast Retailing Co., the leading domestic company within Japan's apparel industry with sales over two trillion yen (USD 14.72 billion) the same year (Mitsui Fudosan, 2022). Meanwhile, a total of 512,000 tons of clothing in Japan was discarded for incineration or use as a landfill (CAA, 2022a).

Thus, not aligning with respectful conduct regarding resources and regret over waste, this shows the pressing need to strengthen the development of sustainable fashion in Japan. SF is a movement opposing the wastefulness of the fashion industry by selling clothes, which are either designed for long-term use, produced in an environmentally friendly way (Saricam & Okur, 2019), or clothes resold through second-hand. In order to achieve more popularity of SF in Japan, one critical aspect is to investigate consumers' intentions and barriers to purchasing sustainable fashion, which is the focus of this study.

The Theory of Planned Behavior (TPB), is a model of consumer behavior which examines the factors which influence an individual's behavioral intention and subsequently their behavior (Ajzen, 1991). It proposes one's attitudes towards a behavior, subjective norms, and perceived behavioral control as the main predictors and was used in various studies in the context of sustainable fashion consumption (e.g. Brandão & da Costa, 2021; Bong Ko & Jin, 2017; Kang et al., 2013; Zhang et al. 2019). However, as previous research reveals, it has neither been used nor adapted in the context of SFC intentions in Japan (Dabas & Whang, 2022).

To develop existing research, we apply the TPB framework to this context and extend the model with multiple sociocultural factors that we identified as obstacles to SFC in Japanese society.

Japanese customers have been ranked as one of the top worldwide luxury brand consumers (Reyes, 2021). Purchasing luxury brands is a sign of success in life in Japan (Slade, 2020), indicating a high *luxury orientation* in Japanese society (Reyes, 2021). However, luxury and sustainability are found as diverging concepts (e.g. Achabou & Dekhili, 2013; Kapferer & Michaut-Denizeau, 2014) and while sustainability is connected with altruism and ethics, luxury has been linked with overconsumption and pleasure (Athwal et al., 2019; Jain, 2018). Thus, luxury fashion and sustainable consumption are difficult to match.

Secondly, Tokyo, Japan is one of the most trend-setting cities in East Asia; being fashionable and following the latest styles is especially important for the younger generation (Kawamura, 2006). However, high *fashion involvement* was negatively associated with the willingness to purchase sustainable clothing (Legere & Kang, 2020; Roozen et al., 2021) and SF was perceived as unfashionable, unexciting in style as well as limited in variety (Moon et al., 2014; Ozdamar Ertekin & Atik, 2014).

Thirdly, idols (Korean (K-) and Japanese (J-)) are an integral part of Japanese society. Everything ‘Korean-from’ has a high demand in Japan (Bartlett, 2022) and J-Idols display the ideal values of what Japanese society embraces (Randy, 2019). They attract great attention and have a strong impact with the messages they convey, which particularly affects people with high *idol attachment*. However, instead of sustainable fashion, these idols promote luxury brands, for instance by being brand ambassadors for high-end brands like Fendi, Dior, or Gucci (Wills, 2021; Nayyar, 2023).

Based on a review of the last 25 years of research, over 200 studies were conducted between 1995 and 2020 on sustainable fashion consumption (Dabas & Whang, 2022). Nevertheless, most studies focus on the U.S. and Western European countries with only a few studies focusing on Asian countries and even less on Japan (Kong & Ko, 2017; Dhir et al. 2021a, 2021b). Existing research, which focused on East Asia, showed varying results between Chinese, South-Korean, and Japanese samples despite comparable cultural backgrounds (Kong & Ko, 2017). So far, no Japanese study applied the TPB to SF consumption nor integrated the proposed barriers into the model. Although targeting environmental concern and morality seem to be reasonable to increase consumers’ intentions to buy sustainable fashion, these are not the main criteria when buying decisions are taken (Boulstridge & Carrigan, 2000; Kong et al., 2016). Especially in fashion, consumers’ desires are the main driver for a purchase decision, not guilt (Niinimäki, 2010). Thus, we identified the need for research to apply the TPB model to SFC in Japan, and examine the proposed barriers of *luxury orientation*, *fashion involvement*, and *idol attachment*. This leads to two main questions guiding our research:

*RQ1: How does the TPB framework (attitudes, subjective norms, and perceived behavior control) apply to SF purchase intentions in Japan?*

*RQ2: How do luxury orientation, fashion involvement, and idol attachment influence intentions to purchase SF?*

The scope of this study covered private university students in Tokyo, Japan who are assumed to be a suitable target group due to sufficient financial means for potentially consuming sustainable fashion, a certain fashion consciousness, and an interest in following new trends by purchasing clothes (Kawamura, 2006). Furthermore, we do not compare the results to the Western context, as this goes beyond the scope of the paper.

The theoretical contribution of this thesis is to test the application of an extended TPB in the Japanese context and add potentially relevant barriers to the existing literature. Based on the results of this study, sustainable fashion brands, aiming to enter the Japanese market, can apply our findings and develop strategies to establish themselves successfully in Japan.

## 2. Literature Review & Theoretical Framework

In the following, relevant literature on sustainable fashion is highlighted and elaborated. Therefore, we define the concept of sustainable fashion consumption, summarize previous findings in this field of research, and present possible barriers in Japan to bridge the identified research gap.

### 2.1 Sustainable Fashion Consumption

The concept of sustainable fashion consumption is defined differently around diverse sources and thus offers a variety of definitions. With *sustainable*, we refer to the definition of sustainable development in the 1987 Brundtland report as the 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (Brundtland, 1987). Sustainable fashion can be defined as fashion that meets the needs of the present without compromising the future. In this paper, we are emphasizing the ecological dimension of the concept. Therefore, *sustainable fashion consumption* relates to buying clothes that are designed for long-term use as well as clothes that are produced in a non-harmful way to the environment (Saricam & Okur, 2019), opposing the practice of over-consuming and rapid mass production of inexpensive clothes in response to latest trends (Birtwistle & Moore, 2007). We also include the field of second-hand clothing, referring to clothes that have been previously owned and resold, as it similarly prolongs the lifespan of clothing and does not require the production of new fabrics.

#### 2.1.1 Barriers to Sustainable Fashion Consumption

Sustainable fashion consumption and its influencing factors have been investigated by a growing body of research, looking from different perspectives and considering different contexts. A systematic review of the last 25 years of research on sustainable fashion consumption (SFC) identified 213 studies, undertaken between 1995 and 2020 (Dabas & Whang, 2022). The authors highlight the expansion of the body and scope of SFC research, including a larger variety of influential factors. Product-based factors, consumer values, consumer knowledge, normative influences, and fashion orientation emerged as major

frequently researched themes in SFC research (Dabas & Whang, 2022; Brandão & da Costa, 2021; Connell, 2010; McNeill & Moore, 2015; Diddi et al., 2019).

However, when looking at the distribution of research across countries, the identified literature is heavily focused on Western countries and overlooks other regions, including East Asia and Japan. Most studies that evaluate the factor of fashion orientation were conducted in the U.S. and Western European countries ( $n = 31$ ) with only two studies conducted in South Korea ( $n=2$ ) (Dabas & Whang, 2022). The review also compared the results of studies where the cultural context resulted in a different association of the factor. For instance, unlike other studies conducted in the Western context that found *altruism* as a positively contributing factor (e.g. Reimers et al., 2016), a study in Ecuador showed a negative association between altruism and sustainable consumption behavior (Cruz-Cárdenas et al., 2019). Similarly, a study on an individual's orientation to nature predicted sustainable consumption only in the U.S. sample but not in the China sample (Bong Ko & Jin, 2017). Based on their synthesis of findings, the review authors stress the need to expand the cross-cultural research and include cultural, ethnic, and gender differences in future studies (Dabas & Whang, 2022).

### 2.1.2 Barriers to SFC in Japan

Only a few studies to date have investigated SFC using Japanese samples (Kong & Ko, 2017, Dhir et al., 2021a, 2021b). Kong & Ko (2017) examined consumers in South Korea, China, and Japan to better understand their decision-making processes regarding sustainable fashion. The results stated that interest in SF is growing, but actual purchasing behavior is lacking behind. Consumers failed to align their behavior with their positive attitudes toward sustainable consumption. A positive attitude towards SF was detected when the product is not perceived as a risk. Participants who are loyal to sustainable products tended to focus on health, eco-friendliness, and economic benefits. If a consumer realized that the purchase of a sustainable product is no harm to their health or finances, they were more likely to purchase sustainable fashion products. Furthermore, they found that consumers of sustainable products have strong environmental concerns, product knowledge, and positive perceived benefits. Some people who were hesitant to purchase SF were skeptical about the quality and aesthetic value of it (Kong & Ko, 2017).

However, comparing the three countries China, South Korea, and Japan, they found varying results despite the comparable cultural background, indicating the need for different marketing approaches. For instance, Chinese consumers were more educated about environmental issues, more involved, and motivated to be ethical consumers, while Korean and Japanese consumers were focused on avoiding uncertainty and risk in their decision-making. Japanese consumers were similar to Korean consumers in having negative perceptions about perceived risks and preferring health-related benefits. As the authors pointed out, this difference in findings among Chinese, Korean, and Japanese consumers showed a divergence from previous studies (Kong & Ko, 2017). This underlines the potential problem of generalizing findings even between East-Asian countries and the necessity to examine Japanese consumers and their SF behavior particularly.



Another study by Dhir et al. (2021a) sought to identify the drivers of green apparel purchase behavior to mitigate the intention-behavior gap. Japan was specifically chosen due to potentially adding new findings to existing literature that predominantly focused on Europe and North America. Using a Stimulus-Organism-Behavior-Consequence (SOBC) approach, it investigates the six under-researched variables of optimism, pessimism, labeling desire, labeling satisfaction, perceived effectiveness, and shopping routine. Positive associations were found between optimism and labeling desire and satisfaction, which were positively associated with purchase intentions. Likewise, shopping routine was positively associated with purchase intentions. In a second study by Dhir et al. (2021b) using an attitude-behavior-context theory, it was added that green trust, environmental attitude, and labeling satisfaction predicted green apparel purchases.

However, mentioned studies (Kong & Ko, 2017, Dhir et al., 2021a, 2021b) focused their research on addressing a potential attitude-behavior gap rather than consumers' purchase intentions as well as different theoretical approaches to our study.

## 2.2 Theory of Planned Behavior

The Theory of Planned Behavior (TPB) is a social-psychological model of consumer behavior which proposes one's attitudes towards a behavior, subjective norms, and perceived behavioral control as the main predictors of an individual's behavioral intention and subsequently behavior (Ajzen, 1991).

In the context of sustainable fashion, the TPB has been found as a relevant theory for investigating environmental behavior (Ozcaglar-Toulouse et al., 2006; Yazdanpanah & Forouzani, 2015; Zhang et al., 2019, Maichum et al., 2016) and has been used in various previous studies in the context of sustainable fashion consumption (Brandão & da Costa, 2021; Bong Ko & Jin, 2017; Kang et al., 2013; McNeill & Venter, 2019; Varshneya & Pandey, 2017). In Japan, a TPB framework has been applied and supported in the areas of tourism (Quintal et al., 2010), medical tourism (Lee, Han & Lockyer, 2012), organ donation (Bresnahan et al., 2007), and mobile technology (Koeder, Mohammed & Sugai, 2011).

We base our empirical analysis on an extended model of the TPB to measure the importance of different factors to SFC (*Figure 1*). The scope of this study is limited to SF purchase intentions, which constitute the proxy of actual behavior in the TPB model (Ajzen, 1991).

### 2.2.1 Attitudes

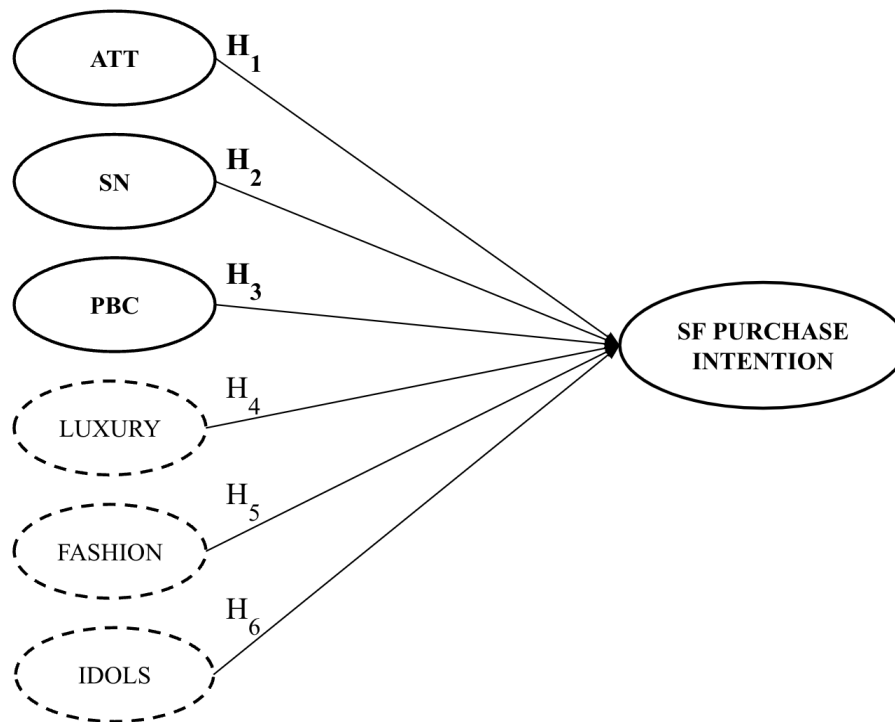
Attitudes (ATT) refer to an individual's beliefs in the results that can be achieved by a behavior, this is, the level to which a person has a favorable or unfavorable evaluation of that behavior (Ajzen, 1991; Fishbein & Ajzen, 1975). The TPB claims that the more positive an attitude is toward a particular behavior, the higher the likelihood of an individual's behavioral intention and subsequently to perform a certain behavior (Ajzen, 1991).

Several empirical studies in the past support the claim of a positive association between attitude and purchase intentions (Bredahl, 2001; Chen, 2007; Michaelidou & Hassan, 2010; Sheppard et al., 1988). In other areas of research using Japanese samples (e.g. traveling,



Quintal et al., 2010; Lee et al. 2012), attitudes were found as significant predictors of intentions. When it comes to the context of sustainability, previous studies on green products

*Figure 1. Proposed conceptual framework*



and environment-related behavior support the positive association between attitudes and green purchasing intention (Yadav & Pathak, 2016; Maichum et al., 2016; Yazdanpanah & Forouzani, 2015). According to Yadav & Pathak (2016), attitudes had the second greatest association with purchase intentions after environmental concerns. In a Thai study, attitudes were found as the most significant influence on green purchase intentions (Maichum et al., 2016) and another study that used the TPB with Iranian students found that only attitudes were a significant predictor of intentions to purchase organic food (Yazdanpanah & Forouzani, 2015). Relating to sustainable fashion consumption, Saricam & Okur (2019) found that attitudes had by far the strongest positive relationship with purchase intentions.

Thus, we argue that:

*H<sub>1</sub>: A positive attitude towards sustainable fashion (SF) positively influences the intention to purchase SF.*

### 2.2.2 Subjective Norms

Subjective norms (SN) are defined as the perception of social pressure, for example of family, friends, or colleagues, to comply with a certain behavior (Ajzen, 2006; Fishbein et al., 2003; Kim & Han, 2010; Brandão & da Costa, 2021). It refers to the normative social belief of a person regarding the behavior (Hansen, 2008).

In the context of sustainable consumption, multiple studies found that consumption patterns are influenced by norms (Kollmuss & Agyeman, 2002; Thøgersen, 2010). Social influence was found as the most essential driver for green purchase intentions (Lee, 2008). Another preceding survey study by Lam and Hsu (2006) confirms subjective norms as important in predicting intention in the sustainable fashion context. Kang et al. (2013) found that purchase intentions for environmentally sustainable apparel of young consumers were positively predicted by subjective norms. A more recent study showed that subjective norms were the secondarily most influential factor on purchase intention after attitudes (Saricam & Okur, 2019). Other findings support that subjective norms affected the purchase intention for hedonic green products, which included organic fashion (Zhang et al., 2019).

Social norms are culturally learned as a result of living in a specific national culture or habitus (Billig, 1995; Hofstede, 1991). They are often derived from the cultural standards of a country or emerge from group norms (Terry, Hogg, & White, 1999) and can act as a 'cohesive glue' (Milton et al., 2018, p. 401). This is also applicable to the context of sustainable consumption (Thøgersen, 2010; Minton et al., 2012): The subjective norm is connected with culture meaning that a consumer's likelihood to perform a sustainable behavior will depend on what others think of this particular behavior and the importance of the public opinion within the culture (Milton et al., 2018).

Originating from China, the school of Confucianism has strongly determined the Japanese way of thinking (Dolan & Worden, 1994). It has an influence on people's propensity to conform to social group norms and maintain face (Redding & Michael, 1983). In a cross-cultural study on green purchasing intentions, Chan & Lau (2002) also found that the subjective norm had a stronger influence on Chinese consumers than on American consumers, which was partly attributed to the cultural differences between both countries. Furthermore, studying green purchase intentions in India, Screen et al. (2018) found that collectivism had a strong relationship with subjective norms.

Due to the central role which collectivism also plays in Japan, our assumption is that subjective norms could have a similarly high impact in this context. We argue that subjective norms affect Japanese consumers' intentions to purchase sustainable fashion.

Thus:

*H<sub>2</sub>: Positive subjective norms towards SF positively influence the intention to purchase SF.*

### 2.2.3 Perceived Behavior Control

Perceived behavior control (PBC) refers to the individual's perception of ease or difficulty to perform a certain behavior including aspects like accessibility, availability, time, resources, and opportunities (Ajzen, 1991; Lam & Hsu, 2006). PBC can account for considerable

variance in behavioral intentions and actions. In this paper, we refer to PBC as the availability and accessibility of sustainable fashion in Tokyo.

Previous literature that used the TPB as a theoretical framework for sustainable fashion confirmed the influence of PBC on the intention to purchase green apparel (Brandão & da Costa, 2021; Bo, Ko & Jin, 2017, Zhang et al., 2019). Brandão & da Costa (2021) even found PBC played the greatest role in predicting the intention to buy sustainable fashion. Another study found PBC to be significant, but less influential than other TPB factors in affecting customer intentions to buy sustainable fashion (Saricam & Okur, 2019). Opposing these findings, a study by Kang et al. (2013) showed that the purchase intentions of young consumers for sustainable fashion were positively influenced by attitudes and subjective norms but not by PBC, which was explained by a problematic operationalization due to differences in organic cotton apparel availability.

Following the major body of research, we hypothesize a positive relationship of PBC with the intention to purchase SF in Japan.

Hence, we argue that:

*H<sub>3</sub>: Perceived behavioral control (PBC) towards SF positively influences the intention to purchase SF.*

### **2.3 Additions to the TPB**

Despite previous research showing behavioral intention is predictable from the three components of the model (e.g. Armitage & Conner, 2001a; Sheeran & Taylor, 1999), the level of prediction strongly ranged in explaining the variance (28 to 40 percent on average), questioning the sufficiency of the TPB in capturing all theoretical determinants of intention (Rise et al., 2010). In response, increasing research has extended the original TPB model with further constructs to improve the predictive power of the framework (e.g. Conner & Armitage, 1998), which was already suggested by the authors of the TPB (Ajzen, 1991).

This recommendation has already been followed in the context of sustainability and green products (e.g. Yazdanpanah & Forouzani, 2015, Brandão & da Costa, 2021; Bong Ko & Jin, 2017; Sreen et al., 2018; Zhang et al., 2019). Saricam & Okur (2019) extended with behavioral, normative, and control beliefs each affecting one TPB construct respectively. Bong Ko & Jin (2017) added the dimensions of man-nature orientation for attitudes as well as environmental knowledge for internal PBC and attitudes as predecessors. Sreen et al. (2018) added collectivism, long-term orientation, and man-nature orientation as predecessors of the TPB framework. Zhang et al. (2019) added the dimension of environmental concern as a preceding and direct predictor of organic clothing purchase intentions. Brandão & da Costa (2021) added environmental apparel knowledge, perceived value, price sensitivity, product attributes & variety, availability, and skepticism, as predecessors of one or more TPB constructs.

Following suit with studies like Sreen et al. (2018) and answering the call from review literature (Dabas & Whang, 2022), there is a need for considering cultural differences and an integration of culture-specific factors when examining sustainable fashion consumption.

Aiming to extend the TPB with sociocultural factors relevant to Japan, this study thus covers the aspects of *luxury orientation*, *fashion involvement*, and *idol attachment* which are presented in the following.

### 2.3.1 *Luxury Orientation*

Luxury goods are those whose price and quality ratios are usually the highest in the market (McKinsey, 1990), and distinguish themselves through exclusivity or rarity (Wiedmann et al., 2009). Furthermore, the consumption of luxury goods is connected with the satisfaction of psychological needs (Nia & Zaichkowsky, 2000). It can act as a symbol of expressing personal and social identity (Vickers & Renand, 2003) or take place in order to signal status, success, distinction, or fuel the desire to impress social others, whose value also depends on social and individual aspects (Wiedmann et al., 2009).

Japan is known for its austere luxury consumption (Donzé & Fujioka, 2018) and is one of the largest luxury markets in the world today (Isozaki & Donzé, 2022). According to a recent marketing insight article, Bvlgari, Salvatore Ferragamo, and Gucci earn 27% of their global revenue in the Japanese market and Louis Vuitton earns half its global profits from its 60 stores on the island (Evans, 2018). Luxurious brands became embedded in Japanese culture with the wealthiest moments in history being almost always connected with the well-known European fashion brands and possessing luxury brands can count as a sign of a successful life in Japan (Slade, 2020).

However, according to the majority of research, sustainability, and luxury are perceived as contrasting concepts (Kapferer & Michaut-Denizeau, 2014; Nash et al., 2016; Athwal et al., 2019; Sauer, 2010). Luxury goods are connected with overconsumption, personal pleasure and excess while on the other side, sustainability is connected with ethics, altruism, respect, and awareness for others (Athwal et al., 2019; Jain, 2018; Moraes et al., 2017; Nash et al., 2016; Widlocher, 2010). Other studies found that luxury-oriented consumers tend to not prioritize sustainability-related aspects when deciding for luxury goods (Davies et al., 2012; Kapferer & Michaut-Denizeau, 2015). Although there is a minority of research aiming to connect green products with status signaling and conspicuous consumption of green products, this is also argued to be dependent on the context and culture (Griskevicius & Van den Bergh, 2010).

Therefore, due to the high luxury orientation in Japanese society and the expression of success through luxury consumption, we assume that luxury fashion items are preferred over sustainable fashion.

Thus, our hypothesis is:

*H<sub>4</sub>: Luxury orientation negatively influences the intention to purchase SF.*

### 2.3.2 Fashion Involvement

When it comes to Japan, local fashion has not only inspired many Western designers in the world since the seventies, but it also has become a force that contributes to the general aesthetic of fashion (Kawamura, 2006). Especially the young generation in spots such as Shibuya or Harajuku in Tokyo can be considered extremely fashionable. Even people from Taiwan and Korea visit Tokyo just to get new fashion ideas. According to Kawamura (2006), telling consumers that a fashion item is popular in Tokyo is a selling point.

Previous research identified style, fit, and quality as important factors for fashion consumers (Niinimäki, 2010; Rayman et al., 2011) and influential to fashion purchase intentions (Ko et al., 2011; Wu & Chalip, 2014). However, these characteristics are usually not associated with sustainable fashion (Blasi et al., 2020; Han & Ko, 2017; Harris et al., 2016). Sustainable clothing designs were found having a negative reputation of being unfashionable, unexciting, and coming with a limited variety, which negatively affects SFC (Moon et al., 2014; Ozdamar Ertekin & Atik, 2014). Additionally, a perceived lack of style was found as one of the primary reasons for not engaging in sustainable clothing consumption behavior in a U.S. study (Diddi et al., 2019). High fashion involvement was also negatively associated with the willingness to purchase a slow fashion product (Legere & Kang, 2020; Roozen et al., 2021). Additionally, the attitude to being a fashionable person was found to outweigh the need to be socially responsible (McNeill & Moore, 2015). Brandão & da Costa (2021) confirm the importance of product attributes and variety to develop intentions towards SFC. Wu & Chalip (2014) and Ko et al. (2011) even suggest it as the greatest predictor. In other words, a high fashion involvement valuing style, fit, quality, and variety of options can act as a barrier towards SFC.

Based on this, we argue:

*H<sub>5</sub>: Fashion involvement negatively influences the intention to purchase SF.*

### 2.3.3 Idol Attachment

In addition to family and peer relationships, young adults often form secondary attachments to popular media figures (Boon & Lomore, 2001). With idol attachment, we refer to the strong emotions and admiration towards a celebrity figure and their personal attributes (Silvera & Austad, 2004; Vlachos et al., 2010). Such idols often serve as idealized self-images for admirers due to qualities or traits they would like to have or develop in themselves (Caughey, 1994). The idol becomes a role model who motivates individuals to adopt a certain lifestyle (Lockwood & Kunda, 1997) or a desired behavior (Desai & Basuroy, 2005). This includes the enactment of a variety of behaviors intended to bring about changes in their physical appearance, abilities, or values in order to bring these aspects more in line with the image of their idol (Caughey, 1994). This attachment can also influence purchase decisions (Martin & Bush, 2000).

When it comes to Japan, so-called Korean (K-) and Japanese (J-) idols are an integral part and big influence in Japanese society. K-Idol celebrities are working in the field of K-Pop in South Korea, either as a solo artist or a member of a group, or as an actor in a Korean Drama (K-drama), a genre for series or movies directed in Korea. In the past, different idols have significantly shaped markets (Kim, 2021; Jang, 2012) and even influenced diplomacy (Bartlett, 2022). For instance, the Korean band BTS was even invited to the United Nations to hold a speech (Lee, 2009b). In South Korea, it went to an extent where not the military has been used for strengthening the position of the country in the world but K-pop or K-dramas (Bartlett, 2022). Previous scholars even called these influences *soft power* (Nye, 1990). Similarly, J-idols are an extremely important cultural aspect of Japanese society. They are entertainers who display the ideal values of what Japanese society, in one form or another, embraces (Randy, 2019). In other words, these idols can attract great attention and have a strong impact on a large number of people with the messages they convey and how they behave. Thus, Japanese society is at least partly governed by the principles Japanese idols publicly express.

This potential influence is also picked up for marketing purposes as idols can market cultural commodities through their fashion and commercials (Lee, 2009a). Marketing that utilizes idols has greatly influenced not only the music market but also many other areas of interest for teenagers and consumers in their twenties. This includes areas of fashion, beauty, advertising, and movies (Kim, 2021). The effect of K-idols on the fashion industry became even more remarkable with the boom in the Chinese entertainment scene, which is the world's fastest-growing consumer group (Jang, 2012) and K-idols became front-row identities at haute couture fashion shows (Kim, 2021).

However, famous K-Idols primarily collaborate with popular luxury brands (Kim, 2021; Kim, 2015): For instance, Song Hye Kyo (Korean actress) is a brand ambassador for Fendi, Jun Ji Hyun (Korean actress) for Alexander McQueen and EXO's Kai (Korean singer) for Gucci (Wills, 2021). Singers of BTS have recently closed deals with Valentino, Louis Vuitton, Dior, and Versace, all names of high-end luxury brands.

That said, K-idols are not promoting sustainability and sustainable fashion brands and hence do not motivate their fans to adopt a more sustainable fashion style. We argue that consumers who identify strongly with idols have low intentions to purchase sustainable fashion.

Thus, our hypothesis is:

*H<sub>6</sub>: Idol attachment negatively influences the intention to purchase SF.*

### **3. Methodology and Data Collection**

Aligning with previous studies using the TPB framework in the context of sustainable fashion (e.g. Kang et al., 2013; Zhang et al., 2019; Brandão et al., 2021), we chose a quantitative study approach to test our hypotheses based on an extended TPB model.



In the following, the methodology of the conducted research will be presented. This includes the chosen population and sample, measurements, collection and analysis process.

### 3.1 Population and Sample

Our target population was Japanese university students as this group was seen as most interesting and suitable to examine when it comes to fashion as well as sustainability. Particularly the younger generation in Tokyo is considered highly fashionable and people from all over Asia travel to the city to see the newest trends in Shibuya or Harajuku (Kawamura, 2006). Additionally, Tokyo University students show a significantly higher awareness of 90% of the UN Sustainable Development Goals (SDGs) compared to the general public (Fabric, 2022).

For our sample, we chose to focus on students at three of the major private universities of the city (Waseda University, Keio University and Sophia University).

In total a number of 167 answers were recorded. 38 responses were submitted in English and 129 in Japanese. One response was deleted due to overall missing answers, one other response had missing values for 11% of items while all other responses had less than 5% missing. As there was no pattern detected regarding the missing values and the extent was sufficiently low, this was considered as MCAR (missing completely at random) and the mean substitution technique was applied in order to complete the data with the mean values (Hair et al., 2014). This method was preferred over a complete elimination of respondents to preserve as much data as possible. This resulted in a remainder of 166 responses ( $n = 166$ ).

Sample size has a direct impact on the statistical power and generalizability of the model (Hair et al., 2014). To maintain power of .8 in multiple regression, a minimum sample of 50 is suggested, preferably 100 observations (Hair et al., 2014). With 166 responses, this study exceeds the requirement of 100 observations, indicating statistical power. Regarding the generalizability of the results, the ratio of observations to independent variables is examined. As a rule of thumb, the ratio should be at least 5:1 observations per independent variable, with a desired level of above 15 observations per variable (Hair et al., 2014). With six latent constructs, 22 items (variables) and 166 responses, this results in 27 observations per latent construct but less than 8 observations per item, indicating limited generalizability of the results due to the sample size. Lastly, the larger the sample's degrees of freedom (df), the more generalizable the results (Hair et al., 2014). An identification check resulted in 160 df which qualifies the overall model as being overidentified, favoring the generalizability of the results.

### 3.2 Measurements

In order to measure the included constructs, we relied on the following items for the study (see *Table 1*). The scale used for all items was a five-point likert scale which ranged from strongly disagree to strongly agree. This was adapted from the original studies using a seven-point likert scale (e.g. Zhang & Kim, 2013). Despite a found optimized reliability



using a seven-point scale (Colman et al., 1997), existing literature suggests that a five-point scale showed to be less confusing and to increase response rate (Babakus & Mangold, 1992; Devlin et al., 1993). Hence, we decided to rely on a five-point scale to keep the survey user-friendly, quick and easy to answer, and achieve a high response rate as a result.

*Attitudes* was taken from Brandão & da Costa (2021) and Kim & Han (2010). However, three items had to be removed due to translation issues as it resulted in the same Japanese word for multiple items. In general, balancing scale length with parsimony in measurement is a debated issue (Clark & Watson, 1995). As three to four items per scale are generally considered sufficient to develop valid constructs (Hair et al., 2014), we chose to continue with the remaining 4 items. Regarding the construct *subjective norms*, all items have been included as used by Brandão & da Costa (2021). *PBC* was also taken from Brandão & da Costa (2021) but reduced by one item. This was because we faced similar translation difficulties as with attitudes and aimed to prevent confusing participants. Although this resulted in less than the recommended three items per construct (Hair et al. 2014), we argue that this can still allow a valid and reliable construct if certain conditions are met. Previous research states that a construct with two items can be considered reliable when the items are highly correlated ( $r > .7$ ) with each other but fairly uncorrelated with other variables (Yong & Pearce, 2013). Moreover, with the inclusion of other factors with three or more items, a model identification problem (under-identification) can be avoided through the general over-identification of the model (Hair et al., 2014). However, for choosing the number of scale items to measure a construct, careful consideration and interpretation are required (Bearden & Netemeyer, 1999; Hair et al., 2014; Yong & Pearce, 2013).

The factors of *luxury orientation*, *fashion involvement*, and *idol attachment* have been extracted from Zhang & Kim (2013) which focused on fashion consumption in China.

*Luxury orientation* and its items were combined and adapted from the original constructs called *materialism* and *brand consciousness* in the study. We argue that in the Japanese context, materialism and brand consciousness belong to luxury orientation since they have been ranked as one of the top worldwide foreign luxury brand consumers (Reyes, 2021) and expensive possessions have an integral role (Slade, 2020). With the combination of both factors, items that were considered beyond the concept of luxury orientation were not included, resulting in five items.

*Fashion involvement* and its items were taken from the equally named factor in the study.

The factor *idol attachment* was derived from Zhang & Kim's (2013) construct named 'social comparison'. However, as the goal was to derive a factor only focusing on idols, solely the items that referred to the comparison with celebrities, movie stars and pop singers were used. Furthermore, an initial question if there are any idols being followed was added resulting in four items for this construct. All the phrasing of items by Zhang & Kim (2013) was adapted from a question style ("How...?") to statements ("I would..."), so respondents could agree or disagree.

For the dependent variable *SF purchase intentions*, the term "*sustainable clothing consumption behavior*" used by Brandão & Costa (2021) was simplified to "*buy sustainable*

*fashion*” in order to create an easier understanding for participants. Two items (“*I plan*” and “*I try to*”) used in Brandão & da Costa (2021) were also removed due to translation issues. After consulting native speakers, a translation of the items to Japanese resulted in the same Japanese Kanji-characters. Once more resulting in two items per construct, less than the statistical recommendation of three (e.g. Hair et al., 2014), we argue similarly with above, that, if the additional high correlation criteria are met (Yong & Pearce, 2013), and the construct is considered carefully and interpreted with caution (e.g. Bearden & Netemeyer, 1999), it can be included in the model.

Respondents were all given brief introductions of the concepts of *luxury*, *idols*, and *sustainable fashion*, based on the definitions in this study, so respondents were all referring to the same terms when answering the survey.

Lastly, in reference to Brandão & da Costa (2021), the variables *age* and *gender* of respondents were collected to control for sociodemographics. Age was divided into four categories from 18 to over 30 years, and gender was asked using ‘male’, ‘female’ and ‘prefer not to say’. However, in contrast to the referenced study, no further controls for nationality, main occupation, income, education were added due to the assumed homogeneity of respondents as Japanese private university students.

**Table 1. Constructs & Items**

Construct	Items	Reference
Attitudes (ATT)	For me, buying sustainable fashion is good wise pleasant desirable	Brandão & da Costa, 2021; Kim & Han, 2010
Subjective Norms (SN)	People who are important to me think I should buy sustainable fashion People who are important to me would approve me buying sustainable fashion Most people who are important to me buy sustainable fashion	Brandão & da Costa, 2021
Perceived Behavior Control (PBC)	I am confident that, if I want to, I could buy sustainable fashion I have resources, time and opportunities to buy sustainable fashion	Brandão & da Costa, 2021

*Table 1 (cont.). Constructs & Items*

<b>Construct</b>	<b>Items</b>	<b>Reference</b>
Luxury Orientation (L)	I admire people who own expensive homes, cars or clothes I see acquiring material possessions as an achievement in life I would feel happier if I could afford more things Material possessions I own say how well I'm doing in life I'm willing to pay higher prices for luxury brands	Zhang & Kim, 2013
Fashion Involvement (F)	Fashion is important to me I usually have one or more of the very latest fashion items I like to shop for fashion goods I usually dress for fashion, not comfort	Zhang & Kim, 2013
Idol Attachment (I)	I have one or more idol that I look up to I pay attention to the products my idols are using I pay attention to the fashion styles of my idols My product choices are influenced by the idols I admire	Zhang & Kim, 2013; Zhou et al., 2021
SF Purchase Intention (SPI)	I'm willing to buy sustainable fashion I intend to buy sustainable fashion	Brandão & da Costa, 2021
Age	18-22, 23-26, 27-30, Over 30	
Gender	Male, Female, Prefer not to say	

### 3.3 Data Collection

To collect data, a standardized online questionnaire was developed in Google Forms. To allow answers in Japanese, the original English form was translated with the help of a translation tool and the proofreading of three Japanese native speakers. Both versions were made available for respondents to fill out and respondents were able to choose the language they feel more comfortable with.

Responses were generated from surveying students of the three universities in Tokyo. Firstly, data was collected by reaching out to Japanese fellow students as well as professors from the three universities and asking them to share the survey with other students and in their networks. Secondly, we handed out the questionnaire on-site to students on the university campus, approaching students who randomly crossed our path. This approach accounted for the largest part of the responses. In both methods of data collection, we emphasized the

anonymity of the survey results and facilitated completion on personal devices using a link or QR code.

### 3.4 Data Quality

The sampling approach consisted of a mix of different non-probability techniques, including convenience and snowball sampling. Although accessible and quick, non-probability sampling has a risk of a sampling and selection bias which restricts the generalizability of findings (Hair et al. 2014). The recruiting of participants via other participants limits the randomness of respondents and can, therefore, skew the results. Similarly, as the number of students on campus was scarce due to the semester break, we were not following specific randomization criteria to approach.

Nevertheless, we aimed to consider potential biases and effects that could impede valid and reliable results. To prevent a potential *question order effect*, which refers to the phenomenon that different orders in which questions or response alternatives are presented may influence respondents' answers (Schuman & Presser, 1981), participants were asked first about their general fashion consumption, then about sustainable fashion in order to prevent a 'sustainability priming' of fashion answers. By theory, earlier items can 'prime' certain beliefs and values, making it easier for respondents to access and retrieve them when answering later questions (Stefkovics & Kmetty, 2022). However, in the study of Stark et al. (2020) question order effects were stronger in more individualistic countries than in more collectivistic countries and particularly, in the Japanese sample of Stark et al. (2020) a question order effect could not be found. Thus, no further attention was paid to the sequence of survey questions.

Secondly, a response bias refers to a type of *selection bias* that occurs when respondents self-select themselves for a study (Sedgwick, 2014). Despite relying on the openness of participants to take part in the survey, we tried to minimize a self-selection bias by the careful choice of respondents by the researchers, as far as possible. For instance, we did not only choose people who look fashionable or wear sustainable fashion brands. Furthermore, the topic of sustainability was not mentioned at the beginning of the survey to limit self-selection of pro-sustainable participants. Still, self-selection bias could have an influence on the snowballed part of the sample.

Lastly, as a major part of the survey was done in-person on campus, participants could be prone to an *attention bias*, referring to the effect that people change their behavior because they know they are being watched (Sedgwick & Greenwood, 2015). This could skew respondents' answers towards what they think was desired by the researchers. Although difficult to avoid completely when surveying in-person, participants were given time and space, the ability to answer the questions using their phone (using a QR-code) and only interacted in the case of questions or the completion of the survey.

Lastly, as a translation method, simple double (back-)translation was used (McGorry, 2000), where the original version is translated into the target language and translated back to the original language. Previous research on survey translation mentions this way as method of

choice (e.g. Homburg et al., 1999, Hofstede et al., 1999). However, ideally, this process involves two independent, professional translators (McGorry, 2000). Due to budget and time restrictions, translations were done in collaboration with Japanese friends and translation tools instead.

### 3.5 Data Analysis

As a first step, Japanese responses were translated back to English. Both, English and Japanese data were merged into one data sheet. Next, all likert scale answers were coded into numeric values (1 = strongly disagree to 5 = strongly agree). The socio-demographic data regarding age brackets and gender were coded into dummy variables.

To analyze the dataset, we were using two methods. In the first step, a confirmatory factor analysis (CFA) was conducted to confirm validity and reliability of the chosen items representing the respective constructs. As items were also partly adapted or removed, to the difference in context and the risk of translation errors, using a CFA was considered as important. The CFA included statistical tests on construct validity and goodness of fit measures of the model (Hair et al., 2014). Firstly, in terms of construct validity, convergent validity was assessed by looking at the items' factor loadings, average variance extracted (AVE), Composite Reliability (CR) and Cronbach's Alpha and comparing it with recommended thresholds (Hair et al., 2014). Furthermore, the nomological and face validity was assessed by careful examination (Hair et al., 2014) and discriminant validity was examined by considering the Fornell-Larcker Criterion (Fornell & Larcker, 1981). Secondly, goodness of fit is evaluated by investigating the model's chi-square ( $\chi^2$ ), normed  $\chi^2$ , Root Mean Square Error of Estimation (RMSEA), Comparative Fit Index (CFI) and Tucker-Lewis-Index (TLI).

In the second step, the relationships between the variables were examined using multiple linear regression (MLR). The MLR analysis is a method that quantitatively describes the influence of several independent variables (or predictors) on a dependent variable. It shows which predictors have a significant influence on the dependent variable and the strength of those influences (Hair et al., 2014). As the aim of this paper was to explain the factors influencing the intention to purchase sustainable fashion, the construct *SF Purchase intentions (SPI)* was used as a dependent variable and the constructs validated in the CFA were used as independent variables. Gender and age were added as controls to the regression model and prevented a possible omitted variable bias (Hair et al., 2014). Thus, dummy variables were created for the different age brackets and gender categories.

The model was analyzed for its explained variance ( $R^2$ ) and adjusted  $R^2$  values and significance. Regarding potential issues of multicollinearity, we were looking at the correlation matrix of factors, the variation inflation factors (VIF), the tolerance as well as the collinearity diagnostics for eigenvalues and condition indices (Hair et al., 2014). Based on previous studies in this field (e.g. Brandão & da Costa, 2021), we applied a significance level of 0.05, indicating a five percent risk of falsely concluding that a difference exists.

## 4. Results and Analysis

In this part, the general results are described followed by the confirmatory factor analysis (CFA) to validate the theoretical constructs and secondly testing the hypothesized relationships using multiple linear regression (MLR).

### 4.1 General Results

The distribution of results is visualized in *Table 2*. In terms of the socio-demographic data, most (67%) of the respondents were between 18-22 years old. 44,6% of respondents were male, 53,6% female, and 0,6% preferred not to say, being slightly skewed towards female respondents. 77,1% answered in Japanese while 22,9% answered in English.

**Table 2.** Distribution of survey responses

<i>n</i> = 166	Completely disagree	Disagree	Neither / nor	Agree	Completely agree
<b>Attitudes (A)</b>					
<i>For me, buying sustainable fashion is...</i>					
<i>A1: ...good</i>	0% (0)	0% (0)	16.9% (28)	60.8% (101)	22.3% (37)
<i>A2: ...wise</i>	0% (0)	3% (5)	18.1% (30)	51.8% (86)	27.1% (45)
<i>A3: ...pleasant</i>	0.6% (1)	4.8% (8)	17.5% (29)	50.6% (84)	26.5% (44)
<i>A4: ...desirable</i>	0.6% (1)	4.8% (8)	17.5% (29)	50.6% (84)	26.5% (44)
<b>Subjective Norms (SN)</b>					
<i>SN1: People who are important to me think I should buy sustainable fashion</i>	0.6% (1)	5.4% (9)	43.4% (72)	41.6% (69)	9% (15)
<i>SN2: People who are important to me would approve me buying sustainable fashion</i>	0% (0)	2.4% (4)	19.9% (33)	53.6% (89)	24.1% (40)
<i>SN3: Most people who are important to me buy sustainable fashion</i>	0.6% (1)	6.6% (11)	41% (68)	41% (68)	10.8% (18)
<b>Perceived Behavior Control (PBC)</b>					
<i>PBC1: I am confident that, if I want to, I could buy sustainable fashion</i>	1.2% (2)	7.8% (13)	21.1% (35)	39.2% (65)	30.7% (51)
<i>PBC2: I have resources, time and opportunities to buy sustainable fashion</i>	5.4% (9)	22.3% (37)	24.1% (40)	29.5% (49)	18.7% (31)

**Table 2 (cont.).** Distribution of survey responses

	Completely disagree	Disagree	Neither / nor	Agree	Completely agree
<b>Luxury Orientation (L)</b>					
<i>L1: I admire people who own expensive homes, cars or clothes</i>	8.4% (14)	16.9% (28)	28.9% (48)	34.9% (58)	10.8% (18)
<i>L2: I see acquiring material possessions as an achievement in life</i>	9% (15)	21.7% (36)	28.3% (47)	34.3% (57)	6.6% (11)
<i>L3: I would feel happier if I could afford more things</i>	5.4% (9)	12% (20)	25.3% (42)	39.8% (66)	17.5% (29)
<i>L4: Material possessions I own say how well I'm doing in life</i>	7.2% (12)	23.5% (39)	34.3% (57)	27.1% (45)	7.8% (13)
<i>L5: I'm willing to pay higher prices for luxury brands</i>	10.2% (17)	13.9% (23)	21.7% (36)	44% (73)	10.2% (17)
<b>Fashion Involvement (F)</b>					
<i>F1: Fashion is important to me</i>	3.6% (6)	2.4% (4)	15.7% (26)	51.2% (85)	27.1% (45)
<i>F2: I usually have one or more of the very latest fashion items</i>	13.9% (23)	19.9% (33)	28.3% (47)	28.9% (48)	9% (15)
<i>F3: I like to shop for fashion goods</i>	5.4% (9)	9% (14)	16.9% (28)	44.6% (74)	24.1% (40)
<i>F4: I usually dress for fashion, not comfort</i>	6.6% (11)	24.7% (41)	25.3% (42)	32.5% (54)	10.8% (18)
<b>Idol Attachment (I)</b>					
<i>I1: I have one or more idol that I look up to</i>	16.9% (28)	11.4% (19)	17.5% (29)	32.5% (54)	21.7% (36)
<i>I2: I pay attention to the products my idols are using</i>	20.5% (34)	19.9% (33)	18.7% (31)	27.1% (45)	13.9% (23)
<i>I3: I pay attention to the fashion styles of my idols</i>	16.3% (27)	15.7% (26)	18.7% (31)	33.1% (55)	16.3% (27)
<i>I4: My product choices are influenced by the idols I admire</i>	22.3% (37)	19.9% (33)	21.1% (35)	26.5% (44)	10.2% (17)
<b>SF Purchase Intention (SPI)</b>					
<i>SP11: I'm willing to buy sustainable fashion</i>	0.6% (1)	11.4% (19)	25.3% (42)	34.3% (57)	28.3% (47)
<i>SP12: I intend to buy sustainable fashion</i>	3% (5)	12.7% (21)	34.9% (58)	30.7% (51)	18.7% (31)
<b>Age</b>	18-22	23-26	27-30	Over 30	
	66.9% (111)	17.5% (29)	3.6% (6)	11.4% (19)	
<b>Gender</b>	Male	Female		Prefer not to say	
	44.6% (74)	53.6% (89)		(0.6%) 1	
<b>Response Language</b>	Japanese			English	
	77.1% (128)			22.9% (38)	



When it comes to the survey questions and the distribution of answers, a few distributions can be highlighted.

Regarding *attitudes*, a great majority (almost 61% agreed and 22% totally) agreed that SF is good (A1), while no respondent disagreed. A similar distribution was found for A2-A4. About 52% agreed and 27% totally agreed on seeing sustainable fashion as wise (A2), 51% agreed and 27% totally agreed on sustainable fashion being pleasant (A3), 49% agreed and 26% totally agreed on perceiving it as desirable (A4).

In terms of *subjective norms*, a close majority (approx. 42% agreed and 9% totally) agreed that people who are important to them would buy sustainable fashion (SN1), while slightly less (about 43%) said that people who are important to them neither/nor think they should buy sustainable fashion, which shows a similar distribution with SN3. Lastly, a majority (approx. 53% agreed and 24% totally) agreed that their peers would approve of them buying sustainable fashion (SN2).

For *PBC*, a majority (approx. 39% agreed and 31% totally) agreed on being confident that they could buy sustainable fashion if they wanted to (PBC1). Additionally, a majority (39% agree and 28% totally) agree that if they have the resources, the time, and the opportunity to buy sustainable fashion (PBC2).

Regarding respondents' *luxury orientation*, slightly less than half of respondents (35% agree and 11% totally) agree that they admire people who have expensive goods. A similar distribution was found for L2, L3, and L4. Lastly, the majority (44% agreed and 10% totally) agreed to be willing to pay higher prices for luxury goods.

When it comes to *fashion involvement*, a majority (approx. 51% agreed and 27% totally) agreed that fashion is important for them (F1). Less than 40% agreed (or totally agreed) that they usually own the latest fashion (F2).

Asking about the participants' *idol attachment*, over half (33% agreed and 22% totally) agreed to have an idol (I1). When it comes to the products used by idols (I2), less than the majority (27% agreed and 14% totally) agreed to pay attention to the products their idols are using. When looking at the idols' fashion style (I3), slightly more respondents (33% agree and 16% totally) agree on paying attention. Relatively mixed is the distribution regarding the influence idols have on product choices (I4).

Lastly, for the participants' *intentions to buy SF*, over half of the respondents (about 34% agreed and 28% totally) agreed that they are *willing* to buy sustainable fashion (SPI1) and exactly half also *intend* to do so, with 31% agreeing and 19% totally agreeing (SPI2).

## 4.2 Confirmatory Factor Analysis (CFA)

In the CFA, items (variables) are assigned to a construct before the analysis, testing their goodness of fit and validity with sample data. The CFA aims to test how well the chosen variables of a model represent the intended construct to measure (Hair et al., 2014).

The constructs we aimed to integrate into our model are 1) *Attitudes*, 2) *Subjective Norms*, 3) *PBC* from the original TPB model, while adding 4) *Luxury Orientation*, 5) *Fashion Involvement*, and 6) *Idol Attachment*.

Due to a software-related issue including constructs with two items or less (STATA error), the construct of 3) *PBC* was checked separately regarding its validity and reliability using another software (SPSS), leading to five factors remaining for the CFA. When developing the overall measurement model in the CFA, unidimensionality is assumed, meaning a set of items (variables) is only explained by a respective single underlying construct (Hair et al., 2014). Hence, all cross-loadings were assumed to be 0 (Hair et al., 2014) and variables were path-modeled to a single construct in the initial model. 1 factor with 5 variables, 3 factors with 4 variables, and 1 factor with 3 variables were included in the CFA.

An identification check resulted in 160 degrees of freedom (df), which qualified the overall model as being overidentified.

Regarding the goodness of fit statistics (*Table 3*), the CFA modeling with 5 constructs provided a chi-square ( $\chi^2$ ) of 291.315 as a global fit index. The normed  $\chi^2$  ( $\chi^2$  divided by df) lies at 1.82, which indicates a good model fit as it is below a suggested threshold value of 3 (Alavi et al., 2020; Hair et al., 2014).

Despite the p-value being significant ( $p > .001$ , preferably above .05; Zimmer, 2019), the RMSEA (= .071; preferably below .08; Hair et al., 2014), the CFI (= .929; good above .9, preferably above .95) and the TLI (= .916, good above .9, preferably above .95) (Hair et al., 2014; Kline, 2016) indicate a good model fit.

**Table 3.** *Goodness of Fit*

Selected model fit measures	CFA model
$\chi^2$ (df)*	291.315 (160)
Normed chi-square	1.82
RMSEA	.071
CFI	.929
TLI	.916

\* $p > .001$

Nomological and face validity were both confirmed through careful examination and interpretation of the constructs. Investigating convergent validity, the results are summarized in *Table 4* (*Figure 3 in the appendix*).

18 of 20 standardized factor loadings were found above the preferable value of .7, with the two remaining factor loadings (L5 and SN2) providing acceptable values of .53 and .66 respectively (Hair et al., 2014).

By computing the average variance extracted (AVE), four constructs give a value over the recommended cutoff point of .5 with subjective norms resulting in an AVE of 0.48, slightly below the threshold value (Hair et al., 2014). However, we decided to maintain the construct of subjective norms as it is a factor that is based on a strong body of previous literature, still provides good composite reliability (.73), and is only slightly below the recommended AVE cutoff point with .048.

Measured in SPSS, PBC was found with an AVE of .66, CR of .79, and a Cronbach's Alpha of .64. Despite being lower than preferred, all numbers were above the recommended cutoff values. In reference to Yong & Pearce criteria (2013) for constructs with only two items, both (PBC1, PBC2) showed a high loading of over .78 into PBC with no cross-loadings on other factors above .3. Hence, due to the acceptable empirical results in combination with the theoretical base for PBC, it was retained as a factor in the model.

**Table 4.** Model fit and construct validity measures after modeling

Construct	Item	Std. factor loading	AVE <sup>1</sup>	CR <sup>2</sup>	$\alpha^3$
Attitudes	A1	.71	.58	.85	.85
	A2	.73			
	A3	.85			
	A4	.77			
Subjective Norms	SN1	.71	.48**	.73	.73
	SN2	.66			
	SN3	.71			
Luxury Orientation	L1	.73	.51	.84	.83
	L2	.77			
	L3	.74			
	L4	.78			
	L5	.53			
Fashion Involvement	F1	.81	.63	.87	.87
	F2	.77			
	F3	.89			
	F4	.71			
Idol Attachment	I1	.8	.77	.93	.93
	I2	.93			
	I3	.9			
	I4	.89			
PBC*	PBC1	.78	.66	.79	.64
	PBC2	.85			

<sup>1</sup>Average Variance Extracted, <sup>2</sup>Composite Reliability, <sup>3</sup>Cronbach's Alpha, \*calculated using SPSS, \*\*AVE <.5  
 $\chi^2$  (160 df) = 291.315, p <.001, RMSEA = .071 (pclose = .006), CFI = 0.929, TLI = .916

By secondly measuring the discriminant validity of the model, we aimed to identify how much the five included constructs distinguish themselves from each other (Hair et al., 2014). This is important to show that items, which measure different constructs, have low correlations between them. Using the Fornell-Larcker Criterion, we examined the square root of the AVE which must be greater than the correlation between the construct and any other construct (Fornell & Larcker, 1981). We found that attitudes showed a relatively high correlation with subjective norms of .549. However, the original TPB model already theorizes

internal relationships between attitudes, subjective norms, and PBC (Ajzen, 1991). Thus, a correlation between some of these factors was expected. However, the value was below the AVE square root of either construct (ATT = .767, SN = .694) and thus, acceptable. As also no other between-constructs correlation was found to be greater than with itself, discriminant validity could be established.

### 4.3 Multiple Linear Regression (MLR)

The six independent variables (predictors) selected for the regression analysis were *attitudes*, *subjective norms*, *PBC*, *luxury orientation*, *fashion involvement*, and *idol attachment* in order to measure their relationship with the dependent variable *SF purchase intentions*. To conduct the regression analysis in SPSS, the items, which compromised the factors, were added up to summated scales with a computed average.

To develop the initial model, it was checked that the independent variables must not have high correlations with each other (Backhaus et al., 2018). An examination of the correlation matrix of all predictors showed that this criterion was fulfilled and no factors had correlations over .6. Hence, all predictors could be added to the model, resulting in a total of 11 factors including 5 dummy variables for age and gender. This resulted in a significant regression model (see Table 5 and Figure 2) at  $p < .001$  ( $n = 166$ ,  $F = 15.764$ ). The explained variance of the model ( $R^2$ ) lied at .533 (53.5%). However, out of the eleven predictors, only two variables, *attitudes* and *PBC*, were found to be statistically significant.

**Table 5. Regression model**

DV: SF Purchase Intention	<i>B</i>	<i>SE B</i>	$\beta$	<i>p</i>
(Constant)	-1.138	.431	-	-
Attitudes	.720	.106	.483	<.001*
Subjective Norms	.168	.107	.112	.119
PBC	.323	.061	.321	<.001*
Luxury Orientation	.061	.074	.056	.412
Fashion Involvement	-.018	.076	-0.18	.813
Idol Attachment	-.095	.051	-.126	.061
Gender (female)	.107	.114	.057	.349
Gender (pref. not to say)	.248	.697	.021	.722
Age (18-22)	.280	.178	.142	.118
Age (23-26)	.265	.209	.109	.207
Age (27-30)	-.534	.322	-.108	.100

Note: *B* = unstandardized beta, *SE B* = Std. Error,  $R^2 = .535$ ,  $F = 15.764$ ,  $p < .001$ , \*statistically significant (1% level), gender compared to "Gender (male)", age compared to "Age (over 30)"

Testing the isolated relationships of gender and age with SPI, there was a small positive relationship between female gender and SPI (.168), significant at the 5% level ( $p = .031$ ). However, the model showed a very low  $R^2$  of .041, indicating a small amount of variance

explained. Similarly, for age, the 18-22 years group showed a small positive relationship (.268) with SPI in comparison to the age group over 30 years at the 5% significance level (.021). This model also showed a very low  $R^2$  of .05. Despite the significance when regarded in isolation, neither gender nor age showed a significant relationship with SPI in the regression model with the other constructs added.

To identify the degree of multicollinearity, the correlation matrix (*see Table 6*) for the constructs was investigated. In general, high correlations ( $> .90$ ) is the first indication of substantial collinearity. As there were no significant correlations over .549 found between constructs, this initial condition was met.

**Table 6.** Correlation Matrix

	Attitudes	Subj. Norms	PBC	Fashion	Idol	Luxury
Attitudes	1					
Subj. Norms	.549**	1				
PBC	.199*	.259**	1			
Fashion	.178*	.279*	.198*	1		
Idol	.094	.062	.154*	.506**	1	
Luxury	-.073	.062	.118	.450**	.312**	1

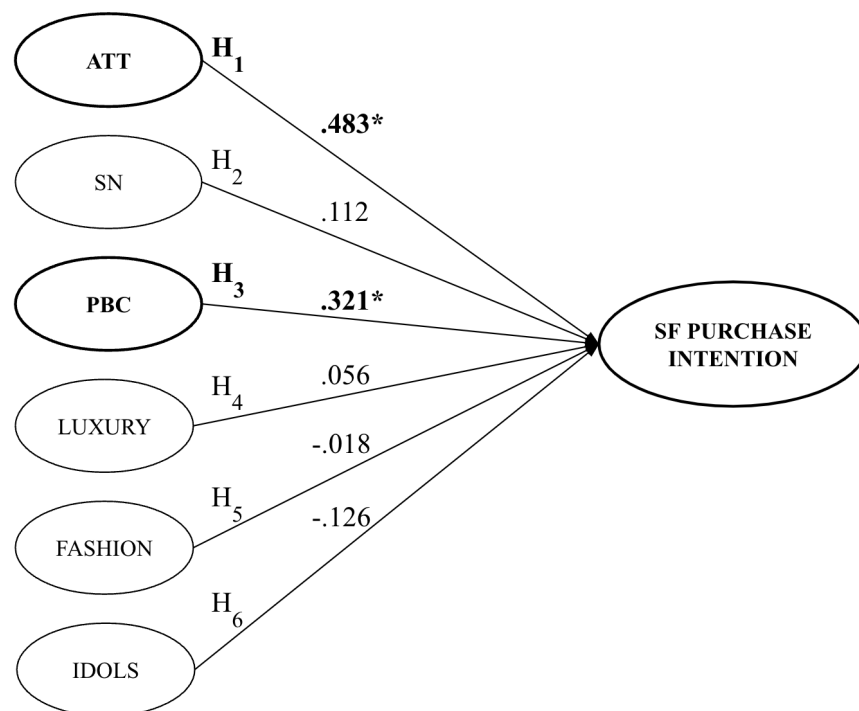
Note: \*\* significant at 0.01 level, \*significant at 0.05 level

However, the lack of any high correlation values does not ensure a lack of collinearity. Thus, additionally, the variation inflation factors (VIF) and the tolerance were examined. Both the VIF and tolerance of all factors were in the required range of below 10 or above .2, respectively (Hair et al., 2014). Ultimately checking the collinearity diagnostics table for low eigenvalues, condition indices above 15, and potential multiple variance proportions above 0.9 (Hair et al., 2014), no indications of multicollinearity were detected.

Despite the model having a high  $R^2$  of .535 with all constructs and control variables included, this value is partly explained due to overfitting, meaning that the statistical model begins to describe the random error in the data rather than the relationships between variables (Hair et al., 2014). This can also be seen by looking at the adjusted  $R^2$ , which involves an adjustment based on the number of independent variables relative to the sample size, and adding nonsignificant variables is discounted (Hair et al., 2014).

As the model's adjusted  $R^2$  of .501 deviates from the  $R^2$ , this indicates an overfitted regression model. Although exceeding the scope of this research, striving for model parsimony would suggest a model that included only significant factors, in this case, Attitudes and PBC, which would already result in an  $R^2$  of .468 and a comparably close adjusted  $R^2$  of .461.

**Figure 2. Regression Model**



\* $p < .001$ , not showing: gender, age

## 5. Discussion

This study examined the intention to purchase SF for Japanese consumers based on the Theory of Planned Behavior (TPB). The TPB model was extended with luxury orientation, fashion involvement and idol attachment as proposed barriers to sustainable fashion consumption (SFC) in Japan, and tested with private university students in Tokyo. In particular, we aimed to answer two research questions: 1) *How does the TPB framework and its constructs attitudes, subjective norms and perceived behavior control (PBC) apply in the context of SFC in Japan?* and 2) *How do luxury orientation, fashion involvement and idol attachment influence the intention to purchase SF?*

The findings of our study are mixed and partly confirm our hypotheses. With H<sub>1</sub>, we argued that a positive attitude towards SF positively influences SF purchase intentions. This was based on previous general findings of attitudes as an important predictor in the TPB model (e.g. Bredahl, 2001; Chen, 2007; Michaelidou & Hassan, 2010) as well as in the sustainability and fashion context (Brandão & da Costa, 2021; Kim & Han, 2010; Saricam & Okur, 2019). We found that attitudes towards SF have a moderate positive influence on SF purchase intentions and appeared to be the strongest predictor of purchase intentions in the model. This finding aligns with previous results, specifically with studies that found attitudes as the most important factor in the TPB, stronger than subjective norms and perceived

behavioral control (Maichum et al., 2016; Yazdanpanah & Forouzani, 2015; Saricam & Okur, 2019).

In H<sub>2</sub>, we hypothesized that positive subjective norms positively influence SF purchase intentions, based on general TPB research (Ajzen, 2006; Fishbein et al., 2003) and previous findings in the area of sustainable fashion consumption (Lam & Hsu, 2006; Kang et al., 2013; Brandão & da Costa, 2021).

However, our study could not confirm these results as we didn't detect a significant effect of subjective norms on SF purchase intentions, resulting in a rejection of the hypothesis. This challenges our theoretical assumption of the high influence of social norms in Japanese society due to its collectivistic nature. Such norms can affect how people think and behave (Dolan & Worden, 1994), including what type of fashion to purchase.

One possible interpretation can be the lack of social discourse and norms regarding SFC in Japan. As mentioned, previous research found a relatively low awareness of sustainable fashion in Japanese society (CAA, 2022). As the subjective norm will depend on what others think of a certain behavior as well as the importance of public opinion within the culture (Milton et al., 2018), this suggests that buying sustainable fashion is not socially prominent and not a commonly performed behavior. Our distribution results show that over 40% say that their peers are undecided (neither/nor) in their opinion on buying sustainable fashion. Additionally, a recent study by the Japanese Environment Ministry showed 41 percent are not interested in sustainability issues, and only four percent of shoppers actively buy sustainable fashion (Sim, 2022). However, Japan places 4th in global rankings of fast-fashion consumption, with USD 3.3 billion (Mawgoud, 2023).

Thus, despite norms playing a major role in Japanese society (Dolan & Worden, 1994; Redding & Michael, 1983) this applies only to values, behaviors or ideas, which are central to a majority of people. For example, when it comes to the usage of public transport in Japan, a common mode of transportation, a recent study showed that people got influenced by the travel experience and practices of others, and thus social norms (Ali et al., 2023). In other words, norms can have a significant influence depending on the prevalence of the topic in society which is however not the case for SFC.

Secondly, a further explanation is a potentially weaker influence of social norms on the younger generation. Focusing on young adults in our study, Japanese norms and traditions might play a decreasing role in decision-making. Young Japanese people are increasingly opting out of traditional career paths and seeking lifestyles with greater personal freedom (Klien, 2021). This movement towards individualization in terms of working and living among younger Japanese (Klien, 2021) may correlate with diminishing importance of collectivistic social norms and thus, influence one's own fashion purchase decisions.

Our hypothesis H<sub>3</sub> stated that perceived behavior control (PBC) towards SF positively influences SF purchase intentions, which was based on general findings using the TPB (Ajzen, 1991; Lam & Hsu, 2006) and the identified influence of PBC in application of the model for sustainable fashion (Brandão & da Costa, 2021; Bo, Ko & Jin, 2017; Zhang et al., 2019).



We can confirm this hypothesis and find that PBC has a small positive influence on the intention to purchase SF. While previous research is divided, the finding adds to the existing literature which confirms the importance of PBC. However, contrary to the study by Brandão & da Costa (2021), PBC was not found as the most influential factor and had less influence than attitudes.

While Brandão & da Costa (2021) didn't provide a further explanation on the highest prediction power of PBC in their model, we infer the lower importance of PBC to the smaller presence of sustainable fashion in Japan. That is, despite having a positive attitude, many people are less clear about their ability, resources, time and opportunities when it comes to purchasing SF. This is also reflected in our data, as about 80 percent of people show a positive or very positive attitude towards SF, but only 60 percent indicate high perceived behavior control. This could be explained due to a lack of concrete knowledge, availability, or time to buy sustainable apparel. Referring to the nascent stage of sustainable fashion in Japan, SF stores are fewer and smaller than big fashion retailers. Moreover, shopping at second-hand stores usually requires more time due to e.g. unpredictable product variety and limited availability of sizes. Those aspects could have lowered the PBC of respondents.

With our second research question, we aimed to identify the influence of luxury orientation, fashion involvement and idol attachment on SF purchase intentions in Japan and if these factors act as barriers.

In  $H_4$  we argued that luxury orientation negatively influences SF purchase intentions, as luxury and sustainability were found as contradicting concepts (Nash et al., 2016; Achabou & Dekhili, 2013; Sauers, 2010). Literature states that consumers who buy luxury brands do not focus on sustainable aspects when they decide on a luxury brand (Kapferer & Michaut-Denizeau, 2015). Furthermore, luxury goods are often related to personal pleasure and excess while sustainability is connected with ethics, altruism, respect and awareness for others (e.g. Athwal et al., 2019; Jain, 2018; Moraes et al., 2017; Widloecher, 2010). Our findings could neither detect a negative nor positive significant influence of this variable on SF purchase intentions, requiring us to reject this hypothesis.

A first stream of research already proposed a perspective of conspicuous green consumption, aiming to connect luxury and sustainability (Griskevicius & Van den Bergh, 2010). In our case, this would mean that Japanese consumers also see buying sustainable as a way of luxury, and signaling their status as an environmentally responsible person instead. However, we assume this effect to be marginal as it strongly depends on context and culture, and in Japanese society, a person with high environmental altruistic behavior is not necessarily assigned a high social status; luxury consumption is what signals success (Slade, 2020).

Our interpretation of these results is that luxury goods and sustainability are not as conflicting as assumed and luxury brands are not necessarily unsustainable (Fendi, 2023). Sustainability focuses on the conservation of natural resources and is thus associated with durability, which is also a core component of luxury brands (Kapferer, 2015) as high-quality materials ensure long-term use. Furthermore, because of the greater feasibility and resources luxury brands have, consumers are beginning to expect more 'responsible luxury' (Janssen, Vanhamme, and

Leblanc, 2017). The industry has received pressure to include pro-environmental aspects into their business model (De Angelis, Adigüzel & Amatulli, 2017) and consequently become more responsible for their carbon footprint (Carrington et al., 2016). For instance, this includes using vegan leather and organic cotton (Wolfe, 2018), avoiding real fur (Jones, 2018) or sharing expertise in sustainable operations (Farra, 2019). This speaks for the increasing importance and expected consideration of sustainability also for luxury-oriented consumers.

Taking another perspective, so-called thrift stores in Tokyo particularly focus on reselling designer brands, fashion jewelry and high-end clothing (Kurita, 2023). In other words, luxury-oriented consumers are able to shop for luxury brands but at the same time purchase at a more sustainable, second-hand store. Nevertheless, the impression of second-hand is often perceived as about saving money (McNeill & Moore, 2015) and thrift shops resell high-quality items at a much cheaper price (Akkerman, 2022). This fundamentally contradicts the purpose of luxury consumption, to differentiate with high pricing (McKinsey, 1990) and distinguish with exclusivity (Wiedmann et al., 2009).

This is, we infer that luxury and sustainability are at least partly compatible and luxury orientation doesn't necessarily exclude sustainability, explaining the undirected relationship in our data.

Based on findings by Zhang & Kim (2013), we suggested in H<sub>5</sub> that high fashion involvement negatively influences SF purchase intentions. Fashion involvement often is connected with continuous changes in clothing, due to the wish to be perceived as trendy and fashionable (Diddi et al., 2019). On the other hand, extraordinary design and variety is usually not associated with sustainable fashion (Moon et al., 2014; Ozdamar Ertekin & Atik, 2014; Vazifdar, 2021), making it less appealing to highly fashionable consumers.

However, the hypothesis was rejected since we could not find a significant influence of fashion involvement on the intention to purchase SF. We interpret that this is because fashion involvement does not necessarily contradict sustainability, either. Although sustainable fashion was considered unfashionable in previous studies, second-hand fashion has become an emerging trend in Tokyo, outgrowing its originally poor reputation. Today, many of the fashionable areas in Tokyo opened second-hand stores and thrift stores, incl. Shimokitazawa, Harajuku, Shibuya or Koenji (Imada, 2022). Vintage and thrift shopping can allow one to find unique clothing pieces and combinations, resulting in a unique style, which can even give the "fashionable edge" (Akkerman, 2022). Additionally, multiple Japanese sustainable fashion startups (e.g. I Was A Kimono, KUON, tennen or Modeco) are focusing on making fashionable products by upcycling high-quality fabrics into stylish apparel or accessories (Lim, 2021). However, as fast-fashion brands can provide clothing with greater variety and up to the latest trends (e.g. Roll, 2021), this can make fashionable consumers decide against sustainable fashion.

That said, fashionability and sustainability can go together, and at least some fashion-involved individuals might specifically choose to shop at second-hand stores or buy from sustainable fashion start-ups.

Finally, we hypothesized that high idol attachment has a negative influence on the intention to buy sustainable fashion ( $H_6$ ). Idols, such as celebrities or influencers, were found to have strong social power (Bartlett, 2022; Zhang & Kim, 2013; Zhou et al., 2021) and particularly young adults form bonds with popular media figures (Boon & Lomore, 2001), which can influence their desires, values and behaviors (Caughey, 1994). We identified that, in Japan, relevant Korean or Japanese idols focus on luxury brand collaborations (Wills, 2021; Kim, 2021) and do not promote sustainable fashion.

Nevertheless, we could not find a significant relationship, rejecting this hypothesis. In other words, even though one follows an idol and their style, this is not a decisive factor for not considering sustainable fashion consumption. This lack of effect is surprising, as we find almost 50 percent indicating to pay attention to the fashion of their idols, and over 35 percent state it influences their product choices.

However, despite the potential impact of idols, our assumption is that idols do not influence sustainable fashion consumption. As idols are focusing on luxury brands, but luxury and sustainability do not necessarily exclude one another (Griskevicius & Van den Bergh, 2010), a high idol attachment might not have a negative influence on the intentions to purchase SF.

A second argument is that K-idols are actually starting to express their opinion about sustainability. In the recent public appearance of the Korean Band BTS at the U.N. Headquarters in South Korea in 2021 (Lee, 2009b), its members were wearing a suit particularly designed by a sustainable upcycling brand “RE;CODE” based in Korea and a rainbow crystal Swarovski pin presenting the U.N. Sustainable Development Goals (Widjojo, 2021). This shows the first actions undertaken by K-idols like BTS to shed light on climate change as well as sustainable development and communicate it through their fashion while combining it with what they usually promote, namely luxury brands. Although a minor stunt compared to ongoing luxury brand collaborations, this appearance could have made more people connect the band’s fashion with sustainability and also provides a symbolic example of combining luxury and sustainability. We assume that if idols emphasized promoting sustainable fashion brands, a high idol attachment could become a driver for sustainable fashion consumption due to the generally high attention people pay to their idols, fashion styles and product choices (Lockwood & Kunda, 1997; Desai & Basuroy, 2005; Martin & Bush, 2000).

## 6. Conclusion

Despite the major negative impact of fashion consumption on the environment (Young, 2020, Japanese fast-fashion retailers are leading the industry with billions of USD in revenue (Mitsui Fudosan, 2022), contributing to high CO<sub>2</sub> emissions and waste (CAA, 2022a). However, Japanese consumers' knowledge of sustainable fashion is currently still low and many people are not aware of the meaning (CAAb, 2022).

This lack of success for sustainable fashion in Japan was hypothesized to be due to sociocultural barriers, which negatively influence Japanese people's intention to purchase sustainable fashion. This study aimed to apply the theory of planned behavior (TPB) model to SF purchase intentions in Japan and investigate the importance of luxury orientation, fashion involvement, and idol attachment as added barriers, which have not yet been examined in previous studies.

We found that the factors attitude and perceived behavior control had a significant positive influence in predicting sustainable fashion purchase intentions, with attitudes being the most influential factor. However, subjective norms did not show a significant relationship which contradicts our assumptions but is explained by a lack of prominence of SF in Japanese society and a less collectivistic mindset of the younger generation. Hence, in relation to our first research question, we can say that the TPB framework partly applied to SF intentions in Japan.

Secondly, the hypothesized barriers of luxury orientation, fashion involvement, and idol attachment could not be confirmed as significant influences to SF purchase intentions in Japan. In our interpretation, luxury orientation does not necessarily exclude sustainability, and luxury brands can increasingly be purchased at brand thrift shops in Tokyo, allowing for second-hand luxury shopping. Secondly, sustainable fashion can also be seen as fashionable, as purchasing second-hand can provide a unique style and emerging Japanese start-ups are designing fashionable, but sustainable apparel. Lastly, idol attachment was not found as a barrier, likely as idols solely focus on luxury brands, which does not necessarily negatively affect SFC, as indicated above.

## 6.1 Implications

Our research contributes to the body of literature investigating SFC (Dabas & Whang, 2022) and particularly SFC in Japan, which has only been examined by a limited amount of studies (Kong & Ko, 2017; Dhir et al. 2021a, 2021b). Our study is the first attempt to test an extended TPB model on SF purchase intentions in Japan, aiming to bridge the identified gap of applying the TPB to SFC in different cultural contexts (Dabas & Whang, 2022) and cover the lack of research regarding Japan.

Although we could not confirm the importance of the proposed barriers of luxury, fashion, and idols, we could validate the positive influence of attitudes and perceived behavior control on SF purchase intentions, and interpret the missing influence of subjective norms due to a lack of prominence of sustainable fashion in Japan.

For practice, these results indicate that targeting Japanese consumers' attitudes as well as their PBC are influential aspects to increase their SF purchase intentions. This is interesting for sustainable fashion brands aiming to establish themselves in this market. For instance, Japanese consumers' attitudes towards SF could be increased by using advertising strategies, which can promote it to be good, wise, or pleasant to consume SF. Perceived behavior control could be targeted by focusing on the availability of SF, making products quick and easy to

find online or locally, as well as offering at reasonable prices. Addressing these aspects can increase Japanese consumers' perceived confidence and ability to purchase SF. To compensate for the lack of social norms towards SF in Japanese society, brands could use educational initiatives to inform more people in society about sustainable fashion and develop public interest in this topic. Ultimately, luxury orientation, fashion involvement, and idol attachment were not found as influential, and while this indicates they should not be considered as strategic priorities, they should also not be fully neglected.

## 6.2 Limitations and Future Research

This study comes with limitations as well as possible avenues for future research. The scope of this research was limited to purchase intentions, which means that conclusions about actual purchase behavior are limited. Purchase intentions do not necessarily translate into behavior, which is documented by a variety of research, also in the context of sustainability and is labeled as the intention-behavior gap (Carrington et al., 2010; Prothero et al., 2011; Connell & Kozar, 2014; Niinimäki, 2010). Therefore, future research could extend our TPB approach and test the relationship of SF intentions and SFC behavior in Japan.

Furthermore, we narrowed our sample to private university students, that is, future research could address a bigger population with a bigger sample size and probability-sampling method, achieving higher generalizability of results. This is particularly suggested due to the high median age in Japan (48.6 years), which makes a sample group of young adults only representative of a fraction of citizens and neglects the political importance this age group has with their attitudes and behavior.

Moreover, we found a majority of respondents stated a (very) positive attitude towards sustainable fashion in our study, indicating rising concern for the topic in this target group. As environmental concern was previously established as a significant predictor of green purchase intentions in other countries (e.g. Yadav & Pathak, 2016; Albayrak & Caber, 2013), future studies should investigate the importance of this factor in the Japanese context to predict SF purchase intentions, especially when it comes to the younger generation.

Lastly, further studies could investigate the influence of personal international experience. Due to its remote location, history of economic isolation (e.g. Sakoku period), and relatively unique culture, Japan can be seen as a somehow shielded country. In combination with strong traditional roots (Dolan & Worden, 1994), it can prevent exposure to external inputs and hence make a change, like a shift to new consumption patterns, rather difficult. However, Japanese who have traveled abroad to other countries like Sweden, Denmark or the UK (Berry, 2021), and experienced a more sustainable society and consumer behavior, might be inclined to switch to sustainable fashion when they return.

With this in mind, it is possible to pave the way for sustainable fashion consumption in Japan and get back on track with *mottainai*, for a respectful use of resources and a better future.



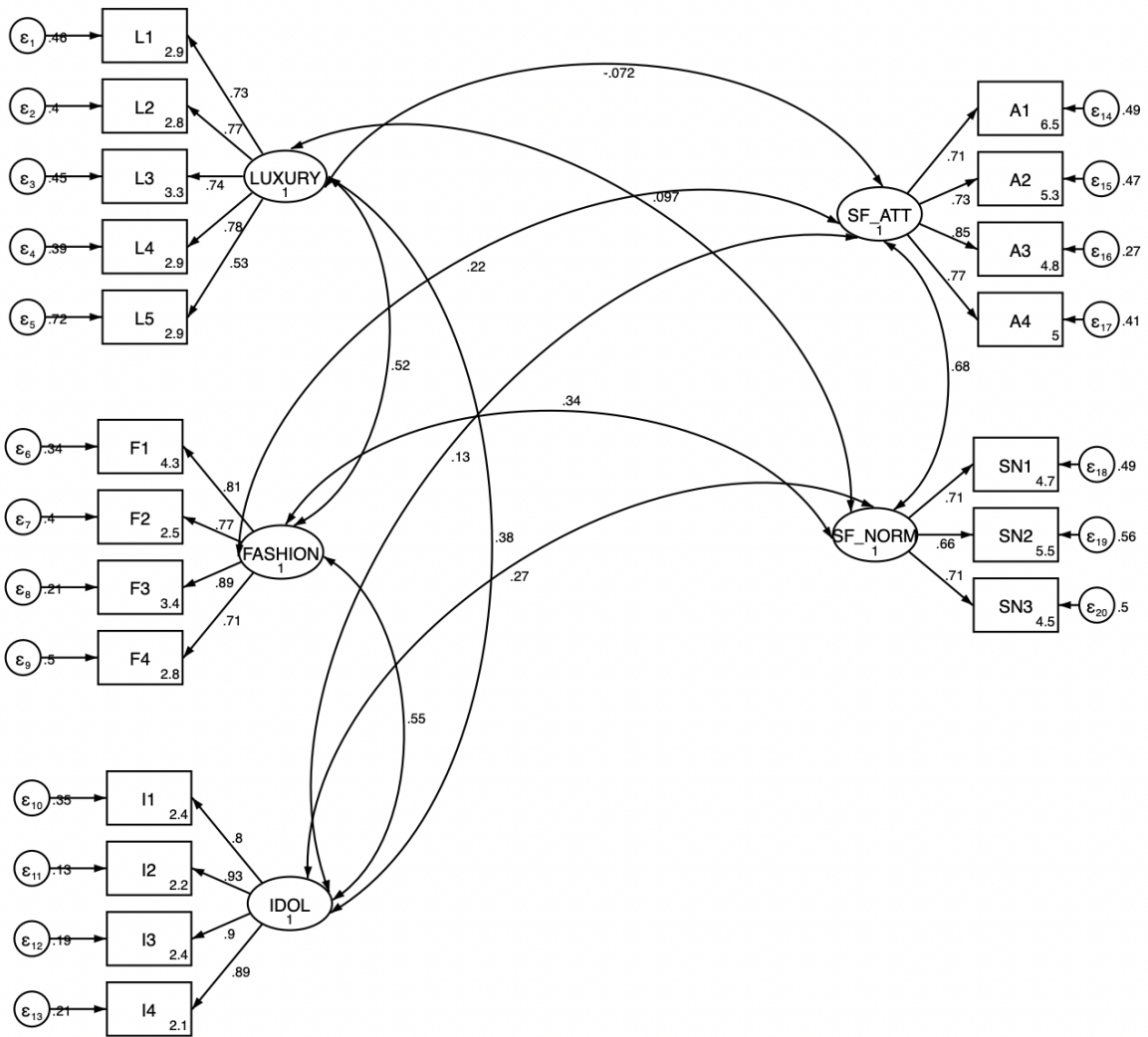
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# Appendix

Figure 3. CFA Model





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