

Understanding financial professionals' perceptions of their clients' financial behaviors

Perceptions of
financial
behaviors

1585

Tania Morris

Accounting Department, Université de Moncton, Moncton, Canada

Lamine Kamano

*Primary Education and Educational Psychology Department, Université de Moncton,
Moncton, Canada, and*

Stéphanie Maillet

Business Department, Université de Moncton, Moncton, Canada

Received 12 July 2022
Revised 21 December 2022
14 April 2023
10 May 2023
Accepted 21 May 2023

Abstract

Purpose – This article describes financial professionals' perceptions of their clients' financial behaviors and the explanatory factors underlying these behaviors.

Design/methodology/approach – In this qualitative research, the authors seek to understand financial professionals' experiences in relation to how their clients manage their own finances. The authors conduct and analyze 26 semi-structured interviews with financial professionals from several industries within the financial sector in Canada.

Findings – The professionals in this study noted that despite their clients' financial knowledge, several other factors can explain these individuals' financial behaviors. They include psychological factors (such as financial bias, the need for instant gratification, and the lack of awareness regarding the long-term effects of certain types of financial behaviors), financial habits (such as lifestyle, financial planning and lack of discipline) and the financial system's flexibility with respect to debt financing and repayment. These perceptions are categorized according to whether they are related to debt financing or repayment, savings or investments.

Originality/value – By using a qualitative methodology that relies on the perceptions of financial professionals, this study aims to better understand the financial behaviors of individuals and households, and these behaviors' underlying factors. This study's findings could be useful to various stakeholders interested, in one way or another, in financial literacy, such as organizations aiming to strengthen and promote financial literacy, educators, researchers, regulatory bodies of financial institutions and financial advisers.

Keywords Financial knowledge, Financial behavior, Financial literacy, Financial habits, Psychological factors, Financial professionals, Qualitative research

Paper type Research paper

1. Introduction

This article investigates the perceptions of financial professionals in relation to their clients' financial behaviors and the explanatory factors underlying these behaviors. Financial professionals are likely to have a better than average understanding of people's financial

© Tania Morris, Lamine Kamano and Stéphanie Maillet. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licences/by/4.0/legalcode>

This research was funded by the Chaire d'études Jeanne et J.-Louis-Lévesque en gestion financière of the Université de Moncton and the Association of Chartered Professional Accountants of New Brunswick.

This manuscript has not been published in any form.

The material in the manuscript will not infringe upon any statutory copyright.

The paper will not be submitted elsewhere while under review.



International Journal of Bank
Marketing
Vol. 41 No. 7, 2023
pp. 1585-1610
Emerald Publishing Limited
0265-2323
DOI 10.1108/IJBM-07-2022-0298

behaviors and the effects these behaviors have on the financial well-being of individuals and households (Adam *et al.*, 2017; Philippas and Avdoulas, 2020). Nowadays, it is a reality that individuals in countries around the world experience financial stress that can jeopardize their financial well-being. For example, the ninth edition of the European consumer payment report, covering 24 European countries, notes that 69% of Europeans are concerned about how inflation affects their financial well-being and more than 50% are worried about their retirement (Intrum, 2021). Americans also report that money is a source of stress (65%) (American Psychological Association, 2022), and Canadians are saying that they are losing sleep over issues related to their finances (48%) (FP Canada, 2018).

Netemeyer *et al.* (2018) conceptualize financial well-being in terms of two interrelated constructs: the stress of managing daily household finances and the sense of security about the household's financial future. In this regard, a number of research studies highlight the negative influence financial stress and lack of financial security can have on individuals, including their physical and psychological health (French and McKillop, 2017; Sinclair and Cheung, 2016; Skinner *et al.*, 2004), their absenteeism from and productivity at work (Kaur *et al.*, 2021; Kim *et al.*, 2006), their life satisfaction (Howell *et al.*, 2013), and the timing of their retirement (Gustman *et al.*, 2010). Financial well-being is therefore a fundamental component of living well in today's society.

In general, studies point to individuals' suboptimal financial decisions with respect to savings, investments, and debt (Behrman *et al.*, 2012; Boisclair *et al.*, 2017; Bucher-Koenen *et al.*, 2017; Gathergood, 2012; Stango and Zinman, 2009; Uppal, 2016). Moreover, several sources of statistical data point to the need for concern about the financial decisions of individuals and households. For example, European statistics show an average debt-to-income ratio of 96.3% in the Eurozone, for 2020, with ratios as high as 214.6% (Eurostats, 2022). According to a 2020 OECD survey carried out in southeastern Europe, more than 60% of respondents admit to not having a long-term financial goal, 33% consider that they do not actively save, and 37% do not prepare budgets (OECD, 2020). The same phenomenon is observed in North America. According to a recent FINRA (2022) report, only 43% of Americans spend less than their disposable income, 40% are unable to pay their monthly credit card balance in full, and only 43% are confident of being able to access \$2,000 quickly if the need arises. According to the 2019 Canadian Financial Capability Survey (Canada Financial Consumer Agency, 2019), the average debt of Canadian households is 177% of disposable income; 53% of Canadians do not know how much money to save periodically to achieve financial independence during their retirement, and only 49% are budgeting.

Given these statistics and the fact that several studies observe low levels of financial literacy in several regions around the world (Behrman *et al.*, 2012; Boisclair *et al.*, 2017; Garg and Singh, 2018; Gathergood and Weber, 2017; Keown, 2011; Uppal, 2016), it is not surprising that many academics and government organizations are interested in learning more about the financial behaviors of individuals and households (Brown *et al.*, 2016; Bucher-Koenen *et al.*, 2017; Disney and Gathergood, 2013; Keown, 2011; Perry and Morris, 2005; Walstad *et al.*, 2010). However, even with a large number of studies on financial literacy, the concept of financial literacy and its relationship to financial management decision-making remains unclear (Warmath and Zimmerman, 2019). Further, some studies find that interventions to increase the level of financial literacy have not always been effective (Fernandes *et al.*, 2014; Kaiser and Menkhoff, 2017; Miller *et al.*, 2015), and the problem of financial illiteracy persists (Fairfax, 2018).

Low financial literacy can translate to persistent, suboptimal financial behaviors despite the fact these behaviors influence individuals' financial and overall well-being (Dolan *et al.*, 2008; Netemeyer *et al.*, 2018). For this reason, it is important to understand what motivates the financial behaviors that undermine individuals and households' financial well-being. Messy and Monticone (2016) argue that financial literacy is a critical twentieth century skill for consumer protection and financial inclusion. Potrich and Vieira (2018) note that this has never

been more true than for today, given the vast array of financial products and services available to individuals and their ever-increasing complexity.

To achieve this study's objective, we used a qualitative research method and a comprehensive description-interpretive process that makes it possible to understand the meaning social actors give to their experience through their own discourse (Anadón and Guillemette, 2006; Denis *et al.*, 2019; Karsenti, 2018). From an epistemological point of view, qualitative research is seen as an approach that makes it possible to study a phenomenon in all its facets and dimensions, depending on the objective the researcher is targeting (Johnson and Christensen, 2004; Paillé, 1996). This approach seems appropriate to our study since we are interested in the financial professional's perceptions of their clients' financial behaviors. Our particular focus is a novelty in the field of financial literacy research as it is on financial professionals' perceptions of this phenomenon.

The remainder of this article is organized as follows. Section 2 reviews the literature on different aspects surrounding financial behaviors, followed by the theoretical framework in section 3. The data and methodology are presented in section 4. In section 5, we discuss the research results. Finally, section 6 is devoted to our conclusions, contributions, limits, implications, and future research.

2. Literature review

2.1 Financial literacy

There is still no consensus on how to define the concept of financial literacy (Hung *et al.*, 2009; Huston, 2010; Lusardi and Mitchell, 2014). This poses major challenges for a quantitative research that aims to assess financial literacy (Allgood and Walstad, 2016). Hasting *et al.* (2013, p. 349) note that the 1997 JumpStart survey defines financial literacy as "the ability to use the knowledge and skills necessary to effectively manage one's financial resources for lifetime financial security." However, Oehler *et al.* (2018) extend this definition when they argue that financial literacy is "not only the knowledge and understanding of financial concepts and risk, but also the skills, motivation and confidence to apply that knowledge to make effective decisions" (p. 206). In its definition, the Organization for Economic Cooperation and Development (OECD) (2016) adds further dimensions by defining financial literacy as "... a combination of awareness, knowledge, skills, attitudes and behaviors needed to make sound financial decisions and achieve financial well-being." Thus, the concept of financial literacy is multi-dimensional and, in addition to knowledge and education, it integrates components that are related to the actual financial skills and attitudes required for money management (Morgan and Long, 2020). In addition to all of these interrelated dimensions, the literature points to other components of the financial literacy construct that can influence financial behaviors, such as self-control (Gathergood, 2012) and having a sense of self-efficacy (Xiao *et al.*, 2014).

2.2 Financial knowledge and financial education

Several studies focus on individuals' financial knowledge and how a lack of knowledge may be the basis of unfavorable financial behavior. These studies focus on individuals' general financial knowledge (Allgood and Walstad, 2016; Henager and Cude, 2016), or on specific dimensions of household financial management (i.e. savings, credit cards, investments, etc.). Many of these studies use surveys to measure financial knowledge and then aggregate the responses and create indicators (Hastings *et al.*, 2013; Lusardi and Mitchell, 2011). Several authors use an alternative approach to assess individuals' financial knowledge, which is to ask participants to self-assess their financial knowledge (Kim *et al.*, 2020; Porto and Xiao, 2016; Xiao *et al.*, 2022). In general, research on the effects of financial knowledge, whether measured subjectively (through self-assessment by asking people to rate their level of

financial knowledge) [1] or more objectively (through knowledge-based test questions) [2], tends to show that financial knowledge positively influences financial behavior (Allgood and Walstad, 2016; De Bassa Scheresberg, 2013).

Studies also show that people tend to overestimate their levels of financial knowledge (Porto and Xiao, 2016; Xiao *et al.*, 2022) and that overconfidence (when there is a large gap between objective and subjective knowledge) can lead to harmful financial behaviors (Kim *et al.*, 2020; Porto and Xiao, 2016; Xiao *et al.*, 2022). The observed lack of financial knowledge led to several interventions being put in place to promote financial education in schools, workplaces, and other settings. Research focuses on whether those interventions are effective, with the results tending to show that, on average, financial education encourages healthier financial behaviors (Kaiser *et al.*, 2022; Kaiser and Menkhoff, 2017; Miller *et al.*, 2015). However, the fact remains that, in some cases, these interventions are not very effective, depending on the areas targeted, the particularities of the interventions, and the context (Fernandes *et al.*, 2014; Kaiser and Menkhoff, 2017; Miller *et al.*, 2015). Indeed, “[d]espite the many initiatives to foster financial literacy, the effectiveness of financial education is debated in quite fundamental ways” (Kaiser *et al.*, 2022, p. 256) and, to be effective, education interventions should be thought out and adapted to specific needs and situations (Kaiser and Menkhoff, 2017).

2.3 Financial behaviors

The concept of behavior has several meanings in the scientific literature. These definitions vary according to the field but highlight several similar elements. In social psychology, several classical theorists, such as Fishbein and Ajzen (1975), see human behavior as “doing”; this is where a human action is generally influenced by individual intentions, attitudes, norms, and beliefs. In the field of financial management, authors such as Xiao (2008) associate this human action with the management of money (in cash, credit, and savings). For Arofah *et al.* (2018), individuals’ financial behaviors and decisions are often determined by various external (culture, social class, social groups) and internal (self-esteem) factors that are related to the individual’s self-motivation, learning, and personality.

Many studies on financial behavior look at a set of financial knowledge indicators (i.e. borrowing, saving, and investing) to test whether general financial knowledge influences financial behavior (De Bassa Scheresberg, 2013; Shih and Ke, 2014; Yap *et al.*, 2018), while other studies focus solely on a specific financial behavior such as saving (Brounen *et al.*, 2016), or debt (Brown *et al.*, 2016), or investment decisions (Van Rooij *et al.*, 2011).

2.4 Financial behaviors regarding debt, saving, and investment

2.4.1 Debt financing. Studies tend to show a link between the debt individuals take on and their level of financial literacy as measured by their financial knowledge. Notably, individuals with lower levels of financial literacy have a greater propensity to accumulate debt (Disney and Gathergood, 2013; Lusardi and Tufano, 2015; Stango and Zinman, 2009) and to take on debt at higher borrowing costs (Gathergood and Weber, 2017; Huston, 2012; Lusardi and De Bassa Scheresberg, 2013). This relationship is observed both in the context of credit cards (Huston, 2012; Lee and Kim, 2020) and mortgages (Gathergood and Weber, 2017). Some studies also address other dimensions of financial literacy. For example, Gathergood and Weber (2017) show that individuals’ short-term biases and self-reported impulsiveness influence the determinants of their mortgage choices. Speaking of credit cards, Lee and Kim (2020) show that planning is negatively related to credit card cash advances. These authors also show that individuals who are overconfident in their financial literacy are more likely to incur debt through taking cash advances on their credit cards.

2.4.2 Debt repayment. Research that focuses on debt repayment is mostly interested in credit card and mortgage debt. With respect to credit cards, results from a study by

Allgood and Walstad (2016) reveal that individuals with lower objective and subjective financial knowledge are more likely to make only minimum payments on their credit card balances and to exceed their credit limits. In their study, Lee and Kim (2020) find essentially the same results as Allgood and Walstad (2016) in the context of millennials (also known as Generation Y). These same researchers also focus on mortgage payments, as this is generally a major debt within households. The findings of these studies again confirm the positive influence of financial knowledge on financial behavior. When looking at how education changes financial behaviors related to debt management, study results are not as clear. In their meta-analysis, Kaiser and Menkhoff (2017) and Miller *et al.* (2015) find that financial behaviors related to debt management are more difficult to influence, even with the help of educational interventions.

2.4.3 Savings. With respect to savings decisions, researchers find that these are generally positively related to the level of financial literacy as measured by individuals' financial knowledge (Behrman *et al.*, 2012; De Bassa Scheresberg, 2013; Henager and Cude, 2016; Lusardi and Mitchell, 2011). Different aspects related to savings are focused on, such as long-term savings (Henager and Cude, 2016), voluntary savings (Landerretche and Martínez, 2013), saving for precautionary reasons (De Bassa Scheresberg, 2013), and saving for retirement (Behrman *et al.*, 2012; De Bassa Scheresberg, 2013; Lusardi and Mitchell, 2011). While some authors focus on the effect of knowledge on financial behavior, others such as Morgan and Long (2020) and Henager and Cude (2016) explore the influence of certain psychological dimensions (attitudes, confidence) on these same behaviors. In general, the results of these studies show that psychological aspects can impact individual and household savings behaviors. The results on the effects of education on financial behaviors are also encouraging, since Miller *et al.*'s (2015) meta-analysis finds that, overall, financial education has a positive impact on savings. However, even with these optimistic results, four of the six papers analyzed in Miller *et al.*'s (2015) meta-analysis are not able to reject the null hypothesis and cannot conclude that there is a positive effect of education on financial behavior.

2.4.4 Investment. Research also shows that investor behavior can be characterized by various biases (Zahera and Bansal, 2018). For example, some research indicates that many investors are poorly diversified (Mangot, 2008), that they often trade too often in the markets (Mangot, 2008; Odean, 1999), and that some investors are overconfident (Odean, 1999). Investors are also characterized by other biases such as disposition bias, whereby they tend to sell profitable investments too soon and hold on to depreciating assets for too long (Shefrin and Statman, 1985). There is also self-attribution bias in which investors attribute their success to their skills while blaming their failures on the actions of others (Bem, 1972). The results of studies investigating the effect of education on financial biases diverge, where some show that education can have the effect of increasing certain biases, such as a study by Mishra and Metilda (2015) which shows that the self-attribution bias increases with education, while other studies show that knowledge reduces certain financial biases (Hsu *et al.*, 2021). Even if we obtain different results on the effect of education or knowledge on the various financial biases, research tends to show that financial knowledge improves financial behavior regarding investments, in general. Indeed, prior research shows that financial knowledge increases participation in markets (Thomas and Spataro, 2018; Van Rooij *et al.*, 2011), improves the profitability of investments (Clark *et al.*, 2017), and allows investors to better anticipate market movements and resist the temptation to sell financial assets at a loss during bear markets (Bucher-Koenen and Ziegelmeyer, 2014). Furthermore, Allgood and Walstad (2016) find that people who are more financially literate (both objectively and subjectively) have a greater propensity to own tax-free retirement savings accounts independent of their employers' pension programs. To measure individuals' levels of financial literacy, all of these studies use general financial knowledge plus context-specific investment knowledge as well as subjective knowledge. In addition to

financial knowledge, other studies also look at other components of investment behavior. For example, a study by [Dinç Aydemir and Aren \(2017\)](#) shows the positive effects of emotional intelligence and the negative effects of risk aversion on investors' risk intentions.

3. Conceptual framework

Aside from pointing to a lack of financial knowledge ([Allgood and Walstad, 2016](#)), financial education ([Kaiser and Menkhoff, 2017](#)) and financial literacy ([Warmath and Zimmerman, 2019](#)), previous research identifies several other causes that may contribute to the poor financial behaviors of individuals and households. Indeed, these include psychological aspects of financial behaviors, such as attitudes ([Aydin and Akben Selcuk, 2019](#); [Dewi et al., 2020](#); [Skagerlund et al., 2018](#)), the need for instant gratification ([Xiao and Porto, 2019](#)), and confidence in one's personal financial knowledge and skills ([Henager and Cude, 2019](#)). In addition, several studies focus on the link between financial behavior and socio-demographic factors ([Driva et al., 2016](#); [Garg and Singh, 2018](#)).

As shown in [Figure 1](#), the study of financial behavior is included within the general framework of financial literacy. According to the literature, financial literacy can be influenced by different factors, like knowledge ([Warmath and Zimmerman, 2019](#)), past behaviors ([Asaad, 2015](#)) and other causes, such as motivation, self-confidence and self-control ([Gathergood, 2012](#); [Oehler et al., 2018](#)).

Finally, as we see in [Figure 1](#), financial behavior is found to be the result of other interrelated elements. For example, individuals' prior financial behaviors can provide them with the opportunity to gain the type of financial experience that could help them to improve their financial knowledge, which could then have an influence on their future financial behaviors ([Hilgert et al., 2003](#); [Tang and Peter, 2015](#)). Some financial knowledge can also indirectly influence financial behavior by first acting on the causes of these behavior. For example, [Yahaya et al. \(2019\)](#) conclude that financial knowledge can form the basis of individuals' attitudes toward money and these attitudes can influence these individuals' actual financial behaviors.

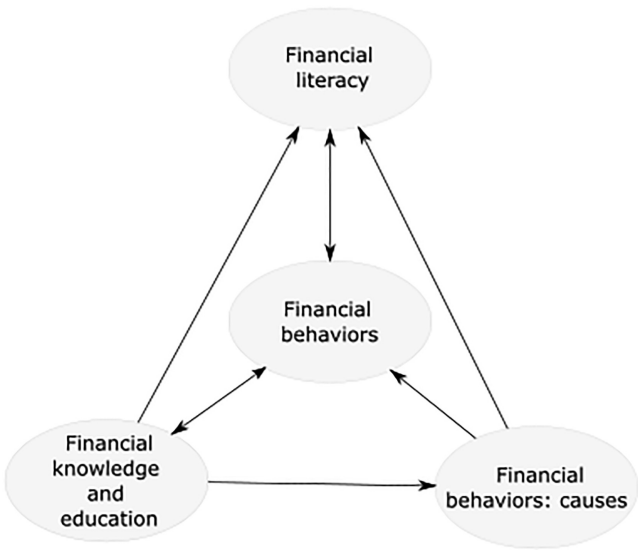


Figure 1.
Conceptual framework
on financial
professionals'
perceptions regarding
their clients' financial
behaviors and their
causes

Source(s): Author's own creation

4. Methodology

This study aims to understand financial professionals' perceptions about their clients' financial behaviors. To achieve this objective, we used an interpretive, exploratory qualitative research design. This approach allows us to understand the meaning social actors give to their experiences through their own discourse (Anadón and Guillemette, 2006; Denis *et al.*, 2019; Savoie-Zajc, 2004). The meaning professionals make of their experiences in relation to their clients' financial behaviors, as expressed through their discourses, is constitutive of our research data. This data was obtained from 26 financial professionals who work with individual clients in financial institutions in the province of New Brunswick, Canada. These are professionals who generally have more expertise in financial management than their clients, and this allows these professionals to take a more critical look at the overall financial situations of the individuals they serve and, by extension, these individuals' households.

As Table 1 shows, the sample is composed of various types of professionals from several financial institutions, which allows for several different perspectives. Participation was on a voluntary basis. Eight women and 18 men, between 25 and 82 years of age, agreed to participate in our study.

To collect the data, we developed an interview guide whose broad dimensions revolved around professionals' perceptions of their clients' financial management and the possible effects on these clients' financial security. Specifically, participants were asked to comment on issues related to their experiences with their clients' financial situations, needs and

No	Position	Type of financial institution or company	Age	Gender
1	Loan Manager	Depository institutions	39	M
2	Investment adviser, retired	Financial and investment services	53	F
3	Branch manager	Depository institutions	36	M
4	Retired accountant	Accounting firm	82	M
5	Branch manager	Depository institutions	33	M
6	Market analyst	Federal commercial State corporation	27	M
7	Retired director of investment development	Depository institutions	31	M
8	Financial adviser	Depository institutions	47	M
9	Financial adviser	Depository institutions	35	F
10	Financing for SMEs	Federal commercial State corporation	28	M
11	Branch manager	Depository institutions	29	M
12	Deputy director	Depository institutions	31	F
13	Insurance broker	Insurance company	45	F
14	Sales manager	Depository institutions	53	M
15	Financial planner	Financial and investment services	25	M
16	Division director	Financial and investment services	35	M
17	Associate accountant - retired	Accounting firm	63	M
18	Director, financing solution	Depository institutions	33	M
19	Department director	Depository institutions	50	F
20	Service officer	Depository institutions	39	F
21	Asset management	Depository institutions	24	M
22	Customer service coordinator	Depository institutions	52	F
23	Financial adviser	Depository institutions	52	F
24	Branch manager	Depository institutions	54	M
25	Wealth management Consultant	Financial and investment services	47	M
26	Financial adviser	Financial and investment services	34	M

Source(s): Authors own creation

Table 1.
Profile of respondents

challenges, and how they (the clients) manage them. The interviews included the following questions.

- (1) Tell us about your clients' financial behaviors with respect to how they manage their personal finances.
- (2) What do you think is at the root of your clients' harmful financial management behaviors?
- (3) Tell us about your clients' challenges in managing their finances.
- (4) Tell us about your clients' financial habits.
- (5) How would you describe your clients' relationship with credit?

The interviewer was given the opportunity to elaborate and deepen their questioning, based on the participants' responses.

The data were collected through semi-structured interviews that took place during the winter of 2019. This technique allows the researcher to use open-ended questions to gather the participant's words and comments (Savoie-Zajc, 2009). The average duration of these interviews was 60 min, depending on the participant's availability at their place of work.

Respondents' words were transcribed using a faithful spelling system (verbatim). Codes were assigned to participants to respect their anonymity, and all other ethical considerations were taken into account in accordance with the recommendations of the Human Research Ethics Committee. Participants had the choice of meeting at the university, at a neutral location, or at their workplace. All of the participants chose the latter arrangement. Before starting the study, we submitted a request to the human research ethics committee of the author's home university, and this request was approved. An information-and-consent form was distributed to the participants. This form presented the objectives of the study and details on the interview process. It also informed participants that their participation was voluntary, and that we did not anticipate any foreseeable inconvenience related to their participation. Finally, it outlined the means used to ensure their confidentiality and anonymity and noted our intention to destroy all records of the study's interviews at the end of the project.

To analyze the data, we used a method that called upon the inductive approach (Guillemette and Luckerhoff, 2012; Savoie-Zajc, 2009) and a thematic type of analysis. Specifically, it involved starting with the data in order to create categories, themes, and sub-themes. The different themes and sub-themes were then linked together in explanatory diagrams of the phenomenon under review. The NVivo 12 software was used to facilitate the coding and categorization process.

The study's qualitative nature, inspired by the inductive-interpretive approach, allowed for our analysis of financial professionals' perceptions of their clients' financial behaviors to provide a better overall understanding of the various factors that influence individuals' financial behaviors. Therefore, this qualitative study provides a new perspective on understanding individuals' financial behaviors through an analysis of the perceptions of the professionals associated with these individuals. This approach is likely to identify potential emerging themes.

5. Results and discussion

The results of our analyses of the various interviews highlight several perceptions financial professionals noted regarding some of the financial behaviors that undermine their clients' financial security.

5.1 Financial professionals' perceptions of their clients' debt financing

(1) Credit abuse

In terms of borrowing, financial professionals feel that many individuals abuse credit by maximizing credit limits that are already excessive or by borrowing beyond their actual needs so they can spend more.

Someone tells me: I want to buy a boat for \$30,000 and I want to borrow \$40,000. Well, no, the boat is \$30,000. Why do you want to borrow the other \$10,000? Why do you need it? (Mrs. Samson).

Professionals observe that this excessive use of credit exists both in accessing term loans, where the loan amortization is based on the useful life of the asset acquired, and in using revolving credit. Regarding term loans, professionals believe that the situation is especially problematic in the case of mortgages, as many of their clients tend to want to take on the maximum mortgage allowed when they are negotiating the purchase of a property. In fact, many clients start looking for a house without first having established a budget for this purchase, or having determined what they could afford. As Mr. Duhamel put it: *they go shopping for a house before coming to see me, they don't even know the amount they can borrow*. And even if they do get approved for the loan they want, that doesn't necessarily mean they can afford to make the payments.

Do you realize that, yes you qualify for the mortgage, but you have three children in daycare that costs you \$1,500 a month and that is not considered in the calculation that approves your financing (credit bureau)? (Mrs. Samson)

Revolving credit arises when the borrower has a sum of money they can freely use within the limit of the amount authorized by the financial institution. This is the case, for example, with credit cards and lines of credit, particularly home equity lines of credit. With respect to excessive credit card balances, professionals are concerned that some clients may become re-indebted as they make payments on their cards, but the balance does not decrease. Concerning home equity lines of credit, respondents noted that some clients are continually refinancing their homes, as revealed in an excerpt from an interview with Mr. Yves: *"Some clients refinance their homes every two to three years; they take out the equity and they never pay off their homes."* Studies such as [Duca and Kumar \(2014\)](#) show that people who are more financially savvy or more educated are less likely to draw on their home equity. There are also increased interest costs that come with higher debt ([Clark et al., 2017](#); [Gathergood and Weber, 2017](#); [Huston, 2012](#); [Lusardi and De Bassa Scheresberg, 2013](#)).

Previous research finds a link between incurring debt and the borrower's level of knowledge or financial literacy ([Disney and Gathergood, 2013](#); [Lusardi and Tufano, 2015](#)), while the results of this study finds that certain psychological aspects (of individuals) factor even more in explaining credit abuse. Indeed, the respondents identify several factors that could explain their clients' excessive borrowing, including the desire for instant gratification (which leads clients to seek immediate consumption at the expense of long-term financial well-being) ([Gathergood and Weber, 2017](#)). According to the professionals in our study, many people do not tailor their lifestyles to their incomes but prefer to support it through a combination of income and borrowing capacity, as Mr. Kristof suggests: *The biggest challenge for my clients . . . is matching their wants with their needs*. This result supports the assertion of [Smith et al. \(2016\)](#), who emphasize that "personal financial behaviors are akin to a change in lifestyle." There is also the lack of budgeting (to understand the impact financial commitments will have on short-, medium- and long-term plans) ([Lee and Kim, 2020](#)). Previous studies agree on this point ([Lee and Kim, 2020](#)) and Mrs. Barbara's comments (below) suggest that this is a fundamental problem.

The family budget, they don't know what it is, they don't know how to do it and they don't know how to maintain it. (Mrs. Barbara)

Professionals are also of the opinion that the flexibility of the financial system and lifestyle (where expenditures exceed household income) are important factors that can promote financial behavior that is detrimental to financial security.

(2) Insisting on being extended credit

1594

Professionals also indicate that despite their excessive use of credit, some clients go so far as insisting on being extended more credit. For example, they emphasize the threats these clients sometimes subject them to, as Mr. Yves points out, "*Clients come here and they tell me: I know I can get it (credit) elsewhere.*" Some clients threaten to go to competitors if they are not granted the additional credit requested, even when the professional is trying to act in the best interest of the client's financial well-being. Some professionals have even seen their clients carry out their threat. Mr. André relates the following:

I once had a client come in here for a \$5,000 line of credit; I turned him down and he went to another financial institution, which loaned him \$50,000, and he called me back and laughed in my face.

Another way to push for credit is to have multiple credit cards from different financial institutions, as André notes, "*Why do we need multiple credit cards? You have to ask yourself that question*". This is relevant because studies indicate that people who have more than two credit cards have more difficulty making payments (Hamid and Loke, 2021). According to Limbu and Sato (2019), it is only when people hold relatively few credit cards that their credit card knowledge leads to improved financial well-being. Professionals relate that they can be caught off guard in situations where the client insists on increasing their credit in circumstances where they, the financial professional, feel that this extended credit will be at the expense of their client's financial well-being. However, according to these professionals, decisions on whether to extend credit are based on limited financial data that come primarily from the individual's credit bureau, while the credit bureau's score calculation does not consider all of these clients' financial commitments. This is why several professionals indicate that the 40% debt ratio is no longer adapted to today's reality and should be modified to consider that people have more financial commitments than they did 25 years ago (for example, a cell phone plan). This financial system's flexibility in terms of debt financing is an emerging theme from this study. Professionals seem to believe that this is an important factor as it also contributes to individuals and households' poor financial behaviors. According to Mr. James, "*Nowadays, people have much more access to credit and it is easier to borrow.*" In our participants' views, the flexibility of some regulations contributes to their clients' sub-optimal behaviors. These professionals view this easy access to credit as being a significant driver of debt because for some clients, credit approval implies that they can definitely afford to repay that debt. Indeed, as Mr. Dubé relates, "*There are clients who think, 'if the bank says we can afford it, then we can definitely afford it.'*" These findings regarding the financial system's flexibility and people's easy access to credit support the viewpoint of Davies (2015), who disagrees with the concept that all of the responsibility for financial literacy should be placed on the individual. In his view, the financial literacy framework must include the responsibility of the financial industry and the government. Several respondents note that they try to explain the dangers of over-indebtedness but that this does not always bring about the desired results and that some of their clients even try to make them (the financial consultants) take responsibility for the financial difficulties that arise when they (the clients) become over-extended from having taken on extra credit.

[They say,] ‘You gave me my MasterCard limit . . . ’ At the end of the day, it doesn’t take much to make them realize that it’s not really our fault; it’s not us who went to spend at Walmart and Amazon. (Mr. Yves)

Even if the consultants’ advice does not always produce the desired results, it should continue to be offered because studies show that financial advice improves people’s financial well-being when they follow through with the advice by reducing their debt (O’Neill *et al.*, 2006; Staten *et al.*, 2002).

(3) Misuse of financial products

Financial professionals also feel that many clients misuse credit by taking on debt for day-to-day expenses without considering their net worth (assets minus debts) or by choosing the wrong debt product. Professionals observe that some clients borrow to immediately enhance their lifestyle by buying non-asset-related items. In fact, professionals are more likely to justify borrowing when it is used to purchase assets, as these assets appear on the individual’s balance sheet while also providing security to the lending financial institution.

Today, your net worth is positive, even with your debt. Now, if you sell the cabin, where you only go three times a year, you could cover your debt. So, on paper, for me, you have no debt. (Mr. Simon)

Not surprisingly, studies find that household financial satisfaction is positively related to net worth (Tenney and Kalenkoski, 2019). Furthermore, some clients use debt instruments that do not suit their situation. Indeed, various debt instruments have distinct characteristics, as a professional named Claude points out, “*Credit cards and lines of credit have different objectives.*” As a result, some types of debt are better suited to certain circumstances. As Mr. André points out, “*You can’t use a credit card to pay off other credit.*” This confusion around different financial products is normal because households are confronted with a multitude of complex financial products whose particular characteristics are constantly evolving (Atlas *et al.*, 2019). In addition, professionals believe that for some of their clients, borrowing replaces saving for unanticipated expenses. “*Many clients feel that their emergency account is their line of credit*” (Mr. Dugas). This is expected given that the lack of financial literacy has resulted in people not even being able to properly assess their financial situation (Lusardi and Tufano, 2015).

As with behaviors related to credit abuse and insistence on credit, professionals point to unsuitable lifestyles and the need for instant gratification as causes of the misuse of credit products. In addition, professionals argue that lack of knowledge or understanding are also factors that explain the misuse of credit products.

I did a debt restructuring for a client to make sure she didn’t use her credit card in a situation where she should be using her savings instead.

I saw that she didn’t understand, so I said, “Be careful!”

(Mr. Lionel)

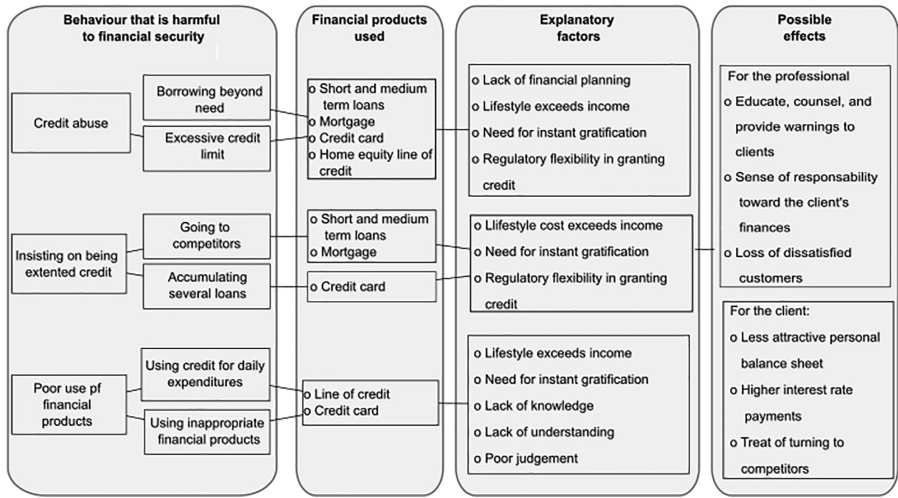
Figure 2 below summarizes the different categories highlighted in this section and their interrelationships.

5.2 Financial professionals’ perceptions of their clients’ debt repayment

(1) Insufficient payments

In terms of debt repayment, respondents indicate that payments should be made over a reasonable period, ensuring that the value of a loan is less than the value of the asset attached to the loan, or that the loan is repaid before the asset requires significant investment or repair.

Figure 2.
Financial behaviors
related to borrowing



Source(s): Author's own creation

Although this concept of maturity synchronization is well known in the context of companies (Costa, 2017; Morris, 1976), professionals note that clients do not necessarily synchronize their payment terms with the life of the asset for which they need to borrow money to buy in the first place.

I've seen that especially with trailers: It's funded over twenty years. These are small payments, but after ten years the trailer is worth less than the debt they have left. When they want to sell, they are 10, 15, 20 grand more in debt than the asset is worth. That's where you lose money. (Mrs. Danielle)

The issue of mismatched payment sizes is even more evident in the case of credit cards that are used for expenses that do not have underlying assets. In this case, many professionals observe that many customers underpay on their credit cards and many only make the minimum payment, as Mr. Simon points out, "*A credit card balance with an interest rate of 20%, even 7 to 8% is high. It's stupid how many people only pay the minimum.*" According to Engels et al. (2020), households should pay off their credit card in full on a monthly basis, especially if the credit card has been used to pay for basic needs, so as not to jeopardize the household's future financial security. According to some authors, people with less financial knowledge are more likely to make minimum payments on their credit cards (Allgood and Walstad, 2016; Lee and Kim, 2020).

(2) Abusing the ability to use credit to pay off debt

Professionals also note that many customers are trying to pay off credit with other types of credit. Indeed, in addition to abusing revolving credit to enhance their lifestyles, as mentioned in the previous section, professionals note that many individuals seek to pay off one form of revolving credit with another. This type of behavior is explained by the desire to enhance one's lifestyle in the short term, at the expense of long-term well-being, and to spend beyond the family income, as Mr. Charles mentions

[They think] 'I want to follow my friends' lifestyle, I take out a line of credit, a credit card. My credit is good and I apply for another credit card.' And then you live on one credit card to pay for another. We see this on a regular basis.

This desire to improve one's lifestyle in the short term can be explained by Richin (2011), whose findings show that consumption gives materialistic people the hope that their purchases will somehow have a positive and significant impact on their lives, leading them to be more prone to debt.

Professionals also observe that many individuals abuse their debt restructuring when they keep regrouping loans into an existing term loan for payment stability, as Madame Samson points out: "... at some point, it no longer works to refinance and refinance." Concerning mortgage refinancing, as mentioned earlier, respondents noted that some clients are continually refinancing their homes. This refinancing behavior is considered equity extraction but it increases the outstanding mortgage on the same home and is a factor behind the rise in household debt among older Americans (Spader, 2021).

To deal with these situations, professionals try to advise their clients on debt management, but they do not always observe the expected results.

They want to use a line of credit to pay the with credit card, it's the same product, it's revolving credit with low payments. So that's where advice comes in. They are told that a pay-as-you-go loan might be more suitable for them. (Mrs. Danielle)

Figure 3 summarizes the main elements discussed in this section and their interrelationships.

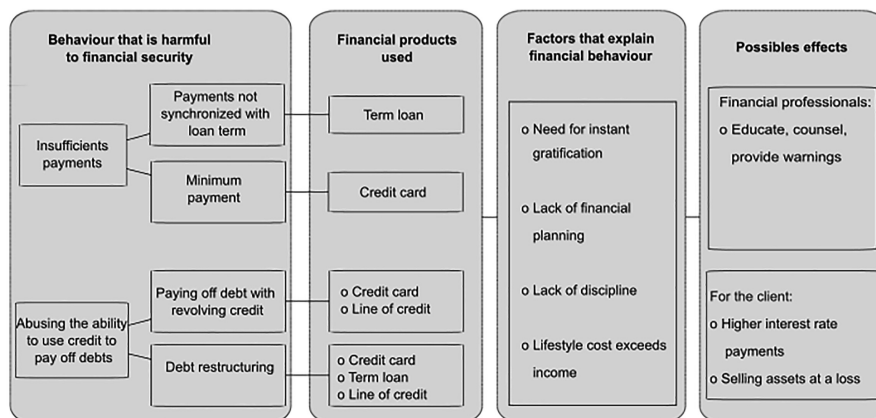
5.3 Financial professionals' perceptions of their clients' savings

(1) Lack of savings

According to the professionals we interviewed, many individuals are not saving enough to achieve financial security before retirement. For Mr. Daniel, "*You can't just put money aside here and there, it's not enough.*" And according to Mr. Olivier,

Although the majority of people save for their retirement, the majority of them use their savings to meet unexpected expenses. I would say that among all my clients, there are really only 10% of them who save for their retirement.

It should be noted that some clients save even less for the unexpected: "*They don't have a plan B*" (Mr. Benoit), and they use their revolving credit "*instead of creating a habit of putting money aside*" (Mr. Dugas). Yet people should have savings to cover contingencies and not put



Source(s): Author's own creation

Figure 3.
Debt repayment

themselves in financially precarious situations. During the pandemic, for example, a lot of people were without a salary and their savings were insufficient to cover their bills (Lusardi *et al.*, 2021). Despard *et al.* (2020) also raise the issue of lack of savings for contingencies and their results indicate that the variable that best explains the likelihood of having an emergency fund is simply holding a savings account. This lack of savings is even observed for predictable expenses, as Mrs. Rose notes,

There are other people who are going to come in and say, 'My property taxes are due next week. I don't have any money; I need to borrow on my Visa.'

Compared to previous research that mostly categorizes savings as long-term, short-term, voluntary, or retirement saving (Behrman *et al.*, 2012; De Bassa Scheresberg, 2013; Henager and Cude, 2019), the results of this study lead us to categorize savings according to whether they will be used for unforeseeable or foreseeable needs (retirement being part of the foreseeable).

But, regardless of the type of saving, professionals believe that individuals in general should put more emphasis on saving and start saving earlier to benefit from compound interest. *"It doesn't matter how much, you have to start yesterday, today is good, tomorrow is too late! That's what you have to explain to them"* (Mr. Simon). Indeed, people should start saving for their retirement as soon as they enter the workforce to be well-prepared for retirement (Bond and Doonan, 2020). But, in general, professionals believe that, except in the case of entrepreneurs and people whose careers are in a finance-related field, many of their clients start saving too late,

People are getting into it too late. We often get calls like, 'Look, I'm retiring in two years, can I get a financial plan?' (Mr. Dugas)

This point of view, that people are starting to save too late, is also supported by statistical data (Bond and Doonan, 2020).

(2) Starting to save late in life

Professionals emphasize the importance of starting to save early and Mr. Dugas goes so far as to say that this is more than fundamental, it is the single most important determinant of an individual's financial success: *"But the number one thing is that people are not starting early enough, that's for sure."* According to Brown *et al.* (2016), they should even begin before adulthood, because having saved in childhood positively influences the probability of saving regularly in the future and the magnitude of the savings. Participants indicate that some clients wait until they have finished paying off their student debt and their children are out of daycare, for example, before they start thinking about savings. In addition, children's sports and travel take up a significant portion of the family budget rather than being allocated to savings. All the while, people are not creating a savings habit, as Mr. Dugas says, *"Unfortunately, it's a little too late, because they no longer have the 30- or 40-year horizon where your money can work and grow for you."* Professionals lament that this type of situation can have major consequences for the individual resulting in, for example, delayed retirement or the sale of assets. Participants observe a decline in the propensity to save and are concerned when they see people living without financial security, as Mr. André expresses it,

The financial calculator says they can have a big house, but it doesn't say that's what they'll be paying for their whole life, that they won't have an RRSP (registered retirement savings plans) and that they'll be in financial trouble if the car breaks down.

Similar to several previous studies, professionals associate this lack of savings with individuals' lack of knowledge about financial management (Behrman *et al.*, 2012;

Henager and Cude, 2016). This is also compounded by the lack of adequate advice, as Mr. Charles puts it,

We see that a lot, people are working longer. These people did not take the opportunity to invest their money. They have not been educated or they have not been well advised by their financial institutions.

According to participants, this lack of savings is also explained by the desire for instant gratification and to have a more lavish lifestyle, as individuals think in the short term and do not plan ahead: *"Today, the savings part has been neglected"* (Mr. Benoit). *"They live paycheck by paycheck, people in their fifties with no savings. It's not good"* (Mrs. Volpé). According to Bernhein, Ray and Yeltekin (2015), when there is a trade-off between long-term goals and the desire for immediate gratification, self-control helps individuals resist temptation. This is why self-control positively influences savings-related behaviors (Mpaata *et al.*, 2021). It is therefore not surprising that professionals also point to clients' lack of discipline in both developing a savings habit and having an awareness of their financial situation as other explanatory factors behind savings-related financial behaviors that are detrimental to financial security. As Madame Dumont puts it, *"Saving is a habit, I don't want to know how much you save, I want to see if you have any saving habits."* These results support the idea that certain attitudes influence financial knowledge and financial behaviors (Henager and Cude, 2016; Shih and Ke, 2014; Skagerlund *et al.*, 2018). From our results, we can see that the psychological aspects of financial behaviors (i.e. instant gratification, excessive lifestyle, poor judgment) and habits (financial discipline and planning) are really important in explaining individuals and households' financial behaviors. Although research identifies psychological causes of financial behaviors, such as impulsiveness (Gathergood and Weber, 2017), short-term biases (Gathergood and Weber, 2017), and good financial habits, such as the propensity to plan (Xiao and O'Neill, 2018), all of which are associated with individuals' financial behaviors, many studies on the topic focus more on financial knowledge and education (Allgood and Walstad, 2016; de Bassa Scheresberg, 2013; Lusardi and Tufano, 2015; Van Rooij *et al.*, 2011; Walstad *et al.*, 2010). Professionals report that some of their clients regret and feel guilty about their past financial behaviors, such as their lack of motivation and financial discipline. This is consistent with research findings suggesting that financial behaviors can have negative effects on individuals' well-being and financial health (Adam *et al.*, 2017; Philippas and Avdoulas, 2020).

To this end, professionals express their desire to help their clients by trying to raise their awareness, as Mr. Albert testifies,

We try to give them good advice about not spending everything they earn so they don't have to start over every year. That's not how you build a personal balance sheet.

Figure 4 captures the essence of the elements presented in this section and highlights their interrelationships.

5.4 Financial professionals' perceptions about their clients' investment habits

(1) Not taking enough advantage of government programs

According to professionals, Canadian government plans such as registered retirement savings plans (RRSPs), tax-free savings accounts (TFSA), and registered education savings plans (RESPs) are not widely used by clients.

The majority of clients don't take full advantage of registered plans and they have a lack of protection in case something happens like illness, death, disability, and those things. (Mr. Simon)

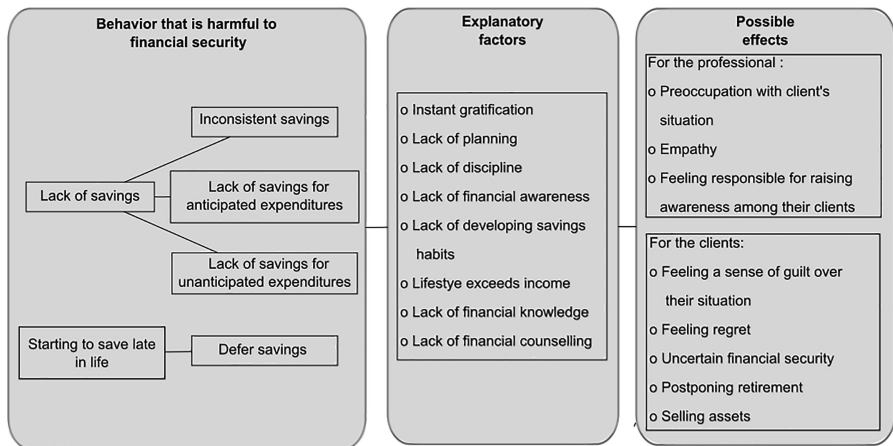


Figure 4.
Savings behaviors

Source(s): Author's own creation

Many professionals attribute this phenomenon to these individuals' lack of knowledge about the benefits of these plans.

But on the investment side, that's where some clients seem to be very unfamiliar . . . especially if we get into the stock market, mutual funds, RRSPs, TFSAs, registered education savings plans, workplace pensions. All of these are unknown to most people. (Mr. Dugas)

Several studies emphasize the importance of financial knowledge in explaining investment behavior (Allgood and Walstad, 2016; Thomas and Spataro, 2018). It is therefore not surprising that professionals are concerned about their clients' lack of knowledge regarding investments.

I have 21 years of experience as an investment advisor and probably one of the things that shocked me most was how limited peoples' understanding of stock markets and investing is. (Mrs. Sinclair)

This leads many professionals to say that some basic financial concepts, such as government plans, should be part of high school curricula, as Madame Justine puts it:

Financial education is something that should be learned from a young age in schools. There should be classes to teach young people how to manage their finances.

This confirms the results of Forbes and Kara (2010), who find that financial knowledge in investments is low, and those of Allgood and Walstad (2016), who observe a link between financial knowledge and the holding of tax-free retirement accounts. Some respondents even feel a social responsibility in this regard and go out to their local high schools, themselves, to provide financial education.

(2) Too risk averse

With respect to risk, professionals believe that some individuals are too risk averse in that they do not sufficiently maximize the profitability of their investments, as Mr. Dugas points out, "Someone who invests in a guaranteed investment certificate at 1.5% when inflation is 2% that year is guaranteed to lose 0.5%." The results of Adil et al. (2022) also demonstrate that risk aversion negatively influences investment decisions. Professionals and researchers alike find that some people have emotional biases that cause them to take their money out of equity

markets during times of financial crisis or bear markets, when they should be doing exactly the opposite (Pompian, 2020). In both cases, professionals are trying to educate their clients on the concepts of risk and return and the link between the two, while lamenting the fact that these basic concepts are not part of the school curriculum.

(3) Take excessive risk

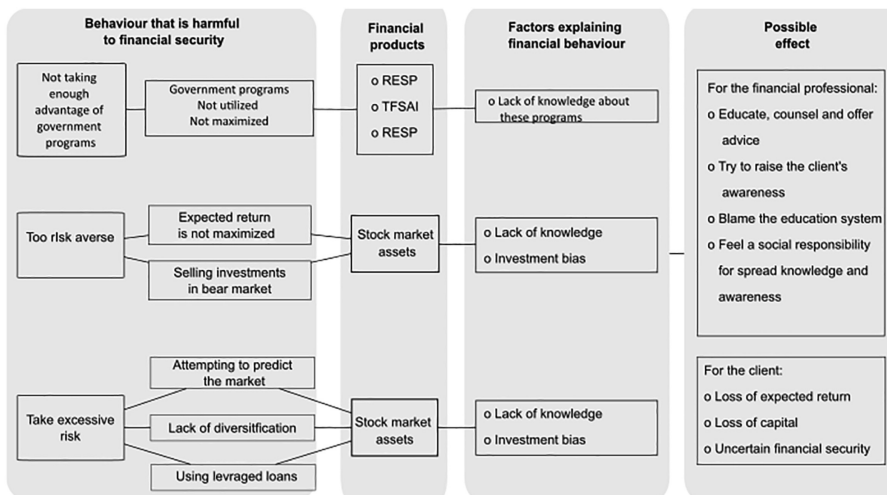
While professionals point out that some individuals are risk averse, they also note that others make risky decisions without understanding the financial consequences. For example, professionals argue that some of their client take excessive risks by investing all of their savings in a single financial security without considering the principle of diversification.

We have clients come in and say they've heard they should buy Organigram (stock market stock). It starts off bad because it's not the idea of the appointment. But there are a lot of people who do this. They just want to win. So, I tell them, 'Are you willing to lose?' They say, 'Well no, it will work.' Well, no, it doesn't work all the time. (Mr. Simon)

One explanation for the lack of portfolio diversification is the familiarity bias, whereby individuals feel safer with what they know best. In his study, Gaudecker (2015) shows that individuals or households that are the least financially literate and those who do not rely on the help of financial professionals will suffer more financial losses from the lack of portfolios diversification.

According to professionals, some people also try to "*time the market*"; that is, they make decisions to buy or sell financial assets (for example, stocks) by trying to predict their future movements without having the financial knowledge necessary to appreciate how the stock market moves. Another form of risky investing respondents referred to is leveraged lending, where clients borrow money to invest on the assumption that the return on the investment will exceed the interest costs of the loan. According to these professionals, amateurs should not use this strategy as it can have disastrous financial consequences if used under the wrong circumstances. Those risky behaviors can be explained by the overconfidence bias which encourages investors to underestimate risk (Chuang and Lee, 2006).

Figure 5 highlights the essential elements presented in this section and the interrelationships between these elements.



Source(s): Author's own creation

Figure 5.
Financial behaviors
related to investments

6. Conclusion

This study describes financial professionals' perceptions of the financial behaviors of individuals and households and analyses their views on the explanatory factors underlying these behaviors. We used an interpretative qualitative research approach in a thematic analysis that reveals several perceptions related to individuals and households' problematic financial behaviors.

6.1 Contribution

Similar to previous research ([Allgood and Walstad, 2016](#); [Gathergood and Weber, 2017](#); [Henager and Cude, 2016](#); [Morgan and Long, 2020](#); [Xiao and O'Neill, 2018](#)), the results of our study show that financial knowledge, psychological factors, and financial habits influence the financial behaviors of individuals and households. The particularity of our study is in the fact that our analyses show that psychological factors and financial habits are at the root of individuals' behaviors related to indebtedness and savings, while we find that financial knowledge seems fundamental in explaining behaviors related to individuals' investment decisions.

In addition to knowledge, psychological factors, and financial habits, professionals indicate that the ease of access to credit and financial institutions' flexibility are factors that likely explain the over-indebtedness of individuals and households. In other studies, for example [Hamid and Loke \(2021\)](#), this is mostly recognized in the context of credit card debt, whereas our study provides a more general portrait of access to credit through various types of financial products and the financial behaviors that are influenced by this credit access.

This study also contributes to previous research by contextualizing the links between financial behaviors, the products associated with them, the explanatory factors of those behaviors, and the possible effects these behaviors can have on financial professionals and their clients. When studies are interested in financial products, they are normally interested in a specific type of product such as the credit card ([Hamid and Loke, 2021](#)) or the mortgage ([Limbu and Sato, 2019](#)). This study therefore provides a broader perspective on the interrelationships between these elements as it highlights the complex nature of the phenomenon of financial literacy, and it may explain the contradictions in previous findings regarding the role of financial knowledge and education in individuals' financial behaviors.

6.2 Limitations

This study also has certain limitations. First, we did not obtain the opinions of the clients of the financial professionals selected for our study. For the purposes of our objectives, we focused on the perceptions of financial professionals. A future study could focus on the experience of clients. Another limitation is that the professionals in this study are employed in different positions in various types of financial institutions (i.e. depository institutions, or those offering financial and investment services). This means that their professional experiences would vary as would their objectives and clientele. For example, a professional whose clients are wealthier, on average, or who are entrepreneurs or work in fields related to finance may have different perceptions than would a professional whose clients are low- or middle-income or have little financial knowledge. Moreover, the choice of our methodology does not allow us to generalize our results. Indeed, the purpose of this qualitative study was to provide a rich and contextualized understanding of the experiences of financial professionals as they look at how their clients manage their personal finances. A future study could use some of the results from this study to carry out quantitative research where the results would be more easily generalizable.

6.3 Implications

The findings of this study could be useful to a variety of stakeholders in education, financial institutions, and regulatory bodies of financial institutions. In addition, the results raise some questions that can be addressed through further research.

With respect to educational interventions, our results highlight the importance of including the psychological aspects of financial management in educational curricula. Tumataroa and O'Hare (2019) and Tang *et al.* (2015) find that education on financial self-control could allow individuals to avoid financial difficulties in the future; this also led these authors to conclude that psychological factors should be part of financial education programs. There is also a need to educate individuals on the importance of early savings and short-, medium, and long-term financial planning, and the different financial biases these approaches may face; all of this will raise individuals' awareness of the long-term consequences of their financial decisions. Financial knowledge about stock markets, financial products, and government programs encourages healthy financial behaviors. Financial professionals believe that financial knowledge about these topics and much more should be part of the education system's curriculum. Our results are thus aligned with those of Warmath and Zimmerman (2019), who conclude that financial literacy must be "theorized in multifaceted ways." The wide-ranging results of this study could thus contribute to the development of future educational content and to guidelines that could help individuals form good financial habits and make long-term changes that would improve their long-term financial well-being. This is especially important since the content of financial educational programs is essential to their success (Urban *et al.*, 2020).

The results of this study support the idea that the financial industry and the government have important roles to play in improving individuals' financial well-being (Davies, 2015). Specifically, the results of this study suggest that some of the regulations governing financial institutions should be tightened to better protect consumers. These regulations primarily concern the ease with which individuals are able to obtain credit. In particular, a 40% debt-to-income ratio should be adapted to the new reality that household financial commitments have increased dramatically over the past few decades, such as in cell phone charges, Internet fees, and childcare costs, which are not included in calculations of this ratio. The current situation may lead people to believe that they can afford to take on debt beyond their ability to pay. In addition, the results suggest that there should be more control over the use of credit, such as limiting debt that does not prioritize asset purchases over day-to-day spending, limiting the number of credit cards and the amounts allocated to these cards' credit limits.

Financial professionals seem to be left to themselves in terms of how they can advise, educate, and raise awareness among their clients regarding managing their finances. There is a need for guidelines so that these professionals do not have to rely on their own conscience or personal sense of ethics when dealing with their client's financial behaviors. This is all the more important as research shows that counseling can have a significant positive impact on an individual's financial situation (Staten *et al.*, 2002).

All of these results can also benefit individuals and households by raising their awareness about the financial behaviors that are detrimental to their financial security.

6.4 Future research

In addition to complementing previous research in financial literacy, this study identifies other areas of research apart from those mentioned in the study limitations. For example, future studies could look more deeply into the relationship between lifestyle, income, and household debt, and the link between the due date of the debt and the expected life of the underlying asset. The role of the financial institution and financial advisers in the quest for financial literacy for all could also be further explored. Studies could seek to understand the more specific motives for debt financing (is it more for day-to-day spending or asset purchase,

short-, medium- or long-term needs, or for discretionary or non-discretionary purchases). The need for instant gratification emerged in this study as a key element in explaining financial behavior. Research could further investigate this phenomenon and also the short-, medium-, and long-term financial consequences of various financial behaviors.

Notes

1. Subjective knowledge may measure people's confidence in their financial abilities (Allgood and Walstad, 2016; Asaad, 2015). In their study, Lind *et al.* (2020) ask participants to self-evaluate based on the following statement: Rate your financial knowledge on a scale from 1 to 7.
2. To assess objective knowledge, authors typically use a set of questions (Kim *et al.*, 2020; Lind *et al.*, 2020; Morris *et al.*, 2022). For example, one of the questions several authors use to assess basic objective financial knowledge is as follows: Suppose you had €100 in a savings account and the interest rate was 2% per year, after five years, how much money do you think you would have in the account if you left it there to grow (Lind *et al.*, 2020; Van Rooij *et al.*, 2012).

References

- Adam, A.M., Frimpong, S. and Boadu, M.O. (2017), "Financial literacy and financial planning: implication for financial well-being of retirees", *Business and Economic Horizons*, Vol. 13 No. 2, pp. 225-236.
- Adil, M., Singh, Y. and Ansari, M.S. (2022), "How financial literacy moderate the association between behaviour biases and investment decision?", *Asian Journal of Accounting Research*, Vol. 7 No. 1, pp. 17-30.
- Allgood, S. and Walstad, W.B. (2016), "The effects of perceived and actual financial literacy on financial behaviors", *Economic Inquiry*, Vol. 54 No. 1, pp. 675-697.
- American Psychological Association (2022), "Stress in America: on second COVID-19 anniversary, money, inflation, war pile on to nation stuck in survival mode", available at: <https://www.apa.org/news/press/releases/stress/2022/march-2022-survival-mode>
- Anadón, M. and Guillemette, F. (2006), "La recherche qualitative est-elle nécessairement inductive", *Recherches Qualitatives*, Vol. 5 No. 1, pp. 26-37.
- Arofah, A.A., Purwaningsih, Y. and Indriayu, M. (2018), "Financial literacy, materialism and financial behavior", *International Journal of Multicultural and Multireligious Understanding*, Vol. 5 No. 4, pp. 370-378.
- Asaad, C.T. (2015), "Financial literacy and financial behavior: assessing knowledge and confidence", *Financial Services Review*, Vol. 24 No. 2, pp. 101-118.
- Atlas, S.A., Lu, J., Micu, P.D. and Porto, N. (2019), "Financial knowledge, confidence, credit use, and financial satisfaction", *Journal of Financial Counseling and Planning*, Vol. 30 No. 2, pp. 175-190, doi: [10.1891/1052-3073.30.2.175](https://doi.org/10.1891/1052-3073.30.2.175).
- Aydin, A.E. and Akben Selcuk, E. (2019), "An investigation of financial literacy, money ethics and time preferences among college students: a structural equation model", *International Journal of Bank Marketing*, Vol. 37 No. 3, pp. 880-900.
- Behrman, J.R., Mitchell, O.S., Soo, C.K. and Bravo, D. (2012), "How financial literacy affects household wealth accumulation", *American Economic Review*, Vol. 102 No. 3, pp. 300-304.
- Bem, D.J. (1972), "Self-perception theory", *Advances in Experimental Social Psychology*, Elsevier, Vol. 6, pp. 1-62.
- Bernheim, B.D., Ray, D. and Yeltekin, S. (2015), "Bernheim: poverty and self-control", *Econometrica*, Vol. 83 No. 5, pp. 1877-1911.
- Boisclair, D., Lusardi, A. and Michaud, P.-C. (2017), "Financial literacy and retirement planning in Canada", *Journal of Pension Economics and Finance*, Vol. 16 No. 3, pp. 277-296.

- Bond, T. and Doonan, D. (2020), "The growing burden of retirement. National institute on retirement security", available at: <https://www.nirsonline.org/reports/growingburden/> (accessed 30 July 2021).
- Brounen, D., Koedijk, K.G. and Pownall, R.A. (2016), "Household financial planning and savings behavior", *Journal of International Money and Finance*, Vol. 69, pp. 95-107.
- Brown, M., Grigsby, J., Van Der Klaauw, W., Wen, J. and Zafar, B. (2016), "Financial education and the debt behavior of the young", *The Review of Financial Studies*, Vol. 29 No. 9, pp. 2490-2522.
- Bucher-Koenen, T. and Ziegelmeyer, M. (2014), "Once burned, twice shy? Financial literacy and wealth losses during the financial crisis", *Review of Finance*, Vol. 18 No. 6, pp. 2215-2246.
- Bucher-Koenen, T., Lusardi, A., Alessie, R. and Van Rooij, M. (2017), "How financially literate are women? An overview and new insights", *Journal of Consumer Affairs*, Vol. 51 No. 2, pp. 255-283.
- Canada Financial Consumer Agency, F. C. A. (2019), "Canadians and their money: key findings from the 2019 Canadian Financial Capability Survey [Research]", Aem, available at: <https://www.canada.ca/en/financial-consumer-agency/programs/research/canadian-financial-capability-survey-2019.html>
- Chuang, W.-I. and Lee, B.-S. (2006), "An empirical evaluation of the overconfidence hypothesis", *Journal of Banking and Finance*, Vol. 30 No. 9, pp. 2489-2515.
- Clark, R., Lusardi, A. and Mitchell, O.S. (2017), "Financial knowledge and 401 (k) investment performance: a case study", *Journal of Pension Economics and Finance*, Vol. 16 No. 3, pp. 324-347.
- Costa, E.D.A.R. (2017), "Determinants of corporate debt maturity structure: a study in Euro zone countries", [PhD Thesis], ISCTE-Instituto Universitario de Lisboa (Portugal).
- Davies, P. (2015), "Towards a framework for financial literacy in the context of democracy", *Journal of Curriculum Studies*, Vol. 47 No. 2, pp. 300-316.
- de Bassa Scheresberg, C. (2013), "Financial literacy and financial behavior among young adults: evidence and implications", *Numeracy*, Vol. 6 No. 2, p. 5.
- Denis, J., Guillemette, F. and Luckerhoff, J. (2019), "Introduction: les approches inductives dans la collecte et l'analyse des données", *Approches inductives: travail intellectuel et construction des connaissances*, Vol. 6 No. 1, pp. 1-9.
- Despard, M.R., Friedline, T. and Martin-West, S. (2020), "Why do households lack emergency savings? The role of financial capability", *Journal of Family and Economic Issues*, Vol. 41, pp. 542-557.
- Dewi, V., Febrian, E., Effendi, N. and Anwar, M. (2020), "Financial literacy among the millennial generation: relationships between knowledge, skills, attitude, and behavior", *Australasian Accounting, Business and Finance Journal*, Vol. 14 No. 4, pp. 24-37.
- Dinç Aydemir, S. and Aren, S. (2017), "Do the effects of individual factors on financial risk-taking behavior diversify with financial literacy?", *Kybernetes*, Vol. 46 No. 10, pp. 1706-1734.
- Disney, R. and Gathergood, J. (2013), "Financial literacy and consumer credit portfolios", *Journal of Banking and Finance*, Vol. 37 No. 7, pp. 2246-2254.
- Dolan, P., Peasgood, T. and White, M. (2008), "Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being", *Journal of Economic Psychology*, Vol. 29 No. 1, pp. 94-122, doi: [10.1016/j.joep.2007.09.001](https://doi.org/10.1016/j.joep.2007.09.001).
- Driva, A., Lührmann, M. and Winter, J. (2016), "Gender differences and stereotypes in financial literacy: off to an early start", *Economics Letters*, Vol. 146, pp. 143-146.
- Duca, J.V. and Kumar, A. (2014), "Financial literacy and mortgage equity withdrawals", *Journal of Urban Economics*, Vol. 80, pp. 62-75.
- Engels, C., Kumar, K. and Philip, D. (2020), "Financial literacy and fraud detection", *The European Journal of Finance*, Vol. 26 Nos 4-5, pp. 420-442.

- Eurostats (2022), "Sector accounts", available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Sector_accounts
- Fairfax, L.M. (2018), "The securities law implications of financial illiteracy", *Virginia Law Review*, Vol. 104 No. 6, pp. 1065-1122.
- Fernandes, D., Lynch, J.G. and Netemeyer, R.G. (2014), "Financial literacy, financial education, and downstream financial behaviors", *Management Science*, Vol. 60 No. 8, pp. 1861-1883, doi: [10.1287/mnsc.2013.1849](https://doi.org/10.1287/mnsc.2013.1849).
- FP Canada (2018), *OMNI REPORT: Financial Stress*, Financial Planning Standards Council, pp. 1-13, available at: https://www.fpcanada.ca/docs/default-source/news/fpsc_financial-stress-survey.pdf
- Finra (2022), *Financial Capability in the United States, Highlights From the FINRA Foundation National Financial Capability Study*, FINRA, available at: <https://www.finra.org/investors/insights/finra-foundation-national-financial-capability-study>
- Fishbein, M. and Ajzen, I. (1975), *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*, Addison-Wesley, Reading, MA.
- Forbes, J. and Kara, S.M. (2010), "Confidence mediates how investment knowledge influences investing self-efficacy", *Journal of Economic Psychology*, Vol. 31 No. 3, pp. 435-443.
- French, D. and McKillop, D. (2017), "The impact of debt and financial stress on health in Northern Irish households", *Journal of European Social Policy*, Vol. 27 No. 5, pp. 458-473.
- Garg, N. and Singh, S. (2018), "Financial literacy among youth", *International Journal of Social Economics*, Vol. 45 No. 1, pp. 173-186, doi: [10.1108/IJSE-11-2016-0303](https://doi.org/10.1108/IJSE-11-2016-0303).
- Gathergood, J. (2012), "Self-control, financial literacy and consumer over-indebtedness", *Journal of Economic Psychology*, Vol. 33 No. 3, pp. 590-602, doi: [10.1016/j.joep.2011.11.006](https://doi.org/10.1016/j.joep.2011.11.006).
- Gathergood, J. and Weber, J. (2017), "Financial literacy, present bias and alternative mortgage products", *Journal of Banking and Finance*, Vol. 78, pp. 58-83.
- Gaudecker, H.-M.V. (2015), "How does household portfolio diversification vary with financial literacy and financial advice?", *The Journal of Finance*, Vol. 70 No. 2, pp. 489-507.
- Guillemette, F. and Luckerhoff, J. (2012), *Méthodologie de la théorisation enracinée: Fondements, procédures et usages*, Presses de l'Université du Québec, Québec.
- Gustman, A.L., Steinmeier, T.L. and Tabatabai, N. (2010), "What the stock market decline means for the financial security and retirement choices of the near-retirement population", *Journal of Economic Perspectives*, Vol. 24 No. 1, pp. 161-182.
- Hamid, F.S. and Loke, Y.J. (2021), "Financial literacy, money management skill and credit card repayments", *International Journal of Consumer Studies*, Vol. 45 No. 2, pp. 235-247.
- Hastings, J.S., Madrian, B.C. and Skimmyhorn, W.L. (2013), "Financial literacy, financial education, and economic outcomes", *Annual Review of Economics*, Vol. 5 No. 1, pp. 347-373.
- Henager, R. and Cude, B.J. (2016), "Financial literacy and long-and short-term financial behavior in different age groups", *Journal of Financial Counseling and Planning*, Vol. 27 No. 1, pp. 3-19.
- Henager, R. and Cude, B.J. (2019), "Financial literacy of high school graduates: long-and short-term financial behavior by age group", *Journal of Family and Economic Issues*, Vol. 40 No. 3, pp. 564-575.
- Hilgert, M.A., Hogarth, J.M. and Beverly, S.G. (2003), "Household financial management: the connection between knowledge and behavior", *Federal Reserve Bulletin*, Vol. 89, pp. 309-322.
- Howell, R.T., Kurai, M. and Tam, L. (2013), "Money buys financial security and psychological need satisfaction: testing need theory in affluence", *Social Indicators Research*, Vol. 110 No. 1, pp. 17-29.
- Hsu, Y.L., Chen, H.L., Huang, P.K. and Lin, W.Y. (2021), "Does financial literacy mitigate gender differences in investment behavioral bias?", *Finance Research Letters*, Vol. 41, p. 101789.

- Hung, A., Parker, A.M. and Yoong, J. (2009), "Defining and measuring financial literacy", (SSRN Scholarly Paper ID 1498674; Working Paper, p. 1-28), Social Science Research Network, available at: <https://papers.ssrn.com/abstract=1498674>
- Huston, S.J. (2010), "Measuring financial literacy", *Journal of Consumer Affairs*, Vol. 44 No. 2, pp. 296-316.
- Huston, S.J. (2012), "Financial literacy and the cost of borrowing", *International Journal of Consumer Studies*, Vol. 36 No. 5, pp. 566-572.
- Intrum (2021), "European consumer payment report 2021", p. 80, available at: <https://www.intrum.com/publications/european-consumer-payment-report/european-consumer-payment-report-2021/>
- Johnson, R.B. and Christensen, L.B. (2004), *Educational Research: Quantitative, Qualitative, and Mixed Approaches*, Allyn and Bacon, Boston, MA.
- Kaiser, T. and Menkhoff, L. (2017), "Does financial education impact financial literacy and financial behavior, and if so, when?", *The World Bank Economic Review*, Vol. 31 No. 3, pp. 611-630.
- Kaiser, T., Lusardi, A., Menkhoff, L. and Urban, C. (2022), "Financial education affects financial knowledge and downstream behaviors", *Journal of Financial Economics*, Vol. 145 No. 2, pp. 255-272.
- Karsenti, T. (2018), *La recherche en éducation: Étapes et approches. 4e édition revue et mise à jour*, Les Presses de l'Université de Montréal, Montréal.
- Kaur, S., Mullainathan, S., Oh, S. and Schilbach, F. (2021), *Do Financial Concerns Make Workers Less Productive?*, National Bureau of Economic Research, Cambridge, MA, Working paper, w28338.pdf (nber.org).
- Keown, L.-A. (2011), "The financial knowledge of Canadians", *Statistics Canada*, Vol. 11, pp. 1-12.
- Kim, J., Sorhaindo, B. and Garman, E.T. (2006), "Relationship between financial stress and workplace absenteeism of credit counseling clients", *Journal of Family and Economic Issues*, Vol. 27 No. 3, pp. 458-478.
- Kim, K.T., Lee, J. and Hanna, S.D. (2020), "The effects of financial literacy overconfidence on the mortgage delinquency of US households", *Journal of Consumer Affairs*, Vol. 54 No. 2, pp. 517-540.
- Landerretche, O.M. and Martínez, C. (2013), "Voluntary savings, financial behavior, and pension finance literacy: evidence from Chile", *Journal of Pension Economics and Finance*, Vol. 12 No. 3, pp. 251-297.
- Lee, S.T. and Kim, K.T. (2020), "Propensity to plan, financial knowledge, overconfidence, and credit card management behaviors of millennials", *Family and Consumer Sciences Research Journal*, Vol. 49 No. 2, pp. 123-143.
- Limbu, Y.B. and Sato, S. (2019), "Credit card literacy and financial well-being of college students: a moderated mediation model of self-efficacy and credit card number", *International Journal of Bank Marketing*, Vol. 37 No. 4, pp. 991-1003.
- Lind, T., Ahmed, A., Skagerlund, K., Strömbäck, C., Västfjäll, D. and Tinghög, G. (2020), "Competence, confidence, and gender: the role of objective and subjective financial knowledge in household finance", *Journal of Family and Economic Issues*, Vol. 41, pp. 626-638.
- L'Organisation de coopération et de développement économiques (OCDE) (2016), "OECD/INFE international survey of adult financial literacy competencies—OECD", available at: <https://www.oecd.org/finance/oecd-infe-survey-adult-financial-literacy-competencies.htm>
- Lusardi, A. and de Bassa Scheresberg, C. (2013), *Financial Literacy and High-Cost Borrowing in the United States*, National Bureau of Economic Research, Cambridge, MA, Working paper, available at: https://www.nber.org/system/files/working_papers/w18969/w18969.pdf
- Lusardi, A. and Mitchell, O.S. (2011), *Financial Literacy and Planning: Implications for Retirement Wellbeing*, National Bureau of Economic Research, Cambridge, MA, Working paper, available at: <https://www.nber.org/papers/w17078>

- Lusardi, A. and Mitchell, O.S. (2014), "The economic importance of financial literacy: theory and evidence", *Journal of Economic Literature*, Vol. 52 No. 1, pp. 5-44, doi: [10.1257/jel.52.1.5](https://doi.org/10.1257/jel.52.1.5).
- Lusardi, A. and Tufano, P. (2015), "Debt literacy, financial experiences, and overindebtedness", *Journal of Pension Economics and Finance*, Vol. 14 No. 4, pp. 332-368.
- Lusardi, A., Hasler, A. and Yakoboski, P.J. (2021), "Building up financial literacy and financial resilience", *Mind and Society*, Vol. 20, pp. 181-187.
- Mangot, M. (2008), *Psychologie de l'investisseur et des marchés financiers-2ème édition*, 2e éd., Dunod, Paris.
- Messy, F. and Monticone, C. (2016), "Financial education policies in Asia and the Pacific", *OECD Working Papers on Finance, Insurance and Private Pensions*, OECD Publishing, Paris, No. 40, doi: [10.1787/5jm5b32v5vvc-en](https://doi.org/10.1787/5jm5b32v5vvc-en).
- Miller, M., Reichelstein, J., Salas, C. and Zia, B. (2015), "Can you help someone become financially capable? A meta-analysis of the literature", *The World Bank Research Observer*, Vol. 30 No. 2, pp. 220-246.
- Mishra, K.C. and Metilda, M.J. (2015), "A study on the impact of investment experience, gender, and level of education on overconfidence and self-attribution bias", *IIMB Management Review*, Vol. 27 No. 4, pp. 228-239.
- Morgan, P.J. and Long, T.Q. (2020), "Financial literacy, financial inclusion, and savings behavior in Laos", *Journal of Asian Economics*, Vol. 68, 101197, doi: [10.1016/j.asieco.2020.101197](https://doi.org/10.1016/j.asieco.2020.101197).
- Morris, J.R. (1976), "On corporate debt maturity strategies", *The Journal of Finance*, Vol. 31 No. 1, pp. 29-37.
- Morris, T., Maillet, S. and Koffi, V. (2022), "Financial knowledge, financial confidence and learning capacity on financial behavior: a Canadian study", *Cogent Social Sciences*, Vol. 8 No. 1, pp. 1-13.
- Mpaata, E., Koske, N. and Saina, E. (2021), "Does self-control moderate financial literacy and savings behavior relationship? A case of micro and small enterprise owners", *Current Psychology*, Vols 1-14.
- Netemeyer, R.G., Warmath, D., Fernandes, D. and Lynch, J.G. Jr (2018), "How am I doing? Perceived financial well-being, its potential antecedents, and its relation to overall well-being", *Journal of Consumer Research*, Vol. 45 No. 1, pp. 68-89.
- Odean, T. (1999), "Do investors trade too much?", *American Economic Review*, Vol. 89 No. 5, pp. 1279-1298.
- OECD (2020), "Financial literacy of adults in South East Europe", OECD, p. 78, available at: <https://www.oecd.org/daf/fin/financial-education/south-east-europe-financial-education.htm>
- Oehler, A., Horn, M., Wendt, S., Reisch, L.A. and Walker, T. (2018), "Young adults and their finances: an international comparative study on applied financial literacy", (SSRN Scholarly Paper ID 3192196), Social Science Research Network, doi: [10.1111/ecno.12110](https://doi.org/10.1111/ecno.12110).
- O'Neill, B., Prawitz, A., Sorhaindo, B., Kim, J. and Garman, E.T. (2006), "Changes in health, negative financial events, and financial distress/financial well-being for debt management program clients", *Journal of Financial Counseling and Planning*, Vol. 17 No. 2.
- Paillé, P. (1996), "De l'analyse qualitative en général et de l'analyse thématique en particulier", *Recherches Qualitatives*, Vol. 15, pp. 179-194.
- Perry, V.G. and Morris, M.D. (2005), "Who is in control? The role of self-perception, knowledge, and income in explaining consumer financial behavior", *Journal of Consumer Affairs*, Vol. 39 No. 2, pp. 299-313, doi: [10.1111/j.1745-6606.2005.00016.x](https://doi.org/10.1111/j.1745-6606.2005.00016.x).
- Philippas, N.D. and Avdoulas, C. (2020), "Financial literacy and financial well-being among generation-Z university students: evidence from Greece", *The European Journal of Finance*, Vol. 26 Nos 4-5, pp. 360-381.
- Pompian, M.M. (2020), "Behavioral finance and the coronavirus bear market", *The Journal of Wealth Management*, Vol. 23 No. 2, pp. 70-74.

- Porto, N. and Xiao, J.J. (2016), "Financial literacy overconfidence and financial advice seeking", *Journal of Financial Service Professionals*, Vol. 70 No. 4.
- Potrich, A.C.G. and Vieira, K.M. (2018), "Demystifying financial literacy: a behavioral perspective analysis", *Management Research Review*, Vol. 41 No. 9, pp. 1047-1068, doi: [10.1108/MRR-08-2017-0263](https://doi.org/10.1108/MRR-08-2017-0263).
- Richins, M.L. (2011), "Materialism, transformation expectations, and spending: implications for credit use", *Journal of Public Policy and Marketing*, Vol. 30 No. 2, pp. 141-156.
- Savoie-Zajc (2004), "Recherche quantitative inductive", in Karsenti, L.T. and Savoie-Zajc, L. (Eds), *La recherche en éducation*, 4e éd., Les presses de L'Université de Montréal, available at: [http://www.recherche-qualitative.qc.ca/documents/files/revue/edition_reguliere/numero28\(1\)/numero_complet_28\(1\).pdf](http://www.recherche-qualitative.qc.ca/documents/files/revue/edition_reguliere/numero28(1)/numero_complet_28(1).pdf)
- Savoie-Zajc, L. (2009), "L'entrevue semi-dirigée", *Recherche sociale: de la problématique à la collecte des données*, Vol. 5, pp. 337-360.
- Shefrin, H. and Statman, M. (1985), "The disposition to sell winners too early and ride losers too long: theory and evidence", *The Journal of Finance*, Vol. 40 No. 3, pp. 777-790.
- Shih, T.-Y. and Ke, S.-C. (2014), "Determinates of financial behavior: insights into consumer money attitudes and financial literacy", *Service Business*, Vol. 8 No. 2, pp. 217-238, doi: [10.1007/s11628-013-0194-x](https://doi.org/10.1007/s11628-013-0194-x).
- Sinclair, R.R. and Cheung, J.H. (2016), "Money matters: recommendations for financial stress research in occupational health psychology", *Stress and Health*, Vol. 32 No. 3, pp. 181-193.
- Skagerlund, K., Lind, T., Strömbäck, C., Tinghög, G. and Västfjäll, D. (2018), "Financial literacy and the role of numeracy—How individuals' attitude and affinity with numbers influence financial literacy", *Journal of Behavioral and Experimental Economics*, Vol. 74, pp. 18-25.
- Skinner, M.A., Zautra, A.J. and Reich, J.W. (2004), "Financial stress predictors and the emotional and physical health of chronic pain patients", *Cognitive Therapy and Research*, Vol. 28 No. 5, pp. 695-713.
- Smith, T.E.V., Richards, K. and M. Shelton, V. (2016), "Mindfulness in financial literacy", *Journal of Human Behavior in the Social Environment*, Vol. 26 No. 2, pp. 154-161.
- Spader, J. (2021), "Can changing demographics or refinancing behaviors explain the rising levels of housing debt among older Americans?", *Housing Policy Debate*, Vol. 31 No. 2, pp. 290-305.
- Stango, V. and Zinman, J. (2009), "Exponential growth bias and household finance", *The Journal of Finance*, Vol. 64 No. 6, pp. 2807-2849, doi: [10.1111/j.1540-6261.2009.01518.x](https://doi.org/10.1111/j.1540-6261.2009.01518.x).
- Staten, M.E., Elliehausen, G. and Lundquist, E.C. (2002), "The impact of credit counseling on subsequent borrower credit usage and payment behavior", *Credit Research Center Monograph*, Vol. 36, pp. 1-38.
- Tang, N. and Peter, P.C. (2015), "Financial knowledge acquisition among the young: the role of financial education, financial experience, and parents' financial experience", *Financial Services Review*, Vol. 24 No. 2, p. 119.
- Tang, N., Baker, A. and Peter, P.C. (2015), "Investigating the disconnect between financial knowledge and behavior: the role of parental influence and psychological characteristics in responsible financial behaviors among young adults", *Journal of Consumer Affairs*, Vol. 49 No. 2, pp. 376-406, doi: [10.1111/joca.12069](https://doi.org/10.1111/joca.12069).
- Tenney, J.A. and Kalenkoski, C.M. (2019), "Financial ratios and financial satisfaction: exploring associations between objective and subjective measures of financial well-being among older Americans", *Journal of Financial Counseling and Planning*, Vol. 30 No. 2, pp. 231-243.
- Thomas and Spataro (2018), "Financial literacy, human capital and stock market participation in Europe", *Journal of Family and Economic Issues*, Vol. 39 No. 4, pp. 532-550.
- Tumataroa, S. and O'Hare, D. (2019), "Improving self-control through financial counseling: a randomized controlled trial", *Journal of Financial Counseling and Planning*, Vol. 30 No. 2, pp. 304-312.

- Uppal, S. (2016), *Financial Literacy and Retirement Planning*, Statistics Canada, Ottawa, pp. 1-19, available at: https://publications.gc.ca/collections/collection_2016/statcan/75-006-x/75-006-2016-3-eng.pdf
- Urban, C., Schmeiser, M., Collins, J.M. and Brown, A. (2020), "The effects of high school personal financial education policies on financial behavior", *Economics of Education Review*, Vol. 78, 101786.
- Van Rooij, M., Lusardi, A. and Alessie, R. (2011), "Financial literacy and stock market participation", *Journal of Financial Economics*, Vol. 101 No. 2, pp. 449-472.
- Van Rooij, M., Lusardi, A. and Alessie, R. (2012), "Financial literacy, retirement planning and household wealth", *The Economic Journal*, Vol. 122 No. 560, pp. 449-478.
- Walstad, W.B., Rebeck, K. and MacDonald, R.A. (2010), "The effects of financial education on the financial knowledge of high school students", *Journal of Consumer Affairs*, Vol. 44 No. 2, pp. 336-357, doi: [10.1111/j.1745-6606.2010.01172.x](https://doi.org/10.1111/j.1745-6606.2010.01172.x).
- Warmath, D. and Zimmerman, D. (2019), "Financial literacy as more than knowledge: the development of a formative scale through the lens of bloom's domains of knowledge", *Journal of Consumer Affairs*, Vol. 53 No. 4, pp. 1602-1629.
- Xiao, J.J. (2008), "Applying behavior theories to financial behavior", in Xiao, J.J. (Ed.), *Handbook of Consumer Finance Research*, Springer, New York, pp. 69-81, doi: [10.1007/978-0-387-75734-6_5](https://doi.org/10.1007/978-0-387-75734-6_5).
- Xiao, J.J. and O'Neill, B. (2018), "Propensity to plan, financial capability, and financial satisfaction", *International Journal of Consumer Studies*, Vol. 42 No. 5, pp. 501-512.
- Xiao, J.J. and Porto, N. (2019), "Present bias and financial behavior", *Financial Planning Review*, Vol. 2 No. 2, p. e1048.
- Xiao, J.J., Chen, C. and Chen, F. (2014), "Consumer financial capability and financial satisfaction", *Social Indicators Research*, Vol. 118 No. 1, pp. 415-432.
- Xiao, X., Li, X. and Zhou, Y. (2022), "Financial literacy overconfidence and investment fraud victimization", *Economics Letters*, Vol. 212, 110308.
- Yahaya, R., Zainol, Z., Osman, J.H., Abidin, Z. and Ismail, R. (2019), "The effect of financial knowledge and financial attitudes on financial behavior among university students", *International Journal of Academic Research in Business and Social Sciences*, Vol. 9 No. 8, pp. 22-32.
- Yap, R.J.C., Komalasari, F. and Hadiansah, I. (2018), "The effect of financial literacy and attitude on financial management behavior and satisfaction", *BISNIS and BIROKRASI: Jurnal Ilmu Administrasi Dan Organisasi*, Vol. 23 No. 3.
- Zahera, S.A. and Bansal, R. (2018), "Do investors exhibit behavioral biases in investment decision making? A systematic review", *Qualitative Research in Financial Markets*, Vol. 10 No. 2, pp. 210-251.

Corresponding author

Tania Morris can be contacted at: tania.morris@umoncton.ca

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgroupublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com