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INFORMATION SEARCH AND DECISION-MAKING IN CREDIT ACQUISITION

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Abstract

This exploratory study employs a mixed-methods approach to investigate consumer decision-making when acquiring credit for significant purchases. We gathered data through preliminary interviews with four participants and online questionnaires administered to 301 respondents, to identify how consumers seek information, evaluate alternatives, and apply decision rules when selecting credit products and providers. Results show that consumers do not invest substantial time in information gathering for their credit decisions, frequently relying on information provided by the retailer, and assessing a limited range of alternatives. The interest rate is the crucial factor for selecting the credit product and provider. The decision-making process typically involves a

compensatory rule for selecting the credit product and a lexicographic heuristic for selecting the provider. Consumer satisfaction with credit decisions was found to be influenced by the usefulness of information obtained, ease of comparing credit agreements, past credit experience, and decision rules employed when selecting the credit provider.

Keywords: consumer behavior; credit acquisition; information search; decision-making.

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INTRODUCTION

Decision-making when choosing alternatives for financing a major purchase is a complex process which involves several cognitive aspects of consumer behavior. To choose optimally, consumers must evaluate various alternatives for financing and consider factors such as interest rates, loan terms, and credit limits (Ranyard et al., 2018; Liu et al., 2022; Kirchler & Hoelzl, 2018).

Consumers must seek out and process information to make informed credit decisions. However, research suggests that many consumers may struggle with the complexity and variety of credit products, making decision-making difficult (Lusardi & Mitchell, 2007). In addition, individuals often do not understand key aspects of credit, including interest rates, repayment terms, and fees (Lea, 1999, 2021; Perry, 2008) relying essentially on information provided by retailers, which usually leads to suboptimal decisions (Agarwal et al., 2008; Elliehausen, 2019). Consumers' satisfaction with their credit decisions may also be influenced by factors such as perceived fairness of the decision-making process, information transparency, and perceived control over the decision (Mandell & Klein, 2009).

Previous research shows that cognitive biases, such as loss aversion, present-biased preferences, self-control problems, and overconfidence, can impact decision-making processes (Kahneman & Tversky, 1996; Kahneman, 2011; Acciarini et al., 2021). In the case of credit decisions, these biases can result in consumers underestimating the cost of borrowing and overestimating their ability to repay the loan (Perry, 2008; Meier & Sprenger, 2010; Berthoud & Kempson, 1992). In fact, limited financial literacy can prevent consumers from making informed credit decisions, leading to suboptimal choices (Lavin et al., 2019; Goyal & Kumar, 2021). Thus, understanding how credit users seek and process information and what factors influence their satisfaction with credit decisions can provide insights into improving their decision-making process.

Based on this reasoning, this study aims to shed light on consumer decision-making when acquiring credit for significant purchases, focusing on cognitive aspects of consumer behavior as credit takers. Despite the widespread availability of credit in most consumer societies, individuals often struggle to manage debt, resulting in problem debt or over indebtedness (Lea, 2021). By identifying the factors influencing consumer decisions when acquiring credit, this research can contribute to developing effective interventions in financial education to help consumers manage their finances and avoid over-indebtedness. Ultimately, retailers and credit providers can benefit from this study by offering comprehensive, accessible information to enhance consumers' decision-making skills and satisfaction.

LITERATURE REVIEW

Information search

People are constantly making decisions. As consumers, every time we compare two or more options for any product or service to select the best alternative to meet a need or desire, we engage in a decision-making process. Usually, consumers have many alternatives and seek information to make a good decision.

Consumer decision-making involves evaluating options for products or services to select the optimal choice. For some consumer decisions, information stored in memory may be sufficient. In this case, the decision involves narrow criteria (e.g., loyalty to a specific brand). However, this information

is insufficient in many situations, especially when the purchase involves high perceived risk, negative consequences, or uncertainty regarding product performance (Van Raaij, 1988; Arruda Filho et al., 2020); and also when the product category is not purchased very often – always likely with larger items, such as vehicles, home appliances and houses (Erasmus & Dobbstein, 2014).

Because some purchases are more important than others, the amount of time and effort we put into each differs. In high-involvement purchases, information processing occurs at a deep level – product attributes will be thoroughly examined, and the eventual decision will carry a fair degree of risk. In low-involvement purchases, information processing is more straightforward– product information is processed superficially, and consumers should use simple decision rules to choose among the alternatives (Van Raaij, 1988; Mandl et al., 2011; Niza Braga & Jacinto, 2022).

Van Raaij (2016) notes that financial decisions are typically the low involvement case, as people usually do not think about financial products very often, but only when there is a real need. On the other hand, risky financial decisions, like investment funds or shares and bonds, demand high financial skills and maturity for consumers to decide correctly, becoming a high involvement decision-making (Van Raaij, 2016; Howcroft et al, 2003). Previous research suggests that information overload and limited processing lead to simplification in credit evaluations (Chang & Hanna, 1992; Elliehausen, 2019) and reliance on third-party experts to improve financial decisions (Fan, 2021; Oehler & Kohlert, 2009).

Individual differences also play a substantial role in financial decision-making. For example, people with high levels of financial literacy are more likely to process more complex information and, consequently, make better decisions (Fan & Chatterjee, 2017; Artavanis & Karra, 2020; Hastings & Mitchell, 2020). On the other hand, impulsive individuals with low self-control tend to shorten the complete decision-making process leading to poorer decisions (Anderloni & Vandone, 2011; Kamleitner et al., 2012; Gathergood, 2012; Rey-Ares et al., 2021).

In the case of credit decisions, consumers tend to simplify the process of seeking information, limiting alternatives evaluation, and allocating less time and effort to decide about credit products and providers (Day & Brandt, 1973; Kamleitner et al., 2012; Chang & Hanna, 1992; Elliehausen, 2019). Chang & Hanna (1992) suggest that search for information should increase with higher amounts borrowed, previously experienced debt, higher income, and educational level (see also Fan & Chatterjee, 2017) and be higher with younger consumers (see also Kamleitner et al., 2012).

Regarding credit evaluative criteria, research suggests that consumers essentially consider convenience and trust when choosing credit providers (Malbon, 1999; Devlin, 1988), whereas, for credit products, they are more sensitive to the impact of monthly installments on their budget (Lea, 2021; Malbon, 1999; Ranyard et al., 2006; Van Raaij, 2016). In fact, consumers are reported to have a payment/interest bias when evaluating credit arrangements - they focus on the monthly payments (if the repayment amount is affordable) and underestimate the importance of the interest rate and the repayment duration of a loan (Stango & Zinman, 2006).

Heuristics and decision rules

Consumers are limited in their ability and willingness to process all the available information and make complete judgments. As a result, they usually simplify their decisions, applying decision rules that allow them to use some dimensions as substitutes for others (Ceschi et al., 2019; Van Raaij, 1988). Especially with low-involvement purchases, consumers tend to use heuristics, or mental rules-of-thumb, to make a faster decision. These allow individuals to make decisions quickly using limited information (Tan et al., 2021; Berthet, 2021; Elliehausen, 2019; Lee et al., 2011).

Heuristics do not require careful deliberation, whereas they do not necessarily lead to wrong decisions. They are fast (for requiring less computational efforts) and frugal (in the use of information). Heuristics are common-sense rules of thumb derived from experience – they are applied to make relatively quick decisions in uncertain situations when the availability of information is difficult and/or time-consuming (Van Raaij, 2016; Tan et al., 2021; Berthet, 2021). Todd and Gigerenzer (2000) propose a human "adaptive toolbox" for heuristic choices, making informed decisions with minimal information and contextual awareness.

Heuristics are mostly viewed as an inevitable solution rather than the most effective strategy, as they can lead to serious cognitive biases (Tversky & Kahneman, 1974; Kahneman, 2011; Berthet, 2021). Furthermore, using heuristics sometimes results in suboptimal decisions and so makes consumers more vulnerable to fraudulent actions, such as scams (Fischer et al., 2013; Simons & Chabris, 2023). On the other hand, empirical studies have demonstrated that in some circumstances, heuristics can perform as well or even better than the models based on trade-offs (Gigerenzer & Goldstein, 1999; Goldstein, & Gigerenzer, 2002; Luan & Gigerenzer, 2019).

One classification of the decision rules used by consumers when evaluating alternatives is that they can be either compensatory - when a weakness in one attribute can be compensated by a strength in another attribute - or non-compensatory - when a weakness in a product attribute cannot be compensated by a strength in another attribute (Lee & Marlowe, 2003; Von Gunten & Scherer, 2019; Araña & León, 2009). Regarding the compensatory models, a significant rule is the weighted additive rule, which considers the values of each alternative on all relevant attributes and their respective importance from the consumer's point of view.

As regards non-compensatory models of decision-making, a representative one is the lexicographic heuristic (Fishburn, 1974; Munthiu, 2009; Meerman, 2022). It is used when the most critical attribute is determined, and the values of all alternatives are evaluated regarding this attribute - the option with the best performance is selected. Then, if two or more alternatives are tied, the second most important attribute is considered, and so on, until the tie is broken. The take-the-best heuristic is a variation of this model. In that case, consumers infer which of two alternatives has a higher value on one criterion based on clues retrieved from memory (Gigerenzer et al., 1991; Meerman, 2022).

For complex financial decisions, heuristics assist consumers in simplifying the task of choosing among different alternatives (Lavin et al., 2019; Elliehausen, 2019). A prevalent credit heuristic seeks the lowest monthly payment with the most extended term (Elliehausen, 2019; Stango & Zinman, 2006; Timmons et al., 2019), which diverges from financial education principles (e.g., Ranyard et al., 2018). However, that may result from most credit providers emphasizing just one aspect of credit cost in their marketing efforts - not presenting standard and complete information about credit agreements so that people could judge the options regarding total costs (Lea, 2021; Timmons et al., 2019). This is particularly important, considering that people usually struggle to estimate loan durations and the total cost of credit (Ranyard & Graig, 1993; Lea, 1999, 2021; Hastings & Mitchell, 2020), which may lead them to suboptimal credit choices.

RESEARCH QUESTIONS

What are the main sources of information considered by consumers when deciding how to finance a major purchase?

This study defines a major purchase as a significant consumer durable (e.g., washing machines, refrigerators, automobiles) or a home improvement project (e.g., new kitchen, window set). This focus is due to the availability of multiple credit options, resulting in a thorough decision process. Smaller or larger purchases typically offer fewer financing choices.

The foundational study on consumers' main credit information sources is Day and Brandt's (1973) research on durable goods and credit purchases (also see Elliehausen, 2019). The authors suggest that consumers are less contemplative about credit choices than the product itself (Chang and Hanna, 1992; Bertola et al., 2005). They simplify decisions by relying on information provided by the credit supplier. Malbon (1999, 2001) observed that consumers mostly use supplier information to comprehend contract terms, especially for housing and personal loans. Similarly, Howcroft et al. (2003)'s informants stated that credit decisions mainly occur in financial institution branches, with professional advice as the primary information source.

How much time and effort do consumers take when deciding how to finance a major purchase?

As noted above, consumers search for information based on goal orientation and involvement. More valuable, infrequently bought products prompt extensive information searches compared to frequently purchased ones (Mengüç, 1999; Munthiu, 2009; Kamleitner & Kirchler, 2007).

However, Day and Brandt's (1973) study concludes that consumers often limit credit searches, investing less effort in decision-making. For instance, Chang and Hanna (1992) discovered that only 20% of buyers financing purchases above US\$500 sought credit information pre-purchase. Other kinds of financing, like student loans, also see minimal consumer search (Kamleitner et al., 2012). Furthermore, consumers do not effectively compare convenient credit offers like payday loans (Kamleitner et al., 2012).

What is the effect of previous experience of credit purchases on subsequent credit decision making?

Consumers often rely on prior experience in credit decisions, favoring credit providers they have previously financed purchases with (Dunkelberg, 1981; Elliehausen, 2019). Elliehausen (2006) notes that credit choices mimic product decisions, where positive past experiences lead to minimal external search. In fact, inertia and passivity are predominant in consumers' financial decisions, what has been called status-quo bias (Howcroft et al, 2003; Madrian, 2001; Godefroid, 2022) – for example, when consumers stay with the current account provider for lengthy periods of time, due mostly to inertia rather than to genuine loyalty (Howcroft et al, 2003). Thus, there is a natural tendency for consumers who had had a previous satisfactory credit experience to firstly seek information with the person or institution responsible for the previous deal, with high probability of doing the same kind of agreement and with the same provider they did before.

What are the consideration set and the main criteria considered by consumers when choosing the credit product and the credit provider for financing a major purchase?

During the consumer's choice process, the alternatives considered form the consideration set, a subset of available options (Marewski et al., 2010; Hauser & Wernerfelt, 1990). Evaluative criteria are the consumers' dimensions for assessing competing alternatives (Taylor & Burns, 1999; Joo, 2023).

As regards the main criteria used, Malbon's (1999) survey on consumers credit highlights convenience and trust as crucial factors in selecting credit providers. Devlin (1988) emphasizes image and reputation of providers are the most important criteria when consumers face complex financial offerings. As regards credit products, consumers prioritize monthly payments over total credit cost when choosing durable goods credit, reflecting the payment/interest bias (Lea, 2021; Stango & Zinman, 2006; Elliehausen, 2019; Van Raaij, 2016). Other studies confirm the importance of repayment periods in months (Herrmann & Wricke, 1998; McHugh et al., 2011) and how monthly installments stand out in mental accounts during credit decisions (Ranyard & Craig, 1995, Ranyard et al., 2006).

Which decision rules & heuristics are used by consumers when choosing the credit product and the credit provider for financing a major purchase?

Most of credit decisions seem to be non-compensatory – one weakness in a product attribute cannot be compensated by a strength in another one (Von Gunten & Scherer, 2019), as the focus is given to one or just a few attributes, especially regarding credit provider and credit product choices (Malbon, 2001; Van Raaij, 2016).

Consumers are expected to use a lexicographic heuristic for credit decisions, relying essentially on the lowest monthly payment in arrangements with the most extended available term. As the payment/interest bias occurs (Stango & Zinman, 2006), consumers focus on the monthly payments, underestimating the interest rate and the loan duration (Lea, 2021; Malbon, 2001; Ranyard et al.,

2006; Van Raaij, 2016), implying, thus, a lexicographic approach. Research also suggests that consumers apply the take-the-best heuristic – a variation of lexicographic heuristic (Gigerenzer et al., 1991; Meerman, 2022), basing their decisions on the annual percentage rate (APR) and the total cost when choosing between different credit sources (Ranyard et al., 2006; Ranyard et al., 2018).

Is the consumer's overall satisfaction after financing a major purchase affected by the decision-making factors?

This research question emerged after initial semi-structured interviews, identifying potential correlations. Consumer satisfaction with credit decisions is likely influenced by factors like decision time, agreements and providers considered, prior experiences, information helpfulness, comparison ease, and product and provider choice rules (compensatory vs. lexicographic).

The research questions of this study are condensed in the framework shown in Figure 1.

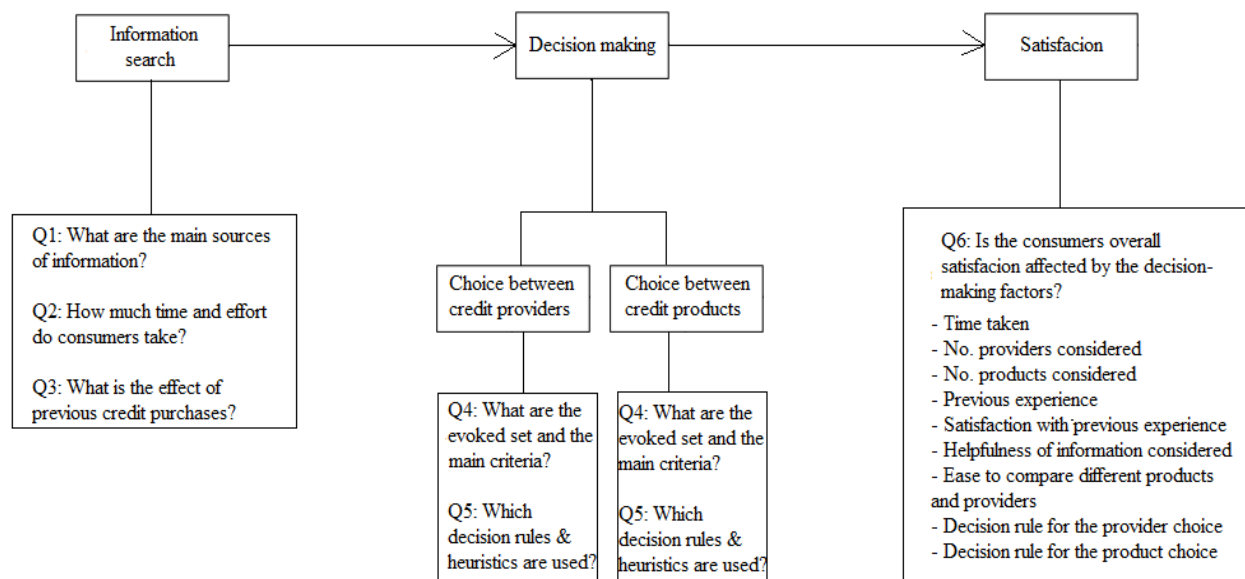


Fig. 1. Framework of the research questions.

METHOD

A pilot study with semi-structured interviews was firstly conducted with four participants - University of Exeter students who had financed a significant purchase within the last three years. The interviews were used to refine the hypotheses based on the literature or point to new ones and constituted a primary source for developing the questionnaire for our main study – a personally-administered questionnaire survey.

A total of 301 participants were recruited from the University of Exeter (22 participants) and Amazon Mechanical Turk (m-Turk) (279 participants) to answer the questionnaire, having the opportunity of winning a prize - an Amazon £50 voucher (there were no significant differences in the results from the two recruitment methods on any variable of interest). As in the pilot study, we selected people who had financed a significant purchase partially or totally within the last three years – this timeframe was imposed to enhance data validity by attenuating the effect of selective memory and memory decay on the reliability of the measures used (Guo, 2001; Moorthy et al., 1997). Data collection occurred from April to August of 2013.

Data analysis

For the primary purpose of mapping the consumer decision process and its components, the study relied on descriptive statistics, as most questions were simple multiple-choice. The distribution of the number of criteria considered was used to identify the type of decision rule used by consumers when acquiring credit for a significant purchase.

Regarding consumers' overall satisfaction, a multiple regression analysis was applied – the dependent variable was the overall satisfaction with the credit decision, and the independent variables were the main decision-making factors. We aimed to identify which factors lead to either more or less satisfaction.

The questionnaire was built based on the interviews and existing literature, covering factors influencing credit decisions grouped into five sections—questions covering purchase details, information sources, decision-making criteria, decision rules, and overall satisfaction. Lastly, the demographic section collected data about age, gender, nationality, occupation, and income.

Ethical Issues

In the semi-structured interviews, participants were briefed beforehand on the research's purpose and the confidential nature of the process. Additionally, recognizing potential sensitivity around financial matters, participants were assured that they need not discuss any topic causing discomfort.

Concerning the survey, the initial questionnaire page contained a welcome message assuring participants of confidentiality and anonymity. Additionally, it stated that the University of Exeter's Research Ethics Committee had approved the project for Psychology. Apart from these measures, no further ethical considerations were necessary for this study.

This study is registered at the OSF repository, and its data can be accessed under permission at: https://osf.io/4gyk5/?view_only=db3bd5478c864960b8cb67a503ab7ad3

RESULTS

Participants' profile and credit acquisition context

Survey participants had diverse profiles, with a slight majority being male (57.1%) and having various occupations, while monthly income ranged from US\$70 to US\$13,000 (median = US\$2,573). Most were from the U.S. (56.1%), and the primary purchases were vehicles (60.2%), electronics & computers (18.6%), and household appliances (8.6%). Item costs ranged from US\$75 to US\$110,000 (median = US\$10,000), monthly installments from US\$2 to US\$5,000 (median = US\$226), and interest rates from zero to 30% APR (median = 5% APR), with 17.6% being interest-free. Credit was acquired mainly through store/dealer arrangements (62.5%), while the remainder used personal loans from banks/financial institutions. Participants were mainly satisfied with their credit agreements (85.1% "very satisfied" or "satisfied"), citing low-interest rates, ease, and service as reasons.

The main sources of information

Table 1 shows the distribution of frequencies for the question "Where did you get information that most influenced your decision about the credit agreement used in this purchase?" As expected, information provided by the store/dealer was the most frequent answer, followed by "family and friends" and "internet".

Further, most of respondents (more than 66%) found the information acquired mostly helpful for their credit decision, and the main reasons for that were because it showed the monthly installments, explained the interest rates, and clearly stated the conditions of the credit agreement.

Table 1
The primary sources of information (*)

Variables	Frequency	Percentage
Information provided by the store/dealer	141	46.8
Family and friends	111	36.9
Internet	90	29.9
My own past experience	81	26.9
Information provided by the bank or financial institution	79	26.2
Financial advisor	24	8.0
Newspaper, magazines, T.V., or radio	22	7.3
None	7	2.3
Other	2	0.7

(*) More than one answer possible

Time and effort

When asked about the time taken to make the credit decision, the participants' answers showed that they do not engage in a long information search process, typically taking less than two days (68.4% of the sample) to sign the credit agreement contract after having decided about the purchase itself. More importantly, over one-third of the sample signed the contract in less than one hour (See Table 2).

Another source of information for that research question was the number of credit agreements and credit providers considered before making the decision: 66.4% of the respondents considered none or just one option of agreement and 69.1%.

Table 2
How much time consumers take to make the credit decision

Variables	Frequency	Percentage
Less than 1 hour	106	35.2
Less than two days	100	33.2
2-7 days	71	23.6
8-14 days	16	5.3
More than 14 days	8	2.7

Previous credit experience

Research question 3 was examined in a subset of participants with prior credit experience (235 individuals). The analysis comprised two stages: first, a cross-tabulation explored the link between prior satisfaction and the number of credit agreements evaluated; next, another cross-tabulation assessed the relationship between prior satisfaction and the number of credit providers considered.

Responses of "none" or "just the one I chose" for both agreement and provider inquiries indicated limited decision-making, often relying on internal information (previous experience). Conversely, responses like "2," "3-4," "5-7," or "more than 7" suggested reliance on external information.

Regarding the cross-tabulation of prior credit satisfaction and the number of credit agreements/products considered, among those without positive past experiences (36 participants), 61.1% considered just one agreement. Among those with positive past experiences (199 participants), a more significant proportion (67.8%) considered just one agreement (Chi-square test - $\chi^2(1) = .62$; $p = .430$). Due to the small sample size without positive experiences, further research with a larger sample is needed to confirm this trend.

For the cross-tabulation of prior credit satisfaction and the number of credit providers considered, there was no difference between those without prior satisfaction (69.4%) and those with prior satisfaction (68.3%) who considered just one provider (Chi-square test - $\chi^2 (1) = .02$; $p = .896$), indicating no distinct trend for credit providers.

To further validate hypothesis 3, cross-tabulations were conducted between responses to the direct question about primary information sources for credit decisions and prior credit satisfaction. Interestingly, the answer "my own experience" was the only one approaching significance. Among those with positive past experiences, 32.7% identified "my own past experience" as the primary information source, compared to 19.4% without positive past experiences. The difference was not significant (Chi-square test - $\chi^2 (1) = 2.51$; $p = .113$). Nevertheless, the fact that only this question yielded any substantial difference between the two groups suggests a possible trend.

Consideration set and evaluative criteria

Most respondents do not consider many possibilities of credit products or providers, indicating a limited consideration set for both situations. Therefore, the consideration set was built with just one or two alternatives (87.3% of the cases for the products and 91.4% for the providers) (See Table 3 for complete data).

Table 3
Number of credit products and credit providers considered before the decision

Variables	Products -		Providers -	
	Frequency	Percentage	Frequency	Percentage
None / Just the one I chose	200	66.4	208	69.1
2	63	20.9	67	22.3
3-4	29	9.6	20	6.6
5-7	0	0.0	2	0.7
More than 7	1	0.3	1	0.3
I don't know	8	2.7	3	1.0

Interestingly, respondents often mentioned providers' names when asked about credit products. Many could not recall names or considered only the chosen one. Regarding providers, some could not remember names, though to a lesser extent. For vehicle purchases, participants often mentioned manufacturer-associated financial institutions (e.g., Ford Motors Credit, Honda Finance, KIA Motor Finance) or general-purpose providers (e.g., Bank of America, Wells Fargo, Chase).

Table 4
Criteria considered by consumers when choosing the credit product (*)

Variables	Frequency	Percentage
The interest rate	190	63.1
The monthly installments	160	53.2
The convenience of the process	121	40.2
The duration of the loan	68	22.6
I followed the guidance from the store/dealer	65	21.6
The possibility of paying back the loan early	48	15.9
It was the same credit provider I used last time	45	15.0
The prestige/name of the institution	28	9.3
Other	11	3.7

(*) More than one answer was possible.

The analysis of the criteria consumers use was done through the observation of the distribution of response frequencies for the questions about the main factor(s) that influenced consumers' decisions when selecting the credit agreement and the credit provider. The figures

indicate that interest rate tends to be the most important criterion for consumers when choosing the credit product and the credit provider (See Tables 4 and 5 for detailed data).

Table 5

Criteria considered by consumers when choosing the credit provider (*)

Variables	Frequency	Percentage
The interest rate	190	63.1
The monthly installments	160	53.2
The convenience of the process	121	40.2
The duration of the loan	68	22.6
I followed the guidance from the store/dealer	65	21.6
The possibility of paying back the loan early	48	15.9
It was the same credit provider I used last time	45	15.0
The prestige/name of the institution	28	9.3
Other	11	3.7

(*) More than one answer was possible.

Heuristics & decision rules

Research question 5 underwent a dual analysis approach: employing a direct query and scrutinizing the distribution of considered factors. Assessing consumers' decision rules is intricate, and employing a questionnaire to capture this information entails limitations. Thus, it is essential to emphasize that this is not a definitive measure but an indication of the cognitive process during decision-making.

Initially, the outcomes of the direct query, "Was there only one factor that really made up your mind or did you consider a balance of factors?" were assessed. Responding to "one factor" indicated a lexicographic heuristic, while "balance of factors" corresponded to a compensatory decision rule.

The results indicate that for the selection of credit agreements, consumers are more likely to use a compensatory decision rule (55% of the sample), whereas, for the selection of credit providers, consumers tend to use a lexicographic heuristic (51.8% of the sample). Although significant (Mc Nemar test - $\chi^2(1) = 12.12$; $p < .001$), the difference in proportions using a compensatory rule for the two decisions was small.

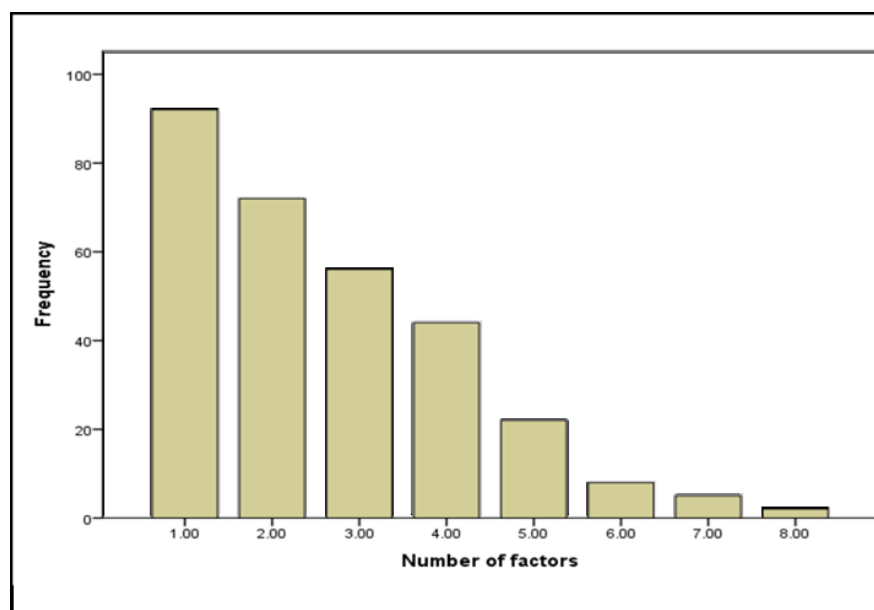


Fig. 2. Distribution of factors for credit products

Accordingly, we examined the distribution of factors considered when choosing the credit product and provider. A gradual decline in factors would signify a compensatory decision approach, reflecting equilibrium in evaluating credit agreements and providers. Conversely, a notable shift from the first category (one factor) to subsequent ones would indicate a lexicographic decision strategy.

Figures 2 and 3 illustrate that the setup embodies a compensatory rule for credit product decisions. In contrast, the setup shifts to a lexicographic rule for credit providers – the disparity between the first and second categories is about 20%, highlighting the tendency for individuals to concentrate on a singular decision factor. This outcome reinforces the trend identified in the initial analysis.

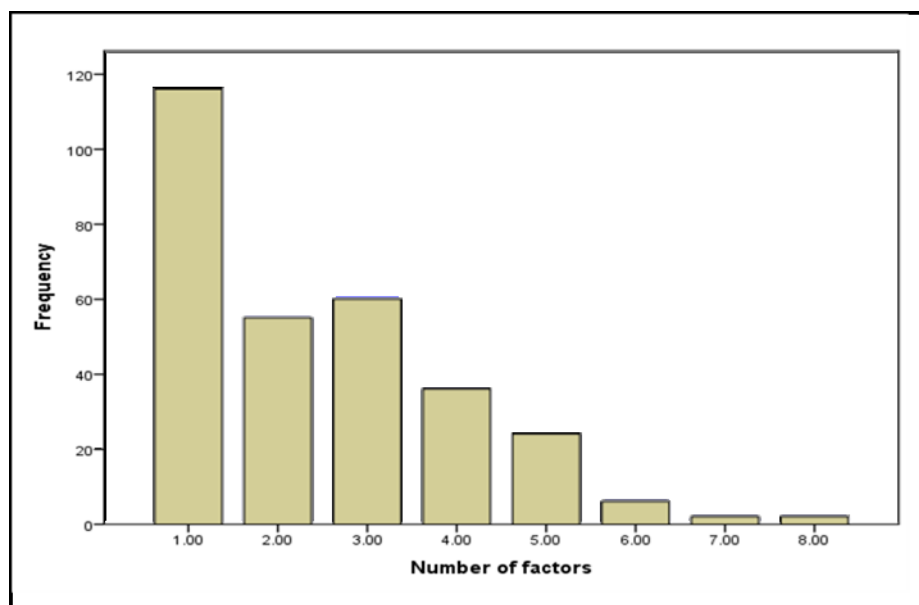


Fig. 3. Distribution of factors for credit providers

Consumer satisfaction and the decision-making factors

Research question 6 was addressed through multiple regression analysis. Initially, dummy variables were employed to reformat the variable of previous credit experience. It allowed for an independent assessment of the correlation between consumers' overall satisfaction and different response categories ("once with a different kind of purchase," "once with the same kind of purchase," and "more than once"). Additionally, the "previous satisfaction" variable was recategorized into "not satisfied" and "satisfied" groups.

Two multiple regression models were used – without (model 1) and with (model 2) the demographic variables (see Tables 6 and 7). Model 1 yielded moderate fit (R^2 adjusted = .454) and significantly predicted overall satisfaction ($F(11,165) = 14.239$; $p < .001$). Significant factors impacting overall satisfaction were: "previous satisfaction", "how helpful the information was", "how easy to compare". The factor "decision rule for the credit provider" approached significance, showing a possible trend (See Table 6).

Demographic variables (age, gender, nationality, and income) were later incorporated into the regression to enhance model accuracy. Income was divided into bands to avoid skewing due to high values, and nationality and gender were categorized as "developed" and "developing" countries. Adding these variables significantly improved the model ($F_{change}(15,124) = 11.052$; $p < .001$), leading to Model 2.

In Model 2, the factors significantly affecting overall satisfaction were: "previous satisfaction", "how helpful the information was," "how easy to compare," and the "decision rule for credit provider" (See Table 7).

Table 6
Consumer's overall satisfaction regression analysis – model 1

Variables	Beta	t-value	p-value
Previous satisfaction	.329	5.390	<.001
How helpful the information was	.264	4.073	<.001
How easy to compare	.327	4.946	<.001
Decision rule for credit provider	.148	1.697	.092

R²adjusted = .454. F(11,165) = 14.239; p< .001

Table 7
Consumer's overall satisfaction regression analysis – model 2

Variables	Beta	t-value	p-value
Previous satisfaction	.384	5.867	<.001
How helpful the information was	.369	5.184	<.001
How easy to compare	.238	3.379	.001
Decision rule for credit provider	.250	2.593	.011

R² adjusted = .520. F-change (15,124) = 11.052; p< .001.

Considering the significant results, we can conclude that consumers who were satisfied with their credit decisions also reported that: (i) information was helpful; (ii) comparing different credit agreements and providers was easier; (iii) they were satisfied with their previous credit experience; (iv) they used a compensatory rule to choose the credit provider.

DISCUSSION

This study aimed to comprehend consumers' decision-making process when acquiring credit for major purchases. Regarding information seeking, retailers emerged as the primary credit decision source, consistent with Malbon (1999, 2001), Elliehausen (2019), and Howcroft et al. (2003). Despite widespread online information availability, consumers predominantly rely on retailer-supplied information, even if biased. This underscores ambiguity about suitable information acquisition methods.

Public policies could inform consumers about key credit aspects for comparison, such as interest rates and total costs. Furthermore, we found that most consumers take under two days to decide on significant purchase financing, indicating limited decision-making – consumers may not have time, resources, or motivation to engage in a deep decision-making process (see Durkin et al., 2015)

Behavioral economics suggests that consumers simplify choices with heuristics, forgoing exhaustive comparisons (Durkin et al., 2015; Elliehausen, 2019; Van Raaij, 2016). However, in the complex credit market, with a high dispersion in interest rates and financial charges (Chang and

Hanna, 1992), comprehensive information searches - considering monthly repayment, total cost, and annual percentage rate of interest (APR) - and compensatory decisions should benefit consumers, aligning with financial education principles. In general, relying on heuristics biases credit evaluations.

Despite the fact that the total cost of credit can be high, and that credit decisions are relatively infrequent, our results reveal limited consideration sets (typically 1-2 options) for both credit products and providers, correlating with information search analysis. Reduced effort relates to fewer options considered, potentially leading to suboptimal choices. Public interventions and financial education are crucial to broaden consumer credit option consideration.

Consumer understanding of credit products appears limited – provider names are often cited instead of products. When asked to name the credit providers, a good number of respondents could not remember their names, which might suggest that many of them relied on the arrangement set up by the store or dealer - a biased way of evaluating credit alternatives.

From the overall satisfaction analysis, two relationships should be highlighted. First, consumers satisfied with their previous credit experience tend to be satisfied with their current credit decision. That might suggest that experienced consumers (with at least one successful credit acquisition experience) should perform better in their recent decision, although having previous experience itself is not associated with consumer satisfaction.

Interestingly, using a compensatory rule for selecting the credit provider is associated with consumer satisfaction. That is an intriguing result, as most respondents reported using a lexicographic heuristic to select the credit provider. Maybe, there is some attitudinal effect underlying this outcome – people who use the compensatory rule might be more confident about their decision as they went through a deeper information-seeking process, leading to more satisfaction with the outcome. Also, it could represent a strategy for reducing any dissonance due to putting more time and effort into the decision – further research should be done to evaluate these possible relationships.

As for limitations of the study, the results for the decision rules are not a definitive measure, but an indication of what happens in the consumer's mind. The sample's representativeness should also be mentioned - the results might have reflected some cultural aspects for the respondents being mostly from the United States - there is an opportunity for cross-cultural studies to uncover regional credit choice variations. Furthermore, as the item purchased was mostly a vehicle, it might have impacted the results - further research should be conducted with diverse item-purchase samples for comprehensive analysis.

Research ethic statement

The authors declare that this manuscript is original, has not been published before and is not currently being considered for publication elsewhere.

Author contribution statement

Felipe Alves: conceptualization, investigation, methodology, formal analysis, writing - original draft. Paulo Prado: writing - review & editing. Djonata Schiessl: writing - review & editing. Stephen Lea: supervision; investigation; methodology; formal analysis; writing – review & editing.

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