



SCHOOL OF  
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# Impulsive Buying Behaviour on BNPL Services

A quantitative study on the buying behaviour of Generation Z

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# Abstract

**Title** A quantitative study on the buying behaviour of Generation Z

**Keywords:** Consumer credit, BNPL, consumer behaviour, generation Z, impulsive buying

**Background:** The Buy now, pay later service has been developing rapidly in recent years and is being regarded as one of the fastest-growing modes of digital payments. There is an increasing number of online retailers and platforms partnering with payment solutions companies to offer an easy, seamless checkout experience for their customers. Despite this, there is little research being done on the relationship between BNPL and consumer behaviour.

**Aim:** The aim of this study is to provide a further understanding of how consumers make purchase decisions on BNPL platforms by focusing on the younger generation. Additionally, the aim was to understand how marketers and companies that offer BNPL services could make use of the outcome of the study. To achieve the aims, a thorough theory and literature review was conducted, and a questionnaire was created based on the findings. More specifically, this study aims to answer the following research questions: How do BNPL services impact the impulsive buying behaviour of Generation Z?

**Methodology:** A quantitative approach was used to analyse the data collected, along with three hypotheses formulated in this thesis. A survey (n=99) was conducted online. The responses were then analysed using SPSS, continuing with hypotheses testing with the combined questions.

**Theoretical perspective:** Impulsive buying theory served as the main framework in this thesis, BNPL and Generation Z was also discussed in the theoretical review to provide a holistic overview of this topic.

**Conclusion:** Three of our proposed hypotheses were rejected, as they are not statistically significant. H1 did not support the hypothesis of Gen Z is more impulsive when buying on BNPL than non-Gen Z. While H2 and H3, show that neither external nor internal factors prove to have a statistically significant effect that would affect Gen Z more than non-Gen Z. We concluded that the age range of generations for which BNPL services are available is gradually converging, resulting in impulsive purchases by both Gen Z and non-Gen Z for BNPL services. Furthermore, both internal and external stimuli can be generated by BNPL services and by consumers themselves, and ultimately generate impulsive buying behaviour.

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## List of Abbreviations

BNPL	Buy Now Pay Later
Fintech	Financial Technology
Gen Z	Generation Z



# 1 Introduction

This chapter introduces the topic of the thesis on the overview of the changing buying patterns brought by digitalization, the rising of Fintech Buy Now, Pay Later (BNPL) services, and "The Future Digital Natives" Generation Z (Gen Z) which serve as the basis of our study. Followed by impulsive buying behaviour which is the core theory of our study. Subsequently, the problematization and research purpose are presented which identifies the research gap and introduces the research question. Finally, the chapter concludes with the delimitations and the outline of the thesis.

## 1.1 Background

The buying patterns of consumers have changed in today's society with the rapid development of digitalization and the volatility of the external environment (FI, 2021). Businesses began to use digital technologies to shape their business models and achieve new revenue opportunities, transforming the essence of interactions between service providers and their customers, such as customer relationships and the underlying process of consumer decision-making (Lahteenmaki et al., 2022; Pousttchi & Dehnert, 2018). Digitized services such as mobile wallets, payment apps and automated wealth advisors have entered the market as replacements for the traditional methods (Lahteenmaki et al., 2022). For the external environment, Swedish consumers are known for their willingness to try new technological solutions (Postnord, 2021). It indicates an increasing usage of BNPL services for payment by Generation Z as they are in search of convenient budget tools with no or little interest (Pincovski, 2021). In addition, the e-commerce of the whole retail market in Sweden, prior to the COVID-19 pandemic in 2019 and by the end of 2020, were 11% and 14% respectively (Postnord, 2021). The increase of e-commerce has accelerated the rise of BNPL services around the world, due to its financial convenience, cost-effectiveness and simplicity (Fisher, Holland & West, 2021; Pincovski, 2021). This shows the dramatic effects on economies around the world impacting employment, businesses and households (Bullock, 2020).

There are different types of credit a consumer can take on the market. Consumer credit has been referred to as credit that is not secured against a home by FI and has been divided into four categories: unsecured loans, object financing, lines of credit and credit cards, and purchases on invoice (FI, 2020). An unsecured loan is an interest-bearing loan that does not require any collateral with an amortization plan and a set maturity date; an object financing

loan has underlying collateral, often a car (FI, 2020). A credit card has a fixed credit limit that a borrower can use and a line of credit is similar but linked to an account (FI, 2020). The three types of purchases on invoices include one can be converted the credit into a hire-purchase agreement after the issue date, one cannot be converted into a hire-purchase agreement and the last one where consumers can choose to pay monthly installments, which is “buy now pay later” (FI, 2020). In Sweden, the increase in popularity of BNPL in recent years has increased the number of borrowers within the BNPL arena (FI, 2020). Figure 1 (adapted from FI, 2020) shows the number of BNPL credit borrowers from 2017 to 2019 are 80910, 281781 and 238850 respectively. The numbers exceed those of the other three types of consumer credit options. Table 1 (adapted from FI, 2020) shows the average size of each credit type in Swedish krona from 2017 to 2019, the amount of BNPL credit is below 3000 SEK which is comparably smaller than any other financing options. The small amount of credit exhibits consumers are more likely to purchase relatively inexpensive or disposable goods/services such as fast fashion, electronics and cosmetics on BNPL (Alcazar & Bradford, 2021). Furthermore, BNPL accounts for 25% of the market share in domestic e-commerce payments in Sweden in 2021, which is the highest among the 41 countries worldwide including the UK, U.S., Australia and the Nordic countries (Worldpay, 2022). It was approximately ten times higher than the same market share in global e-commerce payments, possibly because of the popularity of Sweden’s BNPL provider Klarna (Best, 2021). Therefore, it is worthwhile to investigate why and how consumer behaviour is affected by BNPL services in the Swedish market.

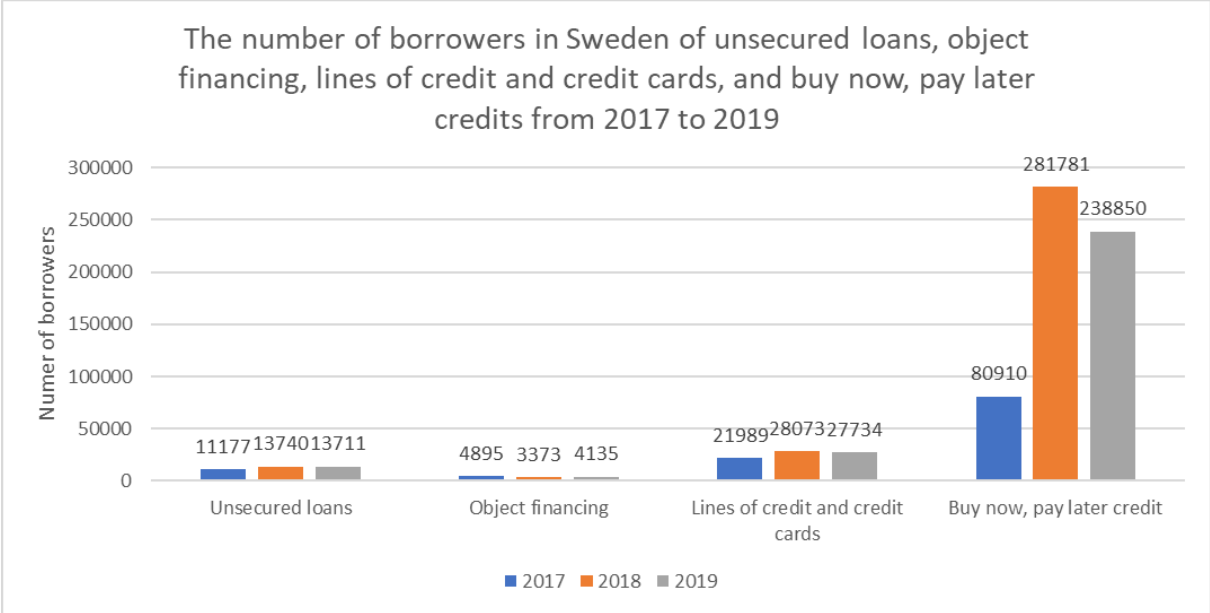


Figure 1: The number of borrowers in Sweden of Unsecured loans, Object financing, Lines of credit and credit cards, and Buy now, pay later credits from 2017 to 2019 (FI, 2020)

Year	Unsecured loans	Objective financing	Lines of credit and credit cards	Buy now, pay later credit
2017	122298	144222	12008	2665
2018	113055	152363	11425	1589
2019	123326	150283	13215	1808

Table 1: The average size of credit (SEK) of Unsecured loans, Object financing, Lines of credit and credit cards, and Buy now, pay later credit in Sweden from 2017 to 2019 (FI, 2020)

### 1.1.1 BNPL

Buy now, pay later (BNPL) is a type of short-term loan that allows customers to make purchases and pay for them over a series of installments (Alcazar & Bradford, 2021). Shorter-term BNPL products are normally interest-free, whereas longer-term BNPL products may charge interest (Alcazar & Bradford, 2021). Payment options such as PayPal’s Pay in 4, Klarna, Afterpay, QuadPay and Affirm have increased in popularity in online shops in recent years, especially during the COVID-19 pandemic (Best, 2021). Due to the lack of data available on why people use BNPL services, one user demographics is of particular interest in this thesis, which is the younger generations or the Generation Z.

### 1.1.2 Generation Z

There are different definitions of Generation Z, and researchers did not have a clear cutoff point for it (Dimock, 2019). Some studies argue that this generation is dated from 1997 to 2012, while others claim that it only includes those born between 1994 to 2004 (Laitkep & Stofkova, 2021). In order to be consistent, this thesis follows the definition from Daqua, Arqawi & Karsh (2020), which states that Generation Z is the generation of people born after the year 2000.

With the development of the internet and smartphone technologies, it has become easier and more convenient to shop online, and the sophistication of electronic payment methods has led to more spending, especially with Generation Z, which has been dubbed "The Future Digital Natives" (Lia & Natswa, 2021). In Raddon's report, Vahrenkamp (2017) stated that Generation Z was born with well-developed smartphone technology, 44% of Generation Z depends on this technology. The results show that two-thirds of this generation are pioneers and first adopters of financial technology (Fintech) services compared to other generations. The results also show that around 35% of them are more financially aware, this awareness is reflected through their enrollment in the financial classes. Another study conducted by

Cornell University (2018) shows that Generation Z is taking over the global arena of adoption of Fintech services, as they are the pioneers of this adoption. They are indeed responsible for USD 143 billion in direct spending; by the end of 2020, they will make up 40% of global consumers. A study from finder.com (2020) shows that half of the Generation Z respondents have used BNPL payments in the UK from January 2020 to July 2020, as well as having high social media activity of a Fintech company such as Klarna. In general, Generation Z is a pioneer of BNPL services in Fintech, using this service with great frequency and maturity.

### 1.1.3 Impulsive buying

A large proportion of consumers occasionally conduct impulse buying, which the actions are unplanned and without considering the consequences (Dawson & Kim, 2009). As the number of BNPL transactions increases, the number of online impulsive buying would increase as well (Dawson & Kim, 2009; FI, 2021). The studies conducted in the early years of impulse buying focused on physical brick-and-mortar stores, later studies then looked at online impulse buying, as technologies started to develop (Dawson & Kim, 2009; Rook & Fisher, 1995). Impulsive buying is an unplanned behaviour, therefore oftentimes consumers are not aware of the consequences (Dawson & Kim, 2009).

## 1.2 Problematization

Online impulsive buying is a topic that has been studied extensively in recent years from both the managerial and consumer perspectives. However, since BNPL is such a new payment method, there is limited research being done solely on the topic of consumers' behaviour with BNPL. It shares many similarities with online shopping due to its environment, but it also provides customers with the opportunity to defer their payments when they purchase items with BNPL. Hence, the assumptions and framework used on investigating why people conduct impulse online buying could also be applied in the BNPL environment. By using different databases such as LUBsearch, Scopus and Business Source Complete, it is found that there are less than a hundred peer-reviewed articles given the keywords "buy now pay later" or "BNPL". For example, Lia & Natswa (2021) studied the relationship between impulsive buying and the overconsumption tendency of Generations Z regarding their intentions to use the BNPL services. Fook & McNeill (2020) studied how the BNPL tool could lead to impulse buying tendency in an online fashion shopping context, specifically among young adult female consumers.

Dawson and Kim (2009) have shown an upward trend of e-purchases, with approximately 40% of the impulse buying being conducted through online channels, and consumers in

Western households spend about USD 5400 per year on impulse purchases of retail items such as fashion, food and household goods (Fook & McNeill, 2020). The consumption cultures around the world have led to the growing concern of negative effects on individual wellbeing and environmental sustainability (Fook & McNeill, 2020). Impulse buying has led to overconsumption which is a common phenomenon that occurs in BNPL transactions, despite consumers being more educated (Fook & McNeill, 2020). As consumers are underestimating their actual impulse purchasing, their unplanned shopping behaviour is likely due to the negative social implications of the behaviour (Fook & McNeill, 2020). The risk is associated with BNPL when consumers are borrowing more than what they can afford to repay (FI, 2021). For instance, a number of young adults run the risk of taking on debt in their early life, which could limit their freedom when they get older (FI, 2021). In addition, a high level of consumption resulting from impulsive buying behaviour on BNPL has a significant cause of damage to the environment. It illustrates the tension between mutually beneficial producer-consumer exchange and the negative impacts of excess waste (Fook & McNeill, 2020).

### 1.3 Research Purpose

The major goal of this thesis is to broaden our understanding of consumer buying behaviour of BNPL services in online settings. The authors want to discover how the impulsive buying behaviours of Generation Z are influenced or impacted by the BNPL services; do internal and external factors impact the impulsive buying behaviour of Generation Z; how do gender and nationality affect impulse buying behaviour, and what are the differences or discrepancies between Generation Z and non-Generation Z. This thesis has adopted the impulsive buying framework, and in particular, we focus on the external and internal stimuli. In addition, the authors hope to improve practitioners' and academics' knowledge of impulsive buying utilizing BNPL services. The research question is as follows:

**Research Question:** How do BNPL services impact the impulsive buying behaviour of Generation Z?

### 1.4 Delimitations

There are several boundaries and delimitations in this thesis. The main focus of this thesis is on impulsive online buying with BNPL. Therefore, offline transactions were left out. It is also noteworthy that this decision was made based on the increase in online purchases in recent years and its future trend (Postnord, 2021).

The responders for this thesis will be Generation Z and non-Generation Z. Subjects born after 2005 were excluded because most of them are too young to legally make purchases online in Sweden (Hallå Konsument, 2020), while older generations were not in the study because they use the internet less frequently (Heery & Noon, 2008). It was intriguing to compare Gen Z with the generations before them because they had slightly different attitudes toward technology (Prensky, 2001). Residents of Sweden will be the chosen sample. Because the authors were stationed in Lund, Sweden, it was convenient.

## 1.5 Outline of the Thesis

There are five chapters in this thesis. Chapter one is a general introduction, with the stated research problem, research questions and the research purpose. Chapter two is the literature and theoretical reviews of the BNPL service, Generation Z under the Fintech trend, and the theory of impulsive buying behaviour, which is the main theory and core idea of the study. The four main factors in the impulsive buying behaviour framework and the reason why we choose the external and internal stimuli as our focus are explained in detail. Based on these theories, three hypotheses for the research are formed. In Chapter three, the methodology which includes the research and data collection design is explained. The validity and reliability as well as the limitations of the data are also discussed. In Chapter four, the research results are presented and analyzed, followed by a general discussion. Lastly, in Chapter five, conclusions are made, limitations of the research are stated, and ideas for future research are presented.

## 2 Literature/Theoretical Review

This section will provide a comprehensive outlook of the BNPL service, the theory of impulsive buying behaviour, Generation Z under the Fintech trend. Hypotheses are developed with the help of the model and the theory, in order to gain a complete understanding of our theoretical background and research question.

### 2.1 Impulse Buying

Impulse buying, also known as impulsive purchasing or unplanned buying, is a behaviour that has been researched for the past seventy years by researchers and practitioners, and it has been offered different perspectives in consumer, economics, social and psychology (Clover, 1950; Stern, 1962; Rook, 1987; Peek & Childers, 2006; Verplanken & Sato, 2011). The definition of impulse buying has been changing over time, Piron (1991) has written a paper showing how researchers define the term 'impulse purchasing' during the twentieth century. Clover (1950) views it to be similar to unplanned buying and merely from a managerial perspective; later studies include cognitive and emotional responses that consumers may experience and expose during an impulse purchase (Applebaum, 1951; Rook & Hoch, 1985).

Stern (1962) proposed that impulsive buying is the consumers' engagement in irrational and unreflective unplanned buying influenced by external stimuli, he then suggested that there are four different types of impulsive buying: pure, reminder, suggestive and planned impulse buying. Pure impulse buying is a type of impulsive buying that deviates from a normal buying pattern due to an emotional trigger; whereas reminder impulse buying happens when a consumer encounters an item or information about the item in-store and recalls that the stock at home is depleted or reminds of promotional advertising (Stern, 1962). When a consumer sees a product for the first time and recognises a need, this is known as suggestion impulsive buying (Stern, 1962). Lastly, planned impulse buying occurs when consumers enter the store with a list of specified purchases in mind but also expect and intend to make other purchases based on promotions and special offers (Stern, 1962; Kimiagari & Malafe, 2021). Regarding online payment platforms such as BNPL services, all of the four types of impulsive buying could be committed by consumers, therefore it is important that they are all taken into account in this thesis.

Kollat and Willett (1967) further explain the different variables of customers' characteristics and demographics associated with and how they affect impulse buying. However, most of the recent studies have built upon Rook's (1987) definition of impulse buying, which is defined as "when a consumer experiences a sudden, often powerful and persistent urge to buy something immediately". It involves emotional conflict when impulse buying is hedonically complex and with diminished consequences (Rook, 1987). Impulse buying later extended to a "sudden and immediate purchase with no pre-shopping intentions either to buy the specific product category or to fulfil a specific buying task" (Beatty and Ferrell, 1998). Impulsive buying has been viewed as a process-outcome mechanism within the scope of an individual psychological approach in the more recent studies (Chan et al. 2017).

Digitalisation and the advancement of information technology contribute to the rapid growth of e-commerce, which amplifies impulsive buying behaviour in recent years (Zhao et al., 2021). Consumers who shop online are also liberated from the restraints they might face in physical stores, which enhances the possibility of impulse purchases (Chan et al., 2017). Through technologies, credit providers are now able to offer a seamless and much smoother shopping experience which aids consumers' decision-making process in the online context (Zhao et al., 2021). To begin with, navigation and search tools assist consumers in speeding up their search, which leads to quicker purchase decisions made by consumers (Moe, 2003). Personalised recommendations optimise consumers' product discovery process, which leads to impulse purchases (Smith & Linden, 2017). Furthermore, accessibility and ease of purchase of products shorten and simplify the entire purchasing process, which increases conversion rates (Verhagen & Dolen, 2011). Therefore, with all these technologies, one might expect the BNPL services would lead to more impulsive purchases.

### 2.1.1 Impulse Buying Behaviour Framework

There are relationships between impulse buying and its determinants, which are associated with a number of internal and external factors (Iyer et al., 2019). To better illustrate, a framework has been shown in Figure 2 (adapted from Muruganatham & Bhakat, 2013), and they are categorized as external stimuli, situational stimuli, internal stimuli and demographic socio-cultural factors. Situational stimuli have been separated from external stimuli because of the dependence on social and environmental factors. Demographic and socio-cultural are also considered separate factors as they generalize as a group of the population, while Generation Z is the focus of this thesis.



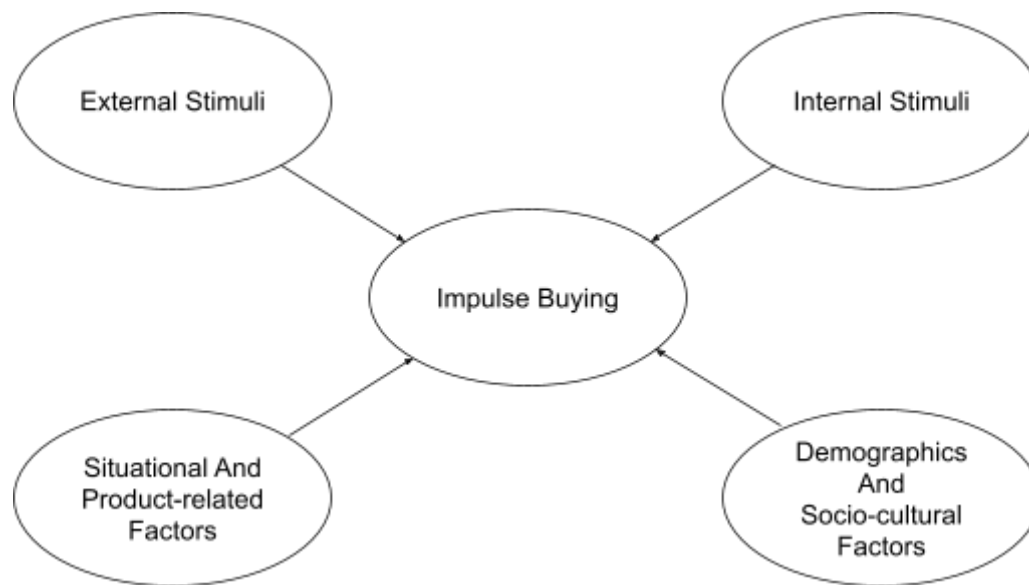


Figure 2: Framework for impulse buying (Muruganatham & Bhakat, 2013)

### 2.1.2 External Stimuli

External stimuli are the factors that are not under the control of customers. Conversely, the companies place and control the marketing cues or stimuli to entice customers to make a purchase (Muruganatham & Bhakat, 2013). External stimuli are different from those in the offline setting, mainly due to online BNPL impulse buying occurs when a consumer interacts with the website or an application, which acts as an intermediary between consumers and retailers (Zhao et al., 2021). Website stimuli and marketing stimuli are the two types of external stimuli (Kimiagari & Malafe, 2021). Website stimuli are the visible and audible signs embedded in shopping websites and BNPL platforms (Chan et al., 2017). The BNPL platforms' features could be media format (text, image, video), website feature (visual appeal, navigability, security) and payment feature (usability, feedback system, rehearsal procedure) (Chan et al., 2017). These options are hugely dependent on customers' personal evaluations and perceptions, hence the subjectivity of each customer would result in different opinions (Kimiagari & Malafe, 2021). However, a visually appealing platform would improve the overall appearance of the online shopping environment, as previous studies show that visual appeal has direct and indirect effects on online impulse buying by means of utilitarian and hedonic browsing (Kimiagari & Malafe, 2021). Having such an environment along with image realism and product clarity, would give a set of more accurate and useful information about the purchase, and enhance the shopping experience (Kimiagari & Malafe, 2021).

Nonetheless, marketing stimuli emphasised the marketing mix and the impact of its perception on online impulse purchases (Kimiagari & Malafe, 2021). The factors are product availability, price attribute and sensory attribute, which are the signals that businesses use to

motivate consumers to purchase (Kimiagari & Malafe, 2021). When customers are exposed to a stimulus in-store, similarly on the BNPL platform, they would search and take advantage of sales and advertising promotions to increase their purchasing power (Piron, 1991). These promotional incentives would motivate customers to buy impulsively (Dholakia, 2000). As impulse buying is usually driven by stimulus, higher exposure to specific external stimuli would increase the likelihood of impulse buying (Dawson & Kim, 2009). In addition, external stimuli determine which consumers encourage impulse purchases and how companies promote the behaviour (Dawson & Kim, 2009).

### 2.1.3 Situational and Product-related Factors

Situational stimuli are social or environmental factors about a special product/service that would influence consumers' purchasing decisions, in particular, they may increase or decrease consumers' tendency to perform impulse buying behaviour (Chan et al., 2017; Kimiagari & Malafe, 2021). Time pressure, variety of selection and store environment are examples of situational stimuli which have been studied in the previous research in the offline context (Park, Iyer & Smith, 1989; Kimiagari & Malafe, 2021). Since consumers are not under time pressure and they do not have a physical store environment as they were in an offline setting, only the 'variety of selection' factor would seem to be appropriate to investigate on BNPL platforms (Kimiagari & Malafe, 2021). Variety of selection is the perception of the diversity of products in the online platform (Chan et al., 2017). When customers encountered a wide range of product selections on the platform, they are more willing to perform a more in-depth evaluation of the products, which would reduce impulsive buying behaviour (Kimiagari & Malafe, 2021).

### 2.1.4 Internal Stimuli

Internal stimuli refer to the individual cues and characteristics that would affect customers' buying behaviour and lead to impulse buying (Muruganantham & Bhakat, 2013). Internal stimuli are commonly studied among researchers, despite older studies on impulse buying being mainly focused on the offline context, the internal stimuli are similar when it comes to the online context (Zhao et al., 2021). The factors include impulse-buying tendency (IBT), customer normative evaluation, and affective and cognitive state (Dawson & Kim, 2009; Kimiagari & Malafe, 2021).

IBT has been defined as "the degree to which an individual is likely to make unintended, immediate, and unreflective purchases", and previous studies are being done using the consumer traits to determine the degree of a person's IBT (Beatty & Ferrell, 1998; Rook & Fisher, 1995). In addition, researchers have developed several scales to measure consumers' impulsive buying tendencies (Jones et al., 2003). Normative evaluation refers to the

“consumers’ judgements about the appropriateness of making an impulsive purchase in a particular buying situation” (Rook & Fisher, 1995). Generally, there are negative views toward impulse buying, therefore customers might have feelings of regret, guilt and remorse due to their performed actions (Dawson & Kim, 2009). However, most people did not consider their impulse purchases to be inappropriate or wrong and therefore continue with their actions (Dawson & Kim, 2009).

Financial literacy is defined as the set of skills, information, awareness, attitude and behaviour needed to make sound financial decisions and attain personal financial well-being (Febriana & Irawan, 2021). Several aspects are used to consider a person’s financially literate, these include general financial knowledge, savings and borrowing, investment, and insurance (Chen & Volpe, 1998). Studies have found that financial literacy has a major influence on online impulse buying (Ningtyas & Vania, 2022). This would affect how people make their financial decisions, and individuals who are less financially literate are more likely to make poor financial decisions, e.g. impulse buying (Febriana & Irawan, 2021). This assumption is being supported by the paper written by Ansia et al. (2020), which exhibits that among the Generation Y students, the lower their financial literacy, the higher their impulse buying behaviour. However, some papers have found that financial literacy does not have any effect on online impulsive buying among students, due to hedonic purchase incentives (Ningtyas & Vania, 2022). The papers also show that financial literacy and self-control do not necessarily benefit each other (Ningtyas & Vania, 2022).

### 2.1.5 Demographics Socio-cultural Factors

Age, gender, occupation, family size, education, residence and income size are the primary demographic factors that would influence impulsive buying (Satyavani & Chalam, 2018). Besides, the local market conditions and cultural variables would also impact how consumers behave (Muruganatham & Bhakat, 2013). The study conducted by Ekend et al. (2012) found that age has a significant association with impulse buying behaviour, and the impulse buying phenomenon decreases when the consumers get older.

Geert Hofstede (1994) presented the model of cultural dimensions based on three different research projects on national cultural differences among subsidiaries of multinational corporations in several countries and among student groups in different countries. He proposed five national cultural dimensions: power distance; individualism versus collectivism; masculinity versus femininity; uncertainty avoidance; long-term versus short term orientation (Hofstede, 1994). This model covered socio-cultural differences arising from different nationalities and gender factors.

Based on Hofstede's model, Cakanlar and Nguyen (2019) conducted a study on the influence of culture on impulse buying in Sweden, Turkey and Vietnam. The results of their research

show that culture generates particular effects on impulse buying behaviour that diverge across the three countries (Cakanlar & Nguyen, 2019). In Turkey and Vietnam, their study did not find any relationship between impulse buying behaviour and individualism/collectivism; in Sweden, they found a significant and positive relationship between impulse buying behaviour and collectivism (Cakanlar & Nguyen, 2019). Swedish culture carries both individualistic and collectivistic characteristics that may contribute to a positive relationship between collectivism and impulse buying behaviour (Cakanlar & Nguyen, 2019). In terms of gender, their study found a positive relationship between Vietnamese masculinity and participants' impulse buying behaviour but did not find any relationship between masculinity/femininity and impulse buying behaviour in Turkey and Sweden (Cakanlar & Nguyen, 2019). They suggest that personality traits arising from the individual level of human programming may have an influence on the impulse buying behaviour of Turkish and Swedish customers (Cakanlar & Nguyen, 2019). For the power distance, their study found a significant positive relationship between impulse buying behaviour and power distance for Turkish and Vietnamese consumers, while the relationship between impulse buying behaviour and power distance for Swedish consumers was not significant and they suggested that it could be explained by the hierarchical division of social classes and individual personalities (Cakanlar & Nguyen, 2019). There is a negative correlation between impulse buying behaviour and uncertainty/avoidance in Vietnam and Turkey, but a positive correlation in Sweden (Cakanlar & Nguyen, 2019). The relatively low level of uncertainty/avoidance in Swedish culture could be a reason for the prevalence of impulse buying in Sweden (Cakanlar & Nguyen, 2019). Their study illustrates that cultural differences arising from different nationalities and genders can all influence impulse buying behaviour to certain degrees and that there are some differences between Swedish and non-Swedish countries.

## 2.2 Buy Now, Pay Later (BNPL)

BNPL, also known as a point-of-sale (POS) loan, is an agreement that allows consumers to purchase and obtain goods and services instantly but pay for the purchase over a scheduled period of time (Gerrans, Baur & Lavagna-Slater, 2021; Melissa, 2021; Pastravanu, 2019). BNPL is mainly used for online purchases, with a range of products available on their platforms, including electronics, clothing and fashion items, furniture, travel, healthcare and appliances (Alcazar & Bradford, 2021). BNPL products can be classified into two main types: pay later and credit option (Pastravanu, 2019). Pay later is an alternative credit that does not require the consumer to pay a fee or interest, at the expense of the merchant. An example would be the 4 instalments provided by Klarna, with 0% consumer APR for up to 30 days, other competitors such as Afterpay and Splitit, are also offering similar solutions (Klarna,

n.d.; Pastravanu, 2019). Subsequently, the credit option permits consumers to spread the payments with an incurred interest, and there are no additional charges for the merchant, an example would be CreditClick (Pastravanu, 2019). Businesses and customers would choose the most suitable products according to their needs, and since BNPL is a relatively new financial instrument, the models are evolving with the market.

### 2.2.1 Business Model

According to Fisher, Holland & West (2021), the most common BNPL business model is when BNPL providers facilitate transactions by entering direct agreements between both participating consumers and merchants. This creates network externalities in this ‘two-sided’ market, the BNPL platforms enable interactions between end-users and the linkages between users of the BNPL platform that result in the value of BNPL being positively related to the number of users (Grant, 2015; Rochet & Tirole, 2006). Consumers would receive greater value when a larger number of merchants accept the BNPL service, whereas merchants are more willing to accept BNPL as a payment method as more consumers use it (Fisher, Holland & West, 2021). Figure 3 (adapted from Fisher, Holland & West, 2021) shows the financial flows in a BNPL transaction in 4 steps. In many BNPL agreements, (1) the BNPL provider pays the merchant the entire purchase price at the time of purchase, (2) minus the BNPL merchant fees, (3) the consumer repays the BNPL provider in a series of zero-interest instalments, the repayment is usually made from a linked debit or credit card or direct debit from a bank account, (4) fees may be associated with the consumer for the establishment or missed payments (Fisher, Holland & West, 2021).

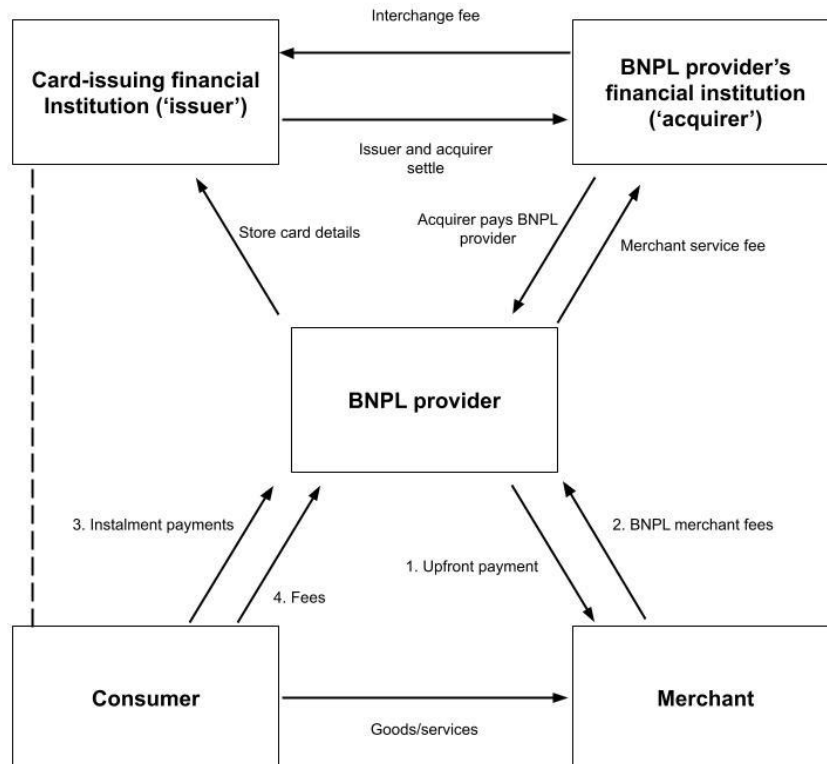


Figure 3: Financial flows in a BNPL transaction (Fisher, Holland & West, 2021)

With digitalisation, people could manage their purchases through a telephone, tablet or computer with an option to pay by “Buy now, pay later” (BNPL). BNPL providers are also expanding this as a payment option in physical stores, which operates via the provider’s app by generating a scannable barcode or QR code (FI, 2021; Fisher, Holland & West, 2021). A number of providers have launched BNPL services that issue virtual cards via a mobile application that can be used for in-store and online purchases, at merchants that accept card payments (Fisher, Holland & West, 2021). This is an alternative model where customers can use the BNPL service at a wider range of merchants that accept Mastercard and/or Visa card payments, including those that did not enter into a direct agreement with the BNPL provider (Fisher, Holland & West, 2021).

## 2.2.2 Stakeholders

Different stakeholders have their own responsibilities in the BNPL market, one should mention how new BNPL services shift the relationships between consumers, businesses, financial organisations and regulators (Gerrans, Baur & Lavagna-Slater, 2021). Figure 4 (adapted from Gerrans, Baur & Lavagna-Slater, 2021) shows a summary of the participant relationships and responsibilities around BNPL. In this market, the regulator has a less direct role and does not interact with the providers in BNPL, whereas providers establish the terms

and processes of this short-term loan (Gerrans, Baur & Lavagna-Slater, 2021). Consumers have the right to utilise BNPL services, but they also have the responsibilities to spend accordingly, while retailers are using the BNPL services provided by the Fintech companies, who serve as a key agent in the providing of BNPL by facilitating access (Gerrans, Baur & Lavagna-Slater, 2021).

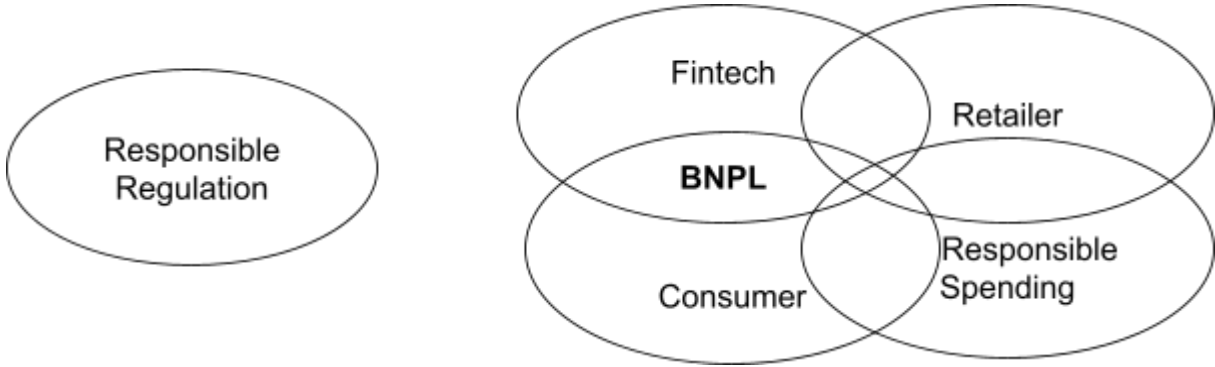


Figure 4: A summary of the participant relationships and responsibilities around BNPL (Gerrans, Baur & Lavagna-Slater, 2021)

On the consumer side, there are certain benefits and risks associated with them when they are using the BNPL services. For consumers who lack access to traditional financial services, BNPL would provide an alternative way of financing disposable items (Alcazar & Bradford, 2021). Low-income consumers and Generation Z without a fixed income would particularly benefit from BNPL. Moreover, predetermined repayment schedules, transparency of terms, interest avoidance and low impact on their credit score are some examples of the benefits of using BNPL (Alcazar & Bradford, 2021). However, the services encourage consumers to conduct impulse buying behaviour as they are a less expensive payment method and allow consumers to take immediate possession of the product at the point of purchase (Alcazar & Bradford, 2021). The soft credit check conducted by BNPL providers would risk the financial overextension of consumers, therefore regulators are concerned about this issue.

Regulation is one of the most important issues being discussed in the financial industry, however different regulators in developed countries such as the US, UK, Australia and Sweden have a relatively minimal regulatory coverage of the BNPL (Johnson, Rodwell, Hendry, 2021). This is often known as a regulatory failure because the regulation is merely captured at a macro level which results in a lack of consumer protections (Gerrans, Baur & Lavagna-Slater, 2021; Johnson, Rodwell & Hendry, 2021). For example in Sweden, BNPL providers are not required to conduct a credit assessment under the Consumer Credit Act as long as they fulfilled these requirements: interest-free, the invoice credit is to be repaid within three months, and is only associated with a nominal fee and is not a high-cost short-term credit (FI, 2020). Consumers with a bad credit history or Generation Z who do not have a reliable source of income could still get a short-term loan such as BNPL, which would put

them in a difficult financial position if they do not have self-control in responsible spending. Therefore, financial authorities are attempting to increase regulatory requirements on BNPL products (Jonhson, Rodwell & Hendry, 2021).

## 2.3 Generation Z

The concept of BNPL is at the centre of many emerging Fintech businesses that offer an innovative way to the payment for goods and services (Sophie Grace, 2020). Generation Z is the main generation with a high interest in Fintech services, and they are the generation of people born after the year 2000 (Mohannad, 2020).

Generation Z is more aware of using Fintech services and e-commerce than other generations. Generation Z is essential for the data age, and the entirety of that data has generally been open through web-based media and the web. Online source is the most basic wording in the quest for buy data (Hidvégi & Kelemen-Erdős, 2016). In Raddon's report (2017), Vahrenkamp stated in his study that Generation Z will expect the future of the mobile-based services for traditional financial institutions and shape their services, this suggests that Generation Z are more financially responsible for taking control of their financial issues compared with other generations. If any company or bank's financial development policies are slow or fail to meet the needs and expectations of Generation Z, these Generation Z driven metrics could end their employment or significantly impact their performance (Vahrenkamp, 2017). A study conducted by Cornell University (2018) shows that Generation Z's professional experience with technology helped them to interact with services effectively; this gained experience constructs from their interactions with social media, e-commerce to finance.

Most Generation Z are fresh graduates, college students, or high school students who do not have any fixed salary, Fintech companies and e-commerce see this as an opportunity to increase their buying behaviour through BNPL services, and servers as a solution for Generation Z to meet their needs (Lia & Natswa, 2021). Today marketers make Generation Z a potential online market share because it is considered feasible to make their own choices (O. Liljefors, 2011). Online purchases by Generation Z are considered faster and easier. In 2016, Hidvégi and Kelemen-Erdős conducted a study on Generation Z in Hungary, the result shows that 99.34% of Hungarian Generation Z use the internet every day, 82.1% said they get the source of information to make purchases from the internet, and 30.4% said they prefer to shop on the internet. Generation Z is more impacted by online correspondence and web-based media identified with brand search and buying and publicizing search endeavours on online special media, so online media can expand Generation Z's connection to brands and buys (D. Alismah Wirokarto & N. Reis Teixeira, 2013).



Generation Z's attitude plays a significant and positive role in their adoption intention to use the Fintech services, this relation comes from their positive attitude toward technologies and their motivation in using new technologies (Shaikh & Karjaluoto, 2015). This kind of strong intention and positive attitude towards new technologies such as Fintech, BNPL services etc. can be seen as an internal stimulus leading to the creation of possible impulsive buying behaviour. Moreover, Generation Z's shopping habit has many positive and negative impacts, depending on the effectiveness point of view (Della Ayu Zonna Lia & Salsabilla Lu'ay Natswa, 2021). The positive impact is that the movement becomes faster because cyberspace removes barriers and restrictions when transacting physically (Della Ayu Zonna Lia & Salsabilla Lu'ay Natswa, 2021). In real life, for example, they no longer need to spend time in physical shops looking for and buying the items they want, without the tangle of comparing and selecting back and forth, but simply use the more convenient online mode. On the other hand, behind the positive impact, there are also destructive impacts to give attention to (Della Ayu Zonna Lia & Salsabilla Lu'ay Natswa, 2021). The ease of transacting through cyberspace can cause Gen Z to be more consumptive (Della Ayu Zonna Lia & Salsabilla Lu'ay Natswa, 2021).

## 2.4 Chapter Summary and Formulation of Hypothesis

The literature review summarizes the impulsive buying behaviour framework, the BNPL business model and previous research on Generation Z under the Fintech trend. Based on the core ideas and shortcomings of these theories, we have formed the hypotheses for our study.

Firstly, for our study, it was difficult to accommodate all four factors of the impulse buying behaviour framework within the limited time and population sample. The situational and the demographics socio-cultural factors in the framework are too complex to be quantified in our study. In contrast, the internal and external factors in the framework are based on those generated by the consumer and the retailer and can be easily visualized in reality, forming our questionnaire and the specific variables within it. In addition, the internal and external factors are more relevant to consumers and retailers, and our findings can provide some inspiration for consumers to improve their buying behaviour and for retailers to improve their services. Therefore, we have chosen two of the most important and easiest to investigate factors, internal and external factors, based on which to form two of the hypotheses for the later research study.

Secondly, the BNPL service model provides a fundamental context for our study, with its basic elements, participants, the framework of responsible relationships and the laws and regulations associated with them all having certain specificities compared to other financial services. This specificity may have a unique appeal to Generation Z or other generations, we

can assume that the BNPL services implemented in a firm's business model affect consumers' propensity and decision to purchase their products.

Finally, Generation Z, as a unique generation, is very interested in e-commerce and Fintech and knows how to use Fintech services better than other generations. In addition, due to their age limitation, the vast majority of Generation Z are still students or have just entered the workforce. The specificity that comes with this age may also cause them to choose Fintech BNPL services and may generate impulse buying behaviour, as they can gain certain advantages that other services cannot offer. As a result, we decided to compare Generation Z with other generations to form our three hypotheses.

These are the hypotheses that will be tested and analyzed throughout the thesis:

H1: Gen Z is more impulsive when buying on BNPL platforms than non-Gen Z.

H2: Internal factors affect Gen Z's impulsive buying using BNPL more than non-Gen Z.

H3: External factors affect Gen Z's impulsive buying using BNPL more than non-Gen Z.

# 3 Methodology

This chapter provides a thorough description and explanation of the research design and data collection of our study, as well as the considerations taken to collect and analyze the data needed to answer our research question. Firstly, it introduces the research methods and demonstrates the reasons for choosing quantitative research methods with deductive and inductive implications. Then, it explains our choice of study design, convenience sampling questionnaire data collection, and statistical and analytical methods. Finally, the limitations of the research are discussed.

## 3.1 Research Approach

The relationship between theory and research must be considered when conducting research (Bryman & Bell, 2015). The aim of the research question, along with the main aim of the research, is to direct the research approach of the study (Bryman & Bell, 2015; Saunders, Lewis & Thornhill, 2009). There is an agreement among social scientists that business research is categorized into inductive, deductive, and abductive approaches (Bell, E. et al., 2019; Saunders, Lewis & Thornhill, 2009). Bryman & Bell (2015) stated that the deductive approach reflects the most dominant research approach within scientific research when studying the relationship between theory and research. In these circumstances, the researcher uses what is already known about the main topic to deduce hypotheses. A deductive approach begins with existing theory, based on which hypotheses are developed (Bell, E. et al., 2019). Through observations, the researcher concludes to either support or not support the postulated hypotheses. Accordingly, accepting the hypotheses will lead to theory development as well as revision of existing ones (Bryman & Bell, 2015). Consequently, the deductive approach is a top-down one, beginning with more general ideas and culminating in more specific ones (Burns & Burns, 2008).

Within quantitative research, a deductive approach is the most common one since hypothesis testing is prominent (Saunders, Lewis & Thornhill, 2009; Yilmaz, 2013). A deductive approach allows for exploring the relationship between independent variables (Bryman & Bell, 2015). Considering this information and the purpose of our study, which is a research question exploring the relationship between the independent and dependent variables, we have decided to opt for the deductive approach. The impulse buying framework has been used

to build the hypotheses. By collecting the results of our research, we will be able to gauge and test whether the hypothesis is supported or not and develop the theory further.

### 3.2 Research Design

A research design is a blueprint for conducting research (Malhotra, 2010). It contains all the procedures and processes required to provide the information needed to answer the research questions. Therefore, a research design is a framework for the data collection as well as analysis (Burns & Burns, 2008). A structured, consistent and carefully executed research design facilitates the later stages of the study and is therefore essential to form carefully.

Research suggests that there are two types of research designs: exploratory and conclusive (Malhotra, 2010). An exploratory research design deals with qualitative studies usually, while the conclusive research design has opted for quantitative studies (Sreejesh, Mohapatra & Anusree, 2014). A conclusive research design also requires a large sample coupled with a research process that is formal and structured. Hypotheses testing and exploring relationships is another aspect of conclusive research design (Malhotra, 2010). Taking these factors into account, we decided to adopt an exploratory research design because of the need to study the factors that influence different impulse purchases in different groups, both internally and externally.

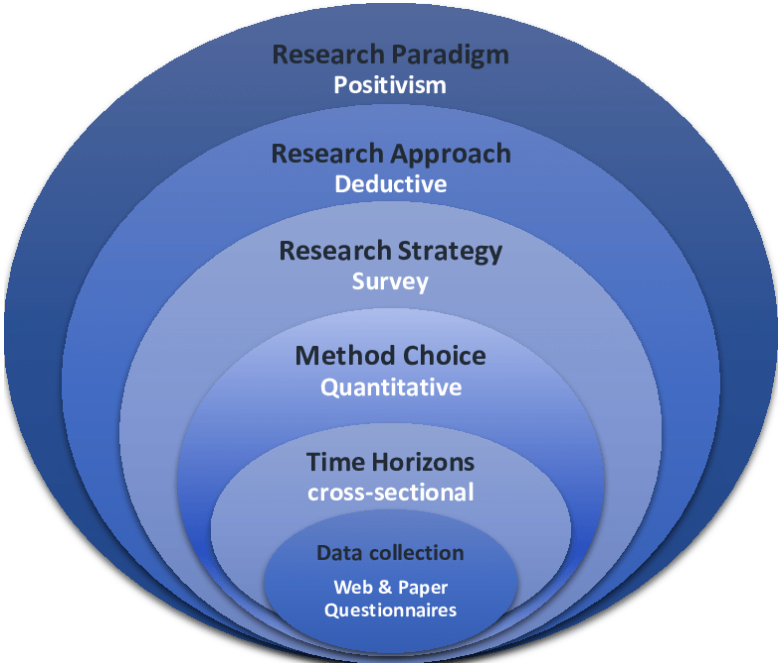


Figure 5: The research onion (Saunders et al., 2009) edited by authors.

## 3.3 Data Collection Method

### 3.3.1 Primary Data Collection

We decided to use the questionnaire-based survey as the main instrument for our research. The primary data was collected through a questionnaire study. The questionnaire targets two groups, one for Generation Z and non-Generation Z. The questionnaire will firstly count the spending habits and profile of the respondents, and secondly count the consumers' perceptions of BNPL services, and their reasons for choosing BNPL services and their habits of using BNPL services. In this research, all respondents will be anonymised.

### 3.3.2 Survey Design & Sampling

An internet-based survey was designed using Google Form, as it is a convenient and time-saving method. A simple convenience sampling method was used to conduct the research by sending questionnaires via the internet and social media to reach our target group. The target group for this study consists of two demographics, Generation Z (born during and after 2000) and non-Generation Z (born before 2000), and in order to find the best match for this study, we targeted Lund University. Lund University is an international university with a huge international student population, especially the Gen Z cohort; also the Lund University campus has a large number of both cohorts at various stages of their lives, still in school or already involved in the workforce, so this is where we can provide the most comprehensive profile of Gen Z and non-Gen Z. Once the data was collected, we used SPSS to analyse the data, create multiple charts and graphs and use descriptive analysis to answer the research questions.

To start with, there is a short description of the topic, why we are doing this questionnaire, together with our goals and objectives. The demographics section concerned the respondent's age, gender, nationality, occupation and location. After that, there are questions regarding BNPL and impulse buying, which are constructed based on the literature and the framework presented in the previous chapter. Five-point Likert scale was used to measure each variable shown in Table 2 under the BNPL section. On the scale, 5 meaning strongly agree and 1 meaning strongly disagrees, a higher score shows that the respondent is more agree with the statement. The authors believe that it is important the survey was conducted appropriately and relevantly, and be able to make analysis and draw conclusions.

Section		Item	Scale
Demographics	Q1	<i>Age</i>	Open-Ended
	Q2	<i>Gender</i>	Multiple Choice
	Q3	<i>Nationality</i>	Open-Ended
	Q4	<i>Full-time student</i>	Yes/No
	Q5	<i>Live in Lund</i>	Yes/No
	Q6	<i>Occupation</i>	Multiple Choice
General Questions	Q7	<i>Reasons for choosing to use BNPL services</i>	Multiple Choice
	Q8	<i>Type of goods that are mostly bought</i>	Multiple Choice
BNPL, Impulsiveness & Internal Factors	Q9	<i>Purchasing control</i>	Five-point Likert Scale
	Q10	<i>Advertisements are a factor of buying impulsivity</i>	Five-point Likert Scale
	Q11	<i>Likelihood to buy something because of BNPL</i>	Five-point Likert Scale
	Q12	<i>Watch spending on BNPL platform</i>	Five-point Likert Scale
	Q13	<i>Shopping using BNPL does not feel like spending money the same as when shopping regularly</i>	Five-point Likert Scale
	Q14	<i>Buying with BNPL as comfort when feeling down</i>	Five-point Likert Scale
	Q15	<i>Careless purchases which lead to regret</i>	Five-point Likert Scale
	Q16	<i>Having issues paying back in time</i>	Five-point Likert Scale
	Q17	<i>Impulsive when using BNPL to purchase (Self-perception)</i>	Five-point Likert Scale
	Q18	<i>Attention Test</i>	Five-point Likert Scale
Financial literacy	Q19	<i>A financial literacy test</i>	Five-point Likert Scale

Table 2: Outline of the survey designed by the authors.

### Independent variable

The independent variable used in our study is the one that derives from question 1 (Age), which then we divide into a nominal binary variable of two groups; Gen Z and non-GenZ, according to its definition. In our analysis, we named the variable **gen\_z**.

### Dependent variable

The dependent variables derive from question 9 up until question 17. In the analysis, the variables are named LQ1-LQ9 (LQ is a short abbreviation of Likert Question). LQ1 derives from Q9, LQ2 from Q10, etc.

### 3.3.3 Pre-test

A pre-test is especially crucial when the questions are novel and untested, according to Saunders et al. (2009), to avoid misconceptions. It is also critical in self-administered surveys when there is no interviewer present to clarify any potential misunderstandings or doubts (Bryman & Bell, 2015).

In our case, before the survey starts, we made sure that the respondents have at least been users of BNPL services before. By asking them “Have you ever used BNPL services? (e.g. Klarna, Afterpay, Paypal Credit, Alipay, etc)” If the respondent answered “No” to the question, the survey automatically ends there and therefore the data point gets discarded from the database. This method is used to test face validity and allows us (the researchers) to confirm that the test is valid at an early stage (Saunders et al., 2009).

In addition, we added an attention test somewhere in the middle of the survey between the questions. In which we ensure that people are not just skimming through the questions by clicking randomly on questions. We formed a question which states, “*This is an attention test (Choose "Strongly disagree").*” If the respondent answered with “*strongly disagree,*” we consider the test passed, any other answer would be a fail. Although it is not necessarily the best test, we thought it could be a good option to have it to increase the validity and reliability of our survey responses. Below is a table of the results of the attention test.

		Count	Layer N %
att_test	Pass	84	91.3%
	Fail	8	8.7%

Table 3: Attention test results

### 3.3.4 Secondary data collection

We also used secondary data resources such as journal articles, books, and internet resources in order to address research methods and achieve research objectives. Through the collection of year-end reports and statistics from the major fintech companies that provide BNPL services, as well as some secondary sources of research, news, etc. on these companies, we will gain a deeper understanding of our research and obtain more comprehensive data.

## 3.4 Data Analysis

Google Forms was used to create the questionnaire. After the survey was finished, a report with descriptive analysis was generated from Google Forms, and the report was then further analyzed in IBM SPSS Statistics 28. The report included a 90.9 percent closure criterion for those who did not complete the survey, therefore the latter questions had a little lower response rate than the initial ones. Between the 2nd and the 14th of May 2022, a total of 99 replies were collected. 43 were Gen Z, 49 were non-Gen Z, and 7 were removed from the final sample after answering "No" to the pre-test question, indicating that they did not belong to the target group.

### 3.4.1 Validity and Reliability

The degree to which data generates consistent results is referred to as the reliability of the scale. When assessing reliability, two elements should be taken into account. First, test-retest stability assesses whether data is consistent and how it relates to previous data (Babin & Zikmund, 2015). Internal consistency, on the other hand, assesses how consistent different components of a summated scale are in what they indicate. This can be accomplished by breaking the test into two halves and calculating the correlation between them, or by utilising Cronbach's coefficient alpha, which is the average of all split-half coefficients. Cronbach's alpha ranges from 0 to 1, with 0.7 or above considered acceptable by Babin and Zikmund (2015). In this analysis, this value was also used as an acceptable value.

The difficulty with validity is that the test measures what it sets out to measure. Validity can be established in a variety of methods. Face validity is the control of whether a question appears to reflect what should be done; this usually necessitates asking the question for a response (Bryman & Bell, 2011). Concurrent validity is the process of asking the same question in several ways and comparing the results. Construct validity compares data obtained using two separate methods, whereas convergent validity compares data collected using two different methods (Bryman & Bell, 2011).

### 3.4.2 Hypothesis testing

Compute variables were used to test the assumptions. Compute variables adds up the answers to each question and produce an average for each responder. Some of the questions appeared in both hypotheses. The hypotheses were then accepted or rejected using a t-test and a chi-square test.



Independent sample t-tests are frequently used to compare two groups. This test looks for statistically significant changes between the groups that might affect the whole population (Pallant, 2020). A separate t-test will be used to see if the two groups come from the same populations (Pallant, 2020). A Sig-2 tailed value, commonly known as a p-value, of less than 0.05 indicates that the difference between the random sample and the larger population is 95 percent reliable (Pallant, 2020). A p-value of 0.05 or below was considered statistically significant in this thesis.

A cross table is useful for two purposes. The first is to compare the observed frequencies in each category and investigate the link between two independent variables (Pallant, 2020). The second purpose is to obtain a chi-square value; this test analyzes the recorded frequency values within each category to see if the difference is statistically significant and may be applied to a larger population (Pallant, 2020).

When the chi-square test and the t-test yielded different results in hypothesis testing, it was decided to emphasise what the t-test said, because a parametric test had more statistical power (Pallant, 2020).

## 4 Analysis

### 4.1 Descriptive statistics

#### 4.1.1 Demographics

After processing the data, 92 respondents remained in the sample. Out of these, 43 respondents were born after 2000, 35 respondents between 1996-1999, 10 respondents between 1991-1995, 2 respondents between 1986-1990, and the remaining 2 respondents before 1985. The majority, 49 respondents (53.3 percent), belonged to non-Generation Z, born before 2000, while 43 of the respondents (46.7 percent) were in Generation Z, as can be seen in Table 4.

		Count	Layer N %
gen_z	Other	49	53.3%
	Gen Z	43	46.7%
gender	Female	49	53.3%
	Male	42	45.7%
	Prefer not to say	1	1.1%
student_inLU	No	10	10.9%
	Yes	82	89.1%
in_lund	No	15	16.3%
	Yes	77	83.7%
employment	No	46	50.0%
	Yes, full-time	9	9.8%
	Yes, part-time	37	40.2%

Table 4: Demographic Responses (Count, %)

		Count	Layer N %
year (Binned)	<= 1985	2	2.2%
	1986 - 1990	2	2.2%
	1991 - 1995	10	10.9%
	1996 - 1999	35	38.0%
	2000+	43	46.7%

Table 5: Age in Year Responses (Count, %)

As can be seen in Table 4, most of the respondents, 49, were women; 42 respondents were men; 1 respondent preferred not to say. Regarding employment, half of the respondents, 46 of them, were not employed; 9 of them were full-time, and 37 respondents, were working part-time. 82 of the respondents (89.1 percent) were students in Lund, while 10 were not (10.9 percent). Currently, there are 77 (83.7 percent) who live in Lund and 15 (16.3 percent) who do not. Every respondent answered yes to the question if they had ever used BNPL.

		Count	Layer N %
nationality	Swedish	43	46.7%
	Chinese	19	20.7%
	Danish	6	6.5%
	German	5	5.4%
	American	4	4.3%
	Hong Kong	2	2.2%
	Vietnamese	1	1.1%
	Turkish	1	1.1%
	Swedish, Norwegian	1	1.1%
	South African	1	1.1%
	Mexican	1	1.1%
	Iranian	1	1.1%
	Indian	1	1.1%
	French	1	1.1%
	Cypriot	1	1.1%
	Bulgarian	1	1.1%
	British	1	1.1%
	Brazilian	1	1.1%
Australian	1	1.1%	

Table 6: Nationality Responses (Count, %)

		Count	Layer N %
SE	Non-Swedish	49	53.3%
	Swedish	43	46.7%

Table 7: SE; Swedish and Non-Swedish (Count, %)

When it comes to nationality, there was a massive diversity of responses. However, as seen above in Table 6, it is clear that Swedish are the majority of the population in the survey with 43 respondents (46.7 percent). Chinese with the 2nd majority of 19 (20.7 percent), 6 Danish (6.5 percent), 5 German (5.4 percent) and 4 American (4.3 percent) while the rest consists of 1 from each nationality as shown above in Table 6. As seen in table 7, we grouped all non-Swedish into one variable in order to compare results between the two demographics.

### 4.1.2 Reasons for Using BNPL

Question 7 and 8 focused on the reasons the respondents chose to use BNPL and what type of goods they mostly used the service for. In the question of the reasons the respondents chose BNPL service, 78 (86.7 percent) answered "convenience." 55 (66.1 percent) chose to make purchases that otherwise wouldn't fit their budget, 36 (40 percent) To avoid paying credit card interest, 25 (27.8 percent) to save time, and the rest of the options of the multiple choices were 1.1% each, as seen below in Figure 6.

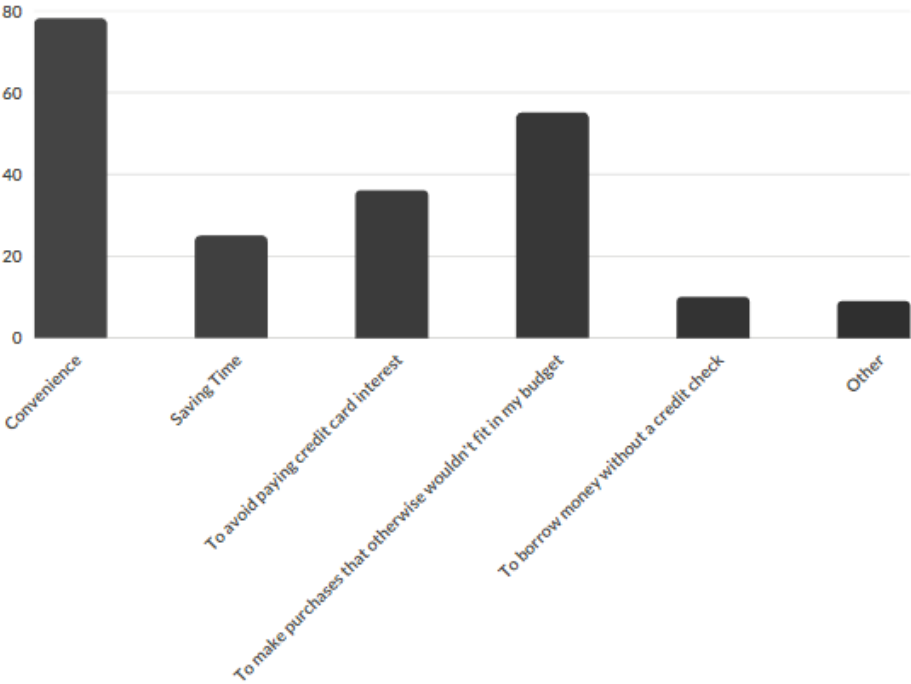


Figure 6: Question 7; Reasons for choosing to use BNPL services (Descriptive Responses Graph)

We separate each MQ answer into separate variables from Q7 What are the reasons you chose to use BNPL services in order to be able to quantify the results and make comparisons between Gen Z and non-Gen Z. We are also using the two control variables of gender and SE.

#### Generation Comparison Q7

As seen on table 9, we can see some big differences in the way the two generations have answered Q7. 26 (72.2 percent) of Q7\_avoid have been chosen by the non-Gen Z, while only 27.8 for the Gen Z. We can also draw a conclusion that convenience is more important for non-Gen Z, 50 (62.5 percent) of them answered, compared to 30 (37.5 percent) from Gen Z. It's the same about Q7\_budget To make purchases that otherwise wouldn't fit in my budget, 37 (67.3 percent) from non-Gen Z and 18 (32.7%) from Gen Z.

## Gender comparison Q7

For the gender differences in the answers to Q7, as seen in table 10, we can clearly see a difference in the Q7\_budget. 18 (32.7 percent) of the responses were males, and 37 (67.3 percent) were females. Convenience had 32 (40 percent) responses from males while there were 48 (60 percent) responses from females. Q7\_save we have the largest discrepancy with 10 (27.8 percent) for males and 26 (72.2 percent) for females.

	Item
Q7_conv	<i>Convenience</i>
Q7_budget	<i>To make purchases that otherwise wouldn't fit in my budget</i>
Q7_save	<i>Saving time</i>
Q7_avoid	<i>To avoid paying credit card interest</i>
Q7_borrow	<i>To borrow money without a credit check</i>
Q7_Other	<i>Other Answers</i>

Table 8: Definition of variables

		gen_z			
		non-Gen Z		Gen Z	
		Count	Layer N %	Count	Layer N %
Q7_conv	Chosen	50	62.5%	30	37.5%
Q7_budget	Chosen	37	67.3%	18	32.7%
Q7_save	Chosen	13	50.0%	13	50.0%
Q7_avoid	Chosen	26	72.2%	10	27.8%
Q7_borrow	Chosen	6	60.0%	4	40.0%
Q7_other	Chosen	8	88.9%	1	11.1%

Table 9: Generation Q7

		gender			
		Male		Female	
		Count	Layer N %	Count	Layer N %
Q7_conv	Chosen	32	40.0%	48	60.0%
Q7_budget	Chosen	18	32.7%	37	67.3%
Q7_save	Chosen	14	53.8%	12	46.2%
Q7_avoid	Chosen	10	27.8%	26	72.2%
Q7_borrow	Chosen	2	20.0%	8	80.0%
Q7_other	Chosen	3	33.3%	6	66.7%

Table 10: Gender Q7

		SE			
		Non-Swedish		Swedish	
		Count	Layer N %	Count	Layer N %
Q7_conv	Chosen	40	50.0%	40	50.0%
Q7_budget	Chosen	30	54.5%	25	45.5%
Q7_save	Chosen	14	53.8%	12	46.2%
Q7_avoid	Chosen	19	52.8%	17	47.2%
Q7_borrow	Chosen	5	50.0%	5	50.0%
Q7_other	Chosen	5	55.6%	4	44.4%

Table 11: Swedish vs non-Swedish Q7

## Nationality comparison

As seen above in Table 11, we compared non-Swedish and Swedish responses to the multiple-choice question, where we had similar responses between the two demographic groups compared to the other demographic control variables. There were exactly the same number of responses from both groups on Q7\_conv and Q7\_borrow. On Q7\_budget there were 30 (54.5 percent) non-Swedish respondents and 25 (45.5 percent) Swedish. Q7\_save had 14 (53.8 percent) responses from non-Swedish and 12 (46.2 percent) from Swedish, Q7\_avoid had 19 (52.8 percent) responses from non-Swedish and 17 (47.2 percent) from Swedish.

### 4.1.3 Type of goods bought using BNPL

In question 8, we intended to analyse and see if there were any discrepancies in the type of product that all respondents were using BNPL services for. The results show that the most chosen product type was *Clothing* with responses of 68 (75.6 percent). *Electronics* being the second highest with 58 (64.4 percent), then *Cosmetics* with 29 (32.2 percent), 15 for *Entertainment* (16.7 percent), 14 for *accessories/jewellery* (15.7 percent) and the rest of the products with a smaller minority of chosen mostly bought goods as seen below in Figure 7.

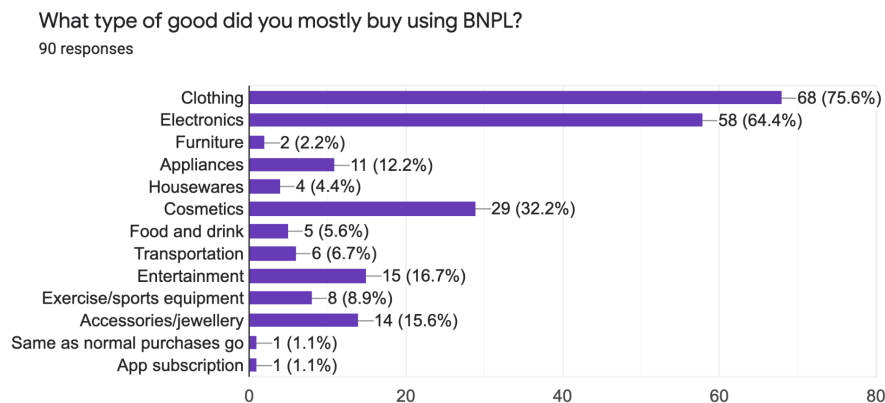


Figure 7: Question 8; Types of goods that are mostly bought (Descriptive Responses Graph)

### 4.1.4 Impulsive Buying

In question 17 (or also labelled as LQ9) as shown in Table 12 below, "*I am impulsive when purchasing on the BNPL platform,*" most respondents from Gen Z, 16.3 percent, answered "Agree," while 13 percent answered the same from the non-Gen Z group. In contrast, 14.1 percent of the non-Gen Z group answered "*Strongly Disagree.*" The same result was for the Gen Z group. However, 9.8 percent of the non-Gen Z group answered with "*disagree,*" while

the Gen Z group was 3.3 percent. 12 percent Non-Gen Z has answered *Neither*, meanwhile, 10.9 percent answered from Gen Z group. As for *strongly agreeing*, which was the minority of choice by both groups, the results are 4.3 percent for non-Gen Z and 2.2 percent for the Gen Z group.

I am impulsive when purchasing on the BNPL platform		non Gen Z	Gen Z
LQ9	Strongly disagree	14.1%	14.1%
	Disagree	9.8%	3.3%
	Neither	12.0%	10.9%
	Agree	13.0%	16.3%
	Strongly agree	4.3%	2.2%

Table 12: Q17; *Impulsive when using BNPL to purchase.*

In question 9 (or also labelled as LQ1) as shown in Table 13 below, “*The decision to purchase something is always under your control*” most respondents from both Gen Z and non-Gen Z groups answered with *Agree*, exactly 25 percent on both groups. However, 23.9 percent of the non-Gen Z group answered with *Strongly agree*, while Gen Z group had a total of 8.7 percent on the same option. 2.2 percent of non-Gen Z groups answered *Neither*, while it was 8.7 percent of Gen Z. For the option *Disagree* 2.2 percent of non-Gen Z answered, on the other hand, 4.3 percent was answered by the Gen Z group. None of the groups chose *Strongly disagree*.

The decision to purchase something is always under your control		non Gen Z	Gen Z
LQ1	Strongly disagree	0.0%	0.0%
	Disagree	2.2%	4.3%
	Neither	2.2%	8.7%
	Agree	25.0%	25.0%
	Strongly agree	23.9%	8.7%

Table 13: Q9; *Purchasing Control*

## 4.2 Hypothesis testing

The new variables H1, H2, and H3 were used to test the two hypotheses. Table 14 shows the new variables, which are a mixture of the topic-related questions. All three hypotheses were found to be false. There was no statistical significance between Gen Z and non-Gen Z in any of the three hypotheses. The outcome, however, was the polar opposite of what the literature review predicted. Below are more detailed descriptions of each of the hypothesis tests. The Appendix contains independent t-tests for all of the individual questions. In the Appendix, you can view the means and standard deviations for all of the generations in all of the questions. When the chi-square test and the t-test yielded different results in hypothesis testing, as indicated in Section 3.4.2, the decision was made to prioritise what the t-test revealed.

### 4.2.1 Hypothesis One

H1: Gen Z is more impulsive when buying on BNPL platforms than non-Gen Z.

The result from the chi-square test showed that there was no statistically significant difference between Gen Z and non-Gen Z's impulsiveness when buying on BNPL platforms. The independent t-test further confirmed this.

H1	$\chi^2$ -value	t-value	df	Sig. 2-tailed	Interpretation
chi-2 test	25.913		23	.305	No sig. difference
t-test		-.439	90	.662	

Question 9, 10, 12-19 were used to analyse hypothesis one. In question 9, *the decision to purchase something is always under your control*. There was a statistical significance, where non-Gen Z had a higher mean, 4.33, compared to Gen Z's 3.81.

The analysis showed that hypothesis one was rejected.

### 4.2.2 Hypothesis Two

H2: Internal factors affect Gen Z's impulsive buying using BNPL more than non-Gen Z.

The hypothesis two regarding whether internal factors affect Gen Z more than the non-Gen Z group showed no statistical significance, using the chi-square test, which had a 0.067 Sig. 2-tailed. The t-test also confirms the rejection of the hypothesis with a 0.717 Significance.



H2	$\chi^2$ -value	t-value	df	Sig. 2-tailed	Interpretation
chi-2 test	25.152		16	.067	No sig. difference
t-test		-.363	90	.717	

The hypothesis was tested by combining questions 9, 12, 13, and 14. Gen Z had a lower mean on Q9 of 3.81, meanwhile, the non-Gen Z had 4.33. In Q12, Gen Z had a lower mean of 2, while the non-Gen Z group had 2.24. As for Q13, the Gen Z group had a slightly higher mean of 3.28 against the 3.12 of the non-Gen Z group. The same applies to Q14, Gen Z also had a slightly higher mean of 1.72, on the contrary, non-Gen Z had 1.65.

Based on the findings, hypothesis two was rejected.

### 4.2.3 Hypothesis Three

When analysing the third hypothesis, regarding whether external factors affect Gen Z more than the non-Gen Z group on impulse buying, using BNPL, the tests gave different results. The result from the chi-square test showed that there was statistical significance between the two generations. However, this result was contradicted by the independent t-test.

H3: External factors affect Gen Z's impulsive buying using BNPL more than non-Gen Z.

H3	$\chi^2$ -value	t-value	df	Sig. 2-tailed	Interpretation
chi-2 test	65.565		11	<.001	No sig. difference
t-test		-.454	90	.651	

Question 10, 11 and 13 were used to analyse this hypothesis. Q13 "*Shopping using BNPL does not feel like spending money the same as when shopping regularly*" was shown to be the one that had the largest mean difference amongst the three questions used for this hypothesis. Gen-Z had a higher mean of 3.28 and non-Gen Z had 3.12. For Q11, Gen Z had a higher mean of 3.19 than the 3.10 of non-Gen Z. As for Q10, there was not much of a difference in mean, Gen Z had 3.02 while non-Gen Z had 3.

Based on the chi-2 test, the hypothesis would have been accepted. However, the t-test contradicts, so as mentioned above, in this case, we would take the results of the t-test which is to reject the hypothesis.

## 4.3 Reliability

### Cronbach's alpha

The overall Cronbach's alpha value for the pre-test was 0.840, which is an acceptable value (see Section 3.4.1).

Cronbach's alpha test was performed once all of the replies were collected. The test yielded a Cronbach's alpha score of 0.840, which is still a good result, with 92 valid cases out of 92 respondents. The Cronbach's alpha would be slightly higher if the question Q9 Purchasing Control was removed (.875). However, the choice to maintain the question was made since it was deemed relevant, and the alpha value, if the item was deleted, was just marginally greater. Using Cronbach's alpha, the authors were able to infer that the survey was highly reliable and that the test was consistent.

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.840	.841	14

### 4.4 Discussion

H#	Hypothesis	Question	Outcome
H1	Gen Z is more impulsive when buying on BNPL platforms than non-Gen Z.	Q9, Q10, Q12-Q19	Rejected
H2	Internal factors affect Gen Z's impulsive buying using BNPL more than non-Gen Z.	Q9, Q12, Q13, Q14, Q15	Rejected
H3	External factors affect Gen Z's impulsive buying using BNPL more than non-Gen Z.	Q10, Q11, Q13	Rejected

Table 14: Summary of Hypothesis Testing

The results of the survey show that all three of our hypotheses were rejected. Our findings do not reveal any statistical significance or differences between Generation Z and other generations, this may be due to the limitations of our study. We only distributed the questionnaire in a few limited locations and group chats, and we did not have enough time to collect more responses, which resulted in inadequate sample size, homogenization of the

samples, uneven distribution of the samples, etc. Although most previous research on Generation Z has shown that Generation Z is more aware of using Fintech services and e-commerce than other generations, our research shows another possibility and idea. Vahrenkamp (2017) stated in his study that Generation Z will expect the future of mobile-based services for the traditional financial institutions and shape their services. That is to say, if any company or bank's financial development policies are slow or fail to meet the needs and expectations of Generation Z, these Generation Z-driven metrics could end their employment or impact their performance significantly (Vahrenkamp, 2017). Additionally, a study conducted by Cornell University (2018) shows that Generation Z's professional experience in technology helps them to interact effectively with services, this acquired experience is built from their interaction with social media, e-commerce to finance. From these previous studies and the results of our study, we can assume that continuing influenced by Generation Z who have a huge interest, knowledge and experience in new technologies, e-commerce, mobile payments, Fintech and BNPL services have improved and progressed over recent years. The unique convenience of BNPL services compared to other payment services and the advantages of interest-free payments are also expanding, attracting more non-Generation Z consumers to use them, and the age range for which BNPL services are available is gradually converging, resulting in impulsive buying by both Generation Z and non-Generation Z for BNPL services. As a result, we intended to further explore the impact of the factors in the impulse buying behaviour framework on the impulse buying behaviour shared by both Generation Z and non-Generation Z.

The results show the majority of people choose the BNPL service because of its exceptional convenience and ease of use compared to other payment services. This is due to the fact that the BNPL service's website and mobile applications are designed to be relatively simple and easy to understand and operate. External stimuli are the factors that are not under the control of customers. Muruganatham and Bhakat (2013) state that the companies place and control the marketing leads or stimuli to entice customers to make a purchase. According to Moe (2003), navigation and search tools assist consumers in speeding up their search, which leads to quicker buying decisions made by consumers. Verhagen and Dolen (2011) also state that the accessibility and ease of purchase of products shorten and simplify the entire purchasing process, thus increasing the conversion rates. Therefore, we assume that all these features of BNPL services serve as external factors which would lead to more impulsive buying behaviours.

At the same time, our findings also show that a large proportion of people choose BNPL services in order to buy items that would otherwise not fit into their budget and to avoid paying interest on their credit cards. According to Muruganatham and Bhakat (2013), internal stimuli refer to personal cues and characteristics that influence customers' buying behaviour and lead to impulse purchases. Financial literacy is defined as the set of skills, information, awareness, attitudes and behaviours required to make sound financial decisions

and achieve personal financial well-being (Febriana & Irawan, 2021). The study by Febriana and Irawan (2021) suggests that individuals who are less financially literate are more likely to make poor financial decisions, such as impulse buying. It is often irrational for people to use BNPL services when they have to make a purchase because they are on a budget and the nature of the service allows them to pay for the purchase at very low or even zero interest without having to worry about a while about how to pay it back at a later date, a typical example of internal factors caused by both consumer and BNPL services causing impulsive buying behaviour.

For the demographic socio-cultural factors of gender and nationality, we are unable to draw a valid conclusion because we do not have a sufficiently large sample with a balanced distribution between each variable. However, Cakanlar and Nguyen (2019) conducted a study on the influence of culture on impulse buying in Sweden, Turkey and Vietnam, they had a sufficient sample size and evenly distributed samples. Their results show that the specific influence of culture on impulse buying behaviour differs across the three countries (Cakanlar & Nguyen, 2019). On the nationality factor, they found that cultural differences between countries make Sweden different from other countries in terms of impulse buying behaviour, with both individualism and collectivism and lower uncertainty/avoidance in Swedish culture-making Swedish consumers are more likely to buy more impulsively (Cakanlar & Nguyen, 2019). Furthermore, there is no relationship between masculinity and femininity and impulse buying behaviour among consumers in Sweden and other countries on the gender factor, which they believe is due to individual-level personality traits (Cakanlar & Nguyen, 2019). To be clear, we take this as a proofed reference rather than our conclusion, only to gain a better understanding of the whole picture of the impulse buying behaviour framework.

# 5 Conclusion

## 5.1 Research Aims and Objectives

By focusing on the younger age group, the aim of this paper is to gain a better understanding of how consumers make purchase decisions and the reasons they choose to purchase products using BNPL services. Moreover, the objective was to determine how marketers and companies that provide BNPL services could benefit from the study's findings. A detailed theory and literature review were undertaken to fulfill the aims, and a questionnaire was constructed based on the literature findings.

## 5.2 Key Findings

As it is stated in the discussion section, the study did not find any significant differences in impulse buying behaviour between Generation Z and non-Generation Z. Apart from the limitations of our study itself, we believe that the main reason may be that BNPL services have been refined and improved under the influence of Generation Z, thus expanding the audience and attracting both Generation Z and non-Generation Z consumers. We concluded that the age range of generations for which BNPL services are available is gradually converging, resulting in impulsive buying by both Generation Z and non-Generation Z for BNPL services.

We further explored the influence of internal, external and demographic socio-cultural factors in the impulse purchase model. The results show that internal and external stimuli under the influence of BNPL services combined to lead to impulse buying behaviour. We concluded that internal stimuli are generated by the special features of BNPL services and the consumer's own personality traits or characteristics, while external stimuli are generated only by the characteristics of the BNPL service and ultimately lead to consumer's impulsive buying behaviour. When it comes to the demographic socio-cultural factor, as the limitation of our research, we are unable to draw a concrete conclusion. As a result, we use the findings of Cakanlar and Nguyen (2019)'s study to further illustrate the potential relationship these factors may have with impulsive buying behaviour.

## 5.3 Practical Implications

This study adds to the volume of information available for marketers interested in knowing more about BNPL consumers' impulsive buying behaviour. Marketers may benefit from adopting the results that belong to their unique target market because the study compared a younger generation to the rest of the population. BNPL companies can use this study to prove the relevance of user-friendly interfaces and get a better understanding of why consumers use their services and how they feel about them. They could see patterns and draw generalizations about the future generations' impulsive buying to increase their user retention.

It is the responsibility of the BNPL companies to promote a safer environment and a more responsible culture for their consumers. Despite there being no evidence showing that Generation Z is more prone to impulse purchases than the other generations, previous research has shown that impulse buying is a prevailing phenomenon in nowadays society. BNPL companies need to find ways to encourage consumers to make rational decisions on consuming goods and services and implement them in their business strategy. One example could be using advertisements and promotions that BNPL companies have control of, to achieve the goal of rational consumption.

On the other hand, governments and regulators play an important role in regulating and controlling market activities. They could develop public policies and improve the social credit system, in order to reduce the tendency of impulse buying from consumers. Regulators could also collaborate closing with the Fintech industry and adjust the level of regulations accordingly among BNPL services.

## 5.4 Limitations

There are limits that appear in some of the areas in this thesis. One limitation of this study is that the large majority of respondents were women; because this does not represent the entire target demographic, this may have skewed the final result and given the study a more feminine perspective. The results would have been more accurate if the respondents were more representative of the entire population, and a better result would have been if the male and female respondents were split more evenly. However, because the survey link was primarily circulated by the authors and their network. However, to make the genders more evenly distributed, we built a hypothetical sample by increasing the number of males. The results of this revised data set were identical to those of the original data, suggesting that the uneven distribution may not have had a significant impact on the final conclusions.

In terms of generation, there was also a disparity in the number of responses. Many more respondents were not from Generation Z. The major goal, however, was to sample 40 persons from each generation, which was accomplished for both generations. A more evenly distributed sample, on the other hand, may have yielded a more accurate statistical analysis and representative responses to the open-ended question. In the first open-ended question, Gen Z provided 43 of the 92 responses. As a result, something mentioned by some Gen Z respondents may have appeared to be more important than it actually was.

Another limitation identified after analyzing the survey is the way how the questions were structured. Some of the multiple-choice alternatives could have been improved, especially the one that asks, "what are the reasons you choose to use BNPL services". By analyzing these questions, it was found that many of the respondents ended up answering the same thing; "Convenience" and "Easy to use" options. We realized that the answers, arguably, signify the same thing. We also realized that it was hard to quantify the answers to the question and connect them to the theoretical model we used in our study; External factors and Internal factors of impulse buying. Instead, we could convert this question into multiple Likert scale questions, to make a better interpretation. However, when we realized this limitation, the survey already had many answers, and the decision was, therefore, to keep the question as it was. Despite this, it was still possible to identify differences/similarities between the generations, and the purpose of the research was still fulfilled.

## 5.5 Future Research

In the early design and brainstorming phase of this thesis, the authors have already thought of the different areas that could be further explored in the topic of impulse buying. Future research could continue to use the impulse buying behaviour framework as a foundation, which is presented in this thesis. Firstly, the consumer segments could be widened further. For example, the baby boomers are the generation who were born after the Second World War until the 1960s, and have been exposed to various technological developments and with different purchasing power (Mulia, 2019). It would be interesting to research their purchasing behaviour, and how they utilize the BNPL services. Similarly, research can also be done with Generation Y, which could be used by marketers to speculate and predict how future generations will consume. Another potential research area could compare impulse buying behaviour on the BNPL platform in different countries. This can extend to countries with a high market share of BNPL in domestic e-commerce payments e.g. Germany, Norway and Finland, or to countries with a large market, e.g. China and the U.S.

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# Appendix A

## A. Independent T-Test, Q9-17

Question	N	P-value	Mean difference	Interpretation
Q9	92	.003	.513	non-Gen Z > Gen Z
Q10	92	.921	-.023	No sig. dif.
Q11	92	.736	-.084	No sig. dif.
Q12	92	.355	.245	No sig. dif.
Q13	92	.555	-.157	No sig. dif.
Q14	92	.758	-.068	No sig. dif.
Q15	92	.638	-.113	No sig. dif.
Q16	92	.246	.190	No sig. dif.
Q17	92	.792	-.074	No sig. dif.

## B. Mean and ST. Dev, Q9-17

Group Statistics					
	gen_z	N	Mean	Std. Deviation	Std. Error Mean
LQ1	non-Gen Z	49	4.33	.747	.107
	Gen Z	43	3.81	.852	.130
LQ2	non-Gen Z	49	3.00	1.118	.160
	Gen Z	43	3.02	1.123	.171
LQ3	non-Gen Z	49	3.10	1.141	.163
	Gen Z	43	3.19	1.239	.189
LQ4	non-Gen Z	49	2.24	1.422	.203
	Gen Z	43	2.00	1.047	.160
LQ5	non-Gen Z	49	3.12	1.252	.179
	Gen Z	43	3.28	1.278	.195
LQ6	non-Gen Z	49	1.65	1.110	.159
	Gen Z	43	1.72	.984	.150
LQ7	non-Gen Z	49	2.14	1.155	.165
	Gen Z	43	2.26	1.136	.173
LQ8	non-Gen Z	49	1.47	.844	.121
	Gen Z	43	1.28	.701	.107
LQ9	non-Gen Z	49	2.69	1.326	.189
	Gen Z	43	2.77	1.342	.205
fin_lit	non-Gen Z	49	1.71	1.137	.162
	Gen Z	43	1.37	.846	.129

## C. Correlation Matrix

**Inter-Item Correlation Matrix**

	LQ1	LQ2	LQ3	LQ4	LQ5	LQ6	LQ7	LQ8	LQ9	fin_lit	att_test	H1	H2	H3
LQ1	1.000	-.368	-.325	-.095	-.236	-.119	-.480	-.321	-.376	.007	.014	-.536	-.546	-.394
LQ2	-.368	1.000	.441	.304	.288	.182	.413	.008	.537	-.092	.136	.629	.476	.721
LQ3	-.325	.441	1.000	.076	.498	.134	.468	.119	.683	.025	-.136	.671	.469	.830
LQ4	-.095	.304	.076	1.000	.205	.440	.425	.295	.350	.088	.307	.567	.685	.248
LQ5	-.236	.288	.498	.205	1.000	.322	.439	.325	.571	-.085	.044	.692	.530	.783
LQ6	-.119	.182	.134	.440	.322	1.000	.420	.416	.262	.124	.279	.559	.656	.277
LQ7	-.480	.413	.468	.425	.439	.420	1.000	.260	.602	.000	.151	.786	.809	.566
LQ8	-.321	.008	.119	.295	.325	.416	.260	1.000	.228	.118	.444	.466	.565	.202
LQ9	-.376	.537	.683	.350	.571	.262	.602	.228	1.000	.015	.122	.826	.740	.767
fin_lit	.007	-.092	.025	.088	-.085	.124	.000	.118	.015	1.000	-.055	.026	.080	-.065
att_test	.014	.136	-.136	.307	.044	.279	.151	.444	.122	-.055	1.000	.216	.310	.017
H1	-.536	.629	.671	.567	.692	.559	.786	.466	.826	.026	.216	1.000	.943	.854
H2	-.546	.476	.469	.685	.530	.656	.809	.565	.740	.080	.310	.943	1.000	.632
H3	-.394	.721	.830	.248	.783	.277	.566	.202	.767	-.065	.017	.854	.632	1.000

## D. Independent Samples Test, Q9-Q18

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						One-Sided p	Two-Sided p			Lower	Upper
LQ1	Equal variances assumed	.120	.730	3.075	90	.001	.003	.513	.167	.181	.844
	Equal variances not assumed			3.048	84.214	.002	.003	.513	.168	.178	.847
LQ2	Equal variances assumed	.132	.718	-.099	90	.461	.921	-.023	.234	-.488	.442
	Equal variances not assumed			-.099	88.349	.461	.921	-.023	.234	-.489	.442
LQ3	Equal variances assumed	.986	.323	-.338	90	.368	.736	-.084	.248	-.577	.409
	Equal variances not assumed			-.337	86.056	.369	.737	-.084	.250	-.580	.412
LQ4	Equal variances assumed	4.423	.038	.930	90	.178	.355	.245	.263	-.278	.768
	Equal variances not assumed			.948	87.460	.173	.346	.245	.258	-.269	.758
LQ5	Equal variances assumed	.109	.742	-.593	90	.277	.555	-.157	.264	-.682	.368
	Equal variances not assumed			-.592	87.945	.278	.555	-.157	.265	-.682	.369
LQ6	Equal variances assumed	.111	.739	-.309	90	.379	.758	-.068	.220	-.505	.369
	Equal variances not assumed			-.311	89.988	.378	.757	-.068	.218	-.501	.366
LQ7	Equal variances assumed	.152	.698	-.472	90	.319	.638	-.113	.239	-.589	.363
	Equal variances not assumed			-.472	88.810	.319	.638	-.113	.239	-.588	.362
LQ8	Equal variances assumed	3.179	.078	1.167	90	.123	.246	.190	.163	-.134	.514
	Equal variances not assumed			1.181	89.747	.120	.241	.190	.161	-.130	.511
LQ9	Equal variances assumed	.028	.867	-.264	90	.396	.792	-.074	.279	-.627	.480
	Equal variances not assumed			-.264	88.164	.396	.793	-.074	.279	-.628	.481
fin_lit	Equal variances assumed	7.089	.009	1.619	90	.054	.109	.342	.211	-.078	.762
	Equal variances not assumed			1.650	87.758	.051	.102	.342	.207	-.070	.754

## E. Independent Samples Test, H1-H3

		Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						One-Sided p	Two-Sided p			Lower	Upper
H1	Equal variances assumed	.028	.868	-.439	90	.331	.662	-.06618	.15090	-.36596	.23360
	Equal variances not assumed			-.440	89.418	.330	.661	-.06618	.15039	-.36498	.23261
H2	Equal variances assumed	1.457	.231	-.363	90	.359	.717	-.05529	.15227	-.35779	.24721
	Equal variances not assumed			-.368	89.518	.357	.714	-.05529	.15024	-.35379	.24321
H3	Equal variances assumed	2.615	.109	-.454	90	.326	.651	-.08796	.19387	-.47313	.29721
	Equal variances not assumed			-.449	82.612	.327	.655	-.08796	.19605	-.47792	.30200

## F. Mean and ST. Dev, H1-H3

Group Statistics					
	gen_z	N	Mean	Std. Deviation	Std. Error Mean
H1	non-Gen Z	49	2.3447	.73920	.10560
	Gen Z	43	2.4109	.70212	.10707
H2	non-Gen Z	49	1.9796	.79395	.11342
	Gen Z	43	2.0349	.64607	.09852
H3	non-Gen Z	49	3.0748	.85056	.12151
	Gen Z	43	3.1628	1.00888	.15385



# Appendix B

## Questionnaire

### Questionnaire on Buy Now, Pay Later (BNPL)

Buy Now, Pay Later (BNPL) service has become an extremely popular trend in the last 3 years. Big companies like Alibaba or Klarna are providing this service on their mobile phone applications, the young generation are undoubtedly the main user group. We are currently writing our bachelor thesis on the consumer behavior and impulse buying behavior towards BNPL services. The questionnaire is anonymous and the answers are solely used for the purpose of this thesis. We sincerely hope to receive your answers!

\* Required

Have you ever used BNPL services? (e.g. Klarna, Afterpay, Paypal Credit, Alipay, etc) \*

Yes

No

## A bit about yourself

Which year were you born in? \*

Your answer \_\_\_\_\_

What is your gender? \*

Male

Female

Prefer not to say

Other: \_\_\_\_\_

What is your nationality? \*

Swedish

Other: \_\_\_\_\_

Are you currently a full-time student enrolled at Lund University? \*

Yes

No

Do you currently live in Lund, Sweden? \*

Yes

No

Do you work? \*

Yes, full-time

Yes, part-time

No

What are the reasons you choose to use BNPL services? \*

- Convenience
- Saving time
- Easy to use
- To avoid paying credit card interest
- To make purchases that otherwise wouldn't fit in my budget
- To borrow money without a credit check
- I can't get approved for a credit card
- Other: \_\_\_\_\_

What type of good did you mostly buy using BNPL? \*

- Clothing
- Electronics
- Furniture
- Appliances
- Housewares
- Cosmetics
- Food and drink
- Transportation
- Entertainment
- Exercise/sports equipment
- Accessories/jewellery
- Other: \_\_\_\_\_

The decision to purchase something is always under your control \*

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

Advertisements are a factor of your buying impulsivity \*

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

This is an attention test (Choose "Strongly disagree") \*

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

How likely are you to buy something because of BNPL \*

	1	2	3	4	5	
Very Unlikely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very Likely

I do not watch how much I spend on the BNPL platform \*

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

When I shop using BNPL it does not feel like that I spend money the same as when i am shopping regularly \*

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

I usually buy using BNPL as comfort when I feel a little down. \*

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

I often make careless purchases decision I later wish I had not \*

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

I previously had issues paying back in time \*

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

I am impulsive when purchasing on the BNPL platform \*

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

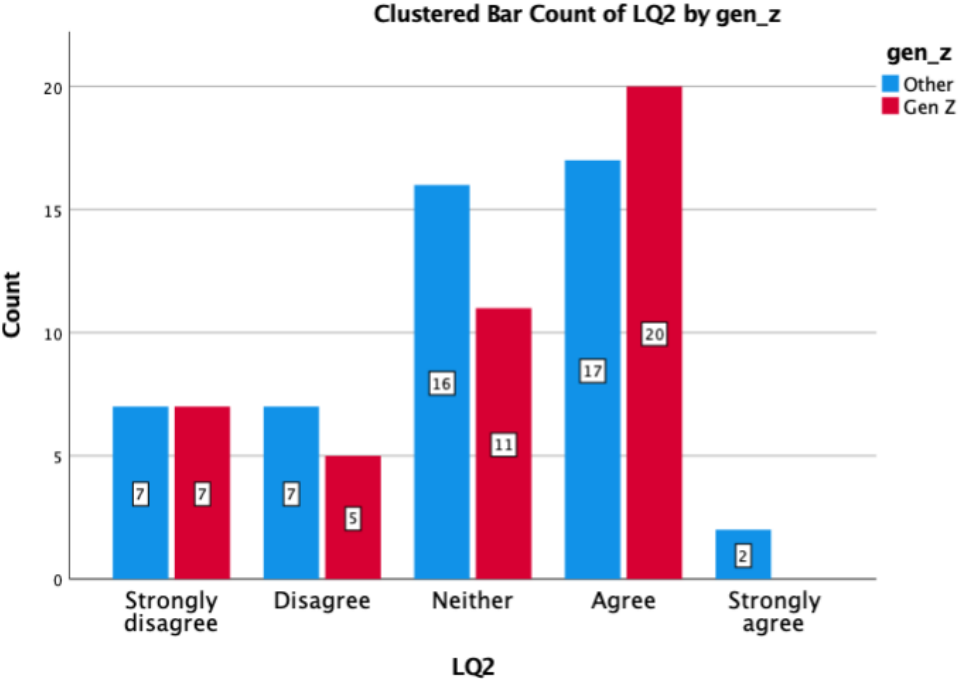
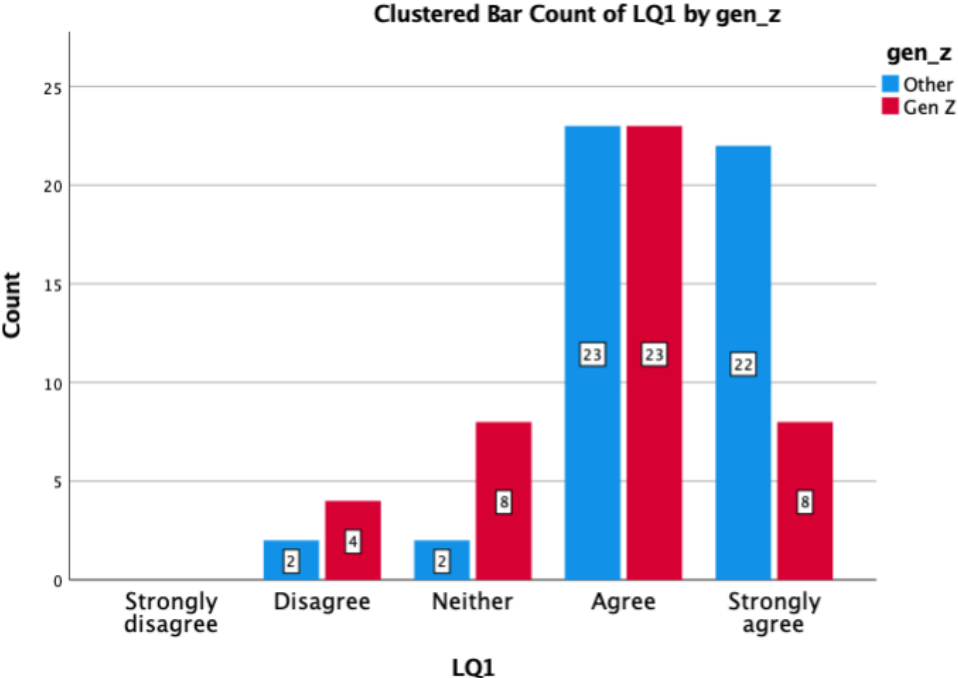
### A little test.

Imagine that the interest rate on your savings account is 1 percent a year and inflation is 2 percent a year. After one year, would the money in the account buy more than it does today, exactly the same or less than today? \*

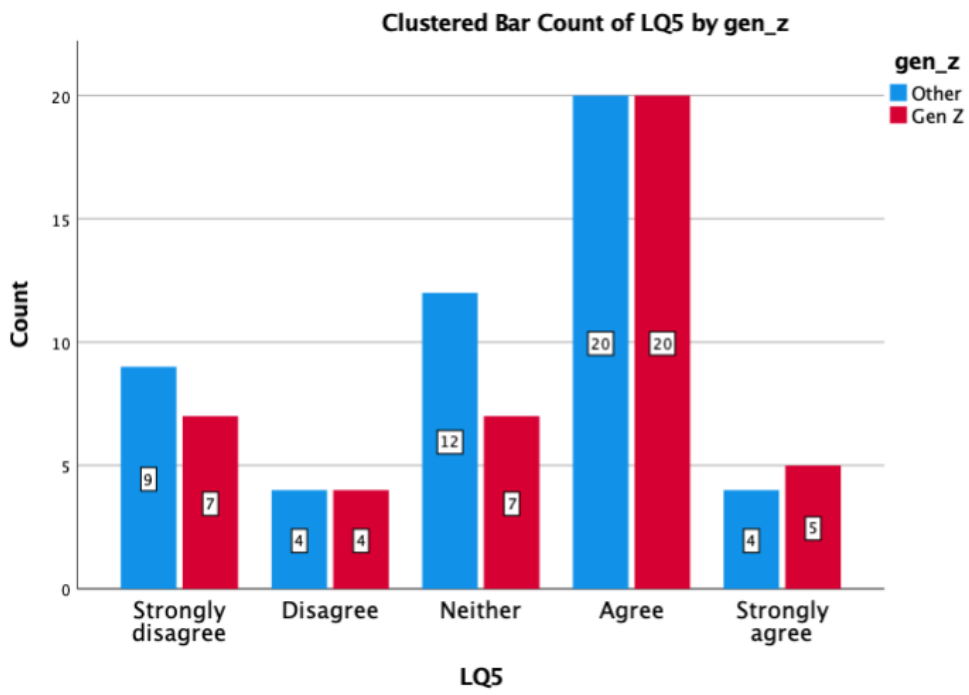
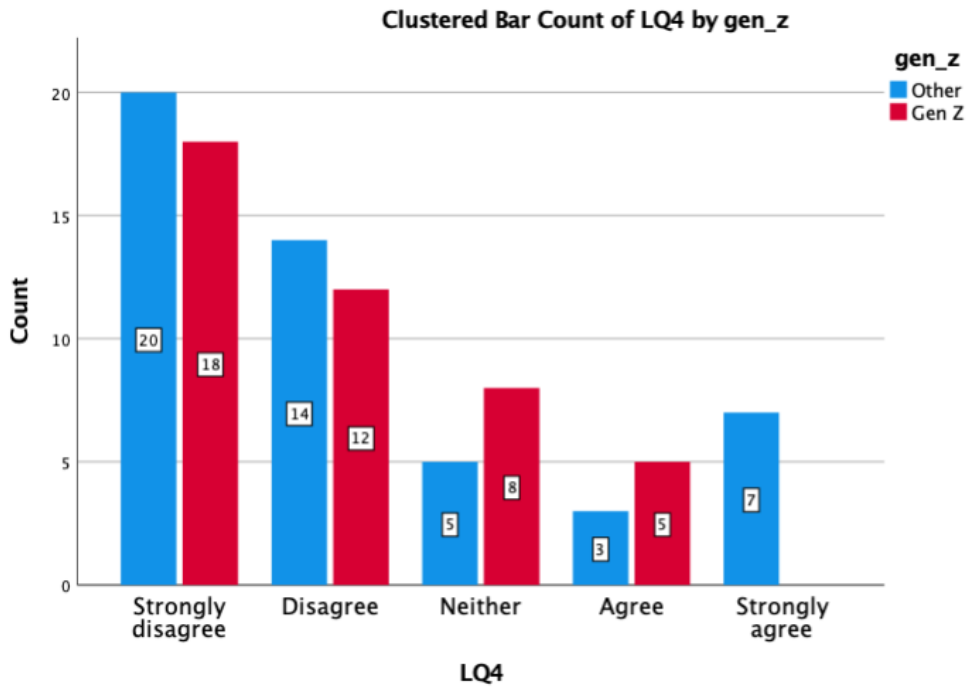
- More
- Same
- Less
- Don't Know

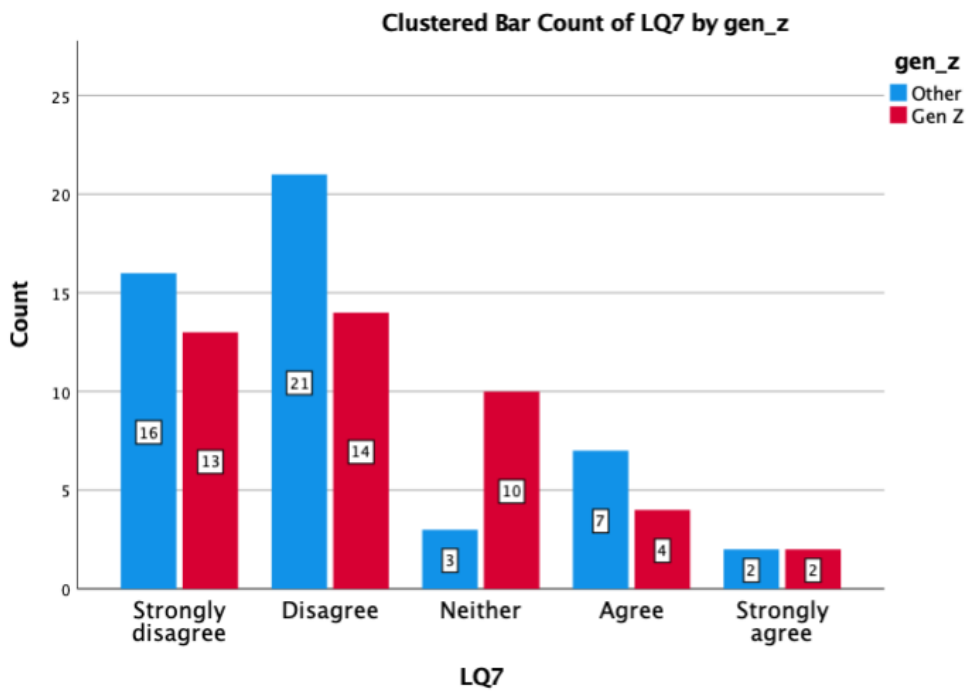
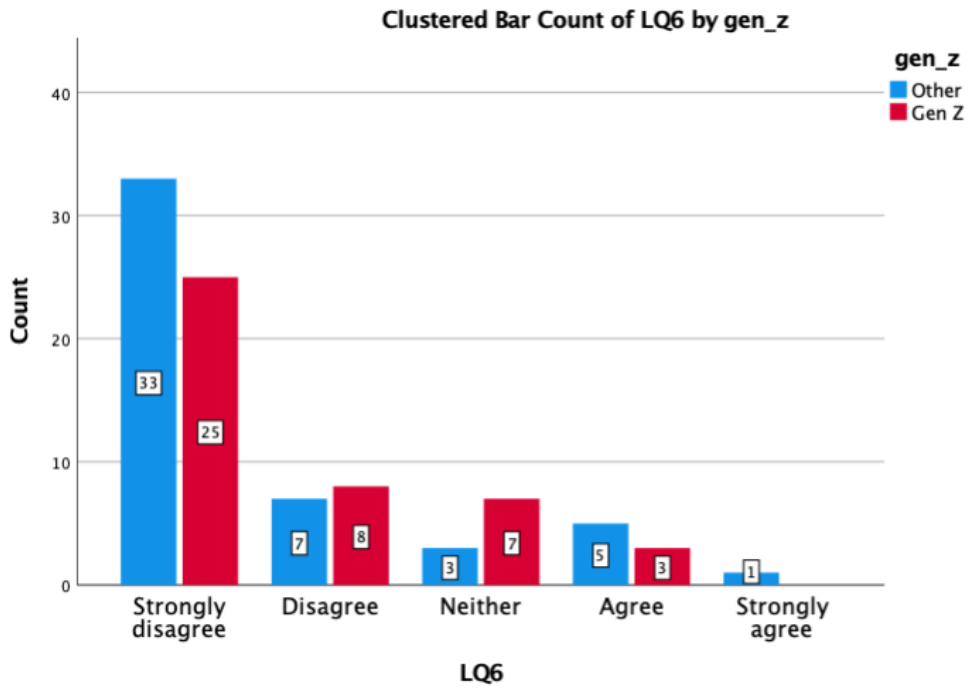
# Appendix C

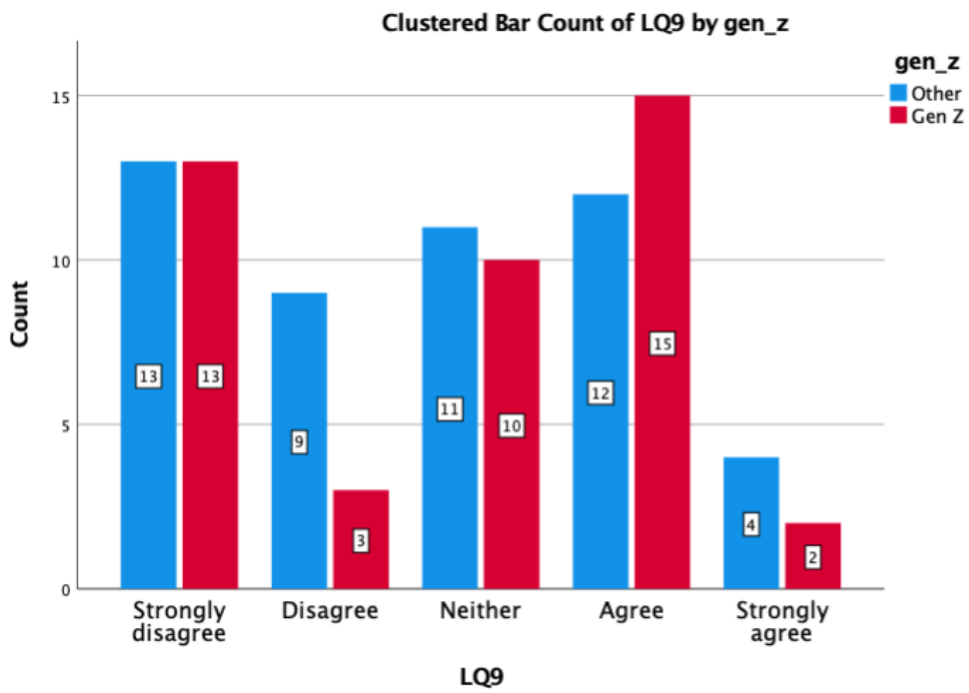
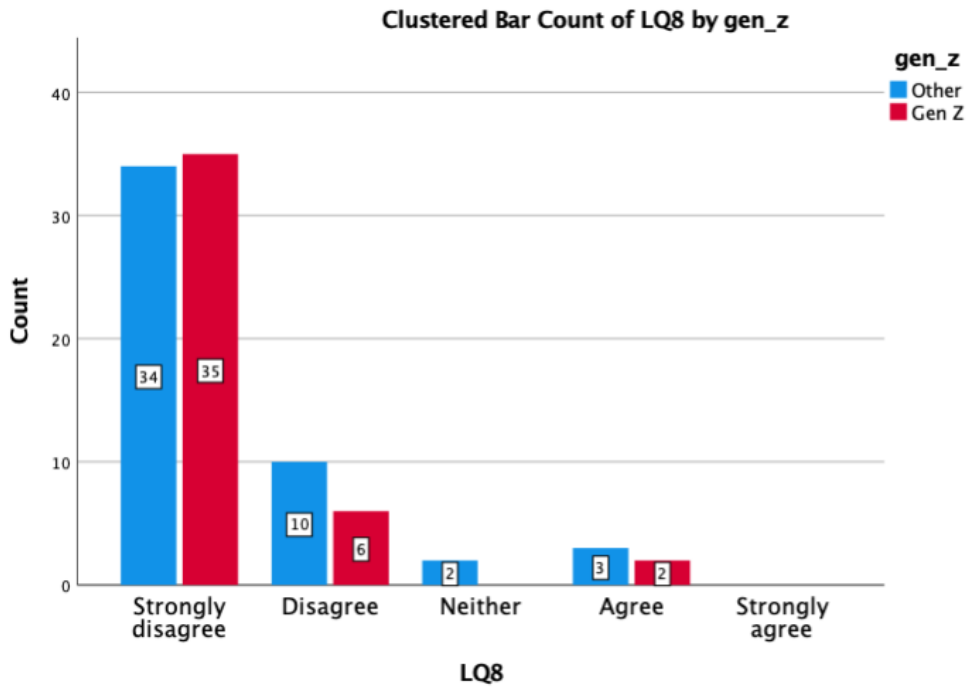
## Clustered Bar Charts of Q9-Q17 by order











# Other Charts

