## Pick and click:

## The use of buy-now-pay-later in the scope of bracketing purchase behaviour

## By

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#### Abstract

Enabled by technological advancements, e-commerce has taken over the retail space expeditiously the past decade. Without the typical brick-and-mortar store, retail brands face novel shopping behaviours that are tricky to comprehend. One of these behaviours is bracketing purchase behaviour (BPB), which is when you buy several versions of the same item, different colours or sizes, with the intention of returning some of them. Moreover, retailers report that some shoppers are abusing buy-now-pay-later (BNPL) services and use it as a tool to order multiple variants of the same item to try at home and return at least one of those items without ever having to debit money from their personal account for what was returned. Thus, this study aims at investigating how much more prevalent BNPL is in BPB scenarios compared to direct payment solutions and to provide an understanding of what motivates those who engage in BPB to use BNPL, which is unprecedented in contemporary research. The research involves a quantitative approach and consists of two studies where the first study consists of an analysis of transaction data from a medium-sized Swedish fashion brand and the latter consists of an analysis of a consumer survey which looks at perceptions, motivations, and behaviours. The results showed that a significant majority of bracketing orders are made using BNPL. What motivates BNPL usage in BPB scenarios is avoidance of pain of paying, mitigation of payment risk, and avoidance of liquidity loss. This paper breaks the ground for more future research on the topic of motivations for BPB and BNPL services' influence on consumer behaviour.


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## Glossary

Buy-Now-Pay-Later (BNPL): BNPL is a type of payment method that allows shoppers to make purchases online or in-store and pay for them over time in instalments, rather than paying the full amount upfront, or completely defer the payment to a future date, typically interest-free (Alcazar \& Bradford, 2021).

Bracketing purchase behaviour (BPB): Throughout this research paper the abbreviation BPB is used frequently and refers to bracketing purchase behaviour. BPB refers to the strategy for dealing with the inherent absence of being able to try on what you intend to buy before making the purchase. It involves buying several versions of the same item with the intention of returning the ones that you are not satisfied with after having tried them on. Balaram et al. (2022) define BPB (or bracketing, as they refer to it as) as the action of buying two additional sizes, one smaller and one larger when purchasing a clothing item online. Our definition refers to buying at least one more size or colour of the same item, with no upper limit, with the intention of returning at least one of them.

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## 1. Introduction

A rise in digitalisation and e-commerce has characterised the marketplace for fashion since the turn of the century. The growth of e-commerce has further been spurred on by the Covid-19 pandemic when physical encounters became limited. As of the year 2022, global e-commerce constituted $22 \%$ of total retail sales and many estimate this number will only continue to grow (Morgan Stanley, 2022). The act of shopping online from the comfort of your own home is substantially different from the one of shopping in a brick-and-mortar store, and thus it entails new consumer behaviours (Wolny \& Charoensuksai, 2014). One such consumer behaviour is what previous research has coined as bracketing purchase behaviour (BPB), which is buying several items to try out at home with the intention of returning some of them. This consumer behaviour has evolved as a response to the inherent absence of tangibility when shopping for clothes online (Xu et al., 2022).

Moreover, e-commerce has become a significant part of the retail space, and together with this development, digital payment solutions have been on the rise. One such payment solution that has gained particular popularity is buy-now-pay-later (BNPL). BNPL as payment method made up for $3 \%$ of e-commerce transactions globally in the year 2021 and is forecasted to grow to 5\% by 2025. In Sweden the corresponding number for 2021 is $25 \%$ (Worldpay, 2022).Whilst e-commerce has made shopping more efficient, BNPL services have made short-term credit more attainable than ever. Companies like Klarna and Affirm provide consumers with credit which entail that consumers can either divide the cost of their purchase into several smaller payments, often interest-free for pay-back periods of less than 30 days or totally defer the payment to a future date. Although short-term loans are no new phenomenon, layaway and credit cards provide a similar function and have been around for several decades, some aspects differentiate BNPL from predecessors. For one, access to BNPL is not dependent on the consumer's creditworthiness. Only people with good credit scores can access a credit card, whilst BNPL is available to consumers after (usually) they only indicate their age, income, and credit history. Thus, BNPL is available for a wider
consumer group, including the less financially strong consumers. This is also true for layaway, but the difference between layaway and BNPL is that with BNPL you get possession of the product you have purchased right away, whilst, with layaway, you only get possession once the smaller instalments add up to the full price amount (Alcazar \& Bradford, 2021). Considering all this, it is understandable how BNPL have reached huge popularity amongst consumers, to some extent at the expense of credit card usage and layaways.

Despite the success of BNPL implementation and its positive effect on sales and key metrics usually measured by retailers, BNPL has proven to increase basket sizes, conversion and loyalty as well as allow for the purchase of goods and services when money is scarce or prices are too high before payday (Maggio et al., 2022). However, some concerns are that this has inflated metrics such as average transaction value, units per transaction and overall month-to-month sales. Furthermore, the hidden costs of BPB include repackaging costs and extra shipment costs and therefore for some retailers discarding the product post-return is the only option to save on costs (Narvar, 2022). With this in mind, for sectors like fashion, where return rates are anywhere between $20-60 \%$, the aggregated cost can be detrimental (Cullinane et al., 2019). To add to this, recent research has found that $58 \%$ of consumers shop more than they tend to keep (Narvar, 2022). The same source also found that a majority of these consumers are young people, who also tend to shop more online than middle aged and older people.

Both BPB and BNPL are relatively recent developments that have experienced a surge in popularity in tandem. Considering both things involve postponement - BPB involves deferring the point of commitment to a prospective purchase to the future whilst BNPL involves postponing payment - it suggests that there might be a link between the two.

### 1.1. Problem statement

Given the trouble of reverse logistics solutions and that returns have to be more or less paid in full by the retailer, and not the consumer, it is obvious that retailers need to aim at minimising the return rates. Situations in which consumers return an item because of some
unexpected event are one thing, but situations in which consumers systematically take advantage of favourable return policies are another thing which is not sustainable for retailers. Lenient return policies are even training customers to return products. Customers now are informed that returns are not only meant for mistakes in delivery or having ordered the wrong item, but returns are now increasingly used to reduce the commitment level when making a purchase. The determining moment is now when the customer decides to keep or return the order, rather than what it was before - when you made the purchase (Robertson et al., 2020). Although encouraging BPB in some cases can be beneficial for retailers as it helps customers deal with the issue of size and preference uncertainty, the net effect of BPB is in most cases negative for the retailers (Balaram et al., 2022; Chen et al., 2023).

Furthermore, as BNPL makes more expensive purchases possible for consumers with lower purchasing power, this has a positive effect on the sales of retailers (Maggio et al., 2022). As overall sales are positively affected, it suggests that there is a possibility that the prevalence of BPB is also positively affected, which, as highlighted above, might be problematic for retailers.

### 1.2. Purpose and research questions

The purpose of this research paper is to contribute to the currently scarce literature on BPB and BNPL. The aim is to investigate how a specific return behaviour, BPB, interacts with a particular stage in the customer journey - namely the payment stage. More specifically, the aim is to see how much more prevalent the usage of BNPL compared to direct payment methods is in BPB scenarios. Also, the aim is to delve deeper into reasons why consumers would want to use BNPL when they engage in BPB, which will be done using applicable theories in consumer behaviour. To fulfil this purpose, the following research questions will be pursued:

1. To what extent is BNPL usage more prevalent than direct payment methods for consumers engaging in BPB?
2. What factors, in terms of shopping behaviour and perceptions, motivate consumers' use of BNPL when they engage in BPB?

### 1.3. Expected contributions

The current literature ties together the reasons why shoppers might engage in BPB and what impact this has on retail brands. Despite the importance of understanding how payment choice contributes and relates to consumers' likelihood to engage in BPB, extant research is limited in providing insights into this relationship. In other words, how BPB interacts with other parts of the customer journey, such as the choice of payment method, is something that has yet to be explored, but something that we aim at providing insight into with this research. Previously, the need for research on the characteristics of habitual returners and the motivations of these consumers have been called for, and this is what we aim to contribute with in this study. Specifically, there is a need to integrate returns into the overall framework of customer journeys, and as a start, we expect to contribute with an understanding of how BPB relates to the payment stage by answering the question of what motivates the use of BNPL when engaging in BPB (Robertson et al., 2020). Also, by building on already established theories of behavioural economics, we aim at providing a more comprehensive understanding of BPB and the motivations for using BNPL in such a scenario. The contribution is thus to further build on the application of behavioural economics theory. Additionally, marketing practices' effect on product returns is often overlooked by retailers as they evaluate the performance of marketing activities, and thus we aim to contribute with a novel approach by investigating how systematically taking advantage of lenient return policies is related to payment choice (El Kihal \& Shehu, 2022). By doing all this we hope to break the ground for new research which can serve as a starting point for other researchers wishing to explore the area of BPB and how BNPL stands in relation to consumer behaviour.

### 1.4. Delimitations

The following segment highlights the delimitations of this research paper. It aims to provide the reader with an understanding of how to interpret the results and discussion in a fair and correct manner. To give context, our research consists of one consumer survey and transaction data from a Swedish fashion retailer (more specifics on the retailer under header 3.1. Methodology).

Firstly, as most survey respondents are from Sweden as well as many of the orders in the transaction data are made by Swedish customers, there is a clear geographic delimitation in our research. Thus, our study cannot be said to reflect all markets and consumers. However, it is not unrealistic to use this study's findings to draw assumptions about other markets, since it is likely that consumers in other markets are similar to the Swedish ones. The retail data provided information on shopper location and thus geographic factors could have been investigated, however, this goes beyond the scope of our research.

Moreover, we made the strategic choice of delimiting ourselves to the fashion industry since it can be deemed that BPB makes the most sense for consumers shopping for fashion online (Balaram et al., 2022). As established earlier, BPB is mainly a strategy to deal with size uncertainty, and size uncertainty mostly exists when buying fashion online (Xu et al., 2022).

## 2. Conceptual background

In this subsequent chapter revolving around the conceptual background, the focus has been divided into three overarching sections. Firstly, literature related to BPB will be covered as it is necessary to know the characteristics of and motivations for the behaviour in order to understand how one might reason about payment in such a scenario. Then, literature on BNPL will be covered to provide an understanding of what can be said about previous research. Lastly, theories from behavioural economics will be presented which will serve as a framework on which we will interpret the results later on, in line with our second research question. Given the novelty of the subject, there is not a lot of previous research. Nevertheless, the previous research and theoretical frameworks will form the foundation of the following empirical research. Only research relevant to our study will be examined in the following section. Thus, the topics covered cannot necessarily be said to be comprehensively reviewed here.

### 2.1. Product returns and bracketing purchase behaviour (BPB)

As more people turn to online shopping due to its convenience, online shopping behaviour is becoming more complex. Consumers compare not only the price level between online retailers, but also the return policies, among other things (Altug \& Aydinliyim, 2016). Lenient return policies are leading to increased product returns and, as highlighted previously, consumer perceptions of returns are changing - returns are no longer exclusively used for mistakes, but instead are also used to postpone the moment for determining whether or not you want to commit to the prospective purchase. However, there is little academic research which investigates the consequences of these changing perceptions for consumer behaviour. Product returns can be seen as a spectrum ranging from completely justified returns such as when the wrong product is delivered or when the order is damaged during delivery to completely unjustified returns as with the case of fraud. Fraudulent returns can for example be when someone returns an item after having previously stolen it (Robertson et al., 2020). Somewhere between these two extremes of the spectrum, BPB can be found.

BPB is a phenomenon that is currently being evaluated and investigated by retailers across the globe and describes the behaviour of ordering several versions of the same item to try at home with the intention of returning some of them (Xu et al., 2022). This behaviour has evolved as a way for consumers to manage size and preference uncertainty and has been enabled by lenient return policies, such as extended return time and free-of-charge returns (Balaram et al., 2022). An example of how to make the return policies more lenient is to offer money-back-guarantees (MBG), which Suwelack et al. (2011) propose gives consumers the opportunity to postpone the final purchase decision from when you place the order to when you decide on what to keep. This should lead to positive emotions as it provides the customer with flexibility (Suwelack et al., 2011). BPB essentially denotes the systematic behaviour of taking advantage of this flexibility (not only in cases of MBG) as it moves the determining stage in the customer journey from the point of placing the order to the point when you decide on what to keep and what to return (Chen et al., 2023).

As already mentioned, there is little research on BPB and the motivations behind it, but these motivations are important to understand in order to subsequently understand why a consumer would prefer to pay using BNPL in such a scenario. When looking at the demographic differences, younger consumers are more likely to order more online and return more (Frei \& Baden, 2021). Younger people tend to order items they intend to return to either "borrow" the item for a specific event or to try at home before returning the products. This is because younger generations prefer access over ownership, which results in illegitimate borrowing (Denning, 2014). A similar finding was presented in a study of those who engage in fraudulent return behaviour, which is on the darker side of the return spectrum - fraudulent returns are more common among young female consumers (Harris, 2008).

Furthermore, when investigating BPB, it is important to highlight what differentiates such scenarios from instances where consumers make justified returns. Xu et al. (2022) explains how opportunistic consumer behaviour is no new thing, but there are some features which distinguish BPB from other consumer behaviour. For one, it increases the probability that the consumer gets the right size since he or she orders several options, but this also inherently entails an increase in returns for the retailer. BPB is not dependent on price as this behaviour can be found in the whole spectrum of fashion, from fast-fashion to luxury fashion. Lastly, the main reason for bracketing is to mitigate the size uncertainty (Xu et al., 2022). Fundamentally, what differentiates BPB from justified returns is that returns resulting from bracketing are planned before placing the order, whilst justified returns are unplanned. This notion is important to keep in mind when discussing what motivates consumers to prefer BNPL in a BPB scenario.

### 2.2. Buy-Now-Pay-Later (BNPL)

As already touched upon in the introductory section, BNPL services have gained huge popularity amongst consumers by lowering the threshold for consumers who want to buy things their budget normally would prohibit them from. Additionally, the emergence of new digital technology influences and changes consumer behaviour (Relja et al., 2023). In this section, we will review literature relating to BNPL and how it links to consumer behaviour.

Studies have previously been made on the subject of BNPL and its link to consumer behaviour. It has been shown that users of BNPL have a higher tendency for impulse buying behaviour in an online setting than non-users of BNPL (Fook \& McNeill, 2020). This leads to overconsumption and essentially, people who use BNPL buy more stuff (Ji et al., 2023; Berg et al., 2022). This in turn leads to an overall decrease in consumer well-being as BNPL usage induces increased stress regarding money management and future financial stability (Schomburgk \& Hoffmann, 2023). Due to the numerosity heuristic effect, BNPL reduces the perceived expensiveness of a purchase, which in turn leads to less pain of paying, which finally leads to increased spending behaviour. The numerosity heuristic effect is a term to describe how people tend to put an over-emphasis on the numbers, when judging quantities, and pay less attention to the unit (Pelham et al., 1994). In a BPB scenario, this means that four instalments of 250 SEK payments spread out over a month are perceived as less than a one-time payment of 1,000 SEK. Expressing the price less numerous, four instalments of 250 SEK, make the purchase seem less expensive than if it was expressed as more numerous, a payment of 1,000 SEK (Powell et al., 2023).

However, consumers need to be aware that perceived inexpensiveness is not the same as actually inexpensiveness. Consumers with negative perceptions of BNPL tend to emphasise the problematic side of BNPL - namely that it leads to indebtedness (Relja et al., 2023). BNPL usage is most common among young and inexperienced consumers. Due to the decoupling effect - the feeling of benefit of consumption is segregated from the negative feeling of having to pay - usage of BNPL can lead to overconsumption, especially among present focused consumers (Guttman-Kenney et al., 2023; Lia \& Natswa, 2021). Moreover, the consumers who are negative towards BNPL say that BNPL providers try to trick you into overconsumption with the sole purpose of gaining interest at the consumer's expense. For the people with a negative stance towards BNPL, there is clearly a lack of trust. On the other side, the consumers who are positive towards BNPL emphasise how it is a great tool for helping the less financially strong consumers with inclusion into consumerism. They also express that BNPL should be used by savvy consumers who know how to properly take
advantage of it (Relja et al., 2023). Indeed, BNPL could be used as a smart tool for budgeting and getting more flexibility with regards to outflows of money, but in most cases it is used by financially vulnerable consumers (Schomburgk \& Hoffmann, 2023).

Moreover, there is a reason as to why BNPL usage is more common amongst financially vulnerable consumers than regular bank credit is. The service is largely the same, but what differentiates them is that banks are much more tightly regulated than BNPL providers are (Gerrans et al., 2022). Banks are required to practise responsible lending which entails not providing credit to consumers who cannot reimburse it. As most BNPL providers are not regulated the same way conventional loan-providing institutions are, they are not bound by this social responsibility. Thus, they can lend to consumers without regard to their ability to repay the loans (Lia \& Natswa, 2021). With this in mind, it is also understandable how BNPL might contribute to overconsumption, since BNPL providers are able to target consumers who under other circumstances would not be able to receive credit.

Furthermore, it has been suggested that BNPL not only leads to more consumption through consumers taking on more leverage but also leads to more consumption by enabling savings to be used for consumption. BNPL can act as a liquidity insurance, enabling other liquidity buffers, that consumers have, to be used for consumption. Thus, not only used credit, but also unused credit can lead to increased consumption (Ji et al., 2023). BNPL essentially provides more liquidity and in a BPB scenario, more liquidity can be beneficial. Additionally, as highlighted by Relja et al. (2023), BNPL can provide flexibility if used cleverly by consumers. As engaging in BPB involves tying up money, money the consumer gets back after returning the items, BPB entails a loss of liquidity. Therefore, it is possible that consumers engaging in BPB should prefer BNPL as it mitigates the loss of liquidity. Also, payment schemes where you pay after delivery have been argued to give more security for the consumer in terms of payment and returns, which also argues that those who engage in BPB should be motivated to use BNPL (Xu et al., 2017).

### 2.3. Behavioural foundations of BPB and payment method preference

The following segment aims to highlight behavioural economics theories that can aid in answering our second research question. The different frameworks and theories will create the foundation for our discussion, and help to evaluate our findings in the scope of behavioural economics.

### 2.3.1. Pain of paying theory

The notion of pain of paying stems from behavioural economics and behavioural science, and it refers to the more or less negative emotions consumers experience in the process of making a purchase. In short, it stipulates that parting ways with your money is psychologically painful (Zellemeyer, 1996). The theory does not assume the previous notion in behavioural economics that consumers are completely rational when purchasing a product or service. Instead, it takes into account the influence of emotions and contextual aspects of the purchasing process, which is something that has become increasingly relevant (Suwelack et al., 2011).

Despite the relationship to be not exactly linear, it has been found that the more financial resources are lost, the more the pain of paying is felt by the consumer (Sheehan \& Van Ittersum, 2018). This can happen by paying a higher price for an item or by increasing the basket size, but either way, the total price is increased, which increases the pain of paying. Moreover, it has been suggested that situational circumstances moderate the pain of paying. The degree of scarcity of money influences the degree of pain when paying. Consumers who have scarce financial resources will feel more pain of paying than more affluent consumers. This can be connected to that as money is more scarce, the importance of using it optimally becomes exacerbated and the opportunity cost becomes more salient (Reshadi \& Fitzgerald, 2023).

Furthermore, the pain of paying is also moderated by the payment mode (Reshadi \& Fitzgerald, 2023). The more transparent the payment mode is, the more pain of paying is felt by the consumer. Thus, the most transparent payment mode, cash, induces more pain of
paying than the less transparent payment mode - credit or debit card. When paying with cash, you physically experience your money leaving your hands to fall into the cashier's hands, which makes parting ways with your money more salient, compared to when paying using a debit or credit card. The less salient the process of parting ways with your money is, the less pain of paying is felt. Technological advancements which have given rise to digital payment solutions, such as BNPL, have enabled the payment process to be even less transparent, and should thus be even less painful to use than its predecessors (Shah et al., 2016 ).

The general key learning from the concept of pain of paying is that parting ways with your money is emotionally painful (Zellemayer, 1996). In a BPB context, this finding is significant, given the nature of a BPB transaction. Since you intend to return items, BNPL makes it possible to never have to part with the money (the money paid for the items you return). Once you have returned the items you did not want to keep, and you made the purchase using a BNPL service, you lose the obligation to make a future payment. Thus, you can circumvent the pain of paying by never parting with your money.

### 2.3.2. Mental accounting theory

Mental accounting theory was brought to life by Nobel Prize winner Richard H. Thaler in his research paper "Mental Accounting Matters", published in 1999. The theory of mental accounting entails that despite money being fungible and having the same value from different sources, the value of the money will be subjective on an individual level depending on factors such as the timing of expenditures, source of the money and purpose of spending (Thaler, 1999). Thus, mental accounting builds on the same assumption that the pain of paying theory builds on - namely that consumers do not think rationally about money. For example, an individual may be very cautious about how they save and spend their savings for a trip abroad, whereas at the same time, they increase their credit card debt at the same rate they save. According to mental accounting theory, these individuals will still feel like they are saving money even though their net worth is decreasing. Moreover, the general idea is that we all have mental accounts and irrational perceptions of money. When looking through the scope of mental accounting theory it is evident that consumers are likely to carry high-interest
credit card debt at the same time as carrying large balances in low-interest accounts, believing that their socioeconomic status is healthy (Thaler, 2008). The same goes for carrying BNPL debt - shoppers perceive their mental accounts to be untouched, when in fact they owe money since the money only is debited when the invoice is paid.

Furthermore, Hou et al. (2021) found that shoppers using credit cards, which is another form of delaying payment, tend to overspend on cheaper goods, whereas they are more rational with larger investments. With this in mind, shopping for clothes online using BNPL allows for a more loose budget compared to shopping with cash, as shoppers transacting with their own hard-earned cash tend to plan ahead more before buying. It was also found that consumers have different degrees of self-control, and consumers with more self-control are able to budget and plan ahead before purchasing (Hou et al., 2021). Therefore, consumers with less self-control are more likely to abuse financial services like BNPL to make impulse purchases without the feeling of spending any money.

Moreover, the degree of psychological ownership of money varies depending on the payment type and the payment term (Skwara, 2023). For example, when comparing paying with a debit or credit card, a purchase done with credit, while still having higher psychological ownership than loans for example, has a lower degree of psychological ownership than a purchase done with debit. To add on this, this further shows in the scope of mental accounting theory that shoppers use BNPL as a tool to make transactions less painful as there is less psychological ownership for borrowed money (Siemens, 2007). This entails that borrowed money is not debited from all shoppers' mental accounts and thus is the preferred payment option for a smooth and painless shopping experience.

In the scope of BNPL and BPB, this theory entails that shoppers might actually perceive money to have less or more value depending on the payment method. For example, shopping with BNPL which, initially, is not money that is debited from the shopper's personal account, might be perceived as having less value. Therefore, if a shopper orders multiple sizes of the
same item to try at home without having to actually debit any money from their account, their mental accounts are actually not affected until the BNPL invoice is paid.

### 2.3.3. Risk perception and risk aversion in the context of online consumer buying behaviour

Consumer behaviour is different in an online context than it is in an offline environment, due to the different customer journeys these two channels entail (Wolny \& Charoensuksai, 2014). When shopping for clothes online, customers lose the usual "touch-and-feel" ability that they are used to from shopping offline. This poses a significant uncertainty for prospective consumers, and this uncertainty means there is a risk for them that the item will not feel and fit as well as hoped for (Balaram et al., 2022; Xiao \& Benbasat, 2011). Since BPB essentially is a risk mitigation strategy, it is helpful to this research to review what previous research has said about risk perception and risk aversion in online consumer buying behaviour.

In a general sense, risk aversion denotes the reluctance to be exposed to risk. Consumers tend to be risk averse and thus tend to want to minimise the risk they put themselves in a purchase situation. Those who are reluctant to shop online often refer to the payment risk as the main reason for the reluctance (Koyuncu \& Bhattacharya, 2004). Differently from a purchasing scenario offline, payment and delivery do not occur simultaneously in an e-commerce setting. Depending on whether or not the purchase is paid when placing the order or paid-upon-delivery, the payment risk either falls on the consumer or on the retailer (Hove \& Karimov, 2016). Risk-averse consumers should thus prefer to pay upon delivery, to avoid payment risk, which includes the risk of not receiving the money back in time or at all when making a return. In any choice situation, there are two aspects of risk, namely, uncertainty about the outcome and uncertainty about the consequences. To deal with the uncertainty of consequences, one common strategy is to reduce the amount at stake (Taylor, 1974). This is indeed coherent with the previous notion of eliminating risk by deferring payment.

## 3. Study 1

### 3.1. Methodology

In study 1, we use real transaction data to determine how prevalent BNPL is in BPB scenarios compared to direct payment alternatives. The data is gathered from a Swedish fashion retailer, who, per request, will remain anonymous throughout this research paper. However, to give some specifics, the fashion brand has a medium to high price point and targets predominantly female but also male adult customers. They operate an online store as well as physical retail stores across Europe through which they offer a broad selection of minimalistic clothing with a regular sizing system. Furthermore, the brand focuses on sustainability and aims at closing the loop of fast fashion. In the data set, there are several key metrics related to different transactions. Some of these metrics include the number of items ordered, the number of items returned and the payment method. Furthermore, the data consists of 46228 individual items and 5115 individual items in a basket where bracketing has occurred, according to our definition presented in the beginning. The data is sorted on each individual item sold by the Swedish fashion brand between an undisclosed, but recent period of time. As the data was presented in such a way it was manageable to match items to order numbers provided, and thus determine what orders had more than 1 of the same product in a different size or colour and where at least one of those was returned.

### 3.1.1. Data manipulation

To be able to establish the prevalence of BNPL in BPB scenarios from the retail transaction data, we had to conduct some data manipulation. Firstly, the raw data received from the Swedish fashion brand contained variables that go beyond the scope of this research such as delivery type, customer spending, lifetime orders, etc, and thus we filtered these out and kept the most relevant variables for this research. Furthermore, to determine which orders contained more variants of the same item we created a new variable with only the first 4 digits of the 8 -digit item number, where the last 4 indicate size and colour. This allowed for matching the item number to the order number and determining if there were duplicates of
the first 4 digits with different last 4 digits. This created a variable that showed how many of the same item, but with different variants such as colours or sizes, were in each order.

Moreover, the fashion brand provided us with information on whether the item had been returned or not and what the payment method was. We then removed duplicates of orders where customers were already ordering different sizes and colours of the same product for more than one product as this created a new data point and would thus skew the data as the order is by the same person. For easy understanding, we split up payment methods into 2 different variables, namely direct payment and BNPL. This allowed for a much easier analysis of the data and better statistical testing.

### 3.2. Results

The following segment highlights the results from the quantitative data from the medium-sized Swedish fashion brand. The results consist of statistical testing through IBM SPSS as well as visualisation for a better understanding of the data.

### 3.2.1. Initial analysis

The following bar chart simply highlights the return rate for BNPL (Klarna Pay Later) and direct payment. The data included in this is all transaction data and includes orders with and without bracketing.

Return rate (\%) for BNPL and Direct Payment


Figure 1. The return rate for each payment type (Data from Swedish fashion brand)

Figure 1 displays a simple metric that all fashion retailers measure: the return rate expressed as a percentage. As expected, when filtering the return rates for individual payment methods we find that the highest return rate $(51,14 \%)$ is from Klarna Pay Later. This entails that more than half of all the items purchased using Klarna pay later were returned. Moreover, direct payment had a return rate of $30,42 \%$ which is significantly less than the BNPL alternative. Furthermore, the return rate gives a clear indication that customers using BNPL services such as Klarna do in fact return more products than customers using direct payment methods such as debit cards.

### 3.2.1. Bracketing scenarios

Through data manipulation, we looked at all the purchases where BPB had occurred and observed the total BPB purchased filtered on payment method. The following frequency table highlights how many bracketing orders there are for each payment method, expressed as a percentage.

Frequency table of BPB orders and payment method

| Payment Method | Frequency | Percent | Valid percent |
| :--- | :--- | :--- | :--- |
| Direct Payment | 1924 | 37,4 | 37,4 |
| BNPL | 3227 | 62,6 | 62,6 |
| Total | 5151 | 100 | 100 |

Table 1. The frequency table of bracketing scenarios split on payment method also expressed as a percentage

The frequency table indicates that $62,6 \%$ of all bracketing orders are done with BNPL. Furthermore, when comparing this to the other payment methods it is evident that for shoppers who engage in BPB, BNPL is the preferred payment method.

To further investigate this relationship we decided to look into how many of the same items were ordered for each payment method. The following heatmap highlights how many bracketing orders there are for each payment method but broken down by the number of the same item ordered (table 2).

Total orders with more than one of the same variant where at least one of the items is returned

| Payment method | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adyen American Express | $1,84 \%$ | $0,31 \%$ | $0,21 \%$ | $0,00 \%$ | $0,00 \%$ | $2,37 \%$ |
| Adyen Bancontact | $0,23 \%$ | $0,00 \%$ | $0,10 \%$ | $0,00 \%$ | $0,00 \%$ | $0,33 \%$ |
| Adyen Entercash | $0,19 \%$ | $0,00 \%$ | $0,00 \%$ | $0,00 \%$ | $0,00 \%$ | $0,19 \%$ |
| Adyen iDEAL | $3,18 \%$ | $0,58 \%$ | $0,21 \%$ | $0,00 \%$ | $0,10 \%$ | $4,08 \%$ |
| Adyen MasterCard | $9,18 \%$ | $1,05 \%$ | $0,64 \%$ | $0,19 \%$ | $0,00 \%$ | $11,07 \%$ |
| Adyen PayPal | $9,77 \%$ | $1,16 \%$ | $0,60 \%$ | $0,27 \%$ | $0,06 \%$ | $11,86 \%$ |
| Adyen SOFORT | $0,16 \%$ | $0,06 \%$ | $0,00 \%$ | $0,00 \%$ | $0,00 \%$ | $0,21 \%$ |
| Adyen Trustly | $0,25 \%$ | $0,00 \%$ | $0,00 \%$ | $0,00 \%$ | $0,00 \%$ | $0,25 \%$ |
| Adyen VISA | $4,60 \%$ | $0,37 \%$ | $0,50 \%$ | $0,10 \%$ | $0,08 \%$ | $5,65 \%$ |
| Adyen VISA/Dankort | $1,20 \%$ | $0,00 \%$ | $0,04 \%$ | $0,00 \%$ | $0,00 \%$ | $1,24 \%$ |
| Klarna | $0,10 \%$ | $0,00 \%$ | $0,00 \%$ | $0,00 \%$ | $0,00 \%$ | $0,10 \%$ |
| Klarna Pay Later | $51,31 \%$ | $4,23 \%$ | $\mathbf{4 , 1 5 \%}$ | $0,21 \%$ | $1,22 \%$ | $61,13 \%$ |
| Klarna Slice It | $1,38 \%$ | $0,14 \%$ | $0,00 \%$ | $0,00 \%$ | $0,00 \%$ | $1,51 \%$ |
| Grand Total | $\mathbf{8 3 , 4 0} \%$ | $7,90 \%$ | $\mathbf{6 , 4 6 \%} \%$ | $\mathbf{0 , 7 8 \%}$ | $\mathbf{1 , 4 6 \%}$ | $\mathbf{1 0 0 , 0 0 \%}$ |

Table 2. The percentage of orders for each payment method where more than one of the same product in a different variant has been ordered and at least one has been returned. The numbers in the top row represent the number of articles ordered of the same item but in a different variant.

The heatmap entails that $62,64 \%$ of customers who engage in BPB are in fact using a BNPL service such as Klarna (Klarna Pay Later \& Klarna Slice It). It is also worth noting that for some baskets, more specifically, the ones with 3-6 different variants of the same product, BNPL is still significantly higher than the other payment methods. This entails that customers who engage in BPB, prefer BNPL as a payment method.

### 3.2.2. $\quad$ Statistical testing

## Cross Tabulation

We ran a cross-tabulation to evaluate the differences for orders where BPB had occurred and where BPB had not occurred and compared the differences between BNPL and direct payment. We also merged all the direct payment method options to direct payment, to create a fair comparison.

Furthermore, we had to recode a few variables in order to create two new variables - one showed the payment method and one showed if the customer had been bracketing or not. To even consider an order as a bracketing order at least one of the items has to be returned and
thus a new variable for the bracketing scenarios was created. The variable was made into either 1. Not bracketing ( 1 of the same item and any amount returned) or 2. Bracketing (More than 1 of the same item ordered and at least one returned).

Variable 1: Payment Method (BNPL or Direct payment)
Variable 2: BPB (bracketing, not bracketing)

For this specific test, as well as for all subsequent statistical tests, we set the threshold for statistical significance at $p<.05$.

| Measure | Value | $p$-value |
| :--- | :--- | :--- |
| Pearson's Chi-squared | 716.751 | $<.001$ |
| Phi | 0.136 | $<.001$ |

Table 3. Results from cross-tabulation between payment method and BPB.

The test resulted in $p<.001$, which indicates statistical significance. Therefore, conclude that there is, in fact, a significant association between payment method and BPB. For example, the expected count of bracketing for BNPL was 2348,9 whereas the actual number was 3242 . The expected count of bracketing for direct payment was 2835,1 whereas the actual count was 1942. Moreover, the expected count of "not bracketing" for BNPL was higher than the actual count, further indicating that customers using BNPL are more prone to engage in BPB.

### 3.2.3. Short commentary

There are some things that we can determine from the findings of Study 1. For one, we can conclude that BNPL is not only more common than direct payment methods in instances where returns have occurred but also significantly more prevalent than direct payment methods among bracketing orders. Consumers who engage in BPB seem to overwhelmingly prefer paying using BNPL services as opposed to paying directly.

These findings help answer our first research question. However, the results from Study 1 do not say anything about why BNPL is more prevalent than direct payment solutions in BPB
scenarios - the motivations behind it. For this purpose, we need to investigate consumer motivations, behaviours and perceptions, which is why we created study 2. In Study 2, we will answer the questions that were left unattended in Study 1.

## 4. Study 2

### 4.1. Methodology

In study 2 , we use a more explorative approach where we, from the use of a consumer survey, dig deeper into the motivations and behaviour of individual consumers. A reason for this choice of method is that we neither want to limit ourselves nor the respondents of the survey, but rather we want to have an open approach. The survey uses an exploratory approach as the subject is novel and will set the groundwork for future research. This goes together with the fact that, even though there is extensive research on product returns, there is limited research on BPB and no research on it in connection to BNPL. Here we aim at investigating the factors in terms of shopping behaviour and perceptions that motivate this behaviour, namely engaging in BPB. Factors of shopping behaviour are focused on practical factors that might motivate the use of BNPL whilst factors of perception are focused on mental constructs and opinions. Aligned with our purpose, we will base our interpretations of the result on the theory covered in the conceptual background.

Since previous research has already established a link between the effects that retail bracketing has on the retailers themselves, this study design aims to dig deeper into consumer behaviour (Balaram et al., 2022; Robertson et al., 2020). Furthermore, due to the possibility of deception and withholding of the truth, the transaction data from the Swedish fashion brand provides valid and reliable information on the effects of payment methods and bracketing. On the other hand, the survey data consists of subjective perceptions and opinions.

### 4.1.1. Questionnaire design

The questionnaire was made in a digital format and consisted of 24 questions split into different segments. The segments of the questionnaire were general demographic, shopping behaviour, payment preference and methods, and factors linked to theory. We created a cohesive segment for each factor we wanted to investigate to ensure that respondents were really thinking about their answers and not just "answering another questionnaire". Furthermore, the questionnaire consisted of ranking scales, multiple-choice questions and qualitative answers. Due to the breadth of this field of study, the questionnaire was fairly long and this resulted in a few people (37) not finishing the whole questionnaire.

### 4.1.2. Questionnaire sampling and respondents

For the questionnaire we used convenience sampling as this allowed for easy access to an available pool of respondents. The digital survey was sent out via a link through the authors' social media channels which helped in reaching a large group of respondents and to ensure diversity of both age and gender. To add to this, using the online service Qualtrics to conduct the questionnaire allowed for convenient collection and analysis of answers. This way we could also keep respondents anonymous which allowed for more reliable answers as some respondents may perceive the topic as sensitive.

The total number of valid respondents for the questionnaire was 116 and most of them were Swedish ( $85,3 \%$ ) with only a few from other countries (see appendix). Furthermore, most respondents were female (56\%) and the rest male ( $44 \%$ ) which provides a good split between genders. As we wanted to look for differences between age groups in our analysis, we divided the respondents into three groups: young, medium and older aged people. The young people were between 19-22 years of age, the medium-aged people between 23-35, and the older people were between 36-72 years of age. The reason for this grouping was twofold. For one, we reason that these three groups represent different stages in life as the young people consist mostly of students, the medium-aged group are mostly people at the beginning of their professional careers whilst the older group consists of people who are in the middle and the end of their careers and might be starting to settle down. These different stages in life are
distinct when it comes to income level and occupation, which are important demographic differences which can influence consumer behaviour (Hasan \& Nika, 2017; Ajay \& Gupta, 2021). Secondly, the age grouping made the most sense from a pragmatic point of view as we wanted to have as close to an equal number of respondents in each group as possible to ensure the reliability of the analysis.

When looking through the scope of convenience sampling it has a potential drawback in terms of representing diverse groups within the sample. Due to its reliance on easily accessible individuals, certain groups or individuals who are less accessible or less likely to participate may be underrepresented. As a consequence, this underrepresentation can introduce bias and ultimately lead to skewed results or limited external validity of the findings. However, the data provides a solid foundation for future research.

### 4.2. Results

In the following section, we present the result from analysing the data gathered from our consumer survey. First, we look to see if we can establish the same relationship between BPB and BNPL as we did in study 1 . Then we more closely investigate consumer motivations, behaviour and perceptions.

### 4.2.1. BNPL when engaging in BPB

The one question which most directly aims to measure the consumers' degree of BPB engagement is Q. 1 which was formulated as "How often do you order multiple sizes and colours of the same clothing item, when shopping online, with the intention of returning some of the items?". The respondents got to answer this question on a five-point scale ranging from "always" to "never". Furthermore, Q. 10 asked respondents to indicate which is their most preferred payment method when shopping online. We do a mean comparison, using a Mann-Whitney U-test, to see if there is a difference in how frequently they engage in BPB based on their preferred payment method. To make the test possible, we recode the question of preferred payment method into binary - direct payment or BNPL. The results show no statistically significant difference $p=.118$ (table 4).

| Test variable | Preferred payment <br> method | Number of <br> respondents | Mean rank |  |
| :--- | :--- | :--- | :--- | :--- |
| Frequency of BPB <br> engagement | Direct payment | 84 | 61,18 |  |
|  | BNPL | 32 | 51,47 | .118 |
| $p$-value |  |  |  |  |

Table 4: Shows the output after doing a Mann-Whitney U-test. The grouping variable is the preferred payment method (Q.10) and the test variable is the frequency of BPB engagement (Q.1). The latter was answered on a scale of 1 (=always) to 5 (=never).

Nevertheless, the mean rank shows that the mean is higher for respondents who prefer direct payment over BNPL, which suggests that the respondents who prefer BNPL also engage in BPB more often, on average, than the respondents who prefer paying directly.

To break it down further, we conduct the same analysis but split the data based on gender to see if the relationship looks different for different genders. From this, we get the same results as in the preceding paragraph. No statistical significance is found with $p=.434$ for females and $p=.210$ for males, and the mean ranks again suggest that the respondents who prefer BNPL also engage in BPB more often, on average, than the respondents who prefer paying directly (table 5).

| Gender | Test variable | Preferred payment method | Number of respondents | Mean rank |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Males | Frequency of BPB engagement | Direct payment | 40 | 25,94 |  |
|  |  | BNPL | 9 | 20,38 |  |
|  | $p$-value |  |  |  | . 210 |
| Females | Frequency of BPB engagement | Direct payment | 42 | 34,26 |  |
|  |  | BNPL | 23 | 30,70 |  |
|  | $p$-value |  |  |  | . 434 |

Table 5: Shows the output after doing a Mann-Whitney U-test using a split file based on gender. The grouping variable is the preferred payment method (Q.10) and the test variable is the frequency of BPB engagement (Q.1). The latter was answered on a scale of 1 (=always) to 5 (=never).

To further look into demographic differences, we conduct the same analysis again but split the data based on their age. We divide the respondents into three age groups - young, medium aged and older, as described previously. The results show the same mean rank relationship as in the previous tests - namely, the mean value of frequency of BPB engagement is higher for those who prefer paying directly than for those who prefer BNPL (table 6). For the medium and the older group of respondents, the result was $p=.732$ and $p=.359$ respectively, indicating no statistical significance. However, for young respondents, the result shows $p$ $=.070$. This is still not below the threshold for statistical significance ( $p<.05$ ), but relative to the other age groups, we are closest to showing statistical significance for young respondents.

| Age group | Test variable | Preferred payment method | Number of respondents | Mean rank |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Young | Frequency of BPB engagement | Direct payment | 40 | 28,31 |  |
|  |  | BNPL | 12 | 20,46 |  |
|  | $p$-value |  |  |  | . 070 |
| Medium | Frequency of BPB engagement | Direct payment | 16 | 9,66 |  |
|  |  | BNPL | 2 | 8,25 |  |
|  | $p$-value |  |  |  | . 732 |
| Old | Frequency of BPB engagement | Direct payment | 26 | 23,81 |  |
|  |  | BNPL | 18 | 20,61 |  |
|  | $p$-value |  |  |  | . 359 |

Table 6: Shows the output after doing a Mann-Whitney U-test using a split file based on age group. The grouping variable is the preferred payment method (Q.10) and the test variable is the frequency of BPB engagement (Q.1). The latter was answered on a scale of 1 (=always) to 5 (=never).

### 4.2.2. Shopping behaviour and perceptions

Next, we will look more at the respondent's shopping behaviour, motivations, and perceptions. As in the previous section, we will split the data in different ways to find potential demographic differences.

Firstly, we look at how BPB relates to other variables of shopping behaviour. A Spearman correlation analysis shows a statistically significant relationship between BPB (Q.1) and store loyalty ( Q .15 ), which indicates that as store loyalty goes up, the frequency of engagement in BPB does too ( $r=-0.192, p=.039$ ). Thus, there is a positive correlation between store loyalty and engagement in BPB. Another Spearman correlation analysis shows there is a statistically significant positive correlation ( $r=0.464, p<.001$ ) between how often the respondents engage BPB (Q.1) and how often they shop for clothes online in general (Q.14).

Furthermore, a clear majority of respondents (110 out of 116) answered that they have noticed that sizes of a particular brand tend to run smaller or larger than sizes of other brands. From doing a cross-tabulation analysis, we see there is a statistically significant difference ( $p$ $<.001$ ) between those who engage in BPB and those who do not in how the aforementioned fact affects their ordering/purchasing decision from a brand.

|  |  | Does this affect your decision to order multiple sizes of a product from that brand? |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | I order more sizes <br> than usual to ensure <br> the best fit | I order fewer sizes <br> than usual to avoid <br> the hassle of returns | I avoid ordering <br> from that brand <br> altogether | I make a guess on <br> which size will fit <br> me best and order <br> only that size |
| Those who engage <br> in BPB | Count | 22 | 3 | 9 | 13 |
|  | Expected count | 9,4 | 1,3 | 6,4 | 29,9 |
| Those who do not <br> engage in BPB | Count | 0 | 0 | 6 | 57 |
|  | Expected count | 12,6 | 1,7 | 40,1 |  |

Table 7: Shows the output after having done a cross-tabulation between Q. 3 and Q. 1 (recoded into binary - not BPB or BPB). ( $p<.001$ ).

As Table 7 indicates, almost all of those who do not engage in BPB make a guess on the correct size and order only that one, whilst a minority tend to avoid the brand altogether. On the other hand, those who engage in BPB overwhelmingly order more sizes than usual to ensure the best fit.

Moreover, we want to see how consumers perceive and consider the impact of BPB on the retailer and the environment. Looking at the perceived impact, the respondents got to answer
what they perceive the impact to be on an interval scale from negative ( -3 ) to neutral (0) to positive (3), and the result shows $M=-1,55$ for the impact on the retailer and $M=-1,78$ for the impact on the environment. Looking at how they consider the impact, the respondents got to answer how much they consider the impact on an interval scale from not at all (1) to very much (7). The results show $M=3,05$ for the degree of consideration of the impact on the retailer and $M=4,34$ for the degree of consideration of the impact on the environment.

We now turn to see if there is a difference between those who engage in BPB and those who do not in how they perceive and consider the impact of BPB on the retailer and the environment. For this, we do Mann-Whitney U-tests (table 8). The results show no statistically significant difference in how they perceive the impact of BPB on the retailer ( $p$ $=.933$ ) or on the environment $(p=.281)$. Neither is there a statistically significant difference in how they consider the impact on the retailer ( $p=.852$ ) or the environment $(p=.296)$.

| Test variables | Grouping variable | Number of respondents | Mean rank |  |
| :---: | :---: | :---: | :---: | :---: |
| Perceived impact on the retailer | BPB | 48 | 58,21 |  |
|  | Non-BPB | 68 | 58,71 |  |
|  | $p$-value |  |  | . 933 |
| Perceived impact on the environment | BPB | 48 | 62,26 |  |
|  | Non-BPB | 68 | 55,85 |  |
|  | $p$-value |  |  | . 281 |
| Consideration of impact on the retailer | BPB | 48 | 57,82 |  |
|  | Non-BPB | 68 | 58,98 |  |
|  | $p$-value |  |  | . 852 |
| Consideration of impact on the environment | BPB | 48 | 62,32 |  |
|  | Non-BPB | 68 | 55,80 |  |
|  | $p$-value |  |  | . 296 |

Table 8: Shows the output after doing Mann-Whitney U-tests. The grouping variable is Q. 1 (recoded into binary - non-BPB or BPB) and the test variables are Q.5-Q. 8 (see appendix).

We now turn to the respondents who indicated that they prefer BNPL as a payment method when shopping for fashion online. Of these people, only 9 are male whilst 23 are female. On the question of whether or not they find it more or less painful to pay with BNPL compared to paying directly (interval scale 1-7 with 1 being less painful and 7 being more painful), the result shows $M=2,25$, indicating that using BNPL is perceived as less painful, on average. After conducting a Mann-Whitney U-test, we can also conclude that there is no statistically significant difference between males and females on the question of pain perception of payment methods ( $p=.213$ )(table 9). Additionally, no statistically significant difference between different age groups on the question of pain perception of payment methods can be found, as demonstrated by a K-independent Kruskal-Wallis test ( $p=.552$ )(table 10). Lastly, neither do we find a statistically significant difference between those who engage in BPB and those who do not on the question of pain perception ( $p=.215$ )(table 9).

| Test variables | Grouping variable | Number of <br> respondents | Mean rank |  |
| :--- | :--- | :--- | :--- | :--- |
| Pain perception of <br> BNPL compared to <br> direct payment <br> alternatives | Male | 9 | 13,17 |  |
|  | Female | 23 | 17,80 | .213 |
|  | $p$-value |  | 18,32 |  |
| Pain perception of <br> BNPL compared to <br> direct payment <br> alternatives | BPB | Non-BPB | 17 | 14,43 |
|  | $p$-value |  |  | .215 |

Table 9: Shows the output after doing Mann-Whitney U-tests. The grouping variables are first Q. 20 and then Q. 1 (recoded into binary -non-BPB or BPB) and the test variable is Q. 19 (see appendix).

| Test variables | Grouping variable | Number of <br> respondents | Mean rank |  |
| :--- | :--- | :--- | :--- | :--- |
| Pain perception of <br> BNPL compared to <br> direct payment <br> alternatives | Young | 12 | 17,33 |  |
|  | Medium | 2 | 10,00 |  |
|  | Old | 18 | 16,67 | .522 |
|  | $p$-value |  |  |  |

Table 10: Shows the output after doing a K-independent Kruskal-Wallis test. The grouping variable is age (Q. 21 recoded into three groups) and the test variable is Q .19 (see appendix).

Moreover, we want to investigate the motivations for choosing any payment method when shopping for clothes, and we want to see if there is a difference in motivations for preferring different payment alternatives. A cross-tabulation of preferred payment methods and answers to the question of which psychological factor influences the consumer's choice of the payment method the most shows no statistically significant difference between the groups ( $p$ $=.246$ )(table 11). The two most quoted answers for people who prefer paying directly were "convenience" and "habit and personal preference". For the people who prefer BNPL, the two most quoted answers were "security" and "convenience".

|  |  |  | Direct payment | BNPL |
| :---: | :---: | :---: | :---: | :---: |
| What psychological factors impact your choice of payment method the most when buying clothes online? | Convenience | Count | 32 | 8 |
|  |  | Expected count | 29,2 | 11,1 |
|  | Security | Count | 16 | 15 |
|  |  | Expected count | 22,8 | 8,7 |
|  | Rewards and incentives | Count | 2 | 1 |
|  |  | Expected count | 2,1 | 0,8 |
|  | Budgeting | Count | 8 | 4 |
|  |  | Expected count | 8,5 | 3,3 |
|  | Habit and personal preference | Count | 24 | 4 |
|  |  | Expected count | 19,9 | 7,6 |
|  | Other | Count | 2 | 0 |
|  |  | Expected count | 1,4 | 0,5 |

Table 11: Shows the cross-tabulation of Q. 11 and Q.10, where Q. 10 has been recoded into binary, i.e. show either paying directly or BNPL. ( $p=.246$ )

### 4.3. Short commentary

In the first part of study 2 , we tried to establish the same finding as we did in study 1 , which we were partly unsuccessful with. We did not reach statistical significance in our mean comparisons. Nevertheless, whichever way we split the data - on age, gender or no split - the results indicated the same thing - the respondents who prefer BNPL also on average engage
in BPB more often. The closest we came to reaching statistical significance was when we looked at young people, aged 22 or below ( $p=.07$ ). Given the big difference from what the $p$-value landed at when we looked at medium and older aged respondents ( $p=.359$ and $p$ $=.732$ respectively), we take it as a hint of that, especially for young consumers, BNPL is significantly more prevalent than direct payment methods among those who engage in BPB. That the prevalence is especially strong for young consumers is also supported by previous research saying that both BPB and BNPL are particularly popular among young consumers (Frei \& Baden, 2021; Relja et al., 2023).

## 5. General discussion

Can anyone just pick and click without having to even spend any money? Certainly. The results of the two studies used within this research may very well raise some concerns for retailers and can be a bit thought-provoking for shoppers. As previous research on this topic is very slim, the results of the two studies provide great insight into how the payment method stands in relation to BPB and acts as an extension to previous research on the matter. Our research shows that not all shoppers who engage in BPB use BNPL, but based on the findings of study 1 , a majority of bracketing orders are made using BNPL, as opposed to direct payment alternatives. Moreover, the cross-tabulation analysis from study 1 indicated that the proclivity for favouring the use of BNPL among those who engage in BPB is of statistical significance.

As established, a majority of those who engage in BPB use BNPL, but what would motivate anyone engaging in BPB to use this payment service? Our research shows that this question has several answers. We will start this discussion by looking at the perceptions that might motivate this behaviour.

To begin the discussion, the results from study 2 show that consumers who prefer BNPL also indicate that they perceive BNPL as being less painful than paying directly. Pain of paying theory stipulates that the more financial resources are lost, the more intensely the pain of
paying is felt by the consumer (Sheehan \& Van Ittersum, 2018). This feeling can also be aggravated by the scarcity of money (Reshadi \& Fitzgerald, 2023). As BNPL reduces the perceived expensiveness of a purchase, it also reduces the pain perception associated with the purchase (Powell et al., 2023). Thus, consumers engaging in BPB should be motivated to use BNPL due to the perception of it reducing the pain of payment. This conclusion is also supported by the fact that BNPL can be used as a tool to circumvent some of the pain of paying altogether. Giving away your money in exchange for a good or a service inflicts negative emotions, but since, in a BPB scenario, the amount required to make the purchase is not what you will have to pay in total since you will return one or more items, BNPL enables you to avoid parting ways with money that you would otherwise have to part ways with if you were to use a direct payment method.

The simple notion that engaging in BPB requires more capital than guessing on the right size and ordering only one item is indeed important in understanding the perceptions that motivate the use of BNPL in a BPB scenario. Through the scope of mental accounting theory, using BNPL enables the consumer to access and use capital without affecting their mental accounts, and since there is less psychological ownership for borrowed money, this should lead to the perception of a smooth and less painful transaction (Siemens, 2007). BNPL is also one of the least transparent payment methods available to consumers, which further strengthens the argument that it helps minimise the pain (Shah et al., 2016). This perception should motivate those engaging in BPB to use BNPL over direct payment alternatives.

Contrary to what we expected, we found no demographic differences in the pain perception related to BNPL compared to direct payment options from study 2 . There was not even a difference when we compared those who engage in BPB with those who do not. This argues that to motivate BNPL usage through saying that it reduces the perceived expensiveness and thereby the pain of paying should hold true irrespective of whether it is a BPB scenario or not. Indeed, contemporary research highlights how BNPL can lower the perceived expensiveness of a purchase and be used as a smart tool for managing personal finances
without differentiating between BPB scenarios and regular purchasing scenarios (Powell et al., 2023; Relja et al., 2023; Schomburgk \& Hoffmann, 2023).

Furthermore, looking at other facets of perception, the perception of risk should play a part in motivating the use of BNPL when engaging in BPB. Previous research has found that payment risk is a main issue for those who are sceptical of online shopping (Koyuncu \& Bhattacharya, 2004). Included in the notion of payment risk is the risk of not receiving your money back when making returns, which is something that should be perceived as an acute risk for those engaging in BPB, since they plan to make returns of usually several items, meaning there is significant money at stake (Xu et al., 2022). By delaying the payment until the point when you have received what you have ordered, you can effectively avoid the payment risk by placing it on the retailer, or in the case of BNPL, on the BNPL service provider (Hove \& Karimov, 2016). Thus, consumers who perceive there is risk involved in BPB and are risk-averse should prefer using BNPL when engaging in BPB. This is coherent with our results in study 2 where we found that, among those who prefer BNPL as a payment tool, security is the most impactful psychological aspect when choosing payment options when shopping for clothes online.

Turning our attention to shopping behaviour aspects that motivate the use of BNPL in BPB scenarios, we first need to be reminded about what distinguishes BPB - it involves planned returns. Interestingly, as shown by study 2, consumers engaging in BPB are just as aware of the negative impact their return behaviour has on the retailer and the environment as those consumers not engaging in BPB are. This highlights how consumers engaging in BPB are aware of the magnitude of what they are doing but choose to put their self-interests first. Indeed, BPB is a smart way for savvy consumers to primarily mitigate size and preference uncertainty (Balaram et al., 2022). Also, BNPL is something that can be used cleverly by savvy consumers wishing to better manage personal budgeting and outflows of money, and as BNPL provides more liquidity, it can have an effect on shopping behaviour (Relja et al., 2023; Ji et al., 2023). Thus, what motivates consumers engaging in BPB to use BNPL might have to do with the simple fact that placing an order for three variants of the same shirt, all in
different sizes, as opposed to making a guess on the size and ordering one, is more expensive. For example, a shopper engaging in BPB without the use of BNPL, will have to pay the full price of items they do not even intend to keep and will only get this money returned when the return and refund is ultimately processed. Of course you will receive back the amount equalling the value of what you return, minus the return fee, but since this whole process might take a couple of weeks, the loss of liquidity might be crucial. Thus, those engaging in BPB should be motivated to use BNPL as a way of avoiding liquidity loss.

The loss of liquidity might be extra crucial for those consumers who shop often, as they then should have more outflows of money spent on fashion than less frequent shoppers. The need for efficient management of personal finances should be larger for frequent shoppers, and thus frequent shoppers should be more motivated to use BNPL than less frequent shoppers. This is coherent with our results from study 1 and 2. In study 1 we found that BNPL is significantly more prevalent than direct payment options in BPB scenarios, and in study 2 we found a significant positive correlation between engagement in BPB and online shopping frequency in general. Thus, those engaging in BPB might be motivated to use BNPL since they also shop online more frequently in general, and therefore have a larger need for financial flexibility. This is also coherent with contemporary research suggesting that BNPL is linked to more consumption (Guttman-Kenney et al., 2023; Lia \& Natswa, 2021).

Furthermore, relating to both shopping behaviour and perceptions, we found in study 1 that the larger the bracketing order is, the more prevalent BNPL is relative to direct payment alternatives. From a perception perspective, this is supported by the pain of paying theory which says that the more financial resources that are lost in a transaction, the more perceived psychological pain is inflicted on the consumers (Sheehan \& Van Ittersum, 2018). Also, the more expensive the order becomes, the more risk is at stake, and thus the urgency to reduce the amount at stake should increase (Taylor, 1974). From a more practical perspective, the larger the order is, the more impactful the liquidity loss should become, and thus it should result in more motivation to avoid it. Our results suggest that the motivation to use BNPL
when engaging in BPB increases with the extent of bracketing. This is also supported by our conceptual background.

### 5.1. Conclusion

To what extent is BNPL usage more prevalent than direct payment methods for consumers engaging in $B P B$ ?

To conclude, BNPL usage is more prevalent than direct payment methods in BPB scenarios to the degree of statistical significance. In study 1 , we show that little over $60 \%$ of all bracketing orders are paid for using BNPL, which is significant considering only $3 \%$ of e-commerce transactions globally, and 25\% in Sweden, were made using BNPL in 2021 (Worldpay, 2022).

What factors, in terms of shopping behaviour and perceptions, motivate consumers' use of $B N P L$ when they engage in BPB?

In terms of consumer perceptions, avoiding pain of paying and mitigating payment risk seem to be important motivational factors for using BNPL when engaging in BPB. Additionally, in terms of shopping behaviour, avoiding a liquidity loss seems to be a significant motivational factor for using BNPL when engaging in BPB. Also, we suggest that as the magnitude of BPB increases, so should the motivation to use BNPL. These findings are supported by our results as well as contemporary research.

However, in line with this research's novelty and explorative approach, our conclusions are very much dependent on interpretations. This leads us on to the limitations of the study and suggestions for further research.

### 5.2. Limitations

This study is not without limitations, which are important to keep in mind in order to better understand the research findings. The aim of this segment is to provide transparency on the
variables that may have affected the research design, results and interpretation of these results. By shedding light on these variables we aim to provide a balanced evaluation of the research and the implications.

The limitations can be split up into the following categories:

## Timeframe

Study 1 - Due to anonymity and confidentiality requested by the Swedish fashion retailer we can not disclose the timeframe for the retail data. We can however say that it is recent and not outdated in any way.

Study 2 - The questionnaire was only available to answer for approximately two weeks. There are several factors that could impact the answer at that specific timeframe such as seasonality and closeness to payday. The study does not investigate the differences at different times of the year or even the development of BPB and BNPL over time, it only looks at responses collected in spring 2023.

## Sample Limitations

Study 2 - Due to the small sample size in study 2 the generalizability is somewhat limited as the results of a small sample may not reflect a larger population. Moreover, as highlighted in the results of study 2 , the small sample size limits the statistical power of the results as it increases the risk for type II errors. With fewer participants, it becomes more challenging to obtain precise estimations of means, proportions, or effect sizes. The wider confidence intervals reduce the level of certainty in the findings, making it harder to draw definitive conclusions.

## Assumptions and limitations of models and theories

As the backbone of the research revolves around the theoretical framework presented earlier there are a few limitations to the assumptions of these. For example, even though pain of paying and mental accounting theory are two behavioural economics frameworks very relevant to our research, we make the assumptions about these theories. For example, the
extent the pain of paying may vary among individuals and situations, highlighting the need to acknowledge these differences. Other factors such as individual characteristics, cultural influences, and the specific context of the purchase, can moderate the impact of the pain experienced, not only the type of payment method. These were not factors included in our research and thus indicates that models have been simplified for easier understanding of the results at hand.

Furthermore, with regards to study 1 we assumed that orders placed for Womenswear were made by women and Menswear were made by men. However, it may be the case that for a few of these orders there were actually gifts which affects the validity of the results. Another assumption made in study 1 is that all customers who order multiple variants of the same item and return at least one engage in BPB. However, it may be the case that shoppers have returned one of the items as it was a faulty product, damaged during shipping, dissatisfaction with quality or an unwanted gift. This may further impact the validity of the results.

### 5.3. Future research

As this topic is very novel, there is plenty of research to be done within this field.There are several interesting factors contributing to BPB. Not only does payment method influence consumer choices and behaviours but so do other factors not investigated within this research. Other factors that could be investigated to further explain this behaviour is to investigate situational factors such as time pressure, shopping context and stress. Other factors relevant for future research are contextual factors such as price promotions, marketing and the competitiveness of the retail landscape. Collectively, all these factors could play a significant role and have significant effects on BPB. Future research should also aim at looking at the differences between retail sectors as it may be the case that for fashion and footwear for example, size uncertainty is the key driver of BPB, whereas the prevalence of this behaviour may be less in other sectors.

## References

Ajay, B., \& Gupta, R. (2021). Exploring the relationship between extended 3Ps and store choice: Moderating role of consumer demographics. FIIB Business Review, 10(4), 440-453. https://doi.org/10.1177/23197145211023407

Alcazar, J. \& Bradford, T. (2021). The appeal and proliferation of buy now, pay later: Consumer and merchant perspectives. Federal Reserve Bank of Kansas City, kcFed Payments System Research Briefing. URL:
https://www.kansascityfed.org/Payments\ Systems\ Research\ Briefings/documents/ 8504/psrb21alcazarbradford1110.pdf

Altug, M. S., \& Aydinliyim, T. (2016). Counteracting strategic purchase deferrals: The impact of online retailers' return policy decisions. Manufacturing \& Service Operations Management, 18(3), 376-392. http://dx.doi.org/10.1287/msom.2015.0570

Balaram, A., Perdikaki, O., \& Galbreth, M. R. (2022). Bracketing of purchases to manage size uncertainty: Should online retailers be worried?. Naval Research Logistics, 69(5), 783-800. https://doi.org/10.1002/nav. 22048

Berg, T., Fuster, A., \& Puri, M. (2022). FinTech Lending. Annual Review of Financial Economics, 14, 187-207. https://doi.org/10.1146/annurev-financial-101521-112042

Chen, J., Yu, B., Chen, B., \& Liu, Z. (2023). Lenient vs. stringent returns policies in the presence of fraudulent returns: The role of customers' fairness perceptions. Omega, 117 . https://doi.org/10.1016/j.omega.2023.102843

Cullinane, S., Browne, M., Karlsson, E \& Wang, Y. (2019). Retail Clothing Returns: A Review of Key Issues. Contemporary Operations and Logistics, 301-322.
https://doi.org/10.1007/978-3-030-14493-7 16

Denning, S. (2014). An economy of access is opening for business: Five strategies for success. Strategy \& Leadership, 42(4), 14-21. https://doi.org/10.1108/SL-05-2014-0037

El Kihal, S. \& Shehu, E. (2022). It's not only what they buy, it's also what they keep: Linking marketing instruments to product returns. Journal of Retailing, 98(3), 558-571.
https://doi.org/10.1016/j.jretai.2022.01.002

Fook, L. A., \& McNeill, L. C. (2020). Click to Buy: The Impact of Retail Credit on Over-Consumption in the Online Environment. Sustainability, 12(18), 7322. https://doi.org/10.3390/su12187322

Frei, R., \& Baden, D. (2021). Product Returns: An Opportunity to Shift towards an Access-Based Economy? Sustainability, 14, 410. https://doi.org/10.3390/su14010410.

Gerrans, P., Baur, D. G., \& Lavagna-Slater, S. (2022). Fintech and responsibility: Buy-now-pay-later arrangements. Australian Journal of Management, 47(3), 474-502. https://doi.org/10.1177/03128962211032448

Guttman-Kenney, B., Firth, C., \& Gathergood, J. (2023). Buy now, pay later (BNPL) ...on your credit card. Journal of Behavioral and Experimental Finance, 37. https://doi.org/10.1016/j.jbef.2023.100788

Harris, L. C. (2008). Fraudulent return proclivity: An empirical analysis. Journal of Retailing, 84(4), 461-476. https://doi.org/10.1016/j.jretai.2008.09.003

Hasan, A., \& Nika, F. A. (2017). CONSUMERS' DECISION MAKING: A LITERATURE REVIEW. Prestige International Journal of Management and Research, 10(2), 35-42.

Hove, L. V., \& Karimov, F. P. (2016). The role of risk in e-retailers' adoption of payment methods: Evidence for transition economies. Electronic Commerce Research, 16(1), 27-72. https://doi.org/10.1007/s10660-015-9203-6

Hou, L., Hsueh, S. \& Shuoxun, Z. (2021). Digital Payments and Households' Consumption: A Mental Accounting Interpretation. Emerging Markets Finance and Trade, 57(7), 2079-2093. https://doi.org/10.1080/1540496x.2021.1887727.

Ji, Y., Wang X., Huang Y., Chen S., \& Wang F. (2023). Buy now, pay later as liquidity insurance: Evidence from an early experiment in China. China Economic Review, 80. https://doi.org/10.1016/j.chieco.2023.101998

Koyuncu, C. \& Bhattacharya, G. (2004). The impacts of quickness, price, payment risk, and delivery issues on on-line shopping. The Journal of Socio-Economics, 33(2), 241-251. https://doi.org/10.1016/j.socec.2003.12.011

Lia, D. A. Z., Natswa, S. L. (2021). Buy-Now-Pay-Later (BNPL): Generation Z's Dilemma on Impulsive Buying and Overconsumption Intention. Advances in Economics, Business and Management Research, 193, 130-137. doi: 10.2991/aebmr.k.211115.018

Maggio, M., Williams, E., \& Katz, J. (2022). Buy Now, Pay Later Credit: User Characteristics and Effects on Spending Patterns. https://doi.org/10.3386/w30508

Morgan Stanley, (2022). Here's why E-commerce growth can stay stronger for longer. https://www.morganstanley.com/ideas/global-ecommerce-growth-forecast-2022

Narvar, (2022). State of Returns: The End of One-Size-Fits-All Returns.
https://corp.narvar.com/resources/2022-the-state-of-returns

Pelham, B. W., Sumarta, T. T., \& Myaskovsky, L. (1994). The easy path from many to much: The numerosity heuristic. Cognitive Psychology, 26(2), 103-133.
https://doi.org/10.1006/cogp.1994.1004

Powell, R., Do, A., Gengatharen, D., Yong, J. \& Gengatharen, R. (2023) The relationship between responsible financial behaviours and financial wellbeing: The case of buy-now-pay-later. Accounting \& Finance, 00, 1-21. doi: https://doi.org/10.1111/acfi. 13100

Relja, R., Ward, P. \& Zhao, A.L. (2023). Understanding the psychological determinants of buy-now-pay-later (BNPL) in the UK: a user perspective. International Journal of Bank Marketing, Vol. ahead-of-print No. ahead-of-print.
https://doi.org/10.1108/IJBM-07-2022-0324

Reshadi, F., \& Fitzgerald, M. P. (2023). The pain of payment: A review and research agenda. Psychology \& Marketing, 1-17. https://doi.org/10.1002/mar. 21825

Robertson, T. S., Hamilton, R., \& Jap, S. D. (2020). Many (un)happy returns? the changing nature of retail product returns and future research directions. Journal of Retailing, 96(2), 172-177. https://doi.org/10.1016/j.jretai.2020.04.001

Schomburgk, L. \& Hoffmann, A. (2023), "How mindfulness reduces BNPL usage and how that relates to overall well-being", European Journal of Marketing, 57(2), 325-359. https://doi.org/10.1108/EJM-11-2021-0923

Shah, A. M., Eisenkraft, N., Bettman, J. R., \& Chartrand, T. L. (2016). "Paper or plastic?": How we pay influences post-transaction connection. Journal of Consumer Research, 42, 688-708. https://doi.org/10.1093/jcr/ucv056

Sheehan, D., \& Van Ittersum, K. (2018). In-store spending dynamics: How budgets invert relative-spending patterns. Journal of Consumer Research, 45(1), 49-67. https://doi.org/10.1093/jer/ucx125

Siemens, J. (2007). When Consumption Benefits Precede Costs: Towards an Understanding of 'Buy Now, Pay Later’ Transactions. Journal of Behavioral Decision Making, 20(5), 2007, 521-531, https://doi.org/10.1002/bdm. 564 .

Skwara, F. (2023). Effects of Mental Accounting on Purchase Decision Processes: A Systematic Review and Research Agenda. Journal of Consumer Behaviour, 22(3) https://doi.org/10.1002/cb.2193.

Suwelack, T., Hogreve, J., \& Hoyer, W. D. (2011). Understanding money-back guarantees: Cognitive, affective, and behavioral outcomes. Journal of Retailing, 87(4), 462-478. https://doi.org/10.1016/j.jretai.2011.09.002

Taylor, J. W. (1974). The role of risk in consumer behavior. The Journal of Marketing, 38(2), 54-60. https://doi.org/10.2307/1250198

Thaler, R. H. (1999). Mental Accounting Matters. Journal of Behavioral Decision Making, 12(3), 183-206.
https://doi.org/10.1002/(sici)1099-0771(199909)12:3<183::aid-bdm318>3.0.co;2-f

Thaler, R. H. (2008) Mental Accounting and Consumer Choice."Marketing Science, 27(1), 15-25. https://doi.org/10.1287/mksc. 1070.0330 .

Wolny, J., \& Charoensuksai, N. (2014). Mapping customer journeys in multichannel decision-making. Journal of Direct, Data and Digital Marketing Practice, 15(4), 317-326. https://doi.org/10.1057/dddmp.2014.24

Worldpay. (2022). The Global Payments Report: Powering the next payments frontier. Worldpay from Fidelity National Information Services. https://offers.worldpayglobal.com/rs/850-JOA-856/images/ENGPR2022.pdf

Xiao, B., \& Benbasat, I. (2011). Product-Related Deception in E-Commerce: A Theoretical Perspective. MIS Quarterly, 35(1), 169-195. https://doi.org/10.2307/23043494

Xu, N., Bai, S. \& Wan, X. (2017). Adding pay-on-delivery to pay-to-order: The value of two payment schemes to online sellers. Electronic Commerce Research and Applications, 21, 27-37. https://doi.org/10.1016/j.elerap.2016.12.001

Xu, Y., Hua, G., Cheng, T., Choi, T., Li, Y., \& Liu, S. (2022). Retailing and ordering strategies for online apparel retailers facing bracketing purchase behaviour. International Journal of Production Research, 61(9), 2841-2853.
https://doi.org/10.1080/00207543.2022.2070045

Zellermayer, O. (1996). "The pain of paying". (Doctoral dissertation). Department of Social and Decision Sciences, Carnegie Mellon University, Pittsburgh, PA.

## Appendix

## Study 2

| Gender | Percent total |
| :--- | :--- |
| Male | $44 \%$ |
| Female | $56 \%$ |
| Other | $0 \%$ |


| Age | Percent total |
| :--- | :--- |
| $19-22$ | $45,7 \%$ |
| $23-35$ | $15,5 \%$ |
| $36-72$ | $38,8 \%$ |


| Country | Percent total |
| :--- | :--- |
| Sweden | $85,3 \%$ |
| UK, Belgium, Italy, <br> Finland, Germany, <br> China, Denmark, <br> Netherlands, \& USA | $14,7 \%$ |

## Survey

|  | Question | Answer alternatives |
| :---: | :---: | :---: |
| Q1 | How often do you order multiple sizes and colours of the same clothing item, when shopping online, with the intention of returning some of the items? | 1. Always <br> 2. Most of the time <br> 3. About half the <br> 4. Sometimes <br> 5. Never |
| Q2 | Have you ever found that the sizes of a particular brand tend to run smaller or larger than other brands? | 1. Yes |
| Q3 | Does this affect your decision to order multiple sizes of a product from that brand? | 1. I order more sizes than usual to ensure the best fit <br> 2. I order fewer sizes than usual to avoid the hassle of returns <br> 3. I avoid ordering from that brand altogether |


|  |  | 4. I make a guess on which size will fit me best and order only that size |
| :---: | :---: | :---: |
| Q4 | Do you prefer retailers that offer a wide range of sizes for each product, or retailers that offer fewer sizes but with more precise measurements? | 1. I prefer a wide range of sizes <br> 2. I prefer fewer sizes with precise measurements <br> 3. I have no preference |
| Q5 | When returning products bought online, do you consider the impacts on the retailer? | Interval scale (1-7) from Not at all to very much |
| Q6 | When you place an order online for clothing with the intention of returning part of the order, what impact do you believe it to have on the retailer? | Interval scale from -3 to 3 . Negative impact to positive impact |
| Q7 | When returning products bought online, do you consider the impacts on the environment? | Interval scale (1-7) from Not at all to very much |
| Q8 | When you place an order online for clothing with the intention of returning part of the order, what impact do you believe it to have on the environment? | Interval scale from -3 to 3 . Negative impact to positive impact |
| Q9 | How important is it, for your loyalty towards a retailer that you can easily return the items you ordered online? | 1. Extremely important <br> 2. Very important <br> 3. Moderately important <br> 4. Slightly important <br> 5. Not at all important |
| Q10 | When shopping for clothes online, what is your preferred payment method of choice? | 1. Pay the full payment amount directly using a debit card <br> 2. Pay the full payment amount directly using a credit card <br> 3. Pay later using services like Klarna Pay Later <br> 4. Divide the payment into incremental payments using services like Klarna Slice It <br> 5. Other alternatives |
| Q11 | What psychological factors impact your choice of payment method the most when buying clothes online? | 1. Convenience <br> 2. Security <br> 3. Rewards and incentives <br> 4. Budgeting <br> 5. Social norms <br> 6. Habit and personal preference <br> 7. Other |
| Q12 | Consider the following shopping scenarios and choose which payment method would be your preferred choice for each scenatio |  |
| Q12a | Buying few cheap items | 1. Direct card payment <br> 2. Klarna Pay later <br> 3. Other |
| Q12b | Buying few expensive items | 1. Direct card payment |


|  |  | 2. Klarna Pay later <br> 3. Other |
| :---: | :---: | :---: |
| Q12c | Buying few expensive items | 1. Direct card payment <br> 2. Klarna Pay later <br> 3. Other |
| Q12d | Buying many expensive items | 1. Direct card payment <br> 2. Klarna Pay later <br> 3. Other |
| Q12e | Buying from a new brand | 1. Direct card payment <br> 2. Klarna Pay later <br> 3. Other |
| Q12f | Buying from a website with free returns | 1. Direct card payment <br> 2. Klarna Pay later <br> 3. Other |
| Q12g | Buying from a website with little product information | 1. Direct card payment <br> 2. Klarna Pay later <br> 3. Other |
| Q12h | Buying from a website that has a store nearby where returns can be dropped off | 1. Direct card payment <br> 2. Klarna Pay later <br> 3. Other |
| Q13 | Do you prefer shopping for clothes online or in physical stores? | 1. In physical stores <br> 2. Online <br> 3. I am indifferent |
| Q14 | Approximately how often do you order clothes online? | 1. 1-2 times a week <br> 2. 1-2 times a month <br> 3. 1-2 times every 3 months <br> 4. 1-2 times every half a year <br> 5. 1-2 times every year <br> 6. Never |
| Q15 | How loyal are you to one or a few online fashion retailers, on a scale of 1-7 (with 7 being the most loyal and 1 being the least) | Interval scale from 1 to 7 |
| Q16 | Approximately how many times have you returned clothing that you have bought online in the last 12 months? | 1. Never <br> 2. Once <br> 3. 2-5 times <br> 4. 5-10 times <br> 5. 10+ times |
| Q17 | When you make a return, how many items do you return on average? | 1. 1-2 <br> 2. 3-4 <br> 3. $5-6$ <br> 4. $7-10$ <br> 5. $10+$ <br> 6. I never make returns |
| Q18 | What would you say is the most common reason for you to return clothing that you have bought online | 1. Size not as expected <br> 2. Quality not as expected <br> 3. Ordered multiple sizes of the same |


|  |  | item <br> 4. Looked different from how it looked online <br> 5. Wrong item or items delivered <br> 6. Late delivery <br> 7. Regretted the purchase <br> 8. Other reason <br> 9. Never returned clothing items which were bought online. |
| :---: | :---: | :---: |
| Q19 | Do you find it more or less painful to pay with Klarna (buy-now-pay-later) compared to direct card payment? | Interval scale from 1 to 7 . Less painful to more painful |
| Q20 | What is your gender? | 1. Male <br> 2. Female <br> 3. Non-binary / third gende <br> 4. Prefer not to say |
| Q21 | What is your age? | Open text answer |
| Q22 | Please state your main occupation (you can select multiple answers) | - Student <br> - Working full-time <br> - Working part-time <br> - Unemployed <br> - Retired <br> - Other |
| Q23 | If you are not situated in Sweden, please state in which country you live (otherwise leave blank) | Open text answer |
| Q24 | If there are any other variables affecting your preferred payment method or reason for returning items bought online, please highlight that in the text box below (otherwise leave blank) | Open text answer |

