



# Review Paper on Affective and Cognitive factors that affect banking Relationship with respect to Millennial

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**Abstract:** The aim of this paper is to explore the affective and cognitive factors that condition banking relationships for economically vulnerable consumers and how these factors contribute to increasing financial difficulties and exclusion. This research, performed on a set of focus groups, bases its findings on a combination of experimental and discourse analysis methods. Financial decisions are not rational and can be biased by affective and cognitive factors. Behavioural finance has focused very little on analysing how consumer biases influence relationships with banking institutions. Additionally, these relationships are affected by the digitalization and transformation of banking business. Thus, in the case of economically vulnerable consumers, who are not profitable for the increasingly competitive banking industry and lack financial abilities, their risk of financial exclusion is increasing. The results show that distrust and shame lead to financial difficulties in economically vulnerable consumers. Distrust generates problems of access and self-exclusion, while shame generates difficulties of use. This lack of trust makes them more

rational when dealing with machines than with people, showing greater banking difficulties for consumers with a “person-suspicious” profile. This finding can help regulators establish limits on banking behaviour, require banks to incorporate affective and cognitive factors in their convenience tests and detect new variables that can help them improve their insolvency ratios and reputations.

**Keywords:** Discourse Analysis, Behavioural Finance, Financial Exclusion, Vulnerable Consumers, Affectivecognitive Factors

## Introduction

Financial decisions entail financial knowledge and literacy (Gathergood, 2012), which are not always available and can affect consumer well-being, as well as the financial and social exclusion of economically vulnerable consumers. The behavioural aspects of banking consumers’ decisions or preferences and the factors influencing them are relevant in terms of personal finance and market behaviour (Anand and Lea, 2011). For the average consumer, psychological factors more largely define financial behaviour than financial knowledge (De Meza et al., 2008).

Previous studies have studied a large variety of these psychological factors: intelligence and cognitive ability, specifically numeracy (Banks et al., 2010; Smith et al., 2010); impulsivity, which mediates the impact of financial literacy on debt (Ottaviani and Vandone, 2018); and personality factors, such as responsibility, planification or

perseverance, in addition to other kinds of factors, such as stable income and a higher level of education (Almlund et al., 2011; Borghans et al., 2008; Roa et al., 2018). Nevertheless, the literature focussing on the affective and cognitive factors of financial decision-making is relatively recent and scarce (see Kusev et al., 2017, for a review).

Affective and cognitive factors affect the way in which people search for and process information, which can lead to bad financial decisions (Capuano and Ramsay, 2011), referring to, for example, self-exclusion or overindebtedness. Negative emotions can influence cognitive biases such as risk-taking behaviour (Kusev et al., 2017). As Roa-Garcia (2013) suggested, the available information, as well as information coming from trusted but not expert people, can be most relevant for consumers. Loss aversion leads people to value what they own more than what they do not own. However, consumers prefer risk rather than ambiguity or uncertainty. Additionally, emotional well-being is also affected by a consumer's relationship with a banking institution (Bustamante and Amaya, 2020).

The transformation and restructuring of the banking sector as a result of the 2008 financial crisis and the 2020 COVID-19 pandemic and the advancement of banking digitization have reduced personalized attention throughout the branch network, increasing the difficulties faced by lower-income users (Bowman et al., 2014; De la Cuesta-Gonzalez et al., 2021; Servon and Kaestner, 2008). The banking sector tends to abandon the relational model based on risk management through a close relationship between bank agents and clients, in favour of a transactional and direct model based on big data, ATMs and online platforms (Dandapani et al., 2018; Filotto et al., 2021). In this environment, a significant burden of responsibility tends to be transferred to consumers: the use of new technologies and the acquisition of sufficient financial literacy are encouraged so that consumers can operate in the retail banking market (Balasubramnian and Sargent, 2020; Gathergood, 2012; Hogg et al., 2007).

## Literature review

Consumer vulnerability can be defined by structural restrictions and individual characteristics that constitute barriers—real or perceived—to obtain adequate value in consumer transactions (Baker and Mason, 2012). Individual characteristics include cognitive, affective and socio-economic factors (Baker et al., 2005). The addition of different personal factors could exacerbate consumers' vulnerability. For example, a person with a precarious job and a tendency to feel anxiety may consider his or her ability to make rational decisions in his or her consumer transactions as being especially affected (Hill and Kozup, 2007). In the financial market, consumer vulnerability may imply a lack of rationality and a search for information (Roa-Garcia, 2013) and difficulties in seeking to redress and solve disputes with banks (Sourdin and Atherton, 2019), inducing overindebtedness or making it more difficult to avoid bad commercial practices (Bowman et al., 2014).

In fact, low-income people face barriers to accessing complex banking services and greater difficulties when consuming these products (Carbo et al., 2005; Nieri, 2007). In terms of financial exclusion, the first example corresponds to ADs (Anderloni and Carluccio, 2007), implying the impossibility of contracting services that could generate value added

for the user. The second example refers to (UDs), that is, negative consequences due to highly expensive or unsuitable services or inappropriate use (Gloukoviezoff, 2007). Other examples of UD identified by one study amongst populations at risk of social exclusion (Spanish Red Cross, 2016) were excessive waiting times at bank branches or the obligation to operate through electronic channels.

A perceived low level of value and wellbeing obtained from financial services – perception difficulties (PDs) – (O’Connoret al., 2019) can also affect the level of financial exclusion (ADs and UD) faced by vulnerable consumers (Devlin, 2005). For example, previous bad experiences may lead consumers to think that their money will be safer in their own hands than in a bank or to not appreciate the benefits of savings (Anderloni and Carluccio, 2007) and reject the use of financial services, increasing their situation of economic vulnerability. Additionally, the perception of insufficient information provided by the bank can be considered poor service (Smith, 1989) and prevent the use of financial services by these vulnerable consumers, especially when these services and products entail innovation and complexity (Davis, 1989; Te’eni, 1989; Rogers, 1995).

Capuano and Ramnsey (2011) suggest that loss aversion is a cognitive bias that lowers risk assumption and the use of financial products, which is exacerbated by socio-economic factors such as poverty and low income. Risk is a cognitive bias that is frequently studied in economic behaviour, as it is important due to its negative consequences (going into debt, purchasing inappropriate products, etc.), especially in a sample of economically vulnerable consumers. Moreover, risk in addition to fear and distrust are important variables behind why many consumers are still unwilling to use online banking (ADs) (see Arora and Kaur, 2018). Risk also influences the choice to conduct online transactions (Bhatnagar et al., 2000) and is related to the reluctance of many consumers to shop online (Forsythe and Shi, 2003).

Overconfidence and optimism are also associated with risk-taking and investment (Blasco and Ferreruela, 2017). Fandos et al. (2006) state that the most important types of value perceived by consumers in banking services are emotional value (the feelings generated in the consumer) and the value from the assistance provided by personnel. Calvo-Porrall and Levy-Mangin (2020) also highlighted that customer behaviour is determined by emotional or affective responses experienced during banking service use. In fact, the values that consumers give to financial (in terms of incentives), social (personal relationship) and structural (valuable services, such as information, study reports, etc.) bonds determine their loyalty to the bank (Chiu et al., 2005; see also McCall, 1970).

Cognitive and emotional factors are interrelated. Loss aversion is related to anxiety and other emotions, but these have been ignored in economic behaviour, even though such emotions are important for making decisions (Swee-Hoon and Devlin, 2011). An emotion is a behavioural (changes in facial expression, crying, smiling and approach-avoidance), physiological, cognitive (evaluation of stimuli) and subjective response to a stimulus. There are six basic emotions (Lewis, 2014): happiness, sadness, disgust, anger, fear and surprise, in addition to secondary (social) emotions that are acquired during our development, such as shame, empathy, pride, guilt, pity and jealousy.

Consumers with lower levels of anxiety and higher levels of distrust tend to engage in more recommended financial management behaviours and, thus, more savings behaviours (Hayhoe et al., 2012). Likewise, customers with low self-esteem see the organizational support of the financial service as a way to feel safe and are more inclined to participate in interactions with service providers, accept support from them (relational banking) and, finally, enjoy even more of the service, which would be reflected in their emotional well-being (Bustamante and Amaya, 2020).

However, people with distrust of the bank and/or the services delivered could lead to financial self-exclusion (ADs) (Devlin, 2005; Kempson and Whyley, 1999). This means the non-use of services to which the consumer is assumed to have access, as using them would lose control of their finances (PDs). Self-exclusion may also be based on shame due to the self-perception that the institution will reject them as a customer, for example, in credit, experiencing feelings of not being “up to the task”, that the product “is not made for me”, etc. These negative emotions can affect people’s financial decisions (AD or UD) and their well-being (PD) (Bustamante and Amaya, 2020).

Moreover, people reject or accept inappropriate financial products to avoid regret and shame (Baker and Nofsinger, 2002). Bad experience can also explain self-exclusion. Consumption emotions (those experienced by consumers during the service encounter) change rapidly, and the uncertainty that exists for consumers before the service encounter begins can cause consumers to experience conflicting or mixed emotions (positive and negative). As people tend to react negatively to mixed emotions (Lau-Gesk et al., 2011), these feelings may lead customers to avoid the service situation in the future.

## Research Method

This research utilized secondary data obtained from a systematic literature review of various reputable journals. 20 research papers were selected for inclusion in the study, based on their relevance to the topic of affective and cognitive factors influencing banking relationships among economically vulnerable consumers. These papers were carefully reviewed and analyzed to extract valuable insights into the subject matter. The systematic literature review involved comprehensive searches across academic databases to identify pertinent studies addressing the research objectives. The selected papers encompassed diverse perspectives and methodologies, offering a rich foundation for understanding the complexities of the topic. By drawing upon existing research findings, this study synthesized and synthesized information from multiple sources to generate meaningful conclusions and recommendations. The rigorous selection process ensured that only high-quality, peer-reviewed papers were included, enhancing the credibility and validity of the study's findings.

## Result and Discussion

The expansion of digital channels in the banking business, involving the reduction of the branch network and the reorientation of customers towards online banking and ATMs, is widespread in advanced economies. However, the speed of the process and its level of acceptance depend on various sociodemographic characteristics, being more intense in countries with higher levels of income, education and urban populations (Menrad and Varga, 2020). Some consumer groups, such as the elderly or those with low incomes, have been identified as particularly vulnerable to this process, as there are fewer resources to serve them in person (Ipsos Mori, 2016; Coppock, 2013; Corrado and Corrado, 2015). Several studies have investigated differences in people's feelings when interacting with machines or people.

For some people, the use of technological interfaces dehumanizes service encounters (Zeithaml and Gilly, 1987), while other people negatively value some aspects of human interaction (e.g. less speed, possibility of human error) and do not value the social aspect of human interaction. For these customers, technological interfaces are preferred to human interactions. Branca (2007) analyses the impact of cognitive versus affective aspects on the consumer usage of financial service delivery channels and finds that both aspects, including positive emotions, influence a higher usage frequency of technology-based channels, while only cognitive factors affect branch usage, suggesting that impersonal channels can be associated with the desire for anonymity a higher sense of control and a lower perceived quality of service through human-based channels. This can be especially relevant for vulnerable consumers, who feel embarrassed by the staff of financial institutions, perceiving shorter service times, lack of understanding and being seen as inferior (De la Cuesta-Gonzalez et al., 2021).

Sanfey et al. (2003) presented the ultimatum game that consists of one player (A) having to share an amount of money with another player (B). If player B declines the offer, then no player wins anything, and if player B accepts the offer, then a deal is made, and both players win the money. The authors found that people accepted a deal when the split of money was fair (equally, for example, five euros for player A and five euros for player B); however, they rejected the deal when it was unfair, even though player B could win one, two or three euros. In terms of economic benefit, this meant that people should have always accepted the deal, regardless of whether the offer was fair. However, such a decision is modulated by emotion. When people evaluated a situation as being unfair, they rejected it, even when they lost money.

People accepted more unfair offers when they regulated their emotions through re-evaluation (Van'tWoumet al., 2010). However, patients with lesions in their ventromedial prefrontal cortex (area related to emotion) rejected more unfair offers than did a control group (Koenigs and Tranel, 2007). A similar effect was found in people with induced sadness and disgust (Lempert and Phelps, 2016). These results seem to indicate that emotion interferes with rational responses (understood as profits or economic gains). The interesting result was that people modulated this response depending on whether player A was a



person or a computer. In the latter case, people accepted more unfair situations, and therefore, they were more rational in terms of economic benefits. In the current context of online banking and digitization, this task seems especially suitable to explore whether these responses to machines or people modulate financial decisions.

## Conclusion

This paper has addressed which affective and cognitive factors condition the banking relationships amongst economically vulnerable consumers and how they contribute to enlarging financial exclusion in terms of ADs, UDs and PDs. Its results outline a series of affective and cognitive profiles that face difficulties in their banking relationships, providing feedback on the socio-economic vulnerability of these consumers. In summary, the results show that economically vulnerable consumers (low income and low working intensity) who tend to feel shame and distrust respond more irrationally to people than to machines, showing loss aversion and more financial difficulties. Unconfident consumers have problems of access and self-exclusion, and ashamed consumers have DUs. Other emotions highlighted by previous studies (Haapio, 2019; Fandos et al., 2006; Spanish Red Cross, 2016), such as fear or anger, emerged recurrently in the discourse analysis associated with banking difficulties, but no statistically significant relationship could be established. This may be due to the limited sample size, and future research, with larger samples, could help confirm its relationship with the generation of banking difficulties.

Unconfident" are defined by a lack of confidence (distrust) when dealing with banks, which often generates self-exclusion and inaction in banking markets (Devlin, 2005; De Meza et al., 2008, Kempson and Whyley, 1999; Spanish Red Cross, 2016). When using banking services, "unconfident" also show a high level of difficulties, such as paying constant attention to abusive fees and tend to engage in more recommended financial management behaviours (Hayhoe et al., 2012).

The perception of injustice, for example, in the evaluation of unfair deals leads to irrational decision-making and to banking difficulties ("machine-suspicious" and "person-suspicious" profiles). These difficulties are higher when we find a "person-suspicious" profile, that is, when injustice is particularly perceived when dealing with a person. Previous bad experiences and a lower quality of interactions at a bank branch for consumers with a low profitability-risk profile may affect the value added and the financial well-being obtained by those consumers and lead them to avoid the service situation in the future (self-exclusion) (Lau-Gesk et al., 2011). The frustration of not obtaining value added from their scarce resources and the high fees inherent in a low banking margin context may prevent vulnerable consumers from regulating their negative emotions through re-evaluation when dealing with bank agents (Van't Wount et al., 2010). Our results support that the digitalization of banking services could avoid the injustice and "person-suspicious" bias affecting the rationality of the economic decisions of socioeconomically vulnerable consumers. Nevertheless, this process should be adapted to other characteristics or

difficulties of this collective (lack of access to technology, lack of financial literacy, etc.).

These results are consistent with previous literature that has found that economically vulnerable consumers are especially affected in terms of their ability to make rational decisions in their banking transactions, which can aggravate their condition of being vulnerable consumers in financial markets (Roa-Garcia, 2013; Baker et al., 2005). Additionally, negative emotions—considering negative perceptions both towards oneself (lack of self-confidence, shame) and towards the bank (lack of trust)—affect the well-being of these consumers and generate difficulties that hinder their relationship with banking institutions and the value obtained from financial services (Salignac et al., 2016; Bustamante and Amaya, 2020; Fandos et al., 2006; Calvo-Porrall and Levy-Mangin, 2020). Although affective and cognitive factors can complicate access to banking services, in our opinion, they mostly affect already banked consumers (Carbo et al., 2005; Spanish Red Cross, 2016). The vulnerability added by these factors would lead socioeconomically vulnerable people to consume unwanted products, assume higher costs and maintain an unsatisfactory relationship with banks.

One of the contributions of this paper is the “translation” of psychological factors into the realm of general banking activities—off the beaten path of investing—and to the experience of socioeconomically vulnerable consumers. The results contribute to expanding the literature regarding the contextual, affective and cognitive factors of financial decisionmaking and can be useful for regulators and policy makers in terms of both consumer protection and financial education (Kusev et al., 2017). As practical conclusions for regulators and practitioners, the risk or convenience surveys proposed by the Market in Financial Instruments Directive (MiFID) may not be collecting all the necessary elements to generate an adequate user profile. There is no incorporation of psychological aspects in the measurement of these tools. Additionally, the current regulation compels banks to use these tests just for investment proposals.

Our results suggest that risk attitudes and some negative emotions are related to difficulties in the general banking operative, which could be addressed in advance by opinion and psychological survey tools. The training of banking personnel could also take into account affective and cognitive factors and be oriented towards vulnerable consumers, as already proposed by the European Commission (2017). For example, banks should be aware of the existence of vulnerable people, who are very sensitive to the treatment of banking personnel, probably by contextual factors, and capable of rejecting transactions that bring them benefits by perceiving them as being unfair. Understanding vulnerable consumers’ difficulties could help banks reduce complaints and improve their social responsibility and reputation. Paraphrasing Kahneman and Riepe (1998) in Muradoglu and Harvey (2012, p. 74), this understanding should contribute to helping banks “communicate realistic odds of success to their vulnerable clients”.

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