The messy realities of financial decision-making and the policy implications for reducing financial vulnerability

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Abstract

Following the 2008 Global Financial Crisis, the financial security of individual consumers has been viewed as vital to economic stability. Policy makers have focused on developing financial literacy to ensure the public has the financial capability needed to underpin 'good' financial decisions and avoid becoming financially vulnerable. However, this approach has been criticised for not fully considering the behavioural factors that influence how consumers manage their money. Through a qualitative study of consumer financial decision-making, we gain deeper empirical insights into the emotions, context, and other behavioural factors which drive financial behaviours. We contribute conceptually by extending thinking on 'muddling through' decision-making to the personal finance context, revealing showing that what consumers consider to be rational may not align with an economic view of rationality. Questions are raised about whether whether current policy is sufficiently aligned with the factors driving consumer financial behaviour and the implications are considered.

Track 26: Public Management and Governance

Introduction

Following the 2008 Global Financial Crisis, policy makers have viewed the financial security of individual consumers as vital to economic stability, particularly amongst advanced economies (OECD INFE 2009). Considerable effort has focused on developing financial literacy (Farías 2019) to ensure the public has the financial capability needed to underpin 'good' financial decisions (Erta et al. 2013; Cook and Sadeghein 2018). Financial capability refers to the ability to manage money well, so that the costs of every-day-living and significant or unexpected life events can be met. Global policy has focused on the provision of financial education (Brüggen et al. 2017) because it is assumed that financially literate consumers will have the skills and knowledge to make sound financial decisions (Lusardi and Mitchell 2014; Papparlardo, 2012). Consumers are assumed to adopt rational decision-making rules and make economically rational decisions, if given the right information. However, this approach to improving financial capability has met with limited success (OECD INFE 2009; Klapper, Lusardi, and van Oudheusden 2015). Through an indepth consumer study, we challenge the link between financial literacy and financial capability, revealing a much messier and emotional process to financial decision-making. The implications for policy and practice are explored.

There is growing evidence of the difficulties people face in making financial decisions, in evaluating complex financial products (Farías 2019; Salisbury 2013; Campbell et al. 2011), and in dealing with the financial consequences (Hansen 2012; Cook and Sadeghein 2018; O' Connor et al. 2019). The scale of the problem is alarming. Figures from the Financial Conduct Authority (FCA 2017b, 2018), indicate that around half of all UK adults are financially vulnerable in terms of their ability to appropriately manage their finances (FinCap, 2017; MAS, 2018a), with one in six being over-indebted (MAS, 2017). Problems include falling behind with bills, suffering from

escalating debts, having minimal savings, or being unaware that their current account balance is very low. Evidence from Europe (Valant 2015), the US (Smith et al. 2015) and Australia (Marston, Banks and Zhang 2018) paints a similar picture, with many consumers becoming trapped in a financial vicious cycle they lack the means to escape.

The disappointing outcomes associated with financial education provision could be explained in several ways. The problem might lie with the education itself, perhaps because certain groups are unable to gain access or because a ‘one-size-fits-all approach to much of the provision, might not meet everyone’s needs (Pappalardo, 2012). Thus non-standard groups that include the most financially vulnerable (FCA, 2018), such as those who struggle to obtain credit (Rowe, De Ionno, Peters, and Wright 2016), may be unable to access appropriate financial education (de Meza, et al., 2008). Alternatively, assumptions about the financial decision-making process itself could be flawed.

The notion that developing financial literacy is the route to improving financial capability assumes that consumers follow a rational decision-making process, in which they weigh up information to make economically rational choices that fit their financial constraints. However, some experts have critised this assumption because it fails to fully consider behavioural factors such as emotions, which can lead consumers to make poor financial decisions (Frederiks, Stenner, and Hobman 2015; Dean and Croft 2009). The inherent complexity in meeting long-term financial goals, might also lead consumers to adopt to a process of ‘muddling through’, in which they navigate muliple and sometimes conflicting financial decisions (Hauseman, 2012).

Such concerns suggest that a more detailed and holistic understanding of the skills, knowledge, attitudes, and motivations that shape financial behaviour is needed (De Meza,

Irlenbusch, and Reyniers 2008; Willis 2011). Recent literature indicating that financial vulnerability and behaviours are intertwined, reinforces this need (Brüggen et al. 2017; Farias, 2019; O'Connor et al., 2019), with an OECD (2017) report on financial vulnerability calling for a behavioural perspective on how consumer make financial decisions. Studies which deepen knowledge about the behaviours which have a 'direct impact on financial well-being' Brüggen et al. (2017 p. 231), are therefore central to reducing financial vulnerability and a potential source of insight for future policy and practice (Erta et al. 2013; DellaVigna and Malmendier 2006).

We contribute to this debate through two underpinning research questions: *(i) what behavioural factors influence the financial decisions that consumers make and how do they view the rationality of those decisions?* and *(ii) what implications do these factors have for approaches to reduce financial vulnerability*? We focus on UK consumers who are financially 'squeezed and struggling', a financial vulnerable group that has been prioritised by policy makers (FCA 2015) as especially susceptible to financial harm (Cartwright 2015). Included within this group are those who are on low and insecure incomes, typically renting their homes, often supporting children, perhaps disabled, or suffering from illness or experiencing relationship breakdown (Appleyard, Rowlingson and Gardner. 2016). We argue that improving these individuals' financial capability is more likely if initatives are based on a rich understanding of the emotions, self-control and mistaken beliefs that shape their financial choices.

Our paper contributes empirically by deepening understanding of the behavioural factors that influence financial decisions, reflecting the need for greater clarity on this issue (Brüggen, Hogreve, Holmlund, Kabadayi, & Löfgren, 2017; Bryant & Zick, 2006). Assumptions about rational financial decision-making are challenged, revealing the impact of disempowering factors, such as emotions, context and the desire for short-term gain. Second, we contribute

conceptually by extending Hausman's (2012) thinking on 'muddling through' to the financial decision making context. Third, we expand the debate about the efficacy of financial education in reducing financial vulnerability. While some studies have supported the role of financial education (O'Connor et al., 2019; Pappalardo, 2012), we show that financial education alone is not guaranteed to reduce financial vulnerability. Finally, we make practical and policy recommendations to support the financial capability of financially squeezed consumers, a priority group for those concerned with financial vulnerability. Given concerns about financial capability are echoed in other advanced economies (Klapper, Lusardi, and Oudheused 2015), we expect our findings to resonate beyond the UK.

In the next section, we explain the conceptual framing for the study, followed by the study's context and methodology. We then present the findings and discussion, concluding with conceptual contributions and implications for policy and practice.

Literature Review

Financial Literacy and Financial Capability

Poor financial decisions can lead to potentially disastrous implications for consumers' finances (Mortimer and Pressey 2013; Smith et al. 2015), such as short-term cash flow problems and excessive long-term debts (Hansen 2017). UK financial capability policy has focused on developing financial literacy and capabilities to alleviate poor decision-making, with the aim of helping consumers to make optimal, economically rational financial decisions (FCA 2017). Specifically, this has included the provision of advice and education to financial literacy (what is taught about personal finance), with the aim of enhancing financial capability (Atkinson et al. 2007; Campbell, 2016; Johnson and Sherraden 2007).

However, the complexity of the financial market and the sophistication of financial products is confusing for consumers (IOSCO and OECD 2018; Pappalardo, 2012), making them vulnerable to making unwise financial decisions (Financial Conduct Authority 2015; Martin and Hill 2015). Even when individuals have the capacity to appraise alternatives and make rational choices (Milner and Rosenstreich 2013), the credence qualities of financial products make them difficult to evaluate (Chung-Herrera 2007; Harrison, Waite, and White 2006; Ennew 1992).

The assumption that financial education leads to more optimal financial decisions (FI Commission 2015) has proven controversial (Willis 2011), with weak evidence that financial education improves consumers' financial decision-making (Ellen, Wiener, and Fitzgerald 2011) (Kaiser and Menkhoff 2017; Fernandes, Lynch, and Netemeyer 2014; Barr, Mullainathan and Shafir 2008). Behavioural economists question whether improving financial literacy alone can support optimal decision-making (Campbell et al. 2011), suggesting that behavioural biases are likely to limit financial capability (Erta et al. 2013). A recent study of family finances was critical of assumptions about people's financial behaviours, suggesting that consumers (Hall 2016, p. 327), "*do not conform to policy makers' expectations of calculative and rational financial subjectivities*". These issues have led to arguments for a multifaceted notion of financial capability, indicating that education and experience interact with financial capability, to shape and influence the mind-set (attitudes and emotions) and behaviours of consumers (Brüggen et al. 2017; Lowe 2017; Willis 2011; Foxall 2001, 2017).

While financial decision-making and the messy personal, social and external factors that shape it are now better understood (DellaVigna 2009; Calvet, Campbell, and Sodini 2007), the impact of these factors on financial decision-making has only recently been acknowledged by

policy makers (OECD 2017). For example, policy decisions have tended to assume that when faced with financial choices, consumers will behave rationally by selecting the optimum financial product in terms of costs (Hastings, Madrian, and Skimmyhorn 2013). This aligns with a traditional economic view of rational decision-making and behaviour, which assumes that people will make decisions that yield the optimal result given their budget constraints (Blume and Easley 2008; Coleman and Fararo 1992). Economic models of consumer behaviour assume that consumers seek to maximise utility (not necessarily wealth or money) based on their preferences, time and other resources (Bryant and Zick, 2006; Pappalardo, 2012). Accordingly, behavioural choices ought to be improved by providing better information (increasing knowledge/awareness) and/or more options (increasing choice) (Goode 1997; Weintraub 1993).

Behavioural Factors and Financial Decision-Making

However, the literature on 'bounded rationality' (Dean and Croft 2009; Bramley and Collard 2015; Wedgewood 1999), suggests that consumers make rational decisions that are coherent with their beliefs and intentions (DellaVigna 2009; Frank 2011). Under this approach, individuals deviate from the rational choice model, in which the costs and benefits of a decision are weighted before choosing the optimal solution (Frederiks, Stenner, and Hobman 2015). Rationality is regarded as a matter of internal justification, so that when faced with the same circumstances, a consumer would follow the same pattern and reach the same decision (Dean and Croft 2009; Wedgewood 1999). As such, people tend to have time-inconsistent preferences for immediate gratification, the effects of which they may naïvely underestimate (Heidhues and Koszegi 2010), because these tendencies sometimes lead them to misjudging the total costs or the risk of become financially vulnerable (Campbell et al. 2010).

Poor decision making is sometimes due to a lack of financial literacy (Lusardi and Mitchell 2014) because consumers have insufficient information to make a reasonably good choice (Pappalardo, 2012). However, discrepancies between what people say and what they do are common (Frederiks, Stenner, and Hobman 2015) and even those with good financial literacy may not behave consistently with their beliefs - the ‘attitude-behaviour gap’ - (Boulstridge and Carrigan 2000, and may become financially vulnerable as a result (O’Connor et al. 2019).

There are several reasons why consumers may not behave in an economically rational way. First, individual preferences or the context in which a decision is made, may result in a choice which does not appear to be to be optimal in the long term (Madrian 2014). For example, an individual may use a payday lender to pay an unexpected bill because their choices are constrained by an immediate lack of financial means (Hyun, Post, and Ray 2018). Because the circumstances have rendered an economical optimal decision infeasible, the consumer is behaving in a rational way given the context.

Second, short-term consumption desires may be chosen over longer term preferences; a decision that may later lead to feelings of regret (Cook and Sadeghein 2018). For example, an individual who on a whim spends their house deposit money on a luxury holiday, may have to live in rented accommodation for many more years. In this case, hedonic or emotional reasons helps explain why, despite the disastrous financial consequences, the individual is behaving in an apparently inconsistent or irrational way. Third, the inherent complexity involved in making rational financial decisions, in which multiple alternatives may need to be weighed up. Such complexity can compound the emotional factors involved (Erta et al. 2013) and challenge the application of a rational decision making approach. Consumers may feel conflicted by apparently

incompatible goals, such as balancing financial responsibility with the desire to purchase a product. A trade-off between the present and the future may also be required (Ellen, Weiner and Fitzgerald 2011), which can be misjudged.

Hausman (2012, p796) draws on 'muddling through' theory to understand such complex process behaviours, which she argues '…*inherently recognises the limitations of rational decisions making by including options for multiple goals that cannot be optimised simultaneously'.* Although her focus was on food consumption, she explicitly mentioned financial behaviour as another area in which the rules of rational decision making may not apply. Highlighting the emotional factors that can get in the way, she describes the disciplined approach that is needed to meet long-term spending goals, and the multiple decisions required to choose between many alternatives.

Through an indepth consumer study, we provide rich empirical insights into the complex factors which influence financial decision making. We expose flaws in the assumed link between financial literacy and financial capability, which help explain why this approach to improving financial capability has met with limited success (OECD INFE 2009; Klapper, Lusardi, and van Oudheusden 2015). We reveal a much messier choice process that is more akin to 'muddling through' and in which emotions play a key role. As a consequence, we show that decisions regarded as optimal by consumers, may not necessarily appear economically rational. As such, we challenge the assumptions that given the right information, consumers will make economically rational decisions. We argue for policy and practice actions which align with this messy day-to-day reality, rather than relying on flawed assumptions about a rational decision making approach.

Methodology

The Context

In 2006, the Financial Services Authority (FSA 2006)[1] undertook the first UK baseline survey of the public's financial capability, which identified the need for greater financial capability in four key domains: 'managing money', 'planning ahead', 'choosing products' and 'staying informed' (Atkinson, McKay, Kempson, and Collard 2006). This study influenced policy deliver in the UK (FCA, 2018) and has also shaped financial capability policy and practice more widely (World Bank 2013). In 2012, the government set up the Money Advice Service (MAS)[1], with a strategy to '*use evidence to understand who across the UK most needs help*' and to '*improve the ability of people to manage their money'* (MAS 2018a, p.1).

The UK financial capability strategy aimed to ensure that consumers could manage their own financial wellbeing, such as by building a safety net of savings to be less reliant on the state in times of need. The public was segmented into three financial capability groups based loosely on level of income and wealth. These segments enabled financial capability programs to be targeted at audiences according to whether they are financially struggling, financially squeezed, or financially cushioned (FinCap 2018), addressing criticisms that financial capability programs have been too generic (Cartwright 2015). We focus on the financially squeezed segment.

Data Collection

The fieldwork took place over an eight month period in the West Midlands. Data were gathered alongside a behaviour change intervention focusing on using financial literacy to improve financial capability (Darnton 2008). Semi-structured in-depth interviews were

[1] The Money Advice Pensions Service (MAPS) was launched in January 2019, bringing together the Money Advice Service with the Pensions Advisory Service and Pension Wise.

undertaken with participants from low to moderate income households who identified themselves as 'financially squeezed'. A sample mixed in age, gender, family type and employment was recruited from members of a local credit union and a higher education college with a significant mature student population (see Table 1). Despite the difficulties in getting people to talk openly about their finances (Cohen 2019), each participant was interviewed twice, immediately before and several weeks after the intervention took place. Reporting on the intervention outcomes is beyond the scope of this paper, which was instead used as an opportunity to gather rich insights into the factors which underlie financial behaviour, the attitudes shaping that behaviour, and the day-to-day issues people face in managing their finances (Berg 2004; Kaczynski, Salmona, and Smith 2014).

Table 1: Participant Profiles

Participant	Age group	Gender	Housing situation		Level of Education	Pseudonym
1	18-24	F	Couple with children	Rent-privately	College	Miriam
2	18-24	M	Shared house	Rent-privately	Bachelor's Degree	Ashley
3	25-34	F	Single no children	Rent-privately	Higher National Diploma	Mia
4	18-24	M	Shared house	Rent-privately	Bachelor's Degree	Gerard
5	35-44	F	Couple with children	Own with mortgage	Secondary School	Jo
6	35-44	F	Single with children	Social housing	Secondary School	Aileen
7	25-34	M	Couple with children	Own with mortgage	Secondary School	Alex
8	25-34	F	Couple no children	Rent-privately	Vocational Qualification	Eliza
9	35-44	F	Single with children	Social housing	Vocational Qualification	Isla
10	18-24	M	Shared house	Rent-privately	Bachelor's Degree	Charlie
11	25-34	F	Single with children	Social housing	College	Lily
12	35-44	F	Single with children	Rent-privately	Higher National Diploma	Feya
13	25-34	M	Couple with children	Social housing	Secondary School	Lewis
14	45-54	F	Couple with children	Own with mortgage	Bachelor's Degree	Imogen

15	35-44	F	Single with children	Rent-privately	Bachelor's Degree	Megan
16	25-34	F	Single with children	Rent-privately	Secondary School	Anita
17	25-34	M	With parents	Own with mortgage	College	Kai
18	35-44	F	Couple with children	Own with mortgage	Bachelor's Degree	Jesse
19	25-34	F	Single with children	Social housing	Bachelor's Degree	Zoe
20	25-34	F	Couple with children	Rent-privately	PhD	Clara
21	65+	F	Single with children	Own-outright	Higher National Diploma	Lexi
22	35-44	F	Single with children	Social housing	Bachelor's Degree	Christine
23	65+	M	Single no children	Social housing	Vocational Qualification	Winston
24	25-34	F	Single no children	Social housing	Secondary School	Bianca
25	35-44	F	Single with children	Social housing	Secondary School	Chantelle
26	55-64	F	Single with children	Social housing	Secondary School	Zara
27	55-64	M	Couple no children	Social housing	Bachelor's Degree	Aiden
28	25-34	F	With parents	Rent-privately	Bachelor's Degree	Darcy
29	35-44	F	Couple with children	Own with mortgage	Bachelor's Degree	Jody
30	35-44	F	Couple with children	Own with mortgage	Bachelor's Degree	Harper
31	18-24	M	With parents	Own-outright	College	Isaac
32	18-24	F	Shared house	Rent-privately	College	Grace
33	18-24	F	Single with children	Rent-privately	Higher National Diploma	Daisy
34	18-24	M	With parents	Rent-privately	Secondary School	Zak
35	18-24	F	With parents	Own with mortgage	College	Sienna
36	35-44	F	Couple with children	Own with mortgage	Higher National Diploma	Florence
37	18-24	F	With parents	Own-outright	Secondary School	Esme
38	25-34	F	Single with children	Rent-privately	Higher National Diploma	Matilda
39	25-34	M	Shared house	Rent-privately	Bachelor's Degree	Don
40	18-24	M	With parents	Own-outright	College	Finn

A semi-structured interview format was used to probe the following topics: participants' confidence in managing their money; their role in managing their household finances; financial

behaviours, including budgeting, saving and financial resilience; attitudes towards money; financial priorities. The interviews were led by researchers experienced in gathering data involving sensitive issues and informed consent was obtained. Pseudonyms have been used to ensure participant confidentiality. In total, 78 semi-structured interviews were conducted with 40 participants, with two participants not attending the second interview. Interviews lasted between 20 minutes and one hour and were conducted by pairs of researchers to ensure research quality.

Data Analysis

The interviews were digitally recorded and transcribed, generating 26 hours of recording, supplemented with contemporaneous research notes taken by the researchers. We scrutinised the data using thematic 'framework' analysis (Ritchie, Lewis, Nicholls, and Ormston 2013) aided by NVivo computer software. This approach enabled an accurate reflection of how participants managed their personal finances and the impact of the intervention. We followed a systematic, iterative approach to ensure the analysis was logical, organised, evidence driven, and an accurate reflection of the data. All researchers were involved in identifying three initial themes, which were treated as core categories in the second stage Bryman (2015). Three researchers then used NVivo to highlight parts of the transcripts corresponding to these codes, with sub-themes subsequently created within these core categories.

The findings are organised into the three core categories (financial capability vs. literacy; focusing on the present; and rational muddling through) and eight sub-themes, (muddy thinking, knowledge isn't enough, emotion, living in the here and now, priorities, learning through experience, tactical money management; and survival) [see Table 2].

Table 2: Core Categories and Sub-Themes

Core Category	Sub-themes	No. of quotes	Example quotations
Financial capability vs Literacy	Maintaining financial clarity	32	*"I do tend to go on some crazy money spending binges. So sometimes, I'll spend months being really good and saving and then when I have a certain amount, I'll treat myself to something nice and expensive" (Anita)*
	Knowledge isn't enough	18	*"I think perhaps, it wasn't aimed at people like me who because of necessity, are so on the ball, I can tell you to the penny, what's in my account. I can tell you the price of beans at three different supermarkets. That's my life." (Megan)*
Focusing on the present	Emotion	80	*"It's like you're almost hurting yourself, like. It's just something that is strict, and I think that disciplines hard to incorporate into your life when you feel like it mentally could have a negative effect on your wellbeing." (Judith)*
	Living in the here and now	63	*"I am never going to say, 'I can't', whatever 'I can't afford Christmas this year, I've got to save', or whatever. I'm not going to, lower my standards." (Isla)*
Rational muddling through	Priorities to survive	186	*"Before I became like a mother and what not, I never had to really stop and think, oh, have I got enough money for x. I just used to go and pay for it, happily. I never had to worry about going into like the red." (Aileen)*
	Learning through experience	74	*"I used to be so uptight, oh, I can't go into the red, but that's what it's there for. Money is money. Life is not dependent upon money." (Aileen)*
	Tactical money management	119	*"I always have to account for the money on my phone bill… the reason I pay for my phone bill is because my parents told me it's good for your credit rating…" (Ashley)*

Findings

Financial Capability versus Literacy

The core category of *financial capability versus literacy* aligns with discussions in the literature about a shortfall in financial literacy and whether its links to financial capability problems (Lusardi and Mitchell 2014). Participants regarded their ability to manage their money

as affected by problems in *maintaining financial clarity*, in some cases because of financial literacy issues, with many also indicating that *knowledge isn't enough*.

Maintaining financial clarity

Most interviewees struggled with maintaining clarity when managing their finances. They would often lose sight of their financial goals or fail to see the bigger picture of their financial position. Maintaining control of their finances and being financially capable was seen to have peaks and troughs. Many often struggled to keep on track and to maintain an overall view of their financial situation and not fall into detrimental financial behaviours:

> *I'm confident that I pay my bills on time…confident that I save as much as I possibly can, and confident that I tend to dabble a bit too much with my credit card. (Mia)*

For some interviewees this lack of financial clarity led to worries they could lose control over their finances, as Bianca explained: *"I am in control…But I don't feel it…I'm waiting for the carpet to be just pulled from under my feet".* Lack of financial literacy was, for some, a root cause; sometimes resulting in a lack of clarity about what actions to take and when. Keeping track of different bill payment dates was an issue to balance with making sure their spending was spread between paydays. They had to have enough to pay bills as they became due, while retaining enough to live on: *"I find it hard... When I get paid…if I get something coming out… I lose when the bill will go out when it's all different dates."(Anita).*

Mental health also influenced the inability to remain focused on their financial goals and clear about their financial position *"Occasionally I'll take out the odd little payday loan if I've gone a bit mad. I get anxiety and depression, so sometimes I lose the plot a little bit and comfort spend." (Anita).* Some described finding clarity regarding their finances, by admitting to

themselves that despite being financially literate, they would always struggle. So they accepted their situation and decided not to let it worry them, *"I felt massively stressed with it up till about two, two and half years ago".* When asked what changed they explained: *...it was just a mental actualisation of well, it doesn't matter how much I worry about it I haven't got it. So why bother worrying. Money is money, It's not life." (Jo).*

Knowledge Isn't Enough

The notion that knowledge alone is not enough to ensure finances are managed effectively was a strong theme. Interviewees readily acknowledged the benefits of learning to manage their money better and saw improving their financial literacy as a good thing. Many had at least a rudimentary understanding of budgeting principles, an understanding which they implemented through keeping simple records of income and expenditure, perhaps on their smartphones or by jotting details down in an accessible place. Yet many also admitted it was difficult to translate this understanding into good financial behaviour and feeling "*frustrated that we're not saving*" (Miriam). In the words of one interviewee, "…*it's like, knowing what to do and doing them are two different things*" (Jody).

Life events or unexpected problems often got in the way of the best laid plans, sometimes because of illness, mental health, problems involving another family member, or because the car had broken down. Such situations compounded feelings of disempowerment, with participants facing tough choices about what to prioritise and when:

> *I know that my washing machine is on its way out and I try and put £25 a week, which is a lot of money to me, away every week but my car broke and I've had to dip in to it. My tumble dryer has gone as well and I'm like … do I buy the washing machine or the tumble dryer?* (Megan)

Being out of control of their finances sometimes precipitated a more general sense of disempowerment; where interviewees were reasonably financial literate but lacked the capability to manage their money for other reasons: *"…the biggest problem I have with my situation [mental health problems] is that knowledge isn't enough. I can't make the phone calls, I can't write the letters … and that is very difficult and very frustrating".* (Megan)

Focusing on the present

The core theme of *focusing on the present* shows how individuals often do not make financially optimal decisions in the longer term. The reasons are linked to the circumstances that people face, which often are not accounted for or are underrepresented in policy makers' considerations of financial capability (FCA 2017b). *Focusing on the present* relates to participants choosing to disregard good financial planning, in favor of spending money for immediate short-term gain. The two sub-themes of *emotion* and *living in the here and now* illustrate the pursuit of instant material rewards from short-term spending, with little consideration of the longer-term impact on their financial vulnerablity.

Emotion

Interviewees discussed how financial capability initiatives often *"miss out on the emotional aspect of spending*" and that knowing they did not need to buy a particular item was irrelevant because, *"you feel it will make you feel better"*. The psychological aspect of spending and the instant gratification attached to it, often overtook the need to budget and save. So even though these decisions might not appear optimal in the longer term, the interviewees were maximizing utility as they saw it. Some participants felt very strongly about the emotions such spending elicited. One interviewee described an almost physical sensation, "*…it gives you that little warm fuzzy glow when you've been shopping* (Jody).

For others, the emotional aspect of such spending involved much more than being frivolous or materialistic. It helped them deal with mental health issues and allowed them to feel good about themselves in the short-term, escaping their financial worries. This escapism was often short-lived, with the realities of their financial situation quickly following the high: *It makes me feel better … Euphoric, that massive feeling when you're spending money. Oh my god, I feel high, I feel amazing. Then the next day, you're like, okay, maybe I shouldn't have spent that.* (Anita)

Other interviewees explained their emotions influenced them to actively choose material desires over-paying bills and other necessities. Some would try to defer bill payments or rollover debt payments to the following month but would then end up repeating this pattern by buying something else. Such decisions could lead to problem debt:

> *I'm one of these people unfortunately, that if there is a major bill to be paid and I want something, I am more inclined to buy something that I like and, in my head, thinking oh well I can replace that money next week. And then it gets to a certain point where you can't afford to replace it and then you end up getting yourself into debt.* (Eliza)

Living in the Here and Now

Through probing these emotional needs, two sorts of influencing factors were important in living for today. The first set was an avoidance tendency by certain individuals, who openly spoke about an inclination to "*to bury my head in the sand*" or to "*just ignore it and it will go away*". Here we see evidence of present bias and of making decisions which could cause problems in the longer term. Some of these people felt disempowered, with one reflecting, "*if I am going to be skint, I may as well have something to show for it, do you get what I mean*?" (Lewis). Others were driven by more philosophical motives, suggesting a conscious decision to

"*enjoy it while I have it*", being in "*the sort of mind set of, well, you know, I'm not always going to be here*" (Gerard). This latter group felt temporarily empowered by being able to spend now because they could not guarantee they would be able to do so in the future. Some younger participants were mindful of being at a life stage in which they were responsible only for themselves, but that they would become more financially constrained in the future.

Rational muddling through

The *rational muddling through* core theme reflects how money was managed on a day-to-day basis and how individuals tackled their financial challenges in ways that worked for them. As reflected in our three sub-themes, this could be a difficult journey of discovery, in which they set out to identify *priorities to survive*, went on a journey of *learning through experience*, to develop their *tactical money management* abilities. Although the tactics employed appear misaligned with policy makers' views of economically rational behaviour (e.g. FinCap 2018), for interviewees they represented a logical way to survive.

Priorities To Survive

Many interviewees discussed having to balance financial priorities in order to survive day-to-day. For the majority, these priorities centered on their children, sometimes at the expense of meeting other financial commitments. Interviewees spoke about how becoming an adult/parent introduced challenges to their financial management and ability to survive day-to-day. Needing to buy school uniforms and shoes for their children was one such burden. Where previously they did not have to worry about meeting certain expenses and commitments, this could all suddenly change: "*…before motherhood. You know, I never had to worry about what bill was coming out when, because it was always there. But kids don't half throw a spanner in your works"*. (Aileen)

Many interviewees faced instances where they had to make financial sacrifices in order to purchase items for children that they did not consider essential due to feeling guilty or being pestered. Such spending could damage their ability to save effectively, as one interviewee shared: "*Yes, when it's pester power. Like yesterday my son wanted a game for his phone, a Minecraft one and that's seven quid for a game for a phone. That's a lot isn't it, to me that's a lot. Seven pound is, well if I think about it now, seven pounds is a meal for the kids"*. (Chantelle)

Learning Through Experience

Some interviewees reported that their ability to manage their money had improved over time, as they became more familiar with managing their finances, learning through experience and by making mistakes. When first faced with having to budget and pay bills, others experienced high levels of stress as they tried to work through and gain perspective on their financial problems. The learning process could be a bitter-sweet experience, in which new insights were gained into how to cope, while facing hard truths along the way. Sometimes interviewees' problems were associated with inexperience without realizing the consequences: *"I would get my student loan and I was so ready to just spend money. I was 17 years old at uni, didn't really know what was going on and I would be just so quick and hasty to spend the money. Now, I'm definitely a bit more wise with it, I'd say"*. (Ashley)

Over time, through a combination of developing more know-how about how financial products worked and getting smarter at navigating their own financial circumstances, interviewees appeared to become more accepting of their situations. One spoke about a process of "*mental actualization"* and of reaching a realization that "*money is money …. It's not life*" (Christine).

Tactical Money Management

A large number of interviewees spoke about managing their money by being tactical in what financial commitments they would meet, particularly if they faced a shortfall. Cancelling direct debits, moving payment dates, deferring payments or rolling over debts were some of the ways they mentioned. One interviewee explained this process allowed them to feel more in control over how their bills were paid and when "*I just juggle things around…I switch payments around all the time. So that if I see something's going to fall a bit short, I change the dates on the payments, so that I make that payment when I need to make it. It's like tactical chess playing with banking"*. (Aileen)

Some interviewees used tactical money management measures such as using balance transfer offers from mainstream credit providers to give them greater control over the expenses and reduce interest payments. However, in some cases these products did not work in the way intended, as they led to accumulating debts elsewhere, as this interviewee explained:

> *I transferred a balance from one credit card to another, paid off that credit card, but what you found was, because I was so focused paying off that credit card before it was in the balance transfer interest free… I then started accumulating more credit…on my credit card I wasn't using. So, it's a game of working out what solution is to manage your money.* (Judith)

Discussion

Developing consumer financial capability has been emphasised as the means to ensure individuals make 'good' financial decisions (Erta et al. 2013). By focusing on the behavioural factors that can lead people to make sub-optimal choices, to deepen understanding of the individual and situational factors that drive consumer financial behaviour. Beginning with our first research question about the behavioural factors that influence consumers' financial

decisions, we found that despite the emphasis on financial education (FCA 2017a, 2017b; FIC 2015; Lin et al., 2016); individuals are driven by a more complex, messy array of behavioural factors than is implied by economic notions of rationality. The misalignment between what are perceived to be the drivers of consumer behaviour and what happens in practice is important because it might help explain why policies and practices to reduce financial vulnerability have met with limited success, and why so many individuals – in the UK, US and other developed economies - remain trapped in a financial vicious cycle (Adams and Smart 2017; OECD 2017; FCA 2017b, 2018; Michie, Johnston, Francis, Hardeman, and Eccles 2008; Smith et al. 2015).

In line with previous studies, participants were often able to rationalize their behaviour in ways that suggested their choices were consistent with their preferences, beliefs and intentions (Della Vigna and Malmendier 2004; Cook and Sadeghein 2018; Marston et al. 2018). However, even though they might be trying to make the best possible decisions in circumstances of constrained choices, they sometimes made short-term decisions which were not economically sensible and which could lead to future harm. Although these short-term decisions could be compounded by financial literacy problems (Pappalardo, 2012), they were also influenced by disempowering behavioural factors, such as *emotions*, *context*, and the *desire for short-term gains*. Crucially, we suggest that how these financial decisions were made and the factors which influenced them often did not conform with the views of rational financial decision-making and were much more akin to a process of ‘muddling through’, as has been seen in other contexts (Hausman, 2012).

Turning to our second research question, these findings have ramifications for how financial vulnerability can be reduced. Efforts by policy makers to improve financial decision-

making and address financial vulnerability have historically emphasised increasing consumer financial knowledge and literacy (FIC 2015; Pappalardo, 2012; O' Connor et al. 2019). However, our findings show that financial literacy is not on its own sufficient to support individuals in making effective and economically rational financial decisions. Our findings therefore align with recent calls for a broader perspective on tackling financial vulnerability (FinCap 2017; Willis 2011; Weaver 2014; Brüggen et al. 2017).

Next, we consider the implications of these findings for the reduction of financial vulnerability. Financial capability problems can occur because of financial literacy problems. However, consumers can be financially literate, without being financially capable, as shown by having debts that are out of control or being unable to meet daily expenses (FCA 2017a; MAS 2017). Our findings suggest that this financial literacy and financial capability gap can occur for several reasons. Firstly, consumers may have insufficient income to meet their regular outgoings, irrespective of their ability to budget and manage their finances, such that an increase in their financial resources is the only solution. Secondly, they may have enough for routine expenditure but not to save regularly, thus lacking financial resilience to sudden financial shocks (FCA 2015). Acknowledging the likelihood of these shortfalls and helping consumers to develop strategies to cope, could be more productive than prevention strategies alone. Thirdly, individuals may prioritise non-essential spending on their children or indulge in expensive purchases, taking a shorter term view of their finances. As many of those interviewed showed, these choices may still make sense to them (Wedgewood 1999), even if they are already financially vulnerable (FCA 2017b).

Bridging the gap between financial literacy and capability might be better achieved by facilitating learning through direct experience rather than through the provision of generic and prescriptive advice. Some participants had learned through experience to muddle through their financial challenges, such that they framed the concept of financial rationality in their own terms. Experiential learning could be a useful tool to help others improve their ability to make financial decisions in their personal best interest (Jana 2015; (Johnson and Sherraden 2007; Frijns, Gilbert and Tourani-rad 2014).

We suggest addressing lack of engagement with personal finances (FCA 2017b) by taking greater account of the powerful behavioural factors that were seen to influence participants' financial decision-making. Our findings add further evidence about the role of emotions in driving behaviour and shaping individuals' financial choices (Cook and Sadeghein 2018; Huysentruyt and Read 2010). Some interviewees admitted buying frivolous, non-essential items to support their short-term emotional wellbeing and escape their financial worries. Thus emotions exacerbated the quest for immediate gratification (Della Vigna and Malmendier 2004, 2006), aligning with previous research suggesting that consumers underestimate costs due to time-inconsistent preferences (Campbell et al. 2010; Heidhues and Koszegi 2010; Richins 2011).

While this desire for gratification may deliver the desired short-term benefits, it may also reduce the ability to properly budget or save for the future. Even though the long-term outcomes of these choices is open to question, when individuals believe they are maximizing their utility from the situation and are able to rationalise their choices (Hausman 2012), they may not be responsive to warnings about the long-term consequences. Policy solutions and interventions to reducing financial vulnerability are needed which recognise and work around these biases, such

as emphasizing that making better financial decisions can be gratifying in its own right. Some participants said that being reminded of their financial aspirations was useful in resisting the urge to spend for instant gratification.

A recent OECD (2017) report acknowledged that consumers make financial decisions that align with their beliefs about what is important, irrespective of their financial literacy and capability. While policy and practice guidance to support financial literacy (Valant 2015), such as through the use of budget tools (MAS 2018b) is therefore important, it is not on its own sufficient to deflect them from the messy process of muddling through. The struggles individuals face in prioritizing their financial issues, managing their emotions and changing their financial behaviours, also need to be reflected.

In consideration of these factors and to reflect that a one-size-fits-all approach may not be sufficient (Pappalardo, 2012), we propose a simple four-cell matrix that uses the dimensions ‘financial capability’ (high/low) and ‘financial literacy’ (high/low) dimensions, as a tool for guiding for policy and practice to reduce financial vulnerability. As Table 3 illustrates, this matrix can be populated by drawing on our findings, as discussed in the final section.

Table 3. Financial capability/Financial literacy policy matrix

	Financial Capability Low	 High
High	*Financial education* is low priority. Although the need to budget and save are recognised, encouragement needed to use *financial budgeting and savings tools* to discourage emotionally-driven, short-term decisions so they are supported through through unexpected life events and can plan for the longer term. Those disempowered by low financial means, need signposting and access to *individual financial guidance*. Policy change to support access to appropriate financial products may be needed. To contend with behavioural/emotional biases, approaches to *reinforce their learning and remind* about good financial practices are a priority.	Although the need to budget and save are recognised, encouragement is still needed to use *financial budgeting and savings tools* to discourage emotionally-driven, short-term decisions so they are supported through through unexpected life events and can plan for the longer term. *Individual financial guidance* is lower priority than for some groups. To contend with behavioural/emotional biases, approaches to *reinforce their learning and remind* about good financial practices may still have a role.
Financial Literacy Low	*Financial education* to use basic financial tools is high priority. They need guidance on how to budget and save and may suffer from muddy thinking in relation to their finances. Access is needed to *financial budgeting and savings tools* to discourage emotionally-driven, short-term decisions so they are supported through through unexpected life events and can plan for the longer term. Guidance on using these tools, including when facing expected or unexpected life events, is essential to their *financial education*. Those disempowered by low financial means, need signposting and access to *individual financial guidance.* Policy change to support access to appropriate financial products may be needed. To contend with behavioural/emotional biases, approaches to *reinforce their learning and remind* about good financial practices are a priority.	*Financial education* to use basic financial tools is high priority. They have often learned through experience and are less familiar with the technicalities of how to budget and save in relation to their finances. Access is needed to *financial budgeting and savings tools* to reinforce their financial capability and to discourage emotionally-driven, short-term decisions so they are supported through through unexpected life events and can plan for the longer term. *Individual financial guidance* is lower priority than for some groups. To contend with behavioural/emotional biases, approaches to *reinforce their learning and remind* about good financial practices may still have a role.

Conclusions and Recommendations

The financial capability/financial literacy matrix generates a series of policy and practice recommendations based on a more nuanced view of the behavioural factors that influence financial decision-making. These recommendations are organised according to the activities from the matrix: *financial education*; *financial tools* and *reinforcing & reminding*.

Although *financial education* is not on its own sufficient to lift consumers out of a vicious financial cycle, our findings reinforce its role as a crucial empowerment tool. To improve their impact, financial education programs should be tailored to individuals needs and reflect the socio-economic context in which decisions are made, the emotional factors driving them, and the messy realities that consumers people face. Uptake is also likely to be greater on programs that include direct contact between the educator and the learner and where a variety of formats are offered (e.g. online, face-to-face, individual or group-based). As consumers learn through experience rather than from directive financial guidance, short-term financial habits are more likely to be improved through experiential learning that positively empowers people and promotes longer-term gains. There seems to be a role for education that increases exposure to financial experience as a way of helping them muddle through the complex reality of their financial decisions. For instance, individuals could be helped to identify unhealthy financial habits, to recognise the triggers and causes of such habits. Providing education and financial experience programmes within a trusted, neutral environment, such as schools or other sheltered environments, could be one way to enable consumers to have the hands-on help they need within a suitable setting.

While simple and flexible *financial tools* to help consumers budget and save are invaluable, they need to be provided in various formats and channels to meet different needs. Formats that can readily be shared increase the likelihood that consumers will be able to pass on their experience to support the financial education and financial capability of other family members or friends. Helping these individuals to weigh up the short and long terms trade-offs of their decisions is especially needed.

Providing opportunities for engaging with financial capability in the presence of trusted intermediaries can create a 'safe space' to work through money management issues. Initiatives to provide such spaces in community-based or workplace settings could help offer a more socially-relevant environment for dealing with the messy realities of their personal finances. Even consumers with good financial capability need ongoing help to *reinforce and remind* them on how best to manage their money, suggesting that *financial tools* with built-in 'nudges' and reminders have a useful role to play in reinforcing good financial habits.

Financial policy to reinforce good money management needs to be emotionally palatable and accessible for consumers who are struggling to cope day-to-day and who may not be well positioned to make economically optimal financial decisions. Guidance that speaks to emotional need and helps consumers balance short and long-term needs, by being based on ideal but realistic outcomes, is more likely to be followed. For example, encouraging consumers to envision their ideal retirement and to consider the actions needed to achieve it, are more likely to encourage long-term thinking than simple 'to do' and 'not to do' checklists of financial recommendations.

Although the UK setting limits the generalizability of the findings, the emerging patterns are likely to have relevance to other advanced economies where financial capability and literacy have been the focus for improving consumer financial decision-making (Stewart 2017). Future research could explore these behavioural factors in such contexts and adapt the extended policy matrix. Further studies are also needed to design and implement alternative interventions that focus on a broader conceptualization of financial capability and which could meaningfully feed into policy recommendations to support the wellbeing of financially vulnerable people.

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[1] The FSA became two separate authorities, i.e. the Financial Conduct Authority (FCA) and the Prudential Regulation Authority.