

Buy now pay later, irrational or responsible?



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## Abstract

As a novel payment method buy now pay later services allow consumers to buy products before having to pay for those products. This is similar to credit cards, but this new credit payment method has some traits which allow it to be different from other credit payment methods. The reminder fees allow buy now pay later services to charge a higher percentage of interest on the purchase and without the same credit checks as credit cards people can use the credit payment system much easier. This lower barrier of entry and higher additional fees make it feasible for consumers to become indebted to buy now pay later companies like Klarna. These companies would say that it is the responsibility of the consumer to manage their purchase behaviour and to control the irrational or responsible purchases in order to avoid debt. However, are there factors that influence consumer purchase behaviour? In this study several psychological mechanisms including urgency impulsivity, the perceived sense of convenience, payment pain, routine and purchase cost were selected, alongside with three different payment methods (debit card, credit card and Klarna) to test whether such mechanisms could influence the purchase behaviour of consumers. To test this an online experiment was created in which participants were asked questions about these psychological mechanisms while being in a purchase scenario. From the 240 responses 176 responses were used in the data analysis. In the results from the analysis, it was shown that urgency, impulsivity, routines and payment pain all had a negative effect on irrational purchases and thereby stimulating responsible purchases. The only factors that had a positive effect on irrational purchases choices was Klarna. Klarna together with the perceived sense of convenience had a negative effect on irrational purchase choices but on its own it had a positive effect on irrational purchases.

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## Introduction

Ads on your phone, ads on YouTube videos, commercials consumers are enticed to purchase by the sheer amount of advertising that they come across. This is strengthened by the worldwide range of online retail which has broadened the possibility for purchasing even further. With so many retailers and brands to choose from, why would you limit your consumption? Consumers can pay for their purchases in different ways. Consumers can pay with a debit account which can be used in physical stores or online with payment portals like Ideal. With a debit account only, purchases can be made with money that is deposited on the account, if the account is emptied a consumer can choose to overdraw their account which is a form of revolving credit. Meaning that the consumer uses money up to an agreed limit, this is money which they themselves did not deposit into the account. Revolving credit can also be used without a debit account as a recurring loan. Overdrawing a debit account and revolving credit fall into a different category namely credit. Credit is the financial means of using money from another party which you then owe to that party and have to pay back to keep it from becoming a debt. Credit services are offered in a variety of ways: loans, leasing, overdrawing a debit account and credit cards. Besides these established credit payment services there has also been a new credit service on the rise, the so called buy now pay later services. Buy now pay later services are credit services that have increasingly been used by young consumers in the Netherlands (*Hoe Klarna en Riverty jongeren in de schulden storten, z.d.-b*). Buy now pay later services allow people to purchase a product which the service pays for, and the consumer repays the service after a specific period. Although similar to credit cards the services are different because of the terms of use. While buy now pay later services are an effective method of credit payment the danger lies with consumers using buy now pay later services beyond the extent that they can pay back. This can lead to debt which burdens consumers with additional payments which could reduce the quality of living. With the example of many consumers accumulating debt by using buy now pay later services there is increasing critique on this new form of credit.

The critique on buy now pay later services is based on several reasons. Buy now pay later services use fees instead of interest on top of the purchase price when consumers have not paid back their purchase in the agreed upon period of time. These fees allow buy now pay later services to charge a higher additional amount than credit cards can with interest, making it more difficult for consumers to pay back what they owe. There is also the fact that buy now pay later users do not have to fulfil the stringent credit checks that credit card users have to go through. Though not being screened thoroughly for the financial risk is dangerous for consumers who make a conscious purchase this is perhaps even more problematic for consumers who make impulse purchases with buy now pay later services. Research indicated that participation in buy now pay later credit services had a connection with the impulse buying behaviour of young women. Participants were recorded to have more online impulsivity and a greater chance of buying products in the future when buy now pay later services were available to them (Ah Fook, & McNeill, 2020). Credit services like credit cards or buy now pay later services would argue against their criticism by pointing out that consumers have financial freedom to make their own decisions on how to spend their money. Buy now pay later services provide a specific service which if used in a responsible manner can help consumers with purchasing. Irresponsible use of buy now pay later services would be argued to be a problem that starts because of the irresponsible behaviour from an individual not because the service itself is irresponsible. It is still unknown to which extent buy now pay later services influence consumers to make irresponsible purchases, meaning purchases that go beyond their spending means. To understand this, it is important to know whether different psychological mechanisms influence consumers into making irresponsible purchase choices and whether that be mechanisms from buy now pay later services or other credit services. Mechanisms like urgency, perceived sense of

convenience, impulsivity and the costs of a service. How each of these affect consumers purchasing decision on their own and together could provide more detailed insight into why irrational or responsible purchases choices are made. By gaining insight on consumer purchasing this knowledge could be shared with consumers to allow them to make more deliberate purchases which hopefully can limit the chance of consumers getting into debt.

In order to possibly get a better comprehension of the influence of buy now pay later services this study aims to understand the psychological mechanisms that are influential on consumers irresponsible purchase choices. The psychological mechanisms that are of influence for Klarna on purchases and the mechanisms of other credit services on purchases, and whether these are different.

With this goal in mind, it leads to the following research question and sub-questions.

Research question: Which psychological mechanisms that play a role in the buy now pay later services influence consumers to make more irrational purchases instead of responsible purchases compared to consumers using other credit payment services?

Sub-questions

1. Which psychological mechanisms are involved when consumers use credit services?
2. Which psychological mechanisms are involved when consumers make irrational purchases compared to responsible purchases?
3. In terms of relevant psychological mechanisms how do buy now pay later services differ from other credit payment services that influence the purchases of consumers?

The results of this research aim to contribute to the growing knowledge of buy now pay later services. It does so by indicating how the influence of buy now pay later services on consumers compares to the influence of other credit payment services on consumers. The practical relevance of this study is that the results could help consumers to understand the impact that buy now pay later services have on them. Which could allow consumers to make more considerate decisions in their use of buy now pay later services. The results could also be helpful for buy now pay later services and retailers that use these services as the results can show them their impact on consumers. This insight could help them with their consumer relationship by supplying information for further adjustments in their consumer policies and interactions, sharing this information with the retailers which in turn could strengthen that relationship.

## Literature background

This chapter presents the psychological mechanisms that were found in the literature and deemed relevant influences in the purchase process of consumers. There is currently not a comprehensive body of literature on buy now pay later services, this means that literature pertaining of other payment types are mostly used. The relevant psychological mechanisms taken from the literature are then used in this study to observe whether they also are of influence on consumer purchasing when buy now pay later services are used. In the consumer purchasing process there are several moments the moment which this study focusses on is the moment when the actual purchase is made. There are concepts which will be addressed in this chapter which will also play a role in the purchase stages before and after the actual moment of purchase, but the moment of purchase is the focus of this study. However, before the psychological mechanisms are revealed the different credit services are explained. These credit services are explained in order to understand how buy now pay later is different from other credit services. Credit services can be categorized into three groups.

### Loans And Overdrawing

Loans and revolving credit are credit services whereby the consumer has an agreement with financial institution like a bank or a loan service. These institutions will extend credit to consumer by the consumer signing an agreement for a specific amount and an agreed upon period in which the consumer must pay back the extended credit. The consumer also agrees to an interest rate which determines the interest payment that the consumer must pay to the institution before the end of the period. The institution that provides this extension of credit is usually not providing the credit with any particular purpose in mind. There is an exception in the case of a mortgage. This separation for the purchase process of the credit differentiates loans and revolving credit from leasing and credit cards.

### Leasing & instalment plans

Leasing is a credit services where the use of a product or service is agreed upon, in connection to a credit payment for the use of the service or product. Similar to loans and overdrawing the period of the credit payment is agreed upon by both parties in advance. Different from loans and credit cards is that for leasing the period of credit payment co-insides with the use of the product or service. Leasing can be separated into two kinds financial and private lease. Instalment plans are a similar payment service whereby the consumer pays for the product or service in parts while already using the product or service. After all payments have been made the instalment plan is fulfilled, when fulfilled the product becomes the property of the consumer. While with leasing the product can be bought or is returned to the leasing party.

### Credit cards and buy now pay later services

Credit cards and buy now pay later services are credit services that are connected to the purchase and ownership of products and services. A third party pays for the purchases when they are bought, and the consumer repays the third party after a period. This is different from loans and leasing. For the use of credit card services, the consumer pays to use the account plus the expenses that have been accumulated by the credit card paying for them in advance. What differentiates the buy now pay later services from the credit cards is the fact that they use fees instead of interest payments, and do not conduct a stringent credit check like credit cards.

Fees work as follows, if the consumer cannot pay the company back before the deadline of the payment period an additional fee is added to the purchase payment with a new deadline. If the

consumer does not fulfil their payments additional fees will be added. For example, the buy now pay later service Klarna charges an initial fee of 13.50 euros for purchases above 20 euros and a fee of 7.50 euros for purchases lower than 20 euros. These are fees belong in the category of reminder costs or referred to in Dutch as aanmaningskosten. Reminder fees are allowed to charge a higher percentage on the initial payment than interest payments in the Netherlands (Ministerie van Algemene Zaken, 2023). Reminders fees can charge up to 15% with a minimum of 40 euros while interest payments can be no more than 12% annual interest (Ministerie van Algemene Zaken, 2021). Because these fees charge higher additional payment consumers have a higher likelihood of not being able to pay this additional cost than with other credit payment services.

Another difference is that to apply for a credit card one has to pass a screening test which in the Netherlands involves a BKR test (Stichting Bureau Krediet Registratie test). The Stichting Bureau Krediet Registratie is an independent organisation which is tasked with the management of all credit information in the Netherlands and also help municipalities with debt problems of their citizens. Buy now pay later services service buy now pay later services do not use such a test. Which means that the oversight of the BKR which that is meant to protect consumers is not there for users of BNPL services. There are buy now pay later services that conduct a "soft credit check". However, this "soft credit check" is far less thorough than the BKR test.

## Psychological Mechanisms

To identify relevant psychological mechanisms for the purchase process of consumers two factors are important: the different stages of the purchasing process and the different payment methods. In the process of purchasing there are different stages such as: picking a retailer to purchase from, choosing a product category, picking a product to purchase and also choosing the payment type of your choice and purchasing the product of your choice. This research focuses on the choice of payment type and the purchasing of the product. The payment method is important because different methods of payments have been shown to be influenced by different psychological mechanisms which are involved in the purchasing process of consumers. There is the influence that urgency has shown to have on payment method choice (Billieux et al., 2010) and purchasing behaviour of consumers (Wu, et al., 2021). Convenience has been indicated as a factor of influence on payment method adoption (Schuh et al., 2011) as well as a preference to distance oneself from the payment in part by postponing payment if possible (Deufel et al., 2018). In the other steps of the purchasing process psychological mechanisms have also been found which could have an influence on the payment method choice. This includes the psychological mechanism of the dual process theory (Evans et al., 2011) and how this can lead to a sense of urgency on consumer behaviour in the product choice stage (Wu et al., 2021) which is connected to its effect in the purchasing stage (Billieux et al., 2010). With the possible influences of psychological factors in stages before the payment method choice these earlier influences will also be discussed as antecedent steps of the influence of psychological mechanisms on the choice of payment type.

### Urgency & Impulsivity

Antecedent to the purchasing decision there is the step of choosing the product one wishes to purchase. In the stage of picking a product, the urgency of the purchase can be emphasised by the retailer indicating that only a limited supply is still available. This sense of urgency that is created is an example of how consumers can be nudged to use system one. This is because the quick decision that consumers feel that they have to make is indicative of system 1 decision making where decisions are made quickly and as a reaction. This sense of urgency could carry over to the payment method with a consumer being more inclined to use a payment method which he deems to be

faster, in order to purchase a product from the limited supply. Similar to a limited supply, a limited amount of time in which the purchase has to be made could also incentivise a consumer to use a payment method which he deems to be faster (Wu., et al 2021) or effect consumers purchase behaviour (Klimm., et al 2023). The effect that a sense of urgency has on the choices from consumers has been shown in previous research, where it increased the likelihood of impulsive behaviour of consumers who find it difficult to not respond to an urgency cue when faced with purchasing, phone use or internet use (Billieux., et al 2010), although there has also been other research which indicates that urgency has minimal or no influence on consumer purchase decisions (Ladeira., et al 2023 ) and other research on impulsivity suggest that the environment whether it is online or in a store can influence the amount of impulsivity (Aragoncillo & Orus., 2018). This difficulty of limiting purchases when consumers have impulsive purchasing behaviours can lead to irresponsible purchases. The reason being that impulsivity leads to purchases that go beyond their intended number of purchases (Ah Fook., et al 2020). This can cause consumers to go beyond their own financial means because the possibility to use the financial means of other parties like with a credit card or buy now pay later services allows consumers to make excessive purchases. Excessive purchases are purchases which the consumer cannot pay back. Which is an example of irrational purchases because purchasing a product despite a high likelihood of accumulating debt is not rational. Not having the money to pay back the purchases leaves the consumer in debt to the credit card provider, or the buy now pay later service. In both cases the debt increases the longer the consumer has not repaid the debt. With these possible effects of the urgency, impulsivity and the dual process theory on the purchasing behaviour the following hypotheses were constructed to test the effect of these factors in this study:

H1) Urgency increases irrational purchase choices mediated through impulsivity and perceived convenience.

H2) Impulsivity increases irrational purchase choices.

Heuristics, Convenience & sense of pain towards payments

Human decision-making is not always rational, humans are actually often irrational (Del Campo., et al 2016). This irrational side of people can lead them to make irrational choices for their purchases which then lead to irrational purchases. The irrational choices are often made because of heuristics which can be described as mental shortcuts that people take in order to make decisions with less effort (Del Campo., et al 2016). With this preference for decision making with the least amount of effort expenditure, the ease with which a decision can be made is influential for which payment method is chosen by a consumer. This is also supported by scientific research that indicates that the ease of use of a payment method is an influential factor on the choice of payment method that is made by consumers (Schuh., et al 2011). The ease of use as an influence is also supported by other research which indicated that convenience was the determining factors in the choice between payment methods (Boden., et al 2020). With credit cards being preferred over cash payments and in later research mobile payments being preferred over credit card payments (Boden., et al 2020). Research has given a plausible explanation why consumers have a preference for credit cards over cash. Research showed that with every payment, consumers experience a sense of pain about the money that is paid (Soman., et al 2003; George & Krishnan., 2022). The sense of pain is diminished the further a consumer is removed from the actual action of paying (Soman., et al 2003). This is why cash feels more painful because the payment is physically performed by the consumer at the same time of the purchase while a purchase with a credit card does not involve a physical transaction and the payment is not made at that moment in time. The preference for payment methods where payment is deferred to a later time period was also shown in another study (Deufel., et al 2018). The

lower sense of pain that consumers feel when using a credit card in comparison to a cash payment also helps to explain why consumers find it easier to make purchases with credit cards and are more inclined to make additional purchases with credit cards (Soman., et al 2001). This increased ease and higher likelihood of making more purchases with credit cards than with cash. The same study also showed it increases the chance of irresponsible purchases being made. With these possible effects of the payment pain and payment methods on the purchasing behaviour the following hypotheses were constructed to test the effect of these factors in this study:

H3) The credit card payment method and buy now pay later method increase irrational purchase choices compared to the debit card payment method.

H4) The debit card payment method increases the payment pain compared to the credit card payment method and the buy now pay later payment method.

H5) Payment pain decreases irrational purchase choices.

### Dual process theory

An important theory in the field of consumer decisions making decisions making that is connected to heuristics is the dual process theory. In this theory decisions are split into two categories, in system one decisions are made quickly and without much deliberation while in system two decisions are taken deliberately and thought about with more detail (Evans, et al., 2011). There are also different schools of thought on how people use system one and system two in the dual process theory. With Kahneman believing that people are always starting in system one and change to system two, if necessary, while other researchers like Evans believe that people can switch back and forth between system one and two (Milkman., et al 2009). As these two different interpretations of the dual process theory clash, one interpretation has to be chosen as the one that this research will abide by. This research chooses to abide by the interpretation that people can switch between system one and two. This interpretation is chosen because this study takes into account other factors that of influence on the sense of convenience. This influence of convenience is expected to have an influence on the dual process system that is used, which is possible with the point of view from Evans. With Kahneman the other factors would have no influence on the change from system one and two and in this study, it is believed that these factors also allow consumers to be steered to system one after having used system two. Two different systems exist because choices have to be made in different circumstances. When a situation requires a decision to be made quickly, a system one decision can act quickly. If decisions require the comparison of different scenarios, then system two can contemplate the different scenarios (Evans., et al 2003). Buy now pay later services can use this knowledge to their advantage by putting factors in place that influence consumers to use the decision-making system that they want consumers to use. Hereby, a consumer makes a decision with system one because with system one the consumer does not deliberate as much about the decision as with system two. Deliberation which could have made the consumer reconsider their decision to purchase. With these possible effects of convenience on the purchasing behaviour the following hypotheses were constructed to test the effect of this factor in this study:

H6) The perceived sense of convenience increases the effect of payment methods on irrational purchase choices.

H7) The perceived sense of convenience increases irrational purchase choices.



## Low or high-cost purchases

Besides the urgency that is used to steer consumers towards system one decision making there is also another factor that could be involved, which is the amount of money for which purchases are made. Research has indicated that with low-cost purchases, consumers are more likely to rely on routine behaviour which involves less elaborative decision making (Madhavan., et al 2015). The use of routine behaviour to make a purchase decision is indicative of system one decision making because system 1 decisions are made automatically and with a small amount of deliberation which is what routine behaviour involves as decisions. This routine purchasing behaviour for low-cost purchases has become more significant with the preference for debit cards and credit cards having increased in comparison to cash (Jonker., et al 2017). Not only the general preference, but also the preference to use credit cards or debit cards for small purchases has increased. With the research indicating that consumers find it easier to make more purchases with credit cards (Jonker., et al 2017). This is used by the online environment steering consumers to make purchase decisions using system 1 decision by using a sense of urgency (Wu., et al 2021) together with the stimulating effect of low-cost purchases. System one decisions as routine driven purchase behaviour rely on less elaborative decision making which makes it more susceptible for impulsive purchasing. This is something one might fear because the decision making of consumer purchases is a process that involves irrational influences (Van der Horst., et al 2013). With these possible effects of the purchase size on the purchasing behaviour the following hypothesis was constructed to test the effect of purchase size in this study:

H8) Low-cost purchases increase irrational purchase choices and decreases responsible purchase choices compared to high-cost purchases mediated through perceived sense of convenience.

H9) A routine purchase behaviour increases the perceived sense of convenience of Low-cost purchases.

Before moving on to the method chapter an overview of all the hypotheses which were explained in this chapter is listed on the next page. There is also a graphical representation of the theoretical framework (figure 1) which shows the concepts and the hypotheses which are used in this study.

## Hypotheses

H1) Urgency increases irrational purchase choices mediating through impulsivity and perceived convenience.

H2) Impulsivity increases irrational purchase choices.

H3) The credit card payment method (2) and buy now pay later method (3) increases irrational purchase choices compared to the debit card payment method (1).

H4) The debit card payment method (1) increases the payment pain compared to the credit card payment method (2) and the buy now pay later payment method (3)

H5) Payment pain decreases irrational purchase choices.

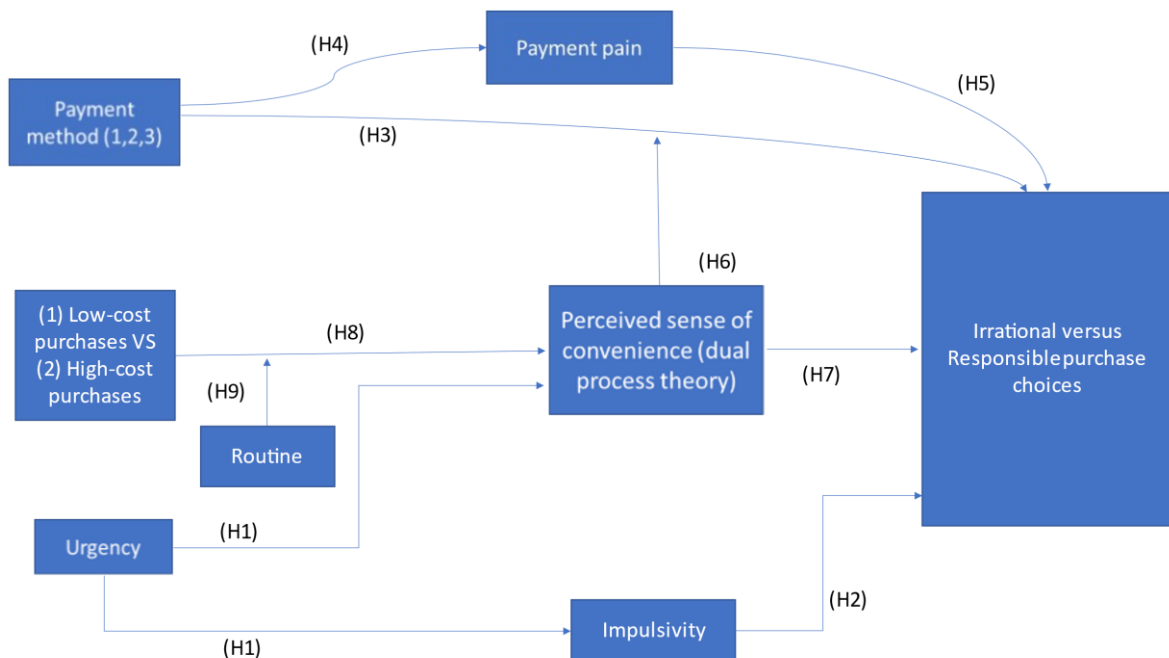
H6) The perceived sense of convenience increases the effect of payment methods on irrational purchase choices.

H7) The perceived sense of convenience increases irrational purchase choices.

H8) Low-cost purchases (A) increase irrational purchase choices and decreases responsible purchase choices compared to high-cost purchases (B) mediating through perceived sense of convenience.

H9) Routine behaviour increases the effect of Low-cost purchases on irrational purchase choices mediated through perceived sense of convenience.

Figure 1: Theoretical framework



## Method

### Participants and design

To conduct this study, convenience sampling was used to disperse the survey and reach a minimum number of participants. This minimum number of participants was calculated with G\*power where a p value of 0.05, a power value of 0.80 and an effect size eta square of 0.09 were used. This calculation indicated that 180 participants would be the minimum number of participants. Previous literature on buy now pay later services, impulsivity, payment methods and G\*power was consulted to see which power value would be most appropriate for this study (Malone., et al 2016; Schulz., et al 2005). It appeared that previous studies that had been consulted did not indicate which power value they used to estimate their sample size, there was also research that did not use a calculation like G\*power to calculate the required sample (Billieux., et al 2010). However, in literature on the correct use of G\*power testing, 0.80 was indicated as the standard level of power when conducting a G\*power test for social science research (Malone., et al 2016). This study is not attempting to conduct medical research where the possibility of a side effect requires a power of 0.90 or 0.95 to rule out the effect of such a side effect, therefore 0.80 is a sufficient size for this study (Schulz., et al 2005). The convenience sampling in this study was done by distributing the survey through the online platforms of WhatsApp, Facebook, Instagram, and LinkedIn. Participants that were targeted had to meet the following requirements: 1) Be age 18 or older, 2) have completed a high school level education, 3) live in the Netherlands.

The theoretical framework provides a full factorial between subject's design of three payment methods (Debit card, Credit card and buy now pay later) x 2 kinds of urgency (high urgency and low urgency) x 2 purchases sizes (small purchases and large purchases). This design of 3 by 2 by 2 provides 12 possible ways in which the conditions can be matched together. To test these 12 different scenarios, participants will be divided as equally as possible into 12 groups each matched to a specific combination of the conditions. As a between subjects' design is used the participants only got to answer questions about the conditions in their scenario. This choice was made as a within subjects' design would require each participant to answer questions about each of the 12 scenarios which would increase the length of the survey and make it more likely that participants would get fatigued and maybe frustrated with the survey. Participants could experience fatigue because of the length and the fact that the scenarios are quite similar could give them a sense that they were answering questions about the same thing which could frustrate them. To build the survey, the software from Qualtrics was used.

### Stimuli

Participants are presented with a scenario which is different for each of the twelve groups as each group gets a scenario with independent variable stimuli which is different from the other groups. Stimuli are a piece of text which describe the variation of the independent variable from the theoretical framework. This includes one of the three variations of payment method which can be Debit account, Credit card and Klarna (as example of a buy now pay later service). One of the two variations of Urgency which can be either a High-time urgency Stimuli of 24 hours or a Low-time urgency Stimuli of 1 month. Also, one of the two variations of purchasing cost which can be the high-purchasing cost Stimuli "a high-prestige brand and are a high-cost item" or the Low-cost purchase Stimuli "a low-prestige brand and are a low-cost item". Below an example is given of all the different kinds of stimuli that can be presented to participants in the scenario they receive. In Appendix A the specific stimulus of each independent variable is given as well as the scenarios for each specific group.

## Example

"You are shopping online because you want to purchase some new clothes for a party which is in (24 hours or 1 month). You find some clothes you like, and you intend to pay for them with your (*Debit account, Credit card or with Klarna*). The clothes you intend to purchase are from a (*High-prestige brand and are a high-cost item or Low-prestige brand and are a low-cost item*)".

## Measures

To measure for the likelihood a participant would purchase a product in a specific scenario, scaled questions are used. For scale, the choice was made to use a seven-point Likert scale (Joshi, et al., 2015). The choice for the 7-point Likert scale instead of a 5-point Likert scale was made because the 7-point scale allows for a participant to give a more specific indication of what they would do (Dawes., 2008).

For each concept that was not used in the stimuli, scenario measures were used to test the effect of that concept and the effect on the purchasing behaviour. In previous research on buy now pay later services, Impulsivity and purchasing behaviour (Aboelmaged., et al 2013; Ah Fook., et al 2020; Liu., et al 2013) concepts had been measured on multiple item scales. Still, other research on single versus multiple item scales indicated that single item scales could be just as useful as long as the concept can be defined well enough in one question (Allen., et al 2022). Another reason to why single item measures were chosen for several of the concepts, was that keeping measures as short as possible is important because otherwise participants could get frustrated at being asked very similar questions and this frustration could affect the manner in which they would answer the survey. Based on this literature the choice was made to use 1 item scales for concepts which could be defined fully in one question and to use multiple item scales for concepts which needed multiple questions to be defined.

*Perceived payment pain* was measured on a one 1 item scale. The question asked: "Did you feel any sense of pain while making the payment and shortly after the purchase?". Participants could answer on a 7-point Likert scale from 1: *No pain at all* to 7: *I felt a very large sense of pain*. This measure was based on a 5-point Likert's scale on pain of payment (1 for *No pain at all* and 5 for *Very painful*) used in a previous study (Shah et al., 2016). To change the scale from a 5 point to a 7-point scale, two additional points on the scale were added with on the low end using no pain at all as the lowest point but adding *slightly painful* as the 2<sup>nd</sup> point and using *very painful* as the sixth point.

*Irrational purchase choices* and *responsible purchase choices* were measured on a multiple item scale. Two questions were asked. Question 1: "I would make this purchase if the cost are within my budget". Question 2: "I would make this purchase even if the cost are larger than my budget". Participants could answer on a 7-point Likert scale from 1: *I would strongly disagree* to 7: *I would strongly agree*. Which was adopted a previous study (Liu., et al 2013).

*Impulsivity* was measured with a multiple item scale. The first question asked: "I would be more inclined to make the purchases if I had seen those same clothes just before online". Participants could answer on a 7-point Likert scale from 1: *I strongly disagree* to 7: *I strongly agree*. The second question asked: "I would be more inclined to make the purchase if you had thought about purchasing those same clothes before that day". Participants could answer on a 7-point Likert scale

from 1: *I would strongly disagree* to 7: *I would strongly agree*. For both questions, the measurement scales were adopted from a previous study (Liu., et al 2013).

*Routine behaviour* was measured on a multiple item scale. Questions were constructed based on the SRHI scale from previous research (Verplanken., et al 2003). This choice was made to use three items from three features as these items and the features represented relevant elements of routines in the form of the history of repetition, the lack of awareness and efficiency. With the Identity not playing an important role in this study, the choice was made to not use any item from this feature. The feature of the difficulty to control behaviour was also left out because this aspect is already addressed with the concept of impulsivity. The first question asked: "The behaviour of making this purchase is something I would do automatically." This question is based on the second item which comes from the feature of a lack of awareness. Participants could answer on a 7-point Likert scale from 1: *I would strongly disagree* to 7: *I would strongly agree*. The second question asked: "The behaviour of making this purchase is something I would do without thinking". This question was based on the fifth item which comes from the feature of Efficiency as cognitive deliberation is not necessary for this behaviour. The third question asked: "The behaviour of making this purchase is something that belongs to my weekly or monthly routine". This question was based on the seventh item which belonged to the feature of the history of repetition (Verplanken., et al 2003).

*Perceived sense of convenience* was measured with a multiple item scale. The first question asked: "The ease of making this purchase is important to me?". Participants could answer on a 7-point Likert scale from 1: *I would strongly disagree* to 7: *I would strongly agree*. The question was based on a question from (Aboelmaged & Gebba., 2013) and the scale was adopted from a previous study (Liu., et al 2013) and adjusted to a 7-point scale. The second question asked: "The ease with which I can make a purchase makes me more inclined to make a purchase?". Participants could answer on a 7-point Likert scale from 1: *I would strongly disagree* to 7: *I would strongly agree*. This question was based on a question from a previous study (Davis., 1989) and adjusted for this specific study, the same scale as for the first question was used for this question.

#### Pre-test

To evaluate whether the visual stimuli of the survey fit the descriptive stimuli, 10 participants were asked to indicate the most expensive and least expensive version of a product from 9 examples, which are available in the Appendix. The results from the pre-test showed that one example was considered mostly as the most expensive with 4 out of 10 votes and one example was considered mostly as the least expensive with also 4 out of 10 votes. By claiming the greatest number of votes, these examples were chosen to represent the expensive and least expensive stimuli in the survey.



The first picture is visual stimuli example 4, the second picture is visual stimuli example 3.

#### Pilot test

A pilot test was conducted where 5 participants filled out the survey and could make remarks about the survey. This was done in order to check whether the stimuli had their intended effect and to check whether any adjustments had to be made to the survey. Each participant who took part in the pilot test fit the participant requirements. Three participants took the survey online while two participants did the survey in person explaining their thoughts while making the survey.

After completing any necessary adjustments, the survey would then be sent to participants through convenience sampling to gather the data for the study. The participants who took part in the Pre-test would not be approached to complete the adjusted survey.

#### Background questions

Background questions are put at the very end of the survey. The reason background questions are put in after the survey questions is that some background questions concerned topics related to the topics of the survey, which could possibly influence the manner in which participants answered the survey questions if they had first answered the background questions. The background questions included a background question about their age, gender, familiarity with payment methods and whether they had any experience with debt.

#### Procedure

For this study, the data collecting program of Qualtrics was used. Using convenience sampling, the link of the survey was sent to eligible participants through WhatsApp, LinkedIn, Signal, and Instagram.

Having received the link with the survey by clicking on the link, the participants would open the page of the survey. Before participants were able to answer the survey, they were first given a brief

summary about the topic of the study. After this summary, a form concerning their voluntary participation was presented which participants had to sign in order to go to the next page. After these preliminary steps participants could click on "Start Survey" in order to be randomly assigned to one of the twelve groups and start with the survey. This would lead the participants to the first part of the survey: the scenario page. This page included a short piece of text emphasizing the importance of reading and understanding the scenario, the scenario which participants had to read and a question to check whether participants had read and understood the scenario. After this page, on the next page participants had to answer questions regarding the choices they would make in the scenario they were put into. The first question was whether a participant would choose to make the purchases or decline to make the purchases. This question together with the scenario would indicate whether a participant would choose to make a responsible or an irrational purchase choice. The second question asked whether the participant would be more inclined to make the purchases if they had seen the same clothes earlier online. The third question was quite similar by asking the participants whether they would be more inclined to make the purchases if they had thought about purchasing the same clothes before that day. These questions were asked regarding the influence of impulsivity. For the next question participants were asked to indicate how much of a sense of pain they could feel during and shortly after making the purchase from the scenario. With this question the intention was to measure the payment pain that participants felt when using a specific method of payment in combination with urgency variation from the scenario. After answering the questions on payment pain participants answer three questions on perceived convenience. The first question asks the participant to indicate what sense of perceived convenience the payment method in the scenario gives to the participant. The second question asks the participant whether a higher perceived sense of convenience would incline them more to make the purchase the clothes? After having completed the survey participants would be required to answer a question about the scenario in order to test whether participants had understood the scenario correctly. This question was intended as a Manipulation check and was positioned at the end of the survey instead of the beginning to avoid reinforcing the effect of the scenario. After the Manipulation check question, participants were required to answer some background questions. After having finished these final questions, the participants were thanked for their contribution and could click on the submit button to finish the survey. Answering the questions in the survey including the basic information and background question should take participants an estimated ten minutes.

#### Data analysis

For the various concepts and hypotheses of this study a data analysis was conducted using SPSS. To test the first and second hypothesis (H1 & H2) an ANOVA in the form of a univariate analysis of variance was conducted. For the concept of payment method and for the H3 hypothesis a regression was performed including dummy variables in order to be able to use all three payment methods. For the H4 and H5 hypothesis the same regression as for the third hypothesis was performed except for the only difference being that pain payment was included as a mediator for the regression. For hypothesis H6 two tests were conducted before running the multiple regression. These two tests were a Grand Mean centring for the Perceived sense of convenience and an effect coding for the payment methods. For the H7, H8 and H9 hypothesis a univariate analysis of variance was performed in order to assess which variables would have an influence on the purchase choices

## Results

### Data screening

As an initial step in analysing the data participants who did not complete the survey were removed from the data set. In this removal the choice was made to remove the participants who had not filled in all the required questions. However, participants who had filled in all the required questions but were marked as unfinished, were retained because they had filled in all the important questions for the research. What many participants had done was fill in all the research questions but not clicked to advance to the final page which thanks all participants and ends the survey. This meant that from the 240 participants the data of 176 participants was used. This is a large drop off between the amount that responded and completed the survey. This is due to the fact that the many participants who opened the survey simply did not fill in all of the necessary survey questions for their data to be used.

### Recoding and computing data

In order to use the data from the survey, part of the data was computed to create variables which provided data for each participant for concepts that were measured with multiple item scales. The concept of irrational and responsible purchases was computed into the single variable of "purchasechoice". To do so the responsible purchase scores were subtracted from the irrational purchase scores to create a value that indicates the irrational purchase intentions from the two combined questions. For the other multiple items concepts the average scores of the multiple items could be used as computed variables because the questions did not include any opposite values like the irrational and responsible purchases did. The multiple items on the concept of routines (Cronbach alpha 0.7) were computed into a single item variable bearing the same name. The multiple items of perceived sense of convenience (Cronbach alpha 0.7) were computed into the single item variable of "perceivedease". The last multiple items to be computed into a single item were items for impulsivity (Cronbach alpha score of 0.5) which was computed into the variable "impulsivity". As with the other multiple items computed into single variables impulsivity use the reliability test of Cronbach alpha where in the case of impulsivity to questions were tested for their reliability. The Cronbach alpha of impulsivity indicates a greater amount of variance between questions for impulsivity then for the questions of routines and perceived sense of convenience because the score has a larger difference between the Cronbach alpha and the upper bound of 1 then the others. With this greater amount of variance in the measurement of impulsivity the results for this variable are less reliable than the results for the routines and perceived sense of convenience.

The three independent variables of urgency, payment methods and low or high-cost purchases, which were all used in the scenario of the survey, were recorded in order to create a new separate variable. These were the separate variables of payment methods (referred to as "payment types"), urgency which separate variable used the same name and low or high-cost purchases which was referred to as "PurchaseSize". This allowed for the three independent variables to be used separately for testing.

### Descriptive statistics

To get a first impression of the data and the results of the survey descriptive statistics were used to generate the mean and standard deviation of the computed variables and the single item of payment pain. In the survey participants had been given questions with seven possible answers with the first indicating that participants agreed the least with the statement and the seventh that



participants agreed the most with the statement. Looking at the table it can be understood that perceived sense of convenience and impulsivity scored above average from the seven-point Likert scale on the survey with a mean score of 4.92 for perceived sense of convenience and 4.82 for impulsivity. Also, payment pain had a score above average with a mean score of 4.11. Routine with a mean score of 2.72 indicates a less important factor for participants as it pertains to purchasing choices. Irrational purchase choices with a mean score of -3.07 indicated that participants would be more likely to agree to buy the jacket if this would be a purchase that fit their budget than if the purchase would go beyond their budget, which is then a responsible purchase.

Table 1: Descriptive Statistics of the main variables (N=176)

Variables	Minimum	Maximum	Mean	SD
Routine	1.00	6.33	2.72	1.25
Perceivedease	1.00	7.00	4.92	1.24
Impulsivity	1.00	7.00	4.82	1.20
PurchaseIrrational	-6.00	1.00	-3.07	1.77
Payment pain	1.00	6.00	4.11	1.37

Mean and Standard deviation table

PurchaseIrrational is measured on a scale from -6 till 6. This larger scale is also why the SD is higher than the other variables.

To give an accurate indication of the mean and the standard deviation scores for the computed variables a custom table (Table 2) was created with the mean and standard deviation scores per scenario. This scenario was determined by the purchase being either high or low-cost, high or low urgency and by the type of payment method that was used being either debit, credit or Klarna. The data from the different scenarios strengthens the notion that perceived ease of use and impulsivity are the highest scoring variables with payment pain ranking third and irrational purchase choices ranking the lowest. When comparing the scores in the different scenarios the three highest ranking scenarios in terms of overall scores for all variables are scenario 5, 3 and 11. With scenario 5 receiving the highest scores for the variable of routine and payment pain while scenario 3 got the highest scores for the variables of perceived ease of use and impulsivity. When studying these top three scenarios for possible similarities it is hard to find similarities that are true for all three, whether that be for the payment method, urgency condition or purchase cost. In terms of the standard deviation the irrational purchases measured with the "PurchaseIrrational" variable had the highest Sd value. This higher standard deviation was due to the fact that two opposing conditions of responsible and irrational purchase behaviour were computed into the "PurchaseIrrational" variable. This then led to the larger scale for "PurchaseIrrational" which as mentioned in the footnote of table 1 was the cause for the higher standard deviation value.

Interesting for the purchase behaviour is that irrational purchase variable scored higher in the scenarios with the higher urgency condition and high-cost purchase condition. The payment pain variable is slightly different than expected. The literature (Soman., et al 2003) on payment pain had said that payment pain would be the highest for debit card payments, while the mean scores show that both credit card and Klarna got higher payment pain scores. For perceived ease of use it is surprising to see that either credit card or Klarna got the highest score in each scenario instead of debit card. This is surprising as debit card is such a highly used payment method in the Netherlands (Jonker., et al 2017).

Table 2: Mean (M) and Standard deviation (SD) scores from each scenario

	High cost						Low cost					
	High urgency			Low urgency			High urgency			Low urgency		
	Debit	Credit	Klarna6	Debit	Credit	Klarna	Debit	Credit	Klarna	Debit	Credit	Klarna9
Routine	M=2.56 SD=1.27	M=3.00 SD=1.59	M=2.58 SD=1.11	M=2.71 SD=0.91	M=2.79 SD=1.41	M=2.62 SD=1.24	M=2.64 SD=1.56	M=2.90 SD=1.13	M=2.81 SD=1.50	M=2.96 SD=0.90	M=2.44 SD=1.30	M=2.53 SD=1.17
Perceivedease	M=3.96 SD=1.52	M=5.00 SD=1.00	M=5.10 SD=1.23	M=5.19 SD=1.25	M=5.28 SD=0.73	M=5.27 SD=0.56	M=4.61 SD=1.62	M=5.14 SD=1.18	M=4.72 SD=1.05	M=4.94 SD=1.12	M=5.13 SD=1.03	M=4.54 SD=2.04
Impulsivity	M=4.38 SD=1.37	M=5.00 SD=1.43	M=4.67 SD=1.68	M=4.72 SD=1.22	M=5.28 SD=1.00	M=5.12 SD=0.74	M=4.93 SD=1.36	M=5.18 SD=1.19	M=4.69 SD=1.11	M=4.59 SD=1.08	M=4.37 SD=1.06	M=4.92 SD=0.95
PurchaseIrrational	M=-2.38 SD=2.14	M=-2.87 SD=1.77	M=-2.73 SD=2.05	M=-3.56 SD=2.00	M=-3.25 SD=1.65	M=-3.69 SD=1.25	M=-3.21 SD=1.58	M=-3.50 SD=1.40	M=-2.88 SD=1.89	M=-3.00 SD=1.94	M=-3.00 SD=1.81	M=-2.67 SD=1.56
Payment pain	M=3.70 SD=1.25	M=4.87 SD=1.46	M=4.27 SD=1.69	M=4.00 SD=1.56	M=4.00 SD=1.27	M=4.00 SD=1.53	M=3.86 SD=1.23	M=4.43 SD=1.16	M=4.12 SD=1.15	M=3.76 SD=1.30	M=4.00 SD=1.46	M=4.00 SD=1.28

\*Red scores are used to emphasise negative values

Table 3: Correlation table

Variables	Tests	Routine	Perceived ease of use	Impulsivity	Purchase choice
Perceived ease of use	Pearson Correlation	.306	-	-	-
	Sig.	<.001*	-	-	-
Impulsivity	Pearson Correlation	.007	.210	-	-
	Sig.	.922	.005*	-	-
Purchase choice	Pearson Correlation	.337	.175	.135	-
	Sig.	<.001*	.021*	.073	-
Payment pain	Pearson Correlation	-.108	-.077	.155	-.064
	Sig.	.155	.308	.040*	.401

For a significant value of <0.05 a \* is given as indication, all significance is provided as two tailed.

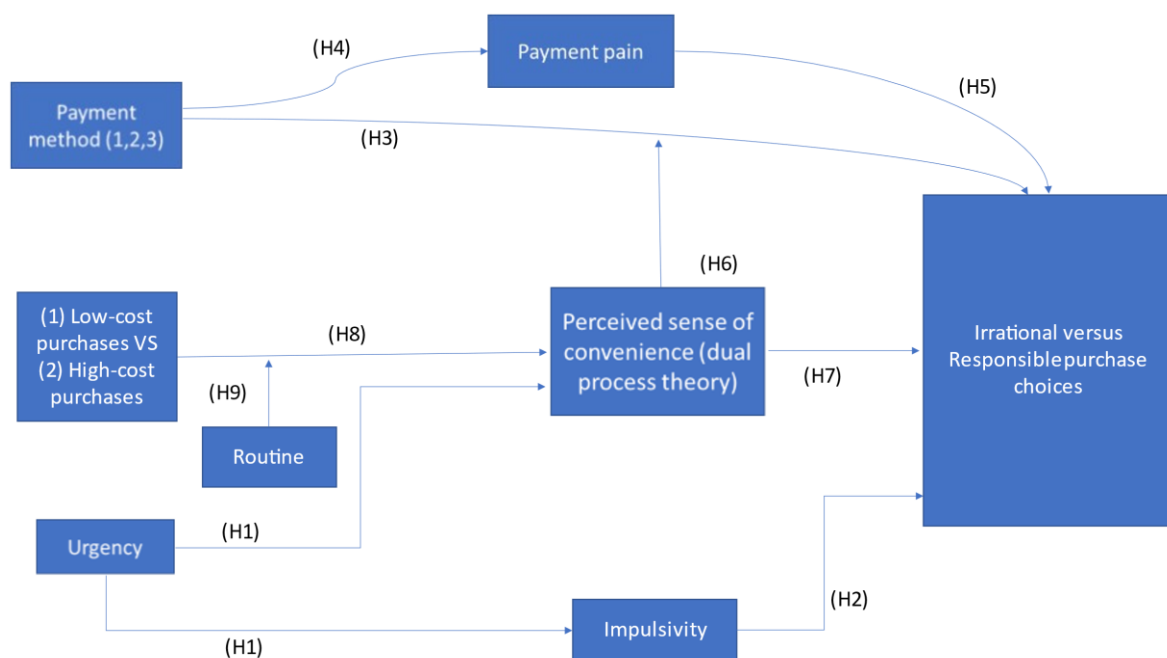
## Correlation table

As a tool to look for relationships that are worth considering a correlation table (table 3) was created with the computed variables. These correlations can be used as indicators of the relationship between variables, whether that be the assumed relationships that had already been present in the framework (Figure 2) or relationships that had not been considered in the framework.

Routine was found to have a significant correlation with perceived sense of convenience ( $<.001$ ) and purchase choice ( $<.001$ ). The relationship of routine with perceived sense of convenience was expected as hypothesis nine (Figure 2, H9) had been constructed with the idea that routine could have an influence on the perceived sense of convenience. With the influence of routine on the perceived sense of convenience it is also understandable that there is a relationship between routine and purchase choices. The fact that the relationship is significant makes this relationship only more noteworthy.

Perceived sense of convenience had a significant correlation with purchase choice (.021) and with impulsivity (.005). This relationship between the perceived sense of convenience and purchase choice was hypothesised (Figure 2, H7). However, the relationships between perceived sense of ease and impulsivity was not part of the framework and is more surprising. The last significant relationship could be found between impulsivity and payment pain (.040), this relationship was not assumed in the framework but could be interesting as the literature (Ah Fook., et al 2020) did mention that impulsivity does cause people to have regret about their purchases.

Figure 2: Theoretical framework



## Hypothesis testing

In order to test the hypotheses that were constructed before the research, omnibus tests were used. By conducting omnibus testing not every hypothesis had to have a separate test because with an omnibus test the effect of multiple variables can be measured in one test. This also means one can avoid being uncertain about whether certain variables overlap and being unsure about the size of influence which each variable has. To do so four omnibus tests were used. The first omnibus test used a Linear regression to test whether all the variables could influence the irrational purchase choices. In the second omnibus a regression was performed to test the influence of urgency, purchase size, routine and the interaction between routine and purchase size on the perceived sense of convenience. In the third omnibus test a regression was performed to test the effect of urgency on impulsivity. In the fourth omnibus test a regression was run to test how the different payment methods could influence payment pain.

H1) Urgency increases irrational purchase choices mediating through impulsivity and perceived convenience.

Initially one has to look at the second and third omnibus tests to understand the effect that urgency has on the perceived sense of convenience (table 5) and the effect that urgency has on impulsivity (table 6). In the second omnibus (table 5) one can see that urgency has a  $B = (.326)$  which indicates a sizeable positive effect of urgency on the perceived sense of convenience, yet urgency does not have a significant effect on the perceived sense of convenience with a  $\text{Sig.} = (.069)$ . For the effect of urgency on impulsivity one can see in the third omnibus that urgency has a  $B = (.010)$  which indicates that it has a very small positive effect on impulsivity which is also reflected in the significance scores which is very non-significant  $\text{Sig.} = (.957)$ . Finally for the first hypothesis the first omnibus test (table 4) had to be consulted to understand what relationship there is between impulsivity and irrational purchase choices and between perceived sense of convenience and irrational purchase choices. In the first omnibus one can see that "perceived ease" which is the variable for perceived sense of convenience has a negative effect on irrational purchases with a  $B = (-.042)$  and is also non-significant with a  $\text{Sig.} = (.740)$ . In the same omnibus one can see that impulsivity also has a negative effect on irrational purchase choices with  $B = (-.191)$  and is also non-significant with  $\text{Sig.} = (.106)$ . These findings indicate that urgency does not increase irrational purchase choices whether that be through impulsivity or perceived convenience, therefore the H1 hypothesis is not supported by these findings.

H2) Impulsivity increases irrational purchase choices.

These findings are also relevant for the H2 hypothesis as the findings from the first omnibus (table 4) showed the effect of impulsivity on irrational purchases which is what the H2 hypothesis assumption is about. In the first omnibus it is shown that impulsivity has a negative effect on irrational purchase with  $B = (-.191)$  and with a non-significant score of  $\text{Sig.} = (.106)$  it is also shown that impulsivity is not a significant influence on irrational purchase choices. With these findings the H2 hypothesis cannot be supported

Table 4: First Omnibus: Coefficients

	B	Std. Error	t	Sig.
(Constant)	-1.501	1.334	-1.125	.262
impulsivity	-0.191	0.118	-1.624	.106
Paydummy1	-0.042	0.170	-0.245	.807
Paydummy2	0.092	0.194	0.472	.637
perceivedease	-0.042	0.125	-0.332	.740
Paymentpain	-0.011	0.104	-0.108	.914
H6_1	0.069	0.146	0.471	.638
H6_2	-0.254	0.161	-1.581	.116
Urgency	-0.268	0.275	-0.974	.332
routine	-0.019	0.349	-0.055	.956
PurchaseSize	-0.251	0.656	-0.382	.703
InteractSizeRoutine	0.105	0.219	0.478	.633

Dependent variable = Irrational purchases

F (11,164) = .748 , p = .691, R<sup>2</sup> = .048 , Mean square error =3.165

Table 5: Second Omnibus: Coefficients

	B	Std. Error	t	Sig.
(Constant)	2.825	0.733	3.853	<.001
Urgency	0.326	0.178	1.830	.069
PurchaseSize	0.512	0.428	1.197	.233
routine	0.519	0.226	2.298	.023
InteractSizeRoutine	-0.140	0.143	-0.980	.328

Dependent variable = Perceived sense of convenience

F ( 4,171)= 5.752, p = <.001 , R<sup>2</sup> = .119 , Mean square error = 1.390

Table 6: Third Omnibus: Coefficients

Model	Unstandardized Coefficients				
	B	B	Std. Error	t	Sig.
1	(Constant)	4.800	0.289	16.619	<.001
	Urgency	0.010	0.182	0.054	.957

Dependent variable = impulsivity

F (1, 174)= .003 , p = .957 , R<sup>2</sup> = .000 , Mean square error= 1.458

H3) The credit card payment method (2) and buy now pay later method (3) increases irrational purchase choices compared to the debit card payment method (1).

From the first omnibus (table 4) one can ascertain the effect of payment methods on the dependent variable of irrational purchase choices. Here the first payment dummy which represents the credit card payment method and the second payment dummy representing the Klarna are used. The first payment dummy is shown to have a negative effect on irrational purchase choices B= (-.042) and

does not have a significant effect on the dependent variable with Sig. = (.807). The second payment dummy does have a positive effect on the dependent variable B= (.092) but also has a non-significant effect on the dependent variable with Sig.= (.637). With these findings the H3 hypothesis cannot be supported because the findings indicate that credit card payment have a negative effect on irrational purchase choices while the H3 hypothesis had suggested that credit card payments would increase the irrational purchase choices. With this difference between the hypothesis and the findings the H3 hypothesis cannot be supported by the findings.

Table 7: Fourth omnibus: Coefficients

Model		Unstandardized Coefficients			
		B	Std.Error	t	Sig.
1	(Constant)	4.113	0.102	40.460	<.001
	Paydummy1	0.333	0.123	2.709	.007
	Paydummy2	-0.006	0.145	-0.044	.965

Dependent variable = Payment pain

F (2,173) =3.669 , p =.027 , R<sup>2</sup> = .041 , Mean square error= 1.817

H4) The debit card payment method (1) increases the payment pain compared to the credit card payment method (2) and the buy now pay later payment method (3)

To test the H4 hypothesis the fourth omnibus (table 7) is used. This omnibus indicates that payment dummy 1 which represents the credit card payment methods has a positive effect on payment pain B= (.333) which means it increases payment pain and this result is strengthened by the fact that this dummy also has a significant score of Sig.= (.007). The second dummy variable representing Klarna has a negative effect on payment pain B= (-.006) and has a non-significant score of Sig.= (.965). With these findings indicating that credit card payment methods have a positive effect on payment pain the hypothesis cannot be supported because the hypothesis believed that the debit card payment method would increase the payment pain compared to credit card payment and Klarna payments, but these findings disprove that for credit card payments. With this difference between the assumption in the H4 hypothesis and the results in the omnibus the H4 hypothesis is not supported by the findings.

H5) Payment pain decreases irrational purchase choices.

For the H5 hypothesis the first omnibus (table 4) can be used to see whether payment pain has a negative effect on irrational purchase choices. The findings show a negative effect of payment pain on irrational purchase choices B= (-.011) still it also shows a very non-significant score for payment pain Sig.= (.914). With the very non-significant score of payment pain the negative effect of the payment pain cannot be used to support the H5 hypothesis which means the H5 hypothesis is not supported by the findings.

H6) The perceived sense of convenience increases the effect of payment methods on irrational purchase choices.

The H6 hypothesis was tested by conducting regression which is shown in the first omnibus (table 4), however before this could be done two different tests had to be conducted. A Grand mean centring was performed for the Perceived sense of convenience and effect coding for payment methods. The effect coding for the payment methods had already been performed by creating dummy variables

which were also used for the H3 and H4 hypothesis. For the grand mean centring of the perceived sense of convenience the mean of the perceived ease of use was subtracted from each score to create the grand mean scores. In order to also measure the interaction effect between the payment method dummies and the grand mean two new variables were created H6\_1 for the interaction between the first dummy and the grand mean and H6\_2 for the interaction between the second dummy and the grand mean.

After the two tests had been performed the regression could be performed which is represented the first omnibus (table 4). The first omnibus findings show that the H6\_1 has a small positive effect on irrational purchase choices with  $B = (.069)$  and has a non-significant score of  $\text{Sig.} = (.638)$ . Compared to the first payment dummy which has a  $B = (-.042)$  and a significance score of  $\text{Sig.} = (.807)$  this means that the effect has changed from a negative to a positive effect and that the variable has become less non-significant. The second interaction variable H6\_2 has a negative effect on the irrational purchase choices with  $B = (-.254)$  and a non-significant score of  $\text{Sig.} = (.116)$ . Compared to the second payment dummy with a  $B = (.092)$  and a significance score of  $\text{Sig.} = (.637)$  it shows that the effect has changed from positive to negative and that H6\_2 variable is less non-significant than the second payment dummy. Both variables become less non-significant, but because the effect changed from positive to negative for one variable (H6\_2) and for the other from a negative to a positive effect (H6\_1) the findings do not support the notion that the perceived sense of convenience increases the effect of payment methods. The H6 hypothesis can therefore not be supported by the findings.

H7) The perceived sense of convenience increases irrational purchase choices.

For the H7 hypothesis the first omnibus (table 4) is used where the effect of the perceived sense of convenience on irrational purchase choices is indicated. The findings of the perceived sense of convenience indicate a negative effect on the irrational purchase choices  $B = (-.042)$  together with a non-significant score of  $\text{Sig.} = (.740)$ . With these findings it is shown that the perceived sense of convenience does not increase irrational purchases and therefore the H7 hypothesis is not supported.

H8) Low-cost purchases (A) increase irrational purchase choices and decreases responsible purchase choices compared to high-cost purchases (B) mediating through perceived sense of convenience.

To test the assumption from the H8 hypothesis the second omnibus (table 5) is used. The findings show that "Purchasesize" has a positive effect on the perceived sense of convenience  $B = (.512)$ , still with a non-significant score of  $\text{Sig.} = (.233)$ . These scores together with the B scores from the first omnibus which indicate a negative effect on irrational purchase choices, indicate that "Purchasesize" which is the variable for purchase cost does not have an influence on irrational purchase choices.

H9) Routine behaviour increases the effect of Low-cost purchases on irrational purchase choices mediated through perceived sense of convenience.

In the second omnibus (table 5) there are also the findings for the H9 hypothesis. The findings show that the interaction between routine and "Purchasesize" has a negative effect on the perceived sense of convenience  $B = (-.140)$  and has a non-significant effect on the perceived sense of convenience  $\text{Sig.} = (.328)$ . With the findings showing that routine has a negative effect on the perceived sense of convenience it indicates that it does not increase the effect of the "Purchasesize" because for that a positive effect would be necessary. Therefore, based on the findings the H9 hypothesis is not supported.

## Discussion and Conclusion

This study was initially set up to get a better understanding of the effect of buy-now-pay later as a payment method and how this payment method could influence purchase choices. As a novel payment method there was not much literature on the payment method. The novel nature of the subject made it an interesting topic as there was still much to discover. By some strange incidence of timing the topic of buy-now-pay later was also covered more by large media like the NOS (Pols, G. 2023, April 18). Large media outlets like these presented stories on the possible financial problems that users of buy-now-pay-later services experienced, which helped to make the topic more relevant in Dutch society. Where before they might have warned about credit card debt the media now tried to warn Dutch consumers about the debt caused by buy-now-pay later services. This study has therefore collected data on the perception of purchases in connection to buy-now-pay later services and other factors and payment methods. The purpose of this research was to add to the scientific literature on this topic and to hopefully help this literature translate to public for them to learn about their purchase choices.

H1) Urgency increases irrational purchase choices mediating through impulsivity and perceived sense convenience.

For the first hypothesis it was assumed that urgency would be an influential factor for irrational purchases which is why it was selected as one of the three independent variables. Previous literature mentioned that impulsivity and urgency could affect the purchase choices of consumers (Billieux., et al 2010) and that time pressure in the form of urgency could affect consumer purchase behaviour (Klimm., et al 2023). Although other literature argued that urgency did not have a decisive effect on consumer purchase decisions (Ladeira., et al 2023). The contradiction between these results made it interesting to test the influence of urgency and impulsivity. For this reason, the H1 hypothesis was constructed. The assumptions were not supported by the findings in the results section which indicated that the interaction effect between impulsivity and urgency did not have a positive effect on irrational purchase choices and the interaction effect of urgency and perceived sense of convenience did not have a positive effect on irrational purchases either. By both interaction effects having a negative effect on irrational purchases it meant that the H1 hypothesis was not supported by the results.

H2) Impulsivity increases irrational purchase choices.

For the second hypothesis the results indicated that impulsivity had a negative effect on irrational purchase choices. With this negative effect the H2 hypothesis was thereby contradicted by the results and therefore not supported. The results are slightly different from the literature previously discussed in the literature framework. In the literature urgency and impulsivity were mentioned as collaborative forces both influential for purchase choices (Billieux., et al 2010). This could support the claims from previous research that impulsivity is stronger in a store environment than online. This study used an online purchase setting in the survey and impulsivity did not have a positive or significant effect on the irrational purchase choices. There was no in store scenario as carried out in previous studies (Aragoncillo & Orus., 2018)

H3) The credit card payment method (2) and buy now pay later method (3) increases irrational purchase choices compared to the debit card payment method (1).



In order to test the effect of payment methods on the irrational purchase choices the third hypothesis was constructed. For this H3 hypothesis the findings did support the notion that buy now pay later services would increase irrational purchases but the scientific based assumption of credit cards increasing irrational purchases was not supported. This meant that the H3 hypothesis was not fully supported by the data. The results differed from the literature which had indicated that credit card users were more likely to make additional purchases than consumers using debit cards (Soman., et al 2001) which was the scientific base for the H3 hypothesis. The addition of buy now pay later services having the same effect as credit cards was made because of the notion that because of their similar nature as credit payment methods, buy now pay later was also assumed to increase irrational purchases (Jonker., et al 2017; Soman., et al 2001).

H4) The debit card payment method (1) increases the payment pain compared to the credit card payment method (2) and the buy now pay later payment method (3)

For the fourth hypothesis the effect of payment methods on the sense of payment pain was tested. For this H4 hypothesis the results did not support the assumptions as the debit card and buy now pay later both had a negative effect on payment pain and only the credit card payments had a positive effect on the payment pain. The notion that the buy now pay later service Klarna would have a similar effect on payment pain as the credit cards came from there similar background as credit payment methods (Jonker., et al 2017; Soman., et al 2001). The H4 hypothesis had been based on payment pain literature where different payment methods were used and the findings indicated that the further a payment method allowed a person to be removed from the actual payment the lower the sense of payment pain would be (Soman., et al 2003). Taking this into account in relation to the three payment methods that were used in this current study, the H4 hypothesis was constructed which assumed that debit card because of the closest proximity between the payment and the purchase would increase payment pain. While situations where a credit card or buy now pay later service would be used would provide a lower sense of payment pain then the debit card scenario because of the greater distance between the moment of payment and the moment of purchase (Soman., et al 2003). However, because of the results that indicated that the credit card payment method had a positive effect on the payment pain the H4 hypothesis could not be supported.

H5) Payment pain decreases irrational purchase choices.

For the fifth hypothesis the effect of payment pain on irrational purchase choices was tested. For the H5 hypothesis the findings from the results indicated that payment pain had a negative effect on the irrational purchase choices, but this effect was so small that it hardly differentiated itself from the other results measured. This small a difference did not allow for the H5 hypothesis to be supported by these findings thus it would not be possible to translate the results of the research population to a broader population. Therefore, the results proved unable to translate the sense that payment pain would provide a negative feeling about a purchase. This finding contradicts the literature (Soman., et al 2001; George, N. L., & Krishnan., 2022) which assumed that payment pain would negatively affect the irrational purchase choices as the sense of regret and pain from the payment would affect future purchases and purchase choices.

H6) The perceived sense of convenience increases the effect of payment methods on irrational purchase choices.

To test the influence of the perceived sense of convenience on the effect of payment methods on irrational purchase choices the sixth hypothesis was constructed. For the tests of the H6 hypothesis the findings indicated that only credit cards had a positive effect on the irrational purchase choices while being influenced by the perceived sense of convenience. This is not enough to support the H6 hypothesis as the hypothesis needed all three payment methods to have a positive effect on the irrational purchase choices. In literature on the Dual-process theory the distinction is made between the more intuitive and instinctual decision making of system 1 and the more deliberative and measured type of decision making with system 2 (Evans., et al 2003). With the lower amount of deliberation required for system 1 decisions the literature (Evans, et al., 2011) carried assumptions that there would be an increased perceived sense of convenience. This perceived sense of convenience and lower amount of deliberation about a decision has been mentioned in the past as a possible reason why more irrational decisions could be made with system 1 decision making (Evans., et al 2011). With this line of reasoning the H6 hypothesis was constructed. It was hypothesised that the perceived sense of convenience would increase the effect of payment methods on the irrational purchase choices, however the results did not follow this assumption which is why the H6 hypothesis could not be supported.

H7) The perceived sense of convenience increases irrational purchase choices.

To study the effect of the perceived sense of convenience on irrational purchase choices the H7 hypothesis was constructed. The results from the study did not agree with the assumption from the H7 hypothesis as the effect between the perceived sense of convenience and the irrational purchase choices was a negative effect. This finding means that the H7 hypothesis is not supported by the data. With the reasoning behind the H6 hypothesis about the Dual-process theory and the effect of perceived sense of convenience on irrational purchases it was also assumed that perceived sense of convenience would positively affect irrational purchases (Evans., et al 2011). That even without the effect of payment methods the perceived ease of use would allow for less deliberation about the purchase decisions which could allow for irrational decisions to be made more easily (Evans., et al 2003).

H8) Low-cost purchases (A) increase irrational purchase choices and decreases responsible purchase choices compared to high-cost purchases (B) mediating through perceived sense of convenience.

H9) Routine behaviour increases the effect of Low-cost purchases on irrational purchase choices mediated through perceived sense of convenience.

To test the effect purchase cost on the irrational purchase choices and the effect of routines on irrational purchase choices the eight and ninth hypotheses were constructed. The results did not support these assumptions of the H8 hypothesis. The reason being that the purchase size had a negative effect on the irrational purchases. This meant that for both high-cost and low-cost purchases the irrational purchase choices decreased. The findings also provided some interesting data for the H9 hypothesis. The routines variable by itself had a positive effect on the perceived sense of convenience but a negative effect on the irrational purchase choices. The interaction effect between routines and purchase size provided a negative effect meaning that together routines and the purchase size, whether that be low or high-cost purchases, would not increase the irrational purchase choices. The negative effect of the interaction means that the H9 hypothesis cannot be supported as the hypothesis forecasted that the interaction affect would cause an increase of irrational purchase choices. The H8 and H9 hypotheses were based on literature that indicated that low-cost purchases are more likely to be made based on routines (Madhavan., et al 2015), the assumption was that routines involve less deliberation and are there for more likely to involve

irrational choices. As with H7 hypothesis the system 1 type decision making with routines would be categorised as system 1 type decisions because of the lack of deliberation about the decision. The perceived sense of convenience was believed to play a role in this as the convenience allows for system 1 type decisions to be made as a higher perceived sense of ease could indicate a lower need for deliberation about a choice (Evans., et al 2011; Evans., et al 2003). This is supported by the finding that routine had a positive effect on the perceived sense of convenience, but data does not indicate that this leads to irrational purchase choices because both variables have a negative effect on irrational purchase choices. The findings did not support the literature and the assumptions from the hypotheses therefore both the H8 and H9 hypothesis could not be supported.

Based on the results for the hypotheses the Sub-questions and Research question can be answered.

1. *Which psychological mechanisms are involved when consumers use credit services?*

From the assumed relevant psychological mechanisms that were selected there were some that were more influential than others. This was indicated in the H4 hypothesis where the psychological mechanism of payment pain was positively affected by credit cards which also had a significant effect on this mechanism while Klarna had a marginal negative effect on this mechanism and had a very non-significant effect on this psychological mechanism. With the H6 hypothesis it was shown that the perceived sense of convenience had an influence on the effect of payment methods on irrational purchases, the findings did indicate that the effect of the perceived sense of convenience was different between the two credit payment methods. Lastly in the H9 findings it was indicated that routines also have an effect on the irrational purchase behaviour which makes them also relevant to the credit services.

2. *Which psychological mechanisms are involved when consumers make irrational purchases compared to responsible purchases?*

The relationship between psychological mechanisms and irrational purchases has been tested according to the assumptions of several hypotheses in this study. With the decision for purchase choices being measured by a variable ("purchasechoice") accounting for irrational and responsible purchase choices the assumption is that the more positive effect a variable has on this purchase choice variable the more positive the effect would be for irrational purchases. If the effect would be negative it would be negative towards irrational purchases. This also meant that because irrational and responsible purchase choices were measured by the same variable that the more negative effect towards irrational purchases indicated a more positive effect towards responsible purchases. At the outset many hypotheses had assumed that the involvement of specific psychological mechanisms would have meant that the psychological mechanisms would positively reinforce the irrational purchases, the results from the study proved different. The findings of the interaction between urgency and the perceived sense of convenience in the H1 hypothesis, the effect from impulsivity in the H2 hypothesis, two payment methods in the H6 hypothesis, the findings of the H8 hypothesis and the interaction between routine and purchase cost in the H9 hypothesis all had a negative effect on irrational purchases. This meant that these variables are going to be involved in the purchase process of consumers by stimulating them to make more responsible decisions by being less likely to make irrational purchases. Besides the majority of psychological factors affecting the irrational purchases negatively there were some factors that did provide a positive effect. The interaction between the perceived sense of convenience and credit cards for the H6 hypothesis had a positive effect on irrational purchases. The effect of buy now pay later service of Klarna on irrational purchases from the H3 hypothesis was positive as well.

3. *In terms of relevant psychological mechanisms how do buy now pay later services differ from other credit payment services that influence the purchases of consumers?*

In the H6 hypothesis the difference between the credit card payment method and the Buy Now Pay later service as Klarna were shown. This difference being that the credit card payment method had a positive effect and significant effect on the irrational purchase choices when having an interaction with perceived sense of convenience and that Klarna had a negative non-significant effect on irrational purchase choices while being influenced by the perceived sense of convenience. Another difference was also shown in the findings from the H4 hypothesis with the credit card payment method stimulating payment pain compared to buy now pay later services which would decrease payment pain. In the findings of the H3 hypothesis it was shown that only Klarna would stimulate irrational purchase choices while the credit card and debit card payment method both had a decreasing effect.

*Research question: Which psychological mechanisms that play a role in the buy now pay later services influence consumers to make more irrational purchases instead of responsible purchases compared to consumers using other credit payment services?*

It is important to mention that impulsivity, urgency, routines, purchase cost, all had a role in the purchase choice process. Their role however was to have a decreasing effect on irrational purchase choices. This is still of influence on the purchase choices but for the research question the goal was to find which psychological mechanism would lead consumers to make more irrational purchase processes. In this study there was only one psychological mechanism which was found to be influential in how buy now pay later services would influence consumer purchase choices. This was the variable of perceived sense of convenience, but not in a way that one might have expected beforehand. Before running the test having read literature on the perceived sense of convenience one would have expected that the perceived sense of convenience would act as positive reinforcement to buy now pay later services (Evans., et al 2011; Evans., et al 2003). Also, that the lower amount of deliberation about purchase choices from the perceived sense of convenience would stimulate more irrational purchase choices, but the opposite was shown in the results. The results indicated that the perceived sense of convenience would influence buy now pay later services which were represented in this study by Klarna by having a decreasing effect on the irrational purchase choices. While without the influence of the perceived sense of convenience Klarna could stimulate irrational purchase choices.

#### Limitations

With hindsight the research methodology and choices could have been improved. As it pertains to the survey, participants could have been made more aware that they had to click through to the last page in order for the system to recognise the survey as being completed. Also, looking back and having listened to feedback from some of the participants it might have been better if the survey had been written in Dutch. As several participants mentioned that this would have allowed them to send the survey to other possible participants who did not grasp the English language very well but were fluent in Dutch. The survey distribution and collection of data could have been quicker if participants had been approached beforehand and agreed to fill in the survey before a specific date. Feedback from participants indicated that even though the survey mentioned that the scenario was critical to remember and therefore had to be read carefully, many participants had difficulty remembering which exact variation of independent variables was in their scenario. This indicates that questionnaire construction is more complex than was originally conceived.

There are also limitations which are there because of conscious decisions that were made in the study. To make the study feasible a between subject's design was chosen which already involved 12 different groups. This was preferred over a within subject's design because with a within subject's design participants would each have to answer the questions for each of the 12 scenarios which is not feasible because of participants' fatigue.

The use of convenience sampling for the survey does mean that the group of participants does not reflect each group of the Dutch population accurately. There is a probability that people from the countryside and people from different educational levels are not well represented. However, with students and young adults making up the majority of the participants of the survey the target population of buy now pay later service users is covered quite well because this population is made of mostly young adults and adolescents and the average age of participants in the survey was measured at 28.5 and a median of 25.

The fact that this study used a survey as an online experiment instead of an experiment where participants have to make actual physical purchase decisions brings more limitations in terms of how well a specific scenario can be mimicked for a participant. By only having to answer questions on what one would do in a purchase scenario the study is more susceptible to participants giving more socially respectable answers. Still a survey also has the strength of being able to recruit more participants and for more variables to be used in connection to the dependent variable.

#### Future research

This study was focused on the possible factors that could influence consumers to make irrational purchase choices. For future research it might be interesting to focus on the opposite aspects which are interventions which could defer consumers from making irrational purchase choices.

This present study used a survey to collect data on consumer behaviour as it pertains to specific payment methods and irrational purchases, but future research could also try to pursue other setups. The set up of an experiment which was mentioned before could be performed by having participants perform actual online or in store purchases in order see how participants would act in specific scenarios. If researchers want to go more in depth on the thinking process of consumers interviews could be used to ask follow up questions.

Future research could go further with the study of the perceived sense of convenience as it pertains to irrational purchases and buy now pay later services. Future research could also retest the interaction effect with buy now pay later services or other possible interactions with variables that are involved in the purchase process.

Besides the perceived sense of convenience, the concept of payment pain is also topic future research could do more research on to get a better understanding about possible factors that could cause payment pain. This study was not able to provide any clear outcome was the effect of payment pain on irrational purchase choices (H5). The findings in the results section could not provide any support to the indication that payment pain had an effect on the irrational purchase choices. Future research could study this relationship more effectively by using a different setup and research programme. The payment pain and irrational purchases could be studied to give more information about the possible rejection of the effect of payment pain on irrational purchase choices.

## Theoretical Implications

In this study it was shown that the perceived sense of convenience could either stimulate or act as a decreasing factor for irrational purchase choices. While the literature had indicated that the perceived sense of convenience would only act as a stimulating factor the result of the current study contradicts this information (Soman., et al 2001; Schuh., et al 2011). By contradicting the literature this result raises questions about the generalisation of the literature and necessity of more research on the effect of the perceived sense of convenience in consumer purchase scenarios with buy now pay later services as a payment method.

In this study the payment method of buy now pay Later was used in the form of Klarna to test how this payment method would be involved with the consumer purchase choices. The other two payment methods of debit and credit card were also used as possible payment methods to compare the buy now pay later method with. The study indicated that buy now pay later services could stimulate irrational purchase choices. This implies that that both the field of irrational purchase choices and payment methods, specifically the field on buy now ay later services, should take this into account for there construction of theories and research. Another interesting aspect of buy now pay later services in this study was that it was indicated to have a decreasing effect on payment pain. This was expected as the buy now pay later payment method is a method where the moment of purchase and the moment of payment are separated which had been indicated by literature to decrease payment pain (Soman., et al 2001). However, with the data from the study actually indicating this relationship there is a scientific basis to support the idea that buy now pay later services decrease payment pain.

## Practical implications

With one of the intentions at the beginning of the study being that consumers could be helped by the outcomes of this study it is fitting that there are outcomes which are relevant for consumers. The perceived sense of convenience which was found to be able to stimulate or decrease irrational purchase choices is an aspect which consumers can be made aware of in order to give them a better chance to lower their susceptibility to making irrational purchase choices. This is even more relevant for consumers who are susceptible to impulsive purchases. As has been mentioned before that buy now pay later services can stimulate these consumers to make additional purchases (Ah Fook, & McNeill, 2020).

Also, the finding that buy now pay later services as a payment method could lower payment pain is an important piece of information for consumers. It can help them to know that when using this payment method, a person's barrier against excessive consumption is not as strong then when they would use a credit card. Being aware of this can incentivise consumers to think more carefully when using the buy now pay later payment method. This knowledge is also relevant for consumer rights organisations and the Dutch government. Both of these organisations have the goal of protecting the consumers of the Netherlands. These parties could use these findings as arguments for policies or laws that protect consumers against irrational purchase choices and possible debt creation.

To conclude, one can say that the goal of finding a relationship between buy now pay later services and irrational purchase choices has been fulfilled with the psychological mechanism of the perceived sense of convenience acting as the bridge between the two concepts. Like a bridge because it can open access to irrational purchases or close access to irrational purchases. The payment method of buy now pay later is still a service which is quite new to the realm of scientific research, but by showing the relationship between this novel payment method and irrational

purchase choices this study has been able to make a contribution. A contribution which could ignite future research on buy now pay later services and irrational purchase choices.

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## Appendix A

### Stimuli for each Independent variable

You are shopping online because you want to purchase some new clothes for a party which is in 1 month. (Time Urgency low Stimuli)

You are shopping online because you want to purchase some new clothes for a party which is in 24 hours. (Time Urgency high Stimuli)

You find some clothes you like, and you intend to pay for them with your (debit account, credit card or with Klarna). (Payment Method Stimuli)

The clothes you intend to purchase are from a high-prestige brand and are high-cost item. (High-cost Stimuli)

The clothes you intend to purchase are from a low-prestige brand and are a low-cost item. (Low-cost Stimuli)

### Scenario for each group

Group 1: "You are shopping online because you want to purchase some new clothes for a party which is in 1 month. You find some clothes you like, and you intend to pay for them with your Debit account. The clothes you intend to purchase are from a high-prestige brand and are a high-cost item.

Group 2: "You are shopping online because you want to purchase some new clothes for a party which is in 1 month. You find some clothes you like, and you intend to pay for them with your Credit card. The clothes you intend to purchase are from a high-prestige brand and are a high-cost item.

Group 3: "You are shopping online because you want to purchase some new clothes for a party which is in 1 month. You find some clothes you like, and you intend to pay for them with Klarna. The clothes you intend to purchase are from a high-prestige brand and are a high-cost item.

Group 4: 'You are shopping online because you want to purchase some new clothes for a party which is in 24 hours. You find some clothes you like, and you intend to pay for them with your Debit account. The clothes you intend to purchase are from a high-prestige brand and are a high-cost item.

Group 5: 'You are shopping online because you want to purchase some new clothes for a party which is in 24 hours. You find some clothes you like, and you intend to pay for them with your Credit card. The clothes you intend to purchase are from a high-prestige brand and are a high-cost item.

Group 6: "You are shopping online because you want to purchase some new clothes for a party which is in 24 hours. You find some clothes you like, and you intend to pay for them with Klarna. The clothes you intend to purchase are from a high-prestige brand and are a high-cost item.

Group 7: "You are shopping online because you want to purchase some new clothes for a party which is in 1 month. You find some clothes you like, and you intend to pay for them with your Debit account. The clothes you intend to purchase are from a low-prestige brand and are a low-cost item.

Group 8: "You are shopping online because you want to purchase some new clothes for a party which is in 1 month. You find some clothes you like, and you intend to pay for them with your Credit card. The clothes you intend to purchase are from a low-prestige brand and are a low-cost item.

Group 9: "You are shopping online because you want to purchase some new clothes for a party which is in 1 month. You find some clothes you like, and you intend to pay for them with Klarna. The clothes you intend to purchase are from a low-prestige brand and are a low-cost item.

Group 10: "You are shopping online because you want to purchase some new clothes for a party which is in 24 hours. You find some clothes you like, and you intend to pay for them with Debit account. The clothes you intend to purchase are from a low-prestige brand and are a low-cost item.

Group 11: "You are shopping online because you want to purchase some new clothes for a party which is in 24 hours. You find some clothes you like, and you intend to pay for them with your Credit card. The clothes you intend to purchase are from a low-prestige brand and are a low-cost item.

Group 12: "You are shopping online because you want to purchase some new clothes for a party which is in 24 hours. You find some clothes you like, and you intend to pay for them with Klarna. The clothes you intend to purchase are from a low-prestige brand and are a low-cost item.

## Survey questions

1) I would purchase this jacket if the cost are within my budget.

Answers: 7-point Likert scale from I strongly disagree to I strongly agree

2) I would purchase this jacket even if the cost are larger than my budget.

Answers: 7-point Likert scale from I strongly disagree to I strongly agree

3) If you buy the jacket, would you feel any sense of pain about the purchase while making the payment or shortly after the purchase?

Answers: 7-point Likert scale from No, I would feel a very large sense of pleasure to I would feel a very large sense of pain

4) I would be more inclined to purchase the jacket if I had seen the same jacket just before online.

Answers: 7-point Likert scale from I strongly disagree to I strongly agree

5) I would be more inclined to make the purchase if I had thought about purchasing the same jacket before I needed the jacket for the outdoor party.

Answers: 7-point Likert scale from I strongly disagree to I strongly agree

6) The behaviour of purchasing this jacket is something I would do automatically.

Answers: 7-point Likert scale from I strongly disagree to I strongly agree

7) The behaviour of purchasing this jacket is something I would do without thinking.

Answers: 7-point Likert scale from I strongly disagree to I strongly agree

8) The behaviour of making a purchase like the jacket is something that belongs to my weekly or monthly routine.

Answers: 7-point Likert scale from I strongly disagree to I strongly agree

9) The ease with which I can purchase the jacket is important to me.

Answers: 7-point Likert scale from I strongly disagree to I strongly agree

10) The ease with which I can make a purchase makes me more inclined to make a purchase.

Answers: 7-point Likert scale from I strongly disagree to I strongly agree

### Manipulation check questions

When do you need the clothes?

Answers: In 24 hours, In 1 week, In 1 month, In 1 year

What kind of item did you want to purchase?

Answers: Low-cost item, High-cost item

What kind of payment method are you using?

Answers: Debit account, Credit card, Klarna

### Background questions

What is your age?

Participants could enter their age in a box themselves as their answer

What is your gender?

Answers: Man, Women, Other

Have you ever had to pay an additional amount on top of the amount of a purchase because you could not pay back the purchase amount in agreed upon time period

Answers:

Yes, I have had to pay an additional amount on top of the purchase.

No, I have never had to pay an additional amount on top of the purchase.

Pre-test visual Stimuli



1



2



3



4





5



6



7



8



9



6