



SCIENTIFIC OASIS

Journal of Soft Computing and Decision Analytics

Journal homepage: www.jsdda-journal.org
ISSN: 3009-3481



Influencers Marketing and its Impacts on Sustainable Fashion Consumption Among Generation Z

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ARTICLE INFO

Article history:

Received 21 August 2023

Received in revised form 3 January 2024

Accepted 2 February 2024

Available online 7 February 2024

Keywords:

Influencer Marketing; Sustainable Fashion;
Generation Z.

ABSTRACT

This research explores the intersection of influencer marketing and sustainable fashion purchase intentions among Generation Z in the UK and China, addressing critical challenges in the fashion industry, such as environmental impacts and overconsumption. The study introduces sustainable fashion as a potential solution and emphasizes the role of influencers in shaping Generation Z's attitudes and behaviours. The research delves into the environmental consequences of fast fashion and the emergence of sustainable fashion, providing a comprehensive understanding of the challenges and potential solutions within the industry. The focus then shifts to influencer marketing, recognizing its significance in the digital age, especially among Generation Z, who are considered crucial influencers in the fashion market. The study develops hypotheses that investigate the impact of influencers' experiences, similarity between influencers and Generation Z, and influencers' expertise in sustainable fashion on Generation Z's purchase intentions. Additionally, the research considers consumer attitudes, subjective norms influenced by influencers, and perceived behavioral control, including affordability concerns, as factors influencing sustainable fashion purchase intentions. Positioning Generation Z as a key demographic, the research aims to contribute valuable insights into the complex dynamics of influencer marketing, consumer attitudes, and sustainable fashion consumption. The formulated hypotheses offer a framework for understanding the nuanced relationships between influencers and Generation Z's decision-making processes in the context of sustainable fashion.

1. Introduction

Climate change, as one of the most serious and noticeable worldwide phenomena of the twenty-first century, is seen as posing a tremendous threat to humanity. One of the aspects of climate change that is receiving the greatest attention is global warming. The fundamental premise is that carbon dioxide, which assumes that human activity is the main contributor to the concentration of carbon dioxide, is the principal driver of global warming [1].

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<https://doi.org/10.31181/jsdda21202438>

Carbon dioxide emissions arise from a variety of sources. There are figures dominated by China, India, the USA and Brazil showed that textile industry rose large scale of carbon dioxide in recent years [2]. Since fashion industry is a broad industry with constant growth of expansion which accounts for around two percent of the world's gross domestic product leading to its severe impact to the environment [3]. Along with creating a lot of trash and placing strain on the environment, the carbon footprint of fashion items rises to one of the highest levels, generating even more greenhouse emissions than the combined aviation and shipping sectors. If the complete lifetime of clothes is taken into account, it is estimated that the fashion sector is responsible for 3.3 billion tones, or 10% of world carbon dioxide emissions, and 20% of global waste streams [4].

Therefore, the fashion industry has been accused of bearing little responsibility for environmental concerns for years, particularly in the context of climate change and greenhouse gas emissions [3]. This leads to a discussion about sustainability in general due to its unsustainable manufacturing products, waste generation and over-consumption behaviors. However, the significance of sustainable production was always emphasized rather than sustainable consumption in the last decade [5]. Kumar and Yadav [6] indicate that the non-sustainable consumption practices of individuals are directly reflected in 30-40% of environmental damage, which is primarily in the form of waste, a by-product of urban lifestyles, and is growing at a rapid rate. It is inevitable to mention the crucial of sustainable consumption.

Sustainable consumption has been gradually introduced into fashion industry processes involved in purchase intentions to sustainable products. Meanwhile fashion industry started to consider sustainability as a priority and advertise their efforts to develop sustainable products and show their corporate social responsibility (CSR) [7]. This study focused on the consumers' perspective, as the growing consumer awareness of sustainability does not match with individuals' purchase intentions [6].

Following the economy continues to digitalize, digital platforms and digital marketing methods are becoming more widespread in the fashion business. According to McKinsey, a significant growth in online sales relative to overall sales is projected in the future. Fashion industry today is also in a highly competitive and dynamic environment dominated by the sudden changes and increasing uncertainty. Despite the recent spate of terrorist acts and new epidemic, the economy's increasing digitization represents another significant shift in the competitive environment. Numerous fashion firms have also realized the value of social media platforms for engaging with customers, fostering brand-customer connections, and aiding in decision-making [7]. Meanwhile many digital efforts now rely on social media and influencer marketing to reach the more than 25% of consumers who block traditional web advertising [8]. Nowadays, influencer marketing has been applied in different industries. Fashion and travel areas are prevalent among industries that marketers will adjust their strategies according to different fields [9]. Along with the interest of influencer marketing increases, Lou and Yuan [10] found that components of influencer marketing would affect brand awareness and purchase intentions. Then, as Generation Z was born with the development of digital, they are willing to follow influencers and purchase recommended products by influencers [11]. Meanwhile observing most people show little behaviors on sustainable fashion purchase, so that this study aims to investigate how can influencer marketing impact on sustainable fashion purchase intention among Generation Z. As Sokolova and Kefi [12] studied that features of influencers could impact followers' purchase intention especially to young generation. Moreover, firms in some main countries like UK and China which influence global fashion industry viewed comments from influencers are more valuable than officials [13]. And then attitudes to sustainable fashion varies among developed countries and developing countries [14], the effectiveness of influencer marketing might be different in countries.

Thus, due to the research above, this study will be conducted in UK and China and focus on: “How does influencer marketing have an impact on sustainable fashion purchase intentions among Generation Z?” through the following research objectives:

RO1: to study how features of influencer marketing impact sustainable fashion purchase intentions among Generation Z

RO2: to evaluate Generation Z’s sustainable fashion consciousness and purchase intentions

RO3: to investigate consumer mindsets regarding to influencer marketing in sustainable fashion consumption intentions

2. Literature review

2.1 Sustainable Fashion

2.1.1 Current challenges in fashion industry

Fashion has always been defined as a hedonistic and short product life cycle, especially in fast fashion [15]. As it is considered the most intensely changing consumer goods category [16], Clube and Tennant [17] found that the fashion industry has experienced dramatic growth along with negative environmental impacts in recent years, such as excess of waste and overconsumption of natural resources. Besides, energy consumption through processes in textile industry leads to many energy issues [18]. Then, the excess of waste is normally from the garment production process and consumption process.

Furthermore, the ever-changing nature attracts most consumers and has led to the availability of 'fast fashion' – low price and employs a rapid response manufacturing mechanism to restock hit styles and launch new ones [19]. Current patterns of apparel consumption are considered unsustainable [16], and there is an urgent need to enable consumers to change their consumption patterns and encourage consumer to consume in a more sustainable manner [20].

2.1.2 Sustainable fashion

Sustainability and fashion are often seen as two conflicting terms: the former is concerned with longevity and the latter is defined by increasingly shorter life cycles. Goodland and Daly [21] defines sustainability as the ability to maintain or increase living conditions for current and future generations without damaging or depleting natural resources. Sustainability usually refers to an ecosystem that aims to maintain a balance between the environment and humans as resource users, and the fashion industry is one of the most resource-intensive businesses [16]. As a result, the fashion industry could move away from fast fashion and be more sustainable. Therefore, this industry requires to consider more environmentally responsible initiatives and take a more responsible approach to environmental issues [22].

Sustainable fashion has emerged in the last decade as a branch of slow fashion and is synonymous with eco-green and ethical fashion. However, a single definition of sustainable fashion is difficult to determine because of no industry standard. The concept of sustainable fashion includes various terms such as organic, green, fair trade, sustainable, slow, ecological, etc. Sustainable consumption in the fashion industry is a complex area which including manufacturing and purchasing. McNeill and Venter [23] propose a definition that fits the consumer perspective: our per capita usage is sustainable if all world citizens can consume in a way that is sustainable without compromising the basis for maintaining or improving the quality of life for future generations.

Puspita [24] suggests that sustainable fashion can be expressed in relation to environmental sustainability, such as the use of renewable and eco-friendly raw materials, reduction of carbon footprint, durability, reuse, and longevity of products. Thus, sustainable consumption has been

introduced into the fashion industry as a decision-making process that considers social responsibility in addition to consumers' personal preferences for product attributes. Therefore, sustainable fashion consumption highlights concern of overconsumption and consuming unsustainable fashion goods. In addition, the second-hand clothing market is often associated with sustainable consumption, including the option of buying, selling or donating used clothes through second-hand stores.

2.2 Influencer Marketing

2.2.1 Influencer marketing

The most common elements of contemporary marketing communications are direct marketing, digital marketing, event marketing and communication on social media [25]. Due to the prevalence of the mobile devices, social media becomes increasingly popular. To be an online community, social media aims to create content and share it with other users, is now an integral part of people's lives and its function is changing systematically [25]. Nowadays, young consumers emphasize the importance of social media as their primary source of obtaining diverse information and discovering comments on items and services that interest them [25].

Social media influencer marketing is a growing field and is becoming an inevitable part of a company's marketing mix. The term influencer marketing is associated with social media and refers to marketing strategies in which brand managers invest in selected social media influencers (SMIs) to drive brand awareness and purchase decisions [15]. SMIs are described as content producers with large followings and defined as "a new type of independent third-party spokesperson who shapes audience attitudes through the use of blogs, tweets, and other social media" [20]. They can be a very relevant source of advice for other consumers as "opinion leaders" [3]. An effective influencer is credible and can subtly influence the opinions of the community gathered around them. The fashion opinion leaders will influence consumers what they will choose initially and form a source of information on fashion products [26].

Influencer marketing is similar to recommendation marketing, but it focuses only on the opinions of influencers. Influencers play the most important role in it rather than advertising products or services [15]. Thus, social media amplifies the influence of consumer recommendations and experiences, it enables consumers to create their own content and gain visibility, which in turn leads to the emergence of SMIs [6]. Therefore, a fundamental reason regarding the effectiveness of influencer marketing is that they are seen as regular customers, relevant and authentic [10].

2.2.2 Influencer marketing impact

SMIs impact the minds of consumers, especially young fashion consumers, they look for the latest trends and they tend to be less willing to consider environmental aspects when making decisions [27]. The number of SMIs focusing on sustainable and environmental topics has grown exponentially over the past few years, they aim to raise awareness of environmental topics and promote specific lifestyles such as buying sustainable fashion [28]. Meanwhile they have been successful in promoting sustainable consumption and encouraging recycling and reuse [21]. Those influencers can draw attention to followers who were previously uninterested in environmental protection by compiling green topics in their communications [21]. Meanwhile, some studies believe that environmental awareness is a trigger to purchase intentions [14].

2.2.2.1 Para-social interaction

Recent studies investigate the underlying mechanisms of influencer marketing and impact on consumer behavior which indicate the concept of para-social interaction plays a role [29]. Horton

and Richard Wohl [30] introduced the idea of para-social interactions, which describes a media user's one-sided pseudo-interpersonal relationships with social media influencers over time through group communication [21].

Contrast to traditional media, SMIs interact with consumers more frequently and deeply that they can shape and spread trends to maintain consistent through sharing habits and lifestyles with their followers [19]. They can also interact and influence large number of consumers on their attitudes and behaviors through communication and relationship building, with research finding that 49% of consumers rely on influencers' recommendations [31].

Through subscribing SMIs, consumers have the chance to approach details of influencers' personal lives and build an interpersonal relationship to develop a para-social interaction [11]. Research also showed that consumers perceive influencers as satisfying their ideality, relatedness and competence which leads to attachment behaviors towards the influencer [6]. Gradually influencers shift their role from not only being a reliable source of information but also building connections with their followers [3]. Besides, related research in China showed that para-social interactions have a positive impact to purchase intention [12].

Yildirim [32] claimed that influencers demonstrating their own consumption behavior could stimulate and influence consumers to switch to sustainable product typically to who lack consumption habits. This especially works for online social media users-Generation Z who often identify with influencers and draw on aspects of their personalities and lifestyles while looking like them. And many influencers are nowadays popular for sustainable lifestyles and sharing their own personal experiences [28], so that personal experiences and life details shared by influencers in para-social relationships have a positive impact on purchase intentions [31]. To the research above, it is hypothesized that:

H1: Influencers' sustainable fashion purchasing experiences (X1) positively relate to Generation Z' sustainable fashion purchase intentions (Y).

2.2.2.2 Similarity

A high degree of congruence between the social media influencer's image and the consumer's ideal self-image leads to effective endorsement outcomes [8]. Similarity refers to the similarity of demographic characteristics, lifestyles, and interests [16]. Consumers tend to follow people who have similar interests or are in similar situations [33]. When consumers feel similar, they feel attracted, trusted, and understood, which enhances the sense of social presence, and therefore, they trust and are more likely to be influenced to purchase intention [16]. On the other hand, homogeneity can enhance consumers' engagement with product use and reduce their risk of purchase, thus making them more interested in generating purchase intentions [11]. And higher similarity between influencers and consumers leads to increased credibility of influencers. This is especially true for Generation z consumers, who are more susceptible to the influence of online activities on beliefs and attitudes [2]. In addition, Casaló *et al.*, [34] proposed if the content posted by opinion leaders on social media matches the consumers' personality, consumers will tend to follow the ideas and behaviors suggested by the opinion leaders to a greater extent. A study conducted on a women's clothing blog showed that consumers' psychological closeness to fashion bloggers was positively correlated with their attitudes towards the content posted and ultimately with the ideas displayed by the fashion blogger.

Similarities between influencers and consumers can positively influence consumer engagement and purchase intention for recommended products [26]. Especially to consumers who have little trust on sustainable fashion retailers and are skeptical to their green products, consumers will feel

more persuasive and authentic on purchasing information providing from similar influencers to them [35]. To the research above, it is hypothesized that:

H2: The similarity between influencers and Generation Z (X2) positively relates to Generation Z' sustainable fashion purchase intentions (Y).

2.2.2.3 Expertise

Social media influencers are always defined as building engaging online personas that centered on specific areas of interest or expertise and have the ability to influence the consumption decisions of others [36]. Expertise is largely dependent on the knowledge or experience that SMIs possess and offer to their target consumers [18]. According to the relevant model it is claimed that influencers with high expertise are more persuasive than those with less expertise [18]. In addition, expertise and experience in a given field are major factors of credibility, and highly credible messages lead people to believe that their information is valid [37], especially when some consumers do not trust the transparency of companies in terms of ethical production and green product range [16]. Whereas professional SMIs are more likely to publish professional and detailed content that can provide professional content services to consumers and improve interpersonal communication efficiency, consumers can easily get the desired brand product information from professional interpretation [14]. For example, Hur and Cassidy [16] noted that most respondents were unable to correctly describe the meaning of a product's carbon footprint once, so communicating sustainable knowledge to consumers is a good way for consumers to better understand the concept of sustainable fashion and thus promote consumer purchase intention. According to the previously mentioned barriers, consumers often lack green product awareness and information to differentiate between green products when faced with sustainable fashion consumption. According to Richards *et al.*, [38] it is believed that green product awareness on social media platforms can be increased to encourage sustainable consumption intentions among young consumers by spreading sustainable consumption knowledge through influencers. To the research above, it is hypothesized that:

H3: Influencers' expertise (X3) in sustainable fashion has a positive relationship with Generation Z' sustainable fashion purchase intentions (Y).

2.3 Consumer Buying Attitude

2.3.1. Generation Z

Generation Z or Gen Z is usually defined as those individuals born in the mid-1990s [39]. Generation Z (1995 to 2009) customers are particularly important when it comes to eco-fashion because their willingness to be sustainable and support environmental values is growing rapidly [40]. And members of this generation are well-educated while their sustainable awareness is lower than older generation [3]. Researchers, policy makers, and educators believe it is critical to intervene in the mainstream unsustainable consumer lifestyles, practices, and patterns of young people [12].

Besides, Haenlein (2020) found that Generation Z has different primary consumption patterns due to a high focus on social media. The influence of SMIs is considered greater for younger generations [3]. 70% of Generation Z follow at least one influencer on platforms such as YouTube and Instagram [18]. They perceive influencers as peers and consider them dependable and reliable. Therefore, they are more likely willing to contribute by shifting their consumption to environmentally friendly products under social norms. Meanwhile the attitude-behavior gap and barriers are also reflected in Generation Z. Despite the lack of studies on Generation Z's views on sustainable fashion, this group is an important force behind shifting fashion consumption trends

[12]. Previous study also indicated that young people are more open to be influenced by social influencer in sustainable fashion industry [32].

2.3.2 Consumer attitudes towards sustainable fashion consumption

Due to the negative impact of current clothing consumption trends on the environment, consumers are increasingly concerned about sustainability in environmental and social contexts when purchasing fashion products [7]. However, previous studies have shown that most consumers ignore sustainability issues when they actually purchase clothes [41].

Intention and behavior gap appeared significantly in ethical consumption, it shows many consumers concerned about environmental issues while there is little evidence showed ethical issues have affected consumer behaviors [42]. The emerging literature also suggests that there is also an attitude-behavior gap between consumers' sustainability concerns and their purchasing behavior in the sustainable fashion domain [4]. This reflects that even though fashion customers have positive attitudes towards environmental protection, such attitudes rarely translate into eco-fashion purchases. The theory of planned behavior (TPB) is often drawn upon to test the social influences that affect attitude-behavior gap [41], and various studies showed that the three cognitions of the theory best predict behavioral intentions which are direct precedents and predictors of behavior.

2.3.3 Influencing factors to consumer behavior towards sustainable fashion consumption

Meanwhile, consumers do not purchase based on ethical values only but are also influenced by additional factors [43]. Many studies attribute this discrepancy to the fact that social responsibility is not the main criterion for their purchasing decisions. Analysis suggests that the following hinder the consumption of sustainable fashion and exacerbate the attitudinal behavior gap: price, trends and brand image [19]. Those factors also have impacts on sustainable fashion purchase intention which plays a significant role to purchasing process. Purchase intention is created when customers consider whether or not to acquire things or services based on their preferences and tastes for the products and services [4].

According to the TPB, attitudes, subjective norms, and perceived behavioral control all impact an individual's intention to conduct a specific activity [44].

2.3.3.1 Attitudes towards sustainable fashion influencers

Attitude refers to the extent to which an individual approves or not a behavior before achieving it [44]. According to previous literature, the influence works successfully when target consumers show satisfaction and trust [45]. To the cultural influencing factor, various fashion marketing imposes the constant changes of clothing and desire to wear new fashion [16], consumers tend to diminish the motivations on sustainable consumption due to lack of promotion of awareness. Related research suggests that consumers have limited awareness of the environmental impact of clothing [23] and feel unable to make sustainable clothing choices. McNeill and Moore [23] revealed that many consumers unaware the sustainable fabrics until they purchase it. Yildirim [32] research indicated that influencers guide their followers adopting sustainable fashion consumption by promoting environmentally friendly products. Sustainable fashion influencers always refer to who sharing sustainable lifestyles and sustainable consumption patterns such as sustainable fashion [32]. Attitudes towards sustainable fashion influencers can be described as a psychological approach in relation to the credibility of a sustainable fashion influencer [26]. Chetoui [44] stress that attitudes toward the influencers as a direct predictor to purchase intention. To the research above, it is hypothesized that:

H4: Attitudes towards sustainable fashion influencers (X4) have positive relationship with sustainable fashion purchase intentions (Y).

2.3.3.2 Subjective norms

Subjective norms are defined as the social pressure that individuals face when behaving in a certain way [44]. That is, to the social factors, consumers have been greatly influenced by their peer groups which highlighted the young consumer demographic keep feeling inadequacy through constant comparison with peers in sustainable fashion [16]. Friends' views influenced by influencers refers that perception about social pressure (e.g. friends) to have the behavior and motivation to comply with such pressure [41]. Consumers with sustainable fashion consumption behaviors tend to be more concerned with behavioral norms and peer opinions [23]. Due to the size of this group and their concern for social norms, social media and influencer marketing can be a valuable medium to increase awareness in this market as this segment of consumers is very concerned about how they are perceived by their peers [23]. To the research above, it is hypothesized that:

H5: Friends' views influenced by influencers (X5) have positive relationship with sustainable fashion purchase intentions (Y).

2.3.3.3 Perceived behavioral control

Perceived behavioral control relates to people's perceptions of how capable or in control they are of doing a specific activity [44]. Cabeza-Ramírez *et al.*, [46] demonstrate that customers are more likely to perform a specific behavior if they have the ability. In this category, stronger driver such as price influences their purchase intentions [23]. The affordability of the products recommended by influencers refers that degree to which the price of a product is considered acceptable [41]. With the spread of sustainable fashion marketing, one of the reasons that most consumers are hesitant to switch to sustainable fashion products is that they believe eco-fashion is expensive and the quality of design is not as good as it could be especially when compared to fast fashion products [33]. Zhang [4] studied that when consumers become aware of environmental issues and begin to prefer natural, durable materials in their clothing, expensive environmentally friendly materials make consumers abandon the purchase behavior of sustainable features apparel. So that they tend to prefer to low-cost fashion availability to fit their small budgets and forgo environmental. All of this is the same issue that has been previously raised in the mainstream ethical consumption literature. To the research above, it is hypothesized that:

H6: The affordability of the products recommended by influencers (X6) has positive relationship with sustainable fashion purchase intentions (Y), Figure 1.

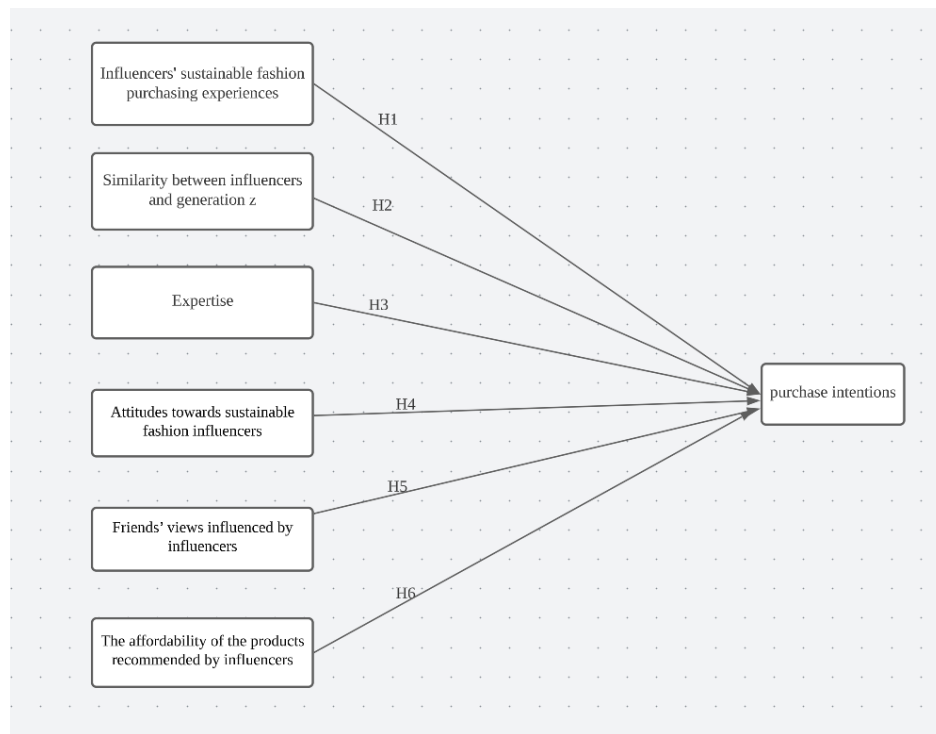


Fig. 1. Hypotheses model

2.4 Research Gap

Early literature mainly focuses on researching brand familiarity and sponsorship disclosure of influencer marketing towards purchase intentions in fashion industry [37]. And little research combining influencer marketing and its impact on sustainable fashion consumption, current literature focuses more on studies of influencers marketing and purchase intentions in general industry or fashion products only [26]. Moreover, previous literature has examined consumer attitudes towards sustainable fashion consumption particularly in the post-millennial generation. Some of the literature identified Generation Z as a research sample mainly focusing on developing countries [40], so that this study aims to enrich the consumer base which beyond developing countries.

3. Research Methodology

This section will define the methodology behind the research conducted, including the approach, methods and data collection, and will be detailed in accordance with the research question.

Research question: how influencer marketing can impact on sustainable fashion consumption among Generation Z?

3.1 Research Approach

This study is explanatory research to seek a situation, with the goal of identifying causal relationships between variables [47].

A deductive approach is taken, the absence theory in the previous academic literature is developed and a number of hypotheses are taken to prove the theory [47].

Moreover, this research uses a single data collection which is known as a mono method quantitative study to test the proposition [47]. The main advantage of quantitative research is always measured numerically and analyzed using a range of statistical and graphical techniques

[47]. The survey strategy is using a questionnaire to collect standardized data from a large number of respondents.

3.2 Advantages of Analysis Model

Due to more accurate statistical of quantitative research than qualitative research, this study applied the mono method quantitative study. The main purpose of quantitative research is the quantification of the data by measuring the views and responses of the sample population to allow a generalization of the result [47]. It looks at measurable, numerical relationships that indicated quantitative research is a straightforward analysis which interprets the data and presenting findings straightforward with less open to error and subjectivity. It is significantly useful in this study due to its ability to test causal relationships and generalizing results to wider populations. Besides, quantitative study is focused that the design of the study determining from the beginning to test the initial theory. The unbiased statistical feature of quantitative research counted as another factor for make generalization to larger universal populations outside the test sample which particularly used in social science research.

Different analysis models research on different purpose of variables and research questions. This study utilizes multiple regression to test the hypotheses of a type of linear regression. Multiple regression could capture the complex and multifaceted nature of real-world phenomena. Alongside accounting more factors that influence dependent variables, multiple regression helps to reduce the error and bias in estimations. Due to flexibility of multiple regression, it can handle different types of data and research questions and attempts to model the variation in an outcome variable as a linear function of a set of regressors [48]. This process is accomplished through a linear equation that quantifies, via regression coefficients, the contribution of each regressor variable on the outcome variable [48]. Then the strength of relationship could be observed from the plotted scatter graph.

The ability of multiple regression helps to determine the relative influence of one or more predictor variables to the criterion value. Other researchers also use ANOVA test or Crosstab to analyze quantitative data, while it does not fit for this research. This project aims to analyze the relationship of features impacted by influencer marketing and sustainable fashion purchase intentions. Moreover, multiple regression could identify outliers when reviewing the data.

3.3 Limitations of Analysis Model

While only focusing on numbers may limit researchers overlooking broader relationships, they may miss the big-picture information of quantitative research. And then if the hypothesis coming up is subjective, that will be difficult to set up a research model and will result in mistakes and invalid data. Furthermore, opinions and biases from researchers may impact quantitative approaches to information gathering. Moreover, the structured questionnaire with close-ended questions used in quantitative research leads to limited outcomes outlined in the research that might not be representative to the actual occurrence. However, multiple regression does have limitations such as overfitting that will lose its ability to generalize new data. Also, using incomplete data will lead to a false correlation in multiple regression.

3.4 Questionnaire Design

Before started the analysis of quantitative data, a questionnaire is conducted from Qualtrics platform to gather primary data. Hypotheses will be tested on a simple random sampling of 120 participants which is a kind of self-completed questionnaire [47]. The results were collected online by Qualtrics from Prolific users and people surroundings. This questionnaire is designed without

location restricted and ethical constraints as the study aims to analyze the perspectives of Gen Z would be impacted by influencers and their purchase intention towards sustainable fashion. So that there is no need to limit the living areas of people. Meanwhile, as several independent variables related to the similarity of participants and influencers, and the influencers displayed is a female. To diminish the bias of testing independent variable of similarity, this survey focuses on the female participants who are Gen Z. This questionnaire includes three parts of the questions: influencer marketing, sustainable fashion and demographics. The first section influencer marketing regarding to a sustainable fashion influencer on Instagram, according to the content of posts she posted to explore participants' reactions. The second section relates to respondents' consumption habits on sustainable fashion and general views towards influencers. The aim of gathering participants' attitudes on sustainable fashion influencers is for collecting data of independent variables and dependent variables. The last part investigates basic information of respondents such as age, gender, education level, occupation, income and ethnicity. They were also studies in terms of do they ever followed influencers, do they ever followed influencers who promoted sustainable fashion and social media platforms they regularly used.

3.5 Questionnaire Advantages

There are strategies regarding quantitative research while the choosing of survey as research strategy is that data acquired might be analyzed using descriptive and inferential statistics, which can be utilized to provide probable explanations for specific correlations between variables, as well as to create models of these associations [47]. The use of surveys, on the other hand, has the capacity to yield conclusions that are statistically representative of the entire population at a cheaper cost than collecting data for the entire population [47]. There are questionnaire, structured observation and structured interviews belong to the survey strategy, while this study used questionnaire only to collect primary data to quantitative analysis. Due to the efficiency of questionnaire as each respondent is asked to respond to the same set of questions [47]. And collecting results online reaches people quickly and is flexibility for respondents over places and times. The aim to collect primary data is the characteristics of reliable, authentic, and objective with the purpose of addressing a particular research problem. Meanwhile, primary data is usually up to date because it collects data in real-time and researchers always have the rights to decide on the choice design, method and data analysis.

Questionnaire is designed through three parts questions beginning with demonstrating sustainable fashion posts by a female sustainable fashion influencer (martacanga). The aim of display specific post is creating the context of what kind of posts sustainable fashion influencers would post normally. Participants would understand the purpose of research accurately. Then a set of questions would be asked to test participants' views to the display of influencer such as influencers' sustainable fashion purchasing experiences, similarity between influencers and Generation Z, expertise and purchase intentions. For each set of questions, there are several measurement scales for each independent variables will be quantified by 7-point Likert scale questions. Then, a set of questions related to general views of influencers would be asked such as attitudes towards sustainable fashion influencers, friends' views influenced by influencers and the affordability of products recommended by influencers. Questions related to participants' sustainable fashion consumption and attitudes will also be investigated for further discussion. Table 1 below demonstrates the measurement scale of each variable.

Table 1

Measurement scale of variables

Variables	Measurement scale	Citation
Influencers' sustainable fashion purchasing experiences	I would like to watch influencer's experiences on her channel regarding sustainable fashion purchasing. I would like to imitate the influencer's behaviors towards sustainable fashion, as I feel as if I am part of her group. When the influencer shows me how she purchases on sustainable fashion products, it helps me make up my own mind about the category.	[33]
Similarity between influencers and Generation Z	This influencer shares my values. This influencer has a lot in common with me. This influencer behaves like me. This influencer has thoughts and ideas that are similar to mine. I think she could be a friend of mine. I would like to have a friendly chat with her.	[26, 33]
Expertise	I find this influencer expert in sustainable fashion. I find this influencer has a lot of experience on sustainable fashion products. I find this influencer knows best about purchasing sustainable fashion products. I find this influencer knows more about sustainable fashion products than other people do.	[26, 29]
Attitudes towards sustainable fashion influencers	It is worth buying sustainable fashion products promoted by influencers. I would like to consider sustainable fashion influencers' suggestions. I would like to subscribe sustainable fashion influencers' account and keep following their posts.	[26]
Friends' views influenced by influencers	I do consider my friends' opinions before purchasing sustainable fashion products. Friends think I should buy sustainable fashion products recommended by influencers. Friends buy sustainable fashion products recommended by influencers	[41]
The affordability of the products recommended by influencers	I have the sufficient affordability to buy most of the sustainable fashion products recommended by influencers.	[23]
Sustainable fashion purchase intentions	I would purchase sustainable fashion products promoted by this influencer in the future. I will probably buy sustainable fashion products after viewing her posts. My willingness to buy sustainable fashion would be high if I were shopping fashion products. I would follow product recommendations from this influencer. I would encourage people close to me to buy the sustainable fashion products promoted by this digital influencer.	[12, 33]

The last set of questions is related to demographics which helps further data analysis and controlled variables. Besides, throughout the survey, there are two attention-check questions setting regarding the content of post to prevent respondents who may not reading questions. Moreover, attention-check questions help to prove the reasonable and high-quality of data to prevent unreliable data harmful to the validity [49].

3.6 Questionnaire Limitations

Meanwhile, the reminder of questionnaire is significantly that researchers must devote effort to ensuring that the sample is representative, devising and piloting data collecting instruments, and assuring a high response rate [47]. The process of preparing and analyzing the data might be time consuming. However, the data is independent after collecting as many researchers complain that it is delayed by the dependence of data on others [47]. Despite this, the major drawback with using a questionnaire is the limit to the number of questions can contain. That also reflects that in some cases the feasibility of collecting primary data is low due to complexity of research. Moreover, closed questions in questionnaire lacks detail that less scope for respondents to answer accurately to a topic. However, the strength is also apparent that the standardized answers could be easily converted into quantitative data.

3.7 Planned Analysis

After collecting data through questionnaires, the next step is preparing data for analysis. Creating a data set document in SPSS first, then cleaning data. Cleaning data would include dealing with missing data, reverse-scored items and “not applicable” in a scaled-response questions [50]. Due to the questionnaire has two attention-check questions, those incorrect data would be deleted as it is threatened to the validity of results. And then the analysis process path through describing data to conducting analysis and displaying results. The descriptive data would be presented in the primary to see the data in collective and pictured forms and help to interpret tests [50]. Then, the chi-square would be used to test whether the variables have statistical relationships. Correlations would be tested through multiple regression to reflect each independent variable’s impacts on the outcome variable [48].

3.8 Ethical Considerations

Some ethical problems need to be considered as the study involves primary data collection via questionnaire, implying human volunteers. Before starting the survey, participants will be introduced and agree with the consent form. Due to the survey is collected through two sources, collecting from friends/ families and Prolific platform. Prolific users would be required to fill in their Prolific ID if they agree with the consent form to ensure their identity. All participants will be over 18 years old and below 27 years old as the target audiences of the study is Gen Z. They need to thoroughly understand the purpose of research and be willing to participate as they will be informed before the survey. Besides, they have the right to withdraw from the research. The data collected will be stored anonymously and used for training and specific research purposes.

4. Results and Discussion

In this section, findings will be presented and analyzed to answer the research question. Hypotheses will be tested through multiple regression and questionnaire analysis in line with influencer marketing works on sustainable fashion products in both firms and consumers aspect.

4.1 Data Collection

4.1.1 Demographics

Based on the results of processing respondent data, from 120 Gen Z respondents who are interest in sustainable fashion products, active on social media platforms mainly on Instagram, TikTok, YouTube and Twitter, and majority follow influencers while minority respondents (42.74%) followed influencers who promoted sustainable fashion before. To control variables and effectiveness of measuring variables, the study restricts the gender as female only. To ensure the validity of all data, cleaning data was operated in the first step that removing 9 non-conforming data. Based on the ethnicity, 60.3% of respondents are White and 35.3% of respondents are Asian, rest of respondents are from other ethnical groups. As the survey was released on the Prolific platform based on UK, White respondents could be certain that they are from the UK. While Asian respondents could be certain that from China as part of the questionnaire was published in China. On average, the survey participants were relatively high educated. The largest category was the university bachelors degree group (43.1%), followed by graduate or professional degree (17.2%), some university but no degree (15.5%). Based on the occupation, majority respondents are full-time employed and students. The data shows that 40.87% of respondents are full-time employed and 37.39% of respondents are students. While nearly 34.19% of respondents are in the first phase of gross household income which is less than 20,000 pounds.

Among the participants, 80.34% reported that they spend less than 10% of their monthly income on sustainable fashion products, only 4.27% of respondents spend 20% - 30% of their monthly income on sustainable fashion products. Lastly, the largest three groups of participants consuming sustainable clothes among their cloth consumption are under 10%, 10% - 20% and 30 - 40%. Among that, 18% consumes over 40% sustainable among their all cloth purchasing.

4.1.2 Characteristics of consumers who purchase sustainable fashion

To investigate the characteristics of consumers who buy purchase sustainable products the most, the data of sustainable fashion consumption among all clothing purchase greater than 20% was selected in this study. 49 data sets were selected to analyze the characteristics of consumers who purchase sustainable fashion, as in Figure 2-5. From the data, it turns out that the white population is higher followed by the Asian population. This may be due to two factors, one due to the limited sample size and the other due to the influence of cultural background. According to previous research, cultural background proved to be important [41]. As consumers in developed countries pursue unique and emphasize their individualism, niche green brands are more popular in developed countries than developing countries [51]. Moreover, the survey found that consumers who consume sustainable fashion tend to be highly educated, suggesting that educational background may influence individual attitudes. Higher education might lead to more knowledge and experiences on sustainable fashion products that forming positive attitudes of consumers to sustainable fashion so that influence purchase intentions [52]. From the perspective of occupation, it can be found that the buyer group is mainly concentrated in full-time employed and they are generally not a high-income group. This may be because the younger generation is considered as less price sensitivity than tend to be hedonistic consumption and is more likely to be influenced by all kinds of information to change their consumption attitudes [53].

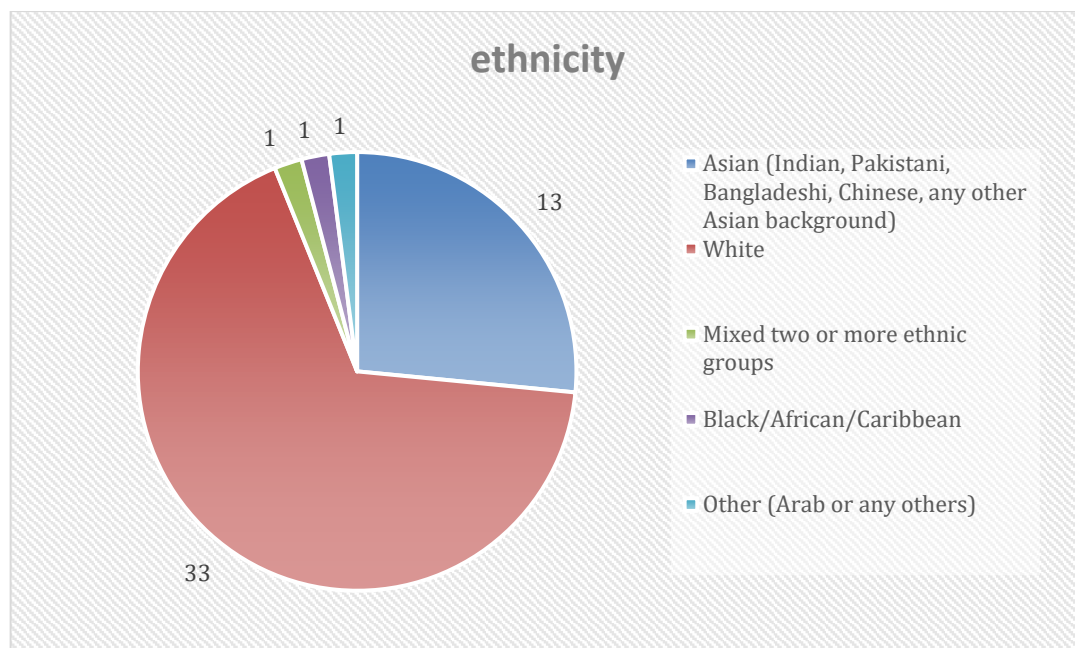


Fig. 2. Ethnicity group distribution pie chart

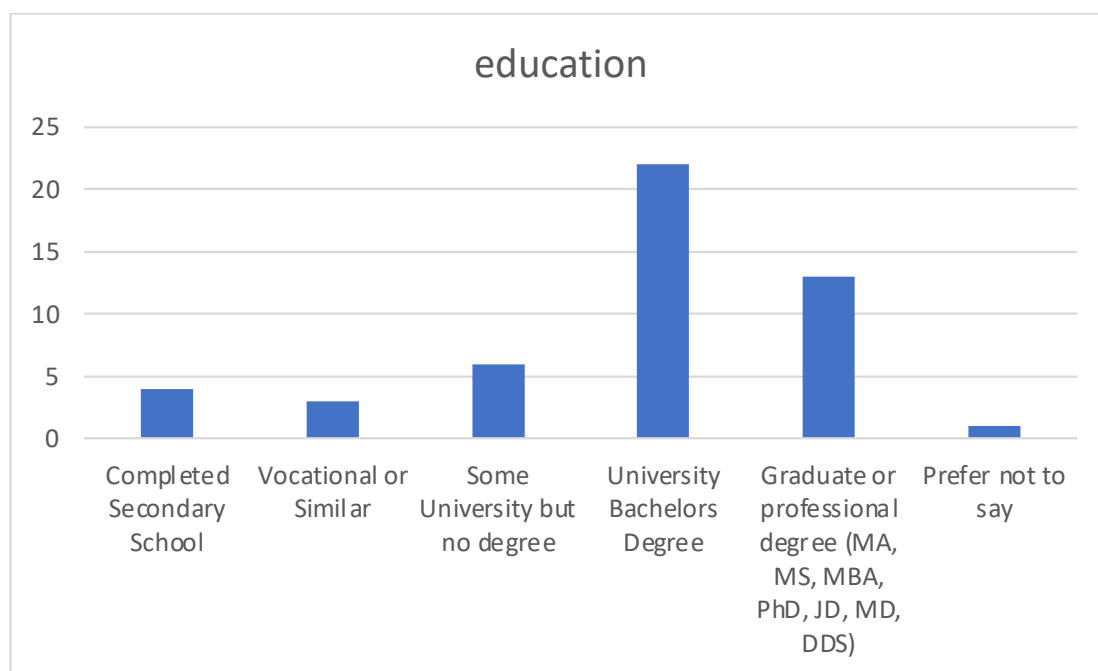


Fig. 3. Education distribution bar chart

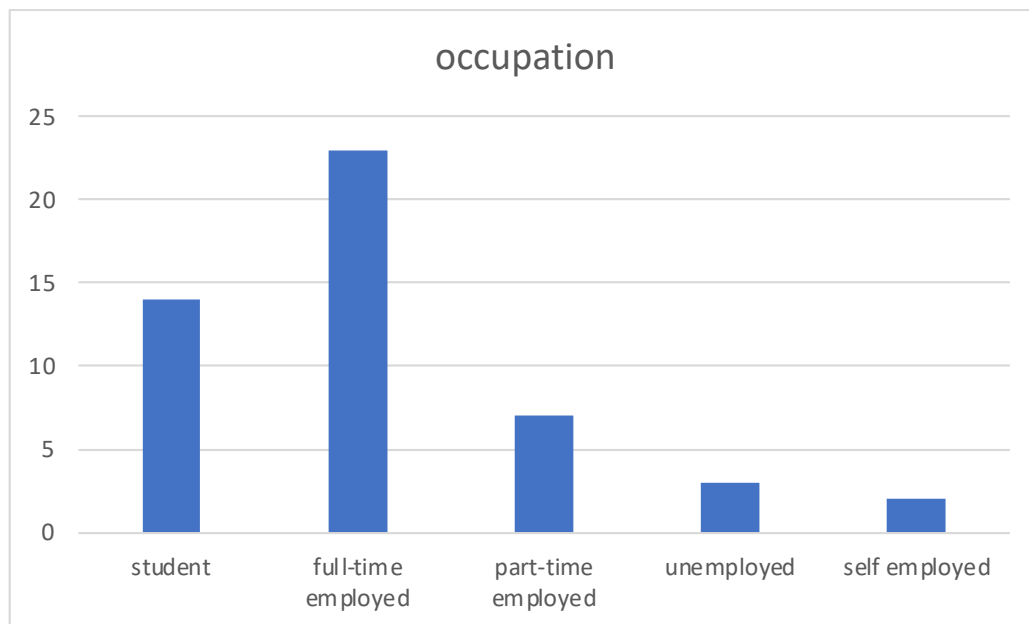


Fig. 4. Occupation distribution bar chart

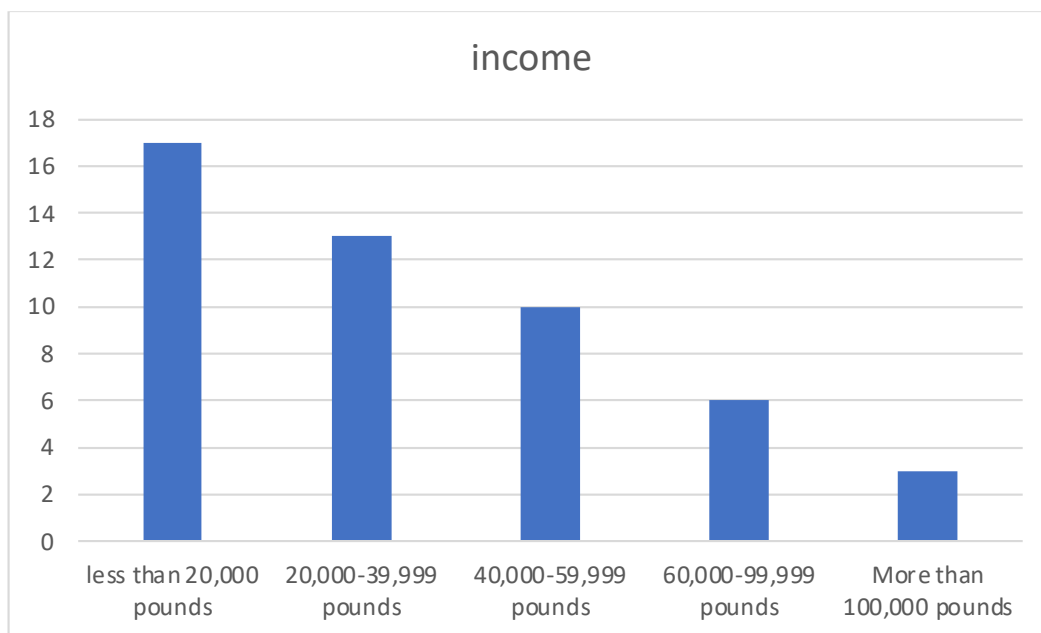


Fig. 5. Income distribution bar chart

4.1.3 Descriptive data

From the purpose of research, this study conducted a multiple regression model by using SPSS to understand the relationship between dependent variable and independent variables. Excel was used to calculate the descriptive statistics for variables and the figure below is the finding in Table 2.

Table 2
Descriptive data of variables

	Y	X1	X2	X3	X4	X5	X6
Mean	4.23963964	4.63063063	4.57014157	4.90315315	4.46546547	3.59459459	3.33333333
Standard Error	0.13793421	0.13248099	0.11290697	0.103292	0.11770852	0.12182115	0.1574434
Median	4.6	4.66666667	4.71428571	5	4.66666667	3.66666667	3
Mode	5	6	4.57142857	5.75	5	3.33333333	3
Standard Deviation	1.45322708	1.39577382	1.18954872	1.08824879	1.24013626	1.28346548	1.65876917
Sample Variance	2.11186896	1.94818455	1.41502616	1.18428542	1.53793794	1.64728365	2.75151515
Kurtosis	-0.5012249	-0.4597559	0.17927635	0.58203651	-0.1288026	-0.5150575	-0.989247
Skewness	-0.549487	-0.4824783	-0.6140818	-0.7235078	-0.6057597	-0.0851515	0.34121593
Range	6	6	6	6	5.66666667	5.33333333	6
Minimum	1	1	1	1	1	1	1
Maximum	7	7	7	7	6.66666667	6.33333333	7
Sum	470.6	514	507.285714	544.25	495.666667	399	370
Count	111	111	111	111	111	111	111

4.2 Influencer Marketing that Influences Consumers

Social media is a communication tool and phenomenon in this century with a growing body of research attempting to better understand the shift in power from firms to consumers brought about by the use of social media. Early literature researched on the advertising, content marketing, interactions between consumers and sales, social media usage and acceptance and online community establish [54]. In the context of purchasing, consumers utilize social media as a searching process to investigate the market, compare products and discount when they decide to make a purchase decision [55]. Information shared among consumers and firms on the social media platform helps consumers glance in all aspects and firms could monitor response immediately. Alongside the social media, marketing strategies boost in the meantime as digital marketing becomes more prevalent with the digital platforms increasingly incorporated into marketing plan. As consumers contribute to kinds of activities online such as purchasing experiences, sharing information on purchase and participating in discussion that help other consumers make a purchase decision [56]. Moreover, multiple online marketing channels are available subsequently, for instance, email marketing, search engine marketing, social media marketing, video advertising, mobile marketing, influencer marketing and etc. [57].

Especially for fashion products, it turns out so powerful that the digital world keeps consumers aware of what is popular and availability of fashion trends [57]. As the data showed that 84.62% of respondents followed influencers online, and they are willing to follow their recommended trends and products. Influencer marketing to be an extension of the original concept of word-of-mouth marketing focuses on a social context and performed in a more professional way [57], it helps a brand to seek to expand their audience and turn them into loyal consumers also helps a concept of sustainable fashion to be propagate. Some marketers employ influencer marketing to develop market reputation, while others start social dialogues about their brand. The value created by influencer marketing may be quantified in a variety of ways. Comparing with the traditional advertising, content created by influencers is considered as more real and direct to consumers. According to a report, it pointed out that 39% marketers increase budgets on influencer marketing in 2018 [10]. Moreover, other literatures researched on the planning of influencer marketing strategy that takes the characteristics of influencers into account as it will have an impact on the behaviors of purchasing mechanism [10], Figure 6.

Do you follow any influencers?

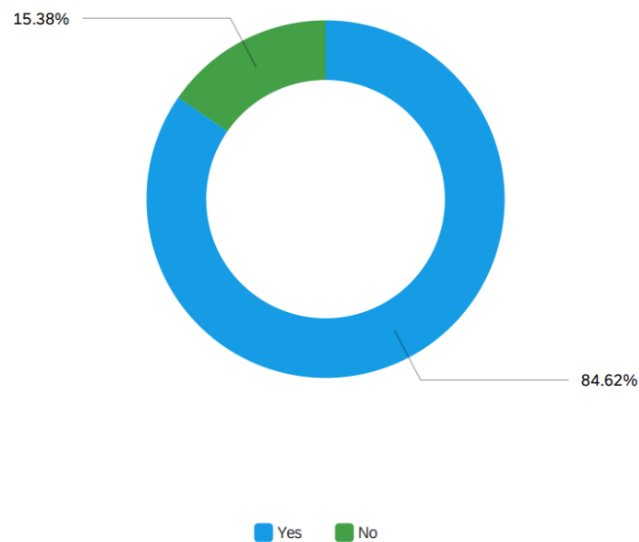


Fig. 6. Distribution of following influencers

4.3 Hypotheses Testing

To determine if the study hypothesis is validated, the p-values of various independent variables are calculated using multiple regression, and the link between variables is investigated. Figure 7 depicts the outcomes of multiple regression.

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
1		B	Std. Error	Beta			Tolerance	VIF
	(Constant)	-1.318	.333		-3.959	<.001		
	EP_X1	.307	.081	.295	3.775	<.001	.334	2.994
	similarity_X2	.248	.094	.203	2.643	.009	.344	2.909
	expert_X3	.126	.079	.094	1.592	.114	.577	1.732
	afford_X6	.074	.047	.084	1.578	.118	.715	1.398
	friends_X5	.190	.070	.168	2.700	.008	.526	1.901
	attitudes_X4	.326	.087	.278	3.750	<.001	.370	2.701

a. Dependent Variable: PI_Y

Fig. 7. Multiple regression model of impact on purchase intentions

Table 3
Hypotheses testing table

Independent variables	Relationship with DV	Test hypotheses
Influencers' sustainable fashion purchasing experiences (X1) – H1	Positive	Support
The similarity between influencers and Generation Z (X2) – H2	Positive	Support
Influencers' expertise (X3) – H3	Positive	Not support
Attitudes towards sustainable fashion influencers (X4) – H4	Positive	Support
Friends' views influenced by influencers (X5) – H5	Positive	Support
The affordability of the products recommended by influencers (X6) – H6	Positive	Not support

This study showed evidence that features of influencer marketing such as sustainable fashion purchasing experiences, similarity, attitudes to sustainable fashion influencers and friends' views influenced by influencers impact consumers' purchase intentions specifically in Table 3. That is corresponding to the mechanism of purchasing on social media which are information and social connection [56].

The effect of Influencers' sustainable fashion purchasing experiences and similarity on Gen Z's purchase intentions

The reasons of high significance of purchasing experiences and similarity between influencers and Gen Z, that is relates to the para-social interaction and relationships. This signifies consumers will experience emotional and international process when influencing by influencers. Consumer behavior during purchase process is easily influenced by the accessibility and transparency of information so that when consumers could get touch with the sustainable fashion products category and purchasing sources they will be raised mind of intentions to purchase. Sokolova and Kefi [12] showed that the impact of para-social interaction is stronger to Gen Z which means if influencers are more attached with followers, followers will be more likely to purchase. Due to one of the major purchasing behaviors features of Gen Z is that they are avid consumers of social media as they are inspired by the social media and online relationships. Although other generations have higher purchasing capacity while online shopping is part of life of Gen Z that they spend plenty of time browsing sharing experiences, contents and reviews [58].

Hence, setting target audience as Gen Z will find they are the most concentrated and easiest to be addictive followers [12]. Pare-social interactions also becomes more like content consumption to younger generation that means quality of content influencers provided such as their purchasing experiences. That also explains the significance of influencers' sustainable fashion purchase experiences to purchase intentions.

Beyond that, similarity also impacted significantly on Gen Z's purchase intentions. As can be seen in the table, similarity (standardized coefficients $\beta = 0.203$, $p < 0.009$). That indicates that sharing values is a crucial aspect to persuasion. Consumers could build emotional link with influencers through shared values which also indicates the quality of content provided by influencers. Meanwhile shared values relates to the emotional international process that impact the decision-making. Therefore, consumers might agree with influencers' values and opinions that leads to intentions to purchase sustainable fashion. This finding is inconsistent with Gomes *et al.*, [26] who evidenced that similarity will not impact on fashion products purchasing. However, Xu and Chen [57] represented that people want to express themselves through fashion and create an

identity regarding to fashion products. Moreover, they tend to copy influencers' styles and follow a trend which is to the psychological aspect that consumers want to be person like influencers.

And they attach importance to values provided by influencers. Besides, they prefer to build relationships with online influencers. The study showed data that 64.7% of respondents agree with watching influencers' purchasing experiences, imitating their behaviors and respondents feel influencers' experiences are helpful for making up mind on sustainable fashion, Figure 9.

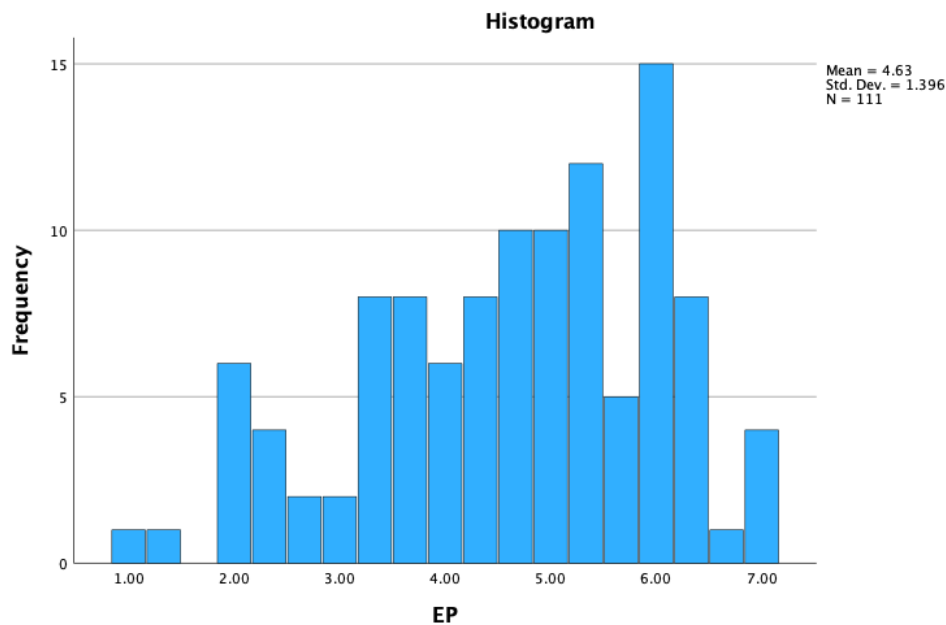


Fig. 9. Histogram of X1

Therefore, according to the research, influencers could utilize those insights to share similar values with consumers to increase credibility and para-social interactions. Moreover, replying to comments and interacting with followers will create para-social relationship that helps to explicit consumers' needs. This helps popularize the concept of sustainable fashion and benefit for brands to adjust marketing strategy to promote sustainable products.

The effect of influencers' expertise in sustainable fashion on Gen Z's purchase intention.

Interestingly, influencers' expertise in sustainable fashion is not a significant factor associated with purchasing intention of sustainable fashion which shows the significance of 0.114 is larger than 0.05. This result contrasts with Nugroho *et al.*, [59] investigation which found that social media influencer expertise has an impact on the purchase intention of Gen Z. Expertise, in this study, proved that it does not have statistically significance with purchase intention and hence does not reinforce the study of Ki and Kim [29]. While in a study by AlFarraj *et al.*, [60] impressive examination of influencers' expert, they showed that expert does not have much impact on purchase intention which emphasizing the reasonable result that experiences in sustainable fashion are still immature and dull to be an influencing factor. This study also brought into correspondence with Gomes *et al.*, [26] research who concluded that expertise will not influence purchase intentions significantly. This result demonstrated that despite influencers be perceived as expertise in the field, this characteristic is not sufficient to influence purchase intention of a recommended product. Meanwhile cultural acceptance is always in an involving stage. Then, the results gathered differed from previous literature might be influenced by the category of products and generation of target respondents.

The effect of attitudes towards sustainable fashion influencers and friends' views influenced by influencers on Gen Z's purchase intentions.

In H4 and H5, the TPB constructs attitudes and subjective norms are proposed to positively affect intention to have a sustainable fashion consumption, supporting the hypotheses. As can be seen in the table, attitudes to sustainable fashion influencers (standardized coefficients $\beta = 0.278$, $p < 0.001$) and friends' views influenced by influencers (standardized coefficients $\beta = 0.168$, $p = 0.008$) are positively related to purchase intention. It is also possible to conclude that attitudes play a greater role in predicting intention to have a sustainable fashion consumption than subjective norms.

The effect of affordability of the products recommended by influencers on Gen Z's purchase intentions.

In H6, the affordability of the products recommended by influencers constructed from the perceived value by TPB does not support hypotheses (standardized coefficients $\beta = 0.084$, $p = 0.118$) that p – value is larger than 0.05. This result against XX's research that individuals with higher affordability are more likely to have purchase intentions on sustainable fashion.

Previous research found that attitude-behavior gap might be the barriers of purchasing sustainable fashion [41], under the influence by influencer marketing, this research proposed main factors through extending TPB model in the sustainable fashion context are attitudes towards sustainable fashion products (attitudes), friends' views influenced by influencers (subjective norms) and affordability of the products recommended by influencers (perceived value, price sensitivity). Based on the research of TPB model, what happens between the moment an intention is formed and the moment an action takes place is still basically a black box [61]. While according to the data, this study could confirm that attitudes and subjective norms are crucial factors to predict intentions under the sustainable fashion background which is also consistent with Brandão and Costa's [41] result.

Additionally, the data shows that attitude has a greater impact on purchase intentions than opinions of friends and peers, while affordability has little impact on purchase intentions. For different ethnicity, a study has shown that France had higher sustainable attitudes than Japan. There are differences between continents that could be discussed based on cultural differences. The higher sustainable attitudes even more frequent purchasing experiences lead to consumers less impact on perceived value. Especially to European consumers, as Asian cultures are more materialistic than other cultures, Asian consumers are more likely to be influenced by perceived value. Among Asian countries, China to be the largest economy shows prominent feature on culture which is face culture that Chinese people are more inclined to have products recommended by their favorite or famous influencers [62]. While the general finding without differentiating ethnicity groups shows perceived value has none influence on purchase intention as the majority respondents are white. Therefore, for brands, seeking different types of influencers to promote sustainable fashion products can occupy a different range of target markets and help more consumers convert to buy their products.

The results confirm that the opinions of friends and peers have an impact on Gen Z's willingness to purchase sustainable fashion, a result that is consistent with the study conducted by Djafarova and Bowes [63] findings. This suggests that consumers intentionally match the behavior and status of their friends and peers in social networks. It also shows that Asians are more inclined to share their experience of sustainable fashion among friends and peers. In addition, for China, considering that it is a collectivist society and highly dependent, sustainable fashion marketing should take into account the influence of social media on friends and peers. Since they will tend to follow influencers as they need to be included in their social network.

Moreover, among variables in TPB model, attitudes towards sustainable fashion influencers shows the most significance with purchase intentions. This result confirms that negative attitudes toward influencers hinder consumers' positive intentions to consume sustainable fashion. This finding could therefore help retailers of sustainable fashion products develop more effective strategies when promoting their products [29]. For example, they can regularly monitor followers' evaluation of influencers and adjust marketing strategies in a timely manner.

5. Conclusion

This study contributes to identify the factors of influencer marketing that influence the main reasons why consumers have the intentions to purchase sustainable fashion products. Hence a model based on the extension of TPB was developed to influencer marketing for sustainable fashion. Other variables were referred from previous literature to construct the conceptual model. Based on a sample of 120 respondents, this study finds that consumers' sustainable fashion purchase intentions are significantly influenced by influencers' sustainable fashion purchase experiences (X1), similarity between influencers and Gen Z (X2), attitudes towards sustainable fashion influencers (X4) and friends' views influenced by influencers (X5) as suggested by previous studies. X1 proved to be a major factor affecting purchase intention. Followed by X4 and X2, and X5 has the weakest influence. In addition, expertise of sustainable fashion influencers and affordability of products recommended by influencers is different from previous studies, showing less influence on purchase intention in this study.

Generation Z is accepting that SM is an important part of marketing today, perhaps because they grew up in a highly commercialized society [59]. These theoretical implications lead us to conclude that influencer marketing is a good option for fashion companies to increase awareness of their products, increase market share of their products, and create purchase intent among existing and potential customers. Especially for sustainable fashion products, through this study, it can be found that a large part of consumers still has low awareness of sustainable fashion and low interest in this category. Furthermore, two main practical implications can be drawn from the structure of this study. First, retailers can use the characteristics of marketers to promote their sustainable fashion products to increase consumers' interest in such products. Second, by further promoting sustainable fashion products, the product market can gain broader development opportunities.

Although this study has meaningful theoretical and practical implications, it still has some limitations. First, the collection of data was collected using random sampling. The use of non-probability sampling can be criticized, but it is not practical to use probability sampling methods in this framework. And although female consumers are more influential in influencer marketing in fashion, focusing respondents on women is not comprehensive. Future research studies should include differences between gender especially for PSI. Secondly, the study is mainly aimed at comparing consumers of different ethnicity in two regions, and the number of samples and regions are relatively limited. To overcome social, cultural and economic differences, similar studies will be conducted in other settings to compare results. Finally, qualitative research can be incorporated in future research to assess the impact of influencer marketing on sustainable fashion purchase intentions. Qualitative research tolerates more exploration and thus may achieve different results.

Furthermore, further research in this area should focus on more specific contexts and investigate how various socio-demographic variables are affected by influencer marketing. For example, educational background may be related to attitudes toward influencers, which may have an impact on eventual purchase propensity. Second, cultural background has been shown to be important in previous studies. Individuals from more collectivist countries seem to feel greater pressure from significant others and are more willing to conform to their opinions. On the other

hand, people born and raised in countries where individualism dominates may have stronger attitudes toward certain behaviors and may be less concerned about what other people think or do. Such cultural differences will lead to different cultural backgrounds may produce different results in terms of subjective norms, thereby affecting intentions. Future research can start from a cultural perspective, comparing the purchase intention of sustainable fashion products between different cultures and the changes under the influence of influencer marketing.

Conflicts of Interest

The authors declare no conflicts of interest.

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