Americans Would Rather Talk About Anything besides Money, Capital Group Survey Finds

Household earnings, retirement savings and debt top list of taboo topics of conversation

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LOS ANGELES, Dec. 6, 2018 /PRNewswire/ -- People would rather talk about anything other than money, including marriage problems, mental illness, drug addiction, race, sex, politics and religion. In a survey of 1,202 American adults conducted by Capital Group, home of American Funds, and one of the world's leading investment management firms, survey participants ranked financial topics such as household earnings, retirement savings, debt and inheritances as the most taboo topics of discussion.

"Most Americans agree that talking about their finances is a social taboo. It's time to break that habit and inspire new, productive conversations about money, saving and investing," said Heather Lord, senior vice president and head of strategy and innovation at Capital Group. "Small changes in how people talk about their finances can yield significant returns over time. Confronting the money taboo head-on is one way to create a more financially secure future for one's self."

Americans rank financial topics as the most taboo

When asked about topics that are too taboo to discuss with friends, respondents overwhelmingly indicated it was those connected to money: household earnings (39%), retirement savings (38%), debt (32%) and inheritance (25%). Politics (17%), drug use (14%) and racial issues (8%) were considered significantly less taboo. Many respondents said finances were none of other people's business, while others cited awkwardness and concern about creating ill feelings among friends.

Male and female respondents provided almost identical responses when asked about personal matters that might be considered taboo, such as marital problems, religion, politics, sexual orientation and family disagreements. However, when it came to financial topics like household earnings, retirement savings and debt, more women consider them a social taboo than men.

About one third of those surveyed — including 30 percent of men and 40 percent of women — indicated they had discussed financial topics with friends and peers in the last six months. The survey found that those who are most willing to talk about money are either very confident (perhaps too confident) about their finances or very insecure.

People turn to financial advisors and spouses to discuss money

The survey found that when faced with a major financial decision or event, people discuss it with their spouse or a financial advisor. Women (50%) are more likely turn to their spouse than men (36%), and women (50%) are also more likely to speak with a financial advisor than men (41%). By generation, millennials are nearly twice as likely as baby boomers to turn to friends or extended family to talk about managing money. The survey also found that millennials are more likely than Generation Xers or baby boomers to turn to their parents, co-workers or online resources for financial advice.

The findings reveal four ways to confront the money taboo and to change saving and investing behavior:

1. **Start at home.** Talk to your spouse or significant other about money, and encourage conversations between parents and children. Millennials are almost twice as likely as baby boomers to say they would speak to their children about money at an early age; many adults say they are still teaching their adult children about financial topics.
2. **Seek advice.** Most investors can benefit from financial advice. Financial advisors can help investors make smart decisions about investing for the long term and help protect against market downturns. Nearly half of survey respondents said they would feel comfortable turning to an advisor for a major financial decision.
3. **Ask your employer.** Many Americans get their first experience with retirement saving through an employer's 401(k) plan, but the Capital Group survey found that employers are an under-utilized resource. There is an opportunity for employers and benefits managers to increase employee engagement and productivity when it comes to financial planning and other money issues.
4. **Picture your retirement.** Capital Group research earlier this year showed survey respondents who first envisioned the lives they want to lead in retirement recommended saving 31% more per paycheck in a 401(k) plan than those who did not. This simple insight could be used to promote conversation and innovations to help Americans build a bigger nest egg for their later years.

For additional information and the full report, click here.

About Capital Group

Since 1931, Capital Group, home of American Funds, has been singularly focused on delivering superior results for long-term investors using high-conviction portfolios, rigorous research and individual accountability. As of June 30, 2018, Capital Group manages more than $1.8 trillion in equity and fixed income assets for millions of individual and institutional investors around the world.

The Capital Group companies manage equity assets through three investment groups. These groups make investment and proxy voting decisions independently. Fixed income investment professionals provide fixed income research and investment management across the Capital organization; however, for securities with equity characteristics, they act solely on behalf of one of the three equity investment groups.

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Methodology
The survey was conducted by APCO Insight, a global opinion research firm, in April 2018. The research consisted of an online quantitative survey of 1,202 American adults — 402 millennials (ages 21 to 37), 400 Gen Xers (ages 38 to 52) and 400 baby boomers (ages 53 to 71) — of varying income levels who have investment assets and some responsibility for making investment decisions for their families. The overall sample reflects national representation on key demographic measures according to the U.S. Census Bureau.

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Managing a moral identity in debt advice conversations

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Previous research has found that stigma can be a barrier to service use but there has been little work examining actual service encounters involving members of stigmatized groups. One such group are those with problematic or unmanageable debts. Providing advice to members of this group is likely to be particularly difficult due to the stigma associated with being in debt. Using conversation analysis and discursive psychology, this study examines 12 telephone advice conversations between debt advisors and individuals in debt. Both clients and advisors oriented to the negative moral implications of indebtedness and typically worked collaboratively to manage these issues. Clients often claimed a moral disposition as a way to disclaim any unwanted associations with debt, but could find it difficult to reconcile this with an insolvency agreement. Moreover, the institutional requirements of the interaction could disrupt the collaborative management of stigma and advisors could manage the subsequent resistance from clients in either client centred or institution centred ways. The findings suggest that the products offered by debt advice agencies, as well as the manner in which they are offered to clients, can either help or hinder debtors negotiate the stigma related barriers to service engagement.

In contemporary societies, people can typically access a range of advice, services, and interventions to help them cope with the challenges of their everyday lives. Paradoxically, the people who most need to access these services are often the least likely to do so. Indeed, research has found that many people who are in need of help in the form of food banks (Fong, Wright, & Wimer, 2016), community services (Stevenson, McNamara, & Muldoon, 2014), debt advice (Goode & Waring, 2011), and mental health services (Livingston & Boyd, 2010) do not avail of that help.

There are a range of possible explanations for this paradox, but one important factor is the stigma which people associate with being poor, having unmanageable debts or having mental health problems. There is a large literature on the potential consequences of having a stigmatized identity: social exclusion (Link & Phelan, 2001); lower self-esteem and poor mental health (Major & O'Brien, 2005); and impaired cognitive performance (Nguyen & Ryan, 2008) and all of these factors demonstrably act as barriers to accessing services. Traditionally, stigma is understood as a socially constructed attribute which is considered a character defect or flaw, leading to negative experiences for the stigmatized (Major & O'Brien, 2005). What is less well understood is the role that stigma plays in the

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unfolding of interactions whereby interlocutors must attend to delicate issues of moral accountability while accomplishing their interactive goals. This is potentially extremely relevant to service use encounters where stigmatized individuals have typically overcome initial cognitive and social barriers to requesting help, but then face the challenge of a morally charged interaction with a service provider. Although we do not examine stigma directly, in this study, we examine a specific type of particularly difficult service encounter: that between individuals with very serious problem debts and debt advisors seeking to help them choose a debt resolution mechanism. Studying such encounters will help us to understand the nature of the difficulties presented by potentially stigmatizing situations as well as the interaction strategies used by both parties to the encounter and their consequences.

Stigma as barrier to service use

It is well established that stigma may hinder service use, especially mental health services (Ben-Zeev, Corrigan, Britt, & Langford, 2012; Clement *et al.*, 2015). Stigma has also been found to be a barrier to seeking care for HIV and other sexually transmitted diseases (Fortenberry *et al.*, 2002; Kinsler, Wong, Sayles, Davis, & Cunningham, 2007), to mitigate against service use in disadvantaged communities (Stevenson *et al.*, 2014; Warr, Davern, Mann, & Gunn, 2016), and racial stigma (Howarth, 2006) has serious consequences for service use (Campbell & McLean, 2002; McLean, Campbell, & Cornish, 2003).

One way that stigma works as a barrier to service use is due to negative associations with a particular service and the fear of being labelled or categorized as a service user. There are several studies which show how people avoid seeking help so as not to be labelled as mental health patients (Corrigan, 2004; Vogel, Wade, & Hackler, 2007). The fear of being included in the stigmatized category is also found in other instances of service use. For example, Fong *et al.* (2016) found that low-income individuals distanced themselves from food banks, despite the great benefit food banks offer, partly due to undesirable characteristics associated with the people who queue for food. In all of these cases, services are used less than they might be because of stigma associated with being a service user.

Stigma can also lead people to disengage with services due to expectations of being treated negatively by service providers on the basis of a broader group membership. For example, Stevenson *et al.* (2014) examined the experience of being a community member of a socially disadvantaged neighbourhood. Perceptions of prejudice from service providers led community members to either distance themselves from service use, or to expect conflictual service use encounters. Thus, stigma can impede service use because potential users perceive service encounters to be a potential site of discrimination.

It is clear that many people who would benefit from utilizing services are not accessing them out of fear of stigma. However, while the current literature has examined the retrospective accounts of stigmatization provided by service providers and stigmatized individuals (Stevenson *et al.*, 2014; Warr *et al.*, 2016), it has focused less on investigating how stigma influences the service encounter itself.

In a rare example of research on debt advice conversations, Ekström, Lindström, and Karlsson (2013) found that talking about money is a delicate concern and that debtors presented themselves as responsible characters when organizing their 'trouble-tellings'. For example, callers made an effort to produce an account for why they were renegotiating their payment loans. They also demonstrated self-awareness of their issues, emphasized the temporary nature of their payment issues, and outlined the steps they had already taken

to solve their money problems. This suggests that debt advice conversations are potentially stigmatizing situations and conversations with service users who are concerned about being stigmatized are likely to be difficult. Adding to this research, in our study, we examined service encounters between debt advisors and people with problem debts.

Specific barriers to seeking debt advice

Across England and Wales, 247 people are declared insolvent each day (The Money Charity, October 2016), suggesting that many people could avail of debt advice. In the United Kingdom, there are a range of services available for people who are struggling with debt including legal debt restructuring plans such as Individual Voluntary Arrangements (IVAs) and bankruptcy (The Insolvency Register, 2015). Estimates of the exact number of individuals with debt problems who have sought help vary, but one study found that only 8% of those who reported needing debt advice have sought it (Department for Business, Innovation & Skills, 2011). Thus, there appears to be a large group of people who may be suffering from the consequences of problem debt and need advice, but who have not taken any steps towards accessing help.

Barriers to seeking debt advice include lack of confidence (Goode & Waring, 2011), lack of knowledge (Goode & Waring, 2011; Pleasance, Buck, Balmer, & Williams, 2007) but perhaps most important of all, feelings of embarrassment and shame (Dearden, Goode, Whitfield, & Cox, 2010; Goode & Waring, 2011). Talking about financial difficulties is related to concerns about one's moral character (Ekström *et al.*, 2013) and qualitative interviews found that people in debt perceived their own debt as evidence of lack of willpower or self-control (Hayes, 2000; Keene, Cowan, & Baker, 2015). This self-stigma associated with problem debt can lead to people hiding their debt from family members and isolating themselves for fear of peers finding out about their financial difficulties (Hayes, 2000; Thorne & Anderson, 2006). Thus, the stigma associated with being in debt in turn makes it less likely that people access freely available debt advice.

Ignoring debt may have severe consequences for one's mental and physical health. A large body of research shows an association between debt and poor well-being (Brown, Taylor, & Price, 2005; Richardson, Elliott, & Roberts, 2013), suicidal ideation (Meltzer *et al.*, 2011), increased rates of mental health disorder (Drentea & Reynolds, 2012), and poorer physical health (Drentea & Lavrakas, 2000). Mental and physical health problems are in turn likely to act as further barriers to accessing debt advice and may also make the debt advice conversation more difficult when it does occur.

Advice conversations

Research on debt advice has focused mainly on the accessibility of advice and rates of successful outcomes after seeking advice (Orton, 2010; Pleasance *et al.*, 2007) rather than analysing how debt advice conversations unfold in specific advice encounters. When examining interactions between service providers and stigmatized groups where identity management is relevant, it is useful to take advantage of an approach which examines conversations on a micro-social level, such as discursive psychology (DP). Edwards (2005) suggests that there are two main features of DP; that language is situated and action-oriented. This means that talk carries out an underlying action that people are skilfully picking up on, although they may not explicitly notice it. In addition to discursive psychology, the current study used elements of conversation analysis (CA) when conducting the analysis, which has been used to examine troubles-talk in institutional

settings previously (Ekström *et al.*, 2013; Heritage & Lindström, 1998). Originally founded by Harvey Sacks (Heritage, 2005), CA examines the organization of talk in naturally occurring conversations to understand the performative action of words, phrases, and silences and how these are coordinated.

From a discursive psychology perspective, advice needs to be differentiated depending on whether it is given in a mundane or an institutional setting (Heritage & Sefi, 1992). Institutional talk is considered to have three particular characteristics that differentiate it from non-institutional interactions: there are institutional identities with relevant goals determining the talk; there are constraints on the talk which occurs due to the setting; and there are specific inferences due to the context. Institutional advice-giving is also asymmetric: medical consultations between physicians and patients are examples of institutional talk where one participant is established as the 'expert' in comparison with the other through interaction (Heritage, 2005; Maynard, 1991; Peräkylä, 1993). CA and DP have been used in research on a range of institutional advice contexts, including helplines (Butler, Potter, Danby, Emmison, & Hepburn, 2010; Emmison, Butler, & Danby, 2011; Hepburn, 2005; Potter & Hepburn, 2003), police interviews (Stokoe & Edwards, 2008), conversations between health visitors and first-time mothers (Heritage & Lindström, 1998; Heritage & Sefi, 1992), pharmacists and patients (Pilnick, 2003), peer tutoring (Waring, 2005, 2007), and renegotiation of student loans (Ekström *et al.*, 2013). However, although Ekström *et al.*'s (2013) study examined advice on paying student loans, to our knowledge problem debt advice has not been examined.

From the findings by Ekström *et al.* (2013), Hayes (2000), and Keene *et al.* (2015), we might expect that talk in debt advice conversations will manage identities to avoid the negative moral judgements associated with indebtedness. Debt advice conversations are likely to be problematic due to both the sensitive nature of the topic and the institutional constraints upon the conversation. The institutional goal for the advisor is to assess the debtors' financial difficulties and advise appropriately, whereas debtors may have an additional goal of managing the accounts of their situations in order to avoid negative inferences about their moral character and behaviour. Sensitive topics, and a variety of means for handling them, have been uncovered in other discursive studies of service encounters such as between midwives and expectant mothers (Linnell & Bredmar, 1996), doctor–patient (Haakana, 2001) and client–counsellor interactions (Solberg, 2011). Given that none of these studies involved the participants being members of categories with negative associations, the challenges posed by the sensitive topic of indebtedness are likely to be greater.

Elsewhere, discursive studies demonstrate that examining service interactions can have practical implications for service providers. Such examinations can be used to identify specific problems which may occur (Potter & Hepburn, 2003), as well as motivating recommendations in the shape of interventions (Stokoe, 2014). Wiggins and Hepburn (2007) provide examples of how discursive research allows for the advisor to understand their own abilities and make changes to their current method of advice delivery. It is our hope that examining debt advice conversations from a discursive perspective would have a similar usefulness, for both the advisor and the advisee.

The current study: Debt advice

In order to help us understand how service users and providers manage the sensitive issues around debt in service encounters, we examined how the conversations related to

service use unfold from an interactional perspective. The particular conversations we studied were initial advice appointments between debt advisors and people with problem debts (hereafter called 'clients' in this study) at a financial advice organization, a private company which provides IVAs in the United Kingdom. The IVA is a formal debt resolution mechanism which allows individuals to pay off a set amount of their debt within 5 years, after which point the remaining debt is written off (The Insolvency Register, 2015).

Previous research on service encounters has examined the institutional constraints of the conversation but they have not examined how moral concerns affect the management of institutional matters. Therefore, in the first section of the analysis, we examine how concerns to avoid the negative associations of indebtedness are managed in service use encounters. In the second section, we then examine how the institutional concerns and constraints influence the delicate conversation and management of these issues.

Method

This research is part of a series of collaborative studies with the financial advice organization which specializes in providing IVAs to individuals with substantial debts. Our data consist of 12 initial advice appointments between clients and telephone-based advisors at the advice organization. The purpose of this advice appointment is to gather information about the client's financial circumstances and assess the viability of the client proceeding to apply for an IVA. Although it is in the company's interest for clients to enter into IVAs, it is only beneficial if the individuals are likely to meet the demands of the payment plan. In nine cases, it was the first time that the client had spoken to the advisor, and in three cases, the advisor and client had spoken briefly before but rescheduled their appointment. So as not to interfere with their decision-making concerning the IVA, participants were not recruited until after their initial advice appointment (Speer & Stokoe, 2014). The researcher was not aware of any personal information apart from the phone number prior to the phone call and only listened to the advice recording if the client agreed to take part in the study. This procedure was approved by the ethics committee at the institution where the study took place.

Previously, the telephone advisors had followed a strict telephone script but changes over the past years have allowed for a greater deal of flexibility for the advisors. Nevertheless, there are features of the appointment which remained the same in all conversations. Typically, a conversation would start with a description of the company and the legal considerations of an IVA. The advisor and the client would then list the client's debts, income, and outgoings. Based on the client's budget and what creditors would accept, the advisor would then advise on a feasible repayment sum. An overview of alternative debt arrangements would be presented, and the clients were then invited to make a decision. The conversations differ in the narratives provided by the client and the extent to which the advisor would discuss other debt resolution options.

Analytic method

As the advice appointments typically lasted between 30 and 90 min, there was a large amount of data within each recording and initially only eight recordings were collected. Each of the remaining four recordings was then recruited, transcribed, and a first pass of analysis was carried out independently before recruiting another recording. The sound files were transcribed using an abridged version of Jeffersonian

transcription, as our primary focus was to explore how the identity of a debtor was managed (Jefferson & Lee, 1981). However, due to the element of CA in our analysis, we also transcribed short and long pauses (indicated by (.) and (. . .) respectively), overlapping speech (indicated by brackets) and laughter particles to improve the reading of the extracts. Advisor and client speech is indicated by 'A' and 'C', respectively. During transcription, all client, advisor, and creditor names were anonymized (as 'Client', 'Advisor' and 'Creditor') and numbered to differentiate between them. For example, if two client names were referred to in one advice conversation, they were transcribed as 'Client1' and 'Client2'.

The initial analysis was carried out by examining the recordings for evidence of troubles-talk or interactional difficulties in the conversation, both of which were demonstrated in Ekström *et al.*'s analysis (2013). During this process, it became evident that in these extracts debtors often gave an account of themselves which allowed them to present their identity in a specific way to avoid or manage the potentially negative associations of debt. Focusing on instances of identity management, the analysis was done inductively until no further features had been found. After twelve recordings, we could not find any further variation within these extracts of interest and we concluded that saturation had been reached (Glaser & Strauss, 1967).[1]

Analysis

Section 1: Managing the topic through claiming a moral disposition

One of the main problems during advice appointments is successfully managing the negative associations surrounding the topic of debt. Both parties to the conversation typically signalled their awareness of the potentially stigmatizing quality of debt on multiple occasions throughout the interview. This was evidenced by clients deploying a range of interrelated strategies to distance themselves from negative stereotypes of debtors as morally compromised or as financially irresponsible, most notably by displaying an awareness of the moral implications of their situation.

Responsibility: 'We can't bury our heads anymore'. The first pattern that we identified was how a moral character can be claimed through claiming responsibility as a disposition. Ekström *et al.* (2013) had found that individuals struggling to repay their debt presented themselves as good debtors by referring to the minimization of financial problems, the reason for the problem and the role of the individual solving those problems. In our extracts, we have found other strategies which allow clients to present themselves as 'good debtors'.

The conversation which occurs when applying for an IVA is delicate because it can be interpreted as a 'problematic' solution (similarly to bankruptcy) allowing individuals to write off substantial sums of debt which may have occurred in 'irresponsible' circumstances. This leads to situations where clients offer a moral character through claiming responsibility states or traits.

[1] *Although the concept of data saturation originates from the grounded theory methodology (Glaser & Strauss, 1967), it was used as a guideline during data collection.*

Extract 1

1	A:	well hopefully then this will be the new start that the two of you
2		need [you know]
3	C:	[yeah definitely]
4	A:	and ehm you know you're saying that Client2 is on the anti-
5		depressants (inaudible) obviously the issue (inaudible) with that too
6	C:	oh definitely honestly you just don't understand how it's gonna
7		feel for her to be able to go to bed at night after doing a hard
8		day's work [(inaudible)]
9	A:	[yeah]
10	C:	knowing that (sigh) who's gonna be ringing what letters are we
11		gonna get through the door (background noise) they've been ringing
12		this morning (.) twice
13	A:	(.) oh no it's awful an- it- especially too whenever you've just
14		got one payment each month because there's quite a lot of creditors
15		there you know so even just to remember to pay them on ti- even if
16		you have them
17	C:	and you know what at the end of the day we owed up to yes we had
18		too much credit we made you know eh (h) uh a j- judgement of you know
19		error thinking that we could afford to do this and that and (.) you
20		just get yourself in over your head
21	A:	of course you do and before you know it you're robbing Peter to
22		pay Paul
23	C:	exactly

The extract above is an example of a client who gives an account of her troubles. In line 6, the client includes 'honestly', a phrase which often occurs when there is a confessional element that the speaker is about to disclose (Edwards & Fasulo, 2006). Towards the end of the trouble-talk, there is a feature which is occasionally found in the transcripts whereby the client will explicitly 'make a confession' to present a moral character (see line 17–20). Although it may seem counter-intuitive, a contrast is being presented between the previous actions that led to debt and the awareness of their consequences in the present. Two explanations are provided to account for why the client got into debt: Firstly, the occurrence of debt is framed as 'a judgement of error', a variant of the phrase 'an error of judgement', which is distanced from one's character. It is also prefaced with laughter, which acts as a signal of the awareness of the sensitive nature of the topic (Haakana, 2001; Jefferson, 1984). 'Thinking that we could afford to do this and that' implies that it was not deliberate. Both explanations are examples of causal attributions which justify how the client got into debt (Heritage, 1988). Parallels can be drawn to Ekström *et al.*'s (2013) paper, where participants used a narrative in which troubles are temporary to account for their indebtedness while preserving an identity as a responsible citizen. As in the previous example, the client marks her troubles as in the past.

In line 20, the client finishes her turn by switching footing to membership of a general category rather than speaking as an individual person (Potter & Hepburn, 2005). The switch is also evident in the advisor's response in line 21, where she refers to people in general ('you're robbing Peter to pay Paul') rather than the client specifically, thereby avoiding laying the blame on the client. Collaboration between the client and the advisor when building a moral account was frequently seen in these conversations, as discussed in the following section.

Emotion: 'I can't stop feeling really guilty. . .'. The second pattern that we identified was the recurring overt display of emotion, which is traditionally seen as an uncontrollable and honest expression, reflecting an internal state (Edwards, 1999). Thus, it is unsurprising that it would occur in debt conversations (Hayes, 2000; Keene *et al.*, 2015). However, in our conversations, we found that emotional displays or claiming emotion allowed the participant to claim and disclaim a number of attributes, as recognized by previous discursive research on emotion (Edwards, 1999). In these conversations, delicate moral issues were negotiated through this strategy, as evidenced below:

Extract 2

1	A:	(...) don't bring any of the creditors across with you	
2	C:	right okay	
3	A:	okay because when you set a direct debit up for a creditor	
4		essentially what you're doing is you're giving them the backdoor key	
5		into your account that they can come in and take money out of it (.)	
6		okay?	[so]
7	C:	(sighing)	[I can't] stop feeling really guilty like I'm doing
8		something really	[wrong]
9	A:		[it's] (.) listen just remove all emotion from this
10		because believe me Client1 they will (h)e(hh)e(h)e(h) you (h) know	
11		what I mean?	[now you will probably]
12	C:		[(inaudible)]
13	A:	start getting phone calls and letters and things like that and it	
14		is (.) that's why I've sent you that letter so that (...)	

In line 7, the client begins her turn with a sigh, which has been found to work as an 'affect forecast' (Hoey, 2014), commonly and also in this case understood as a marker for negative affect. By positioning herself as not in control of her emotions (line 7) and then as the feelings of guilt being a consequence of the event of her 'doing something really wrong', she accomplishes several things: The sentence is structured as a confession which disclaims any moral irresponsibility. Further, the guilt is not presented as an internal disposition (Edwards, 1999), but rather the feeling is presented as a cognitive assessment, reflecting her knowledge of justice and fairness. This display of knowledge signals that she is aware that there is a strong contrast between her current circumstances and the ideal state of affairs and her awareness of this difference is offered as a true reflection of her character rather than the one her financial circumstances offer.

Furthermore, we can note that the participant is attending to the potentially morally problematic nature of the IVA settlement itself. Previous qualitative research has

demonstrated how being in debt (Hayes, 2000) or being unable to meet repayments (Keene *et al.*, 2015) can cause feelings of shame. However, in this study, the repayment option, partially writing off debt, means that an IVA could be interpreted as avoiding moral responsibility. Here, the clients' emotional avowal of guilt is structured to counter this potential inference, being worked up through the repetitive use of 'really', which as an intensified phrase (Pomerantz, 1986) serves to make her statement seem more justified and genuine. This therefore serves to maintain her moral reputation while accepting an ostensibly 'easy' option.

The recipient of the 'confession', the advisor, begins her turn with an empathetic display, maintaining her role as a concerned listener who is on the client's side and providing the client with a morality account. This is carried out by contrasting the client, who is emotional and therefore a responsible character, with the creditors who are not emotional as indicated by the advisor ('listen just remove all emotion from this because believe me Client1 they will') . Directly after ending her first turn, the advisor then makes a shift so that the institutional matters can be attended to although the client seemingly interprets 'you know what I mean' as the end of the turn.

Advisor support: 'You've probably paid what you borrowed three times over'. In the previous examples, the client leads the moral management work, with the advisor collaborating. On other occasions, this work was initiated and led by the advisor. In contrast to other institutional settings in which troubles-tellings are followed by minimal responses, such as between doctors and patients in Ruusuvuori's (2005) study, sometimes the advisors in this study responded emphatically to troubles-tellings. The following extracts demonstrate patterns in which the advisor is the one who claims or collaborates in building moral dispositions on behalf of the client to manage delicate situations. An example of a delicate situation is when the client is displaying emotion, at which point the advisor would generally acknowledge the situation but ultimately needs to address the institutional concerns.

Extract 3

1	A:	(...) a debt management plan (.) which (.) we spoke about earlier too	
2		which is another way it's an informal way of dealing with your	
3		[creditors]	
4	C:	[mhm]	
5	A:	it's gonna take you at the very very best eighteen years to clear	
6		this	
7	C:	yeah	
8	A:	mm okay (.) so it's kind of eighteen versus five you know eh h-h	
9		(.) what about bankruptcy Client1 have you thought about that or	
10		looked at it or	
11	C:	no I didn't eh no I didn't didn't want to do that at all	
12	A:	you didn't want to do that why why not? why would you not want to	
13		do that?	
14	C:	well (.) I feel bad enough (...)	[going into an IVA]
15	A:		[you just just you'd rather] pay
16		what you could	

In line 2, the advisor's suggestion of bankruptcy is masked as a question, which is commonly used where explicit advising is not appropriate (Butler *et al.*, 2010). As found in other examples of delicate issues (Silverman & Peräkylä, 1990), there is a pause in line 9 before approaching a delicate topic for the first time (bankruptcy) and rather than explicitly saying that bankruptcy is a viable option for the client, the advisor formulates the suggestion as a question ('what about bankruptcy'). Indeed, the client interprets it as a suggestion rather than a question and does not wait for a marker signalling for her turn before proceeding to resist the advice. Her immediate answer could possibly be interpreted as incompetence, which may be why she follows the utterance with a repair which reframes her stance on bankruptcy as a personal choice. It can be noted that the client glosses over the word 'bankruptcy' by using 'that' instead, which has been found in other contexts of discussing delicate topics (Silverman & Peräkylä, 1990; Yu & Wu, 2015). Although the advisor persists with the line of questioning, her initial question ('you didn't want to do that why why not') is immediately followed by a repair that is less personal ('why would you not want to do that'). The use of talk that is at a more general level rather than addressed to the individual is a common method of approaching delicate topics, and mitigating vocabulary is common when discussing morally sensitive issues (Linnell & Bredmar, 1996). After the advisor has persisted with the line of questioning, the client uses emotion as a resource to claim moral attributes (also seen in extract 2, 'I can't stop feeling really guilty'). As a consequence, in line 15, the advisor abandons the line of advice and provides an interpretation of the client's feelings. This line is similar to Extract 1 in which the advisor demonstrates that she is an active listener by summarizing the client's concerns (Danby, Butler, & Emmison, 2009), but it also allows her to collaborate with the client in building a morally responsible account of her behaviour.

This active collaboration of advisors building a moral account is in stark contrast to the advisors in Ekström *et al.*'s (2013) study and more akin to the examples found in peer support hotlines (Pudlinski, 2005). Another example of collaboration can be seen in the following extract.

Extract 4

1	C:	so yeah I I suppose ehm I don't know it's like a nightmare it's
2		been quite difficult to deal with really to be honest [ehm]
3	A:	[I'm sure] you
4		know it's not an it's not an easy thing to go through but you know at
5		least you're not you know burying your head in the sand you're being
6		proactive about it and you're thinking about it which is the good
7		thing which you know will show to the creditors
8		(.)
9	C:	I mean twelve thousand pounds and I've worked out the debt

During a discussion of creditor negotiation, the client describes her situation 'like a nightmare', an extreme description of a negative emotion which is characterized as uncontrollable. Metaphors are commonly used to allow speakers to make use of emotion resources without having to explicitly mention them, and provide the listener with a graphic

description of the speaker's circumstances (Edwards, 1999). The client continues to enforce her emotional claim and ends her utterance with 'to be honest', a phrase which is commonly used when offering a subjective, confessional evaluation (Edwards & Fasulo, 2006).

The advisor does interpret this as an emotional claim and starts her turn in line 3 with agreement and referring to her own expertise in the matter. This is followed by displaying a sense of understanding (Pudlinski, 2005) by offering an interpretation of the feelings of the client (Danby *et al.*, 2009). This is done through attributing several positive dispositions to the client. 'At least', alludes to the possibility of irresponsible behaviour which the client is currently not engaging in. She finishes her turn with an incomplete sentence followed by a brief pause, accepted by the client as the end of the advisor's turn.

Section 2: Managing institutional constraints and client resistance

In section one, we demonstrated how both the client and the advisor display awareness of the threat of the potentially stigmatizing associations of debt and successfully use various strategies to collaboratively manage these concerns. However, there are also institutional constraints on the advisor who is subject to rules set by the creditors. These often became evident towards the end of the interaction where the sum to be repaid to the creditors was calculated and the non-negotiable details of this offer were presented to the client. At this stage, the advisor could either maintain their client-centred focus or adopt a more overtly institutionally structured approach, both of which impacted the way that the client's moral character was managed by endorsing or undermining it.

Maintaining a client-centred approach. In the following extract, the advisor has calculated a non-negotiable repayment sum and is presenting this to the client. However, the manner in which this is done is to suggest a future line of action whilst not directly advising the client to act on the suggestion. This is commonly used in situations of advice-giving where there is a goal to empower the clients, such as on a children's helpline (Butler *et al.*, 2010). However, here this approach occasions some interactional trouble as the client construes the offer as requiring further financial concessions and a further demonstration of their moral responsibility.

Extract 5

1	A:	(...) so as I was saying to you Client1 what do you think then of
2		the hundred and twenty?
3	C:	well I I don't know you know should I cancel my ehm broadband and
4		stuff like that?
5	A:	(.) oh god no (.) >no no no no no no< no no (.) no I've put all of
6		your households costs in and I've put a wee bit more in besides as
7		well ehm it it exactly as you know is down on the thing here eh just
8		in a different way so it's just showing in a different way (.) okay?

The client begins with a dis-preferred response by avoiding an explicit rejection of the suggestion and proceeds to counter with a question (Pomerantz, 1984). The question itself pertains to the consequences of the arrangement for the client (further frugality) and

serves to display their responsible consideration of these consequences. Rather than too readily accepting a debt-reducing IVA, the client interprets the offer as an invitation to further display their acknowledgement of the implications of the arrangement.

The advisor's oh-prefaced response signals that this is new and unexpected information (Bolden, 2006), and then proceeds with self-repair. By making her response so extreme, the advisor both acknowledges the difficulty conveyed by the client's deliberations and reframes the issue as one of misunderstanding the detail of the calculation by referring to the budget report provided by the client. In this way, the institutional concerns of the interaction, to present and agree a repayment sum, are observed while the concerns of the client to be construed as a morally competent agent are skilfully maintained. A similar pattern can be seen in helplines where advisors can persist with advice without challenging clients' accounts even when the advice is initially rejected (Butler *et al.*, 2010).

Shifting the approach to expert positioning. The previous extract demonstrates how delicate negotiation can occur whilst adhering to a client-centred approach. However, this is not always carried out by the advisor. An example is seen below after the advisor and the client have just finished the budgeting portion of the advice appointment. The client has mentioned the monthly payments that he is currently making to repay his debt. At this point, the advisor tells the client that in an IVA he would pay a substantially smaller amount than he is currently paying towards his debt and it is met with scepticism.

Extract 6[2]

1	A:	a hundred a hundred pounds
2	C:	a hundred pounds [really enough enough]
3	A:	[yeah that's what]
4	C:	cause that doesn't sound right to me
5	A:	well it's the best the best offer that you can make so it is ehm
6		wait do we see eh [(inaudible)]
7	C:	[omitted]
8	A:	[ah don't] worry about that (.) no no don't worry
9		about that so honestly ehm (to herself) three and twenty eight
10		thousand (...) yeah, it's actually not that bad an offer to them
11		[you know]
12	C:	[right] as long as [you (inaudible)]
13	A:	[I know it doesn't – yeah] absolutely I
14		I you know I wouldn't put it across at a hundred if I didn't think
15		you know it was going to be accepted at all [ehm]
16	C:	[right]

[2] *The line omitted is the client talking primarily to himself about creditors. Although it is an interesting feature, it was omitted for readability and due to not being directly relevant to the rest of the extract. The next turn made by the advisor, in line 8, references the client's previous concerns in line 4.*

In line 4, the client resists the offer that the advisor has suggested. The statement 'doesn't sound right to me' works as a display of his moral character. By stating that he expected to pay more, the client is offering a responsible character in contrast to the stigma-associated one as seen in extract 1. In contrast to the client, the advisor shifts to an expert position by stating her reply as a fact and uses an extreme case formulation (Pomerantz, 1986) to strengthen her argument (the last three words are used for emphasis.) After revisiting the numbers, the advisor softens her approach (line 8 and 10) but continues to position herself as an expert by warranting her assertion on the basis of her experience (line 14). The client accepts her offer and the conversation moves on.

At other times, the expert position is used in a way that undermines the identity of the client:

Extract 7 (The client is listing her expenses)

1	A:	(.) okay ehm anything else?
2	C:	ehm house insurance was fifteen ehm take-away twenty-five
3	A:	what's take-away?
4	C:	sort of like if I get ehm take-away pizza or something
5	A:	we Client1 we have budget guidelines to go by ehm and quite a lot
6		of this is well over budget guidelines for protocol compliant IVA I
7		mean we wouldn't be allowed to set aside twenty-five pounds for take-
8		away and monthly for getting your eyelashes and eyebrows done
9		[and the]
10	C:	[no]
11	A:	creditors would see those as ehm (...) as luxuries really (.)
12		[so]
13	C:	[alright] okay
14	A:	there are other figures that you haven't mentioned so far that I
15		can put in ehm but is there (.) have you much more on your list
16		there?
17	C:	no that's the end of it actually

In the extract above, the advisor has just received a list of the client's expenses which are substantially higher than allowed under the guidelines for an IVA. In contrast to clients in the previous two extracts, this client does not seem to be orienting to the identity-related concerns. This leads to the advisor using less client-centred language than we have seen previously and although she does not explicitly reject the requested expenses, she pre-empts advice resistance from the client and starts to build an account for her advice. By referring to herself as 'we', she positions herself as a category member of the company and then uses the client name, also used by counsellors in the beginning of turns that disalign with the previous turn (Butler, Danby, & Emmison, 2011). She then invokes an epistemological entitlement by speaking on behalf of the creditors and pauses, a sign of the delicate item ahead (Silverman & Peräkylä, 1990), before using the word 'luxuries', which is charged with negative values. This works to position the client as morally accountable for their excessive expenditure, something further reflected in the advisor's

reformulation of their question on line 15 from a straightforward request for information 'is there?' to 'have you much more?', which signifies the problematic nature of further expenditure. The client orients to this undermining of her moral stance by terminating her list. While this outcome may serve the institutional demands of the encounter, this differs from previous extracts in that the advisors' expertise has here been used to criticise rather than support the clients' position.

Discussion

The purpose of this study was to examine how interactants' negotiation of the potentially stigmatizing associations of debt might affect debt advice conversations. We found that both the advisor and the client managed these negative associations through disclaiming the stigmatized identity associated with debt and that the advisor would typically use a client-centred approach, allowing the client to privilege their own account of their situation. However, in order to service the institutional goals, the advisor would occasionally shift their positioning to that of expert. On occasions, this was evidently problematic as it could undermine the face-saving strategies of clients.

At the outset, this paper adds to the current body of literature on advice conversations from a discursive perspective. While authors such as Linnell and Bredmar (1996) have identified strategies used to manage sensitive topics in service use interactions, and previous research on institutional talk has examined expert or client-centred talk (Butler *et al.*, 2010; Emmison *et al.*, 2011; Maynard, 1991; Peräkylä, 1993), no research has examined these features of advice-giving in tandem. Our research illustrates how institutional constraints can serve to undermine the delicate face-saving collaboration between service provider and user, through shifting their interactional dynamics. We suggest that further research is required into how the changing policy frameworks of statutory and private services operate to structure their institutional requirements and thereby serve to counter or reproduce stigma in service use encounters.

A further set of findings pertain to the multiple epistemologies attended to by participants. On one hand, the advisor has the role of expert, from which multiple resources can be drawn. They have access to training and documents on IVAs, experience of advising previous clients and a unique relationship with creditors, all of which can strengthen or discount clients' accounts. On the other hand, the client has access to their personal experiences and knowledge of their current circumstances which is also vital to the success of the interaction, but which is fraught with stigma-management concerns. During the appointment, the advisor can therefore pursue one of two strategies, using a client-centred approach or adopting an expert footing. Where the client is treated as the expert upon their own circumstances, this typically serves to elicit accurate data, necessary for the success of the service encounter. When this diverges from the institutional constraints of the conversation, an expert positioning can enable the advisor to redirect the interaction towards institutional goals. However, if this shift in footing undermines clients' concerns, it can make the negative associations of debt explicit and unavoidable for the client and also undermine their entitlement to speak. Although in our data the advisors treated these positions as discrete, a further practical implication is therefore that interactional strategies which manage both the institutional goals and client concerns should work best to keep the client engaged.

Our third contribution builds upon previous research into the specific dynamics of debt advice which has primarily examined the initial barriers to seeking advice (Dearden

et al., 2010; Goode & Waring, 2011; Pleasance *et al.*, 2007). Our research extends this research by examining actual service use encounters, finding that even when individuals overcome these initial barriers, debt remains a sensitive topic (Hayes, 2000). To negotiate this, clients can use several interactional strategies to disclaim the identity associated with debt and reclaim a moral character, including through using emotional discourse and by explicitly claiming responsibility. Both these strategies signal awareness and disapproval of the opposing, undesirable character (i.e., a financially irresponsible and immoral character) thereby serving to signal an opposing moral position.

However, these strategies were found to be problematized by the nature of the advice on offer. Although one advantage of IVAs is the opportunity to discharge some of the debt, we found that this aspect of the solution was seen as problematic for some clients: the implications of defaulting on debt and not paying back the full amount required clients to perform additional identity management to demonstrate that it was not considered the 'easy way out'. In order to remedy this problem, the advisor typically collaborated with the client in building a moral account to manage delicate circumstances in the conversations, often through empathy but also through invoking their own expertise in the area. Hence, one practical implication of our findings is that debt advice agencies need to consider how the solutions they offer may ironically reproduce the stigma felt by potential clients. The repackaging of products as a 'morally responsible' choice for themselves, their families, and their creditors could afford an effective face-saving strategy that enables more effective service uptake.

Finally, our research also addresses the broader literature on stigma and the issue of service uptake among potentially stigmatized groups. Previous research has examined retrospective accounts of stigmatized service use leading to disengagement from community and social services (Campbell & McLean, 2002; McLean *et al.*, 2003; Stevenson *et al.*, 2014). These studies found that the expectation and experience of prejudice worked as a barrier to future service engagement. In contrast to this previous research, our study found that debt advisors often undertake complex collaborative work to enable clients to save face within this encounter, though this may be constrained by institutional requirements. A final conclusion then is that the manifestation and management of stigma in service use is a more complex and multifaceted phenomenon than previously considered, and that stigma can be considered as a collaborative outcome of institutional talk where both participants manage moral accountability concerns.

As our study is on a small and selective sample of advice appointments, it is unlikely to span the entire range of possible debt advice interactions in the United Kingdom much less those in countries with different levels of debt and debt advice provision. Moreover, the advisors in the current study belong to a private company and the advice appointment has a specific goal of assessing how appropriate legal debt restructuring is for the client. In contrast, other debt advice agencies may focus on more practical concerns, for example budget management, which may lend themselves to different stigma-management and epistemological concerns. Regardless of the type of debt advice that is offered though, we argue that the conversation is likely to be difficult due to the difficulties associated with debt (Hayes, 2000). By examining the unfolding of advice conversations, we can see how interactional strategies have an immediate effect on the conversation. However, as our research considers only the initial encounters without examining the subsequent stages in the debt management process, we propose that future research examines the link between the content of the conversation and debt advice outcomes. By taking this approach, we would be able to examine the relationship between the interactional

strategies used in the initial debt advice appointment and engagement with the debt resolution process, which is beyond the scope of the current study. In doing so, we can begin to better understand the link between these micro-processes of service use and their wider personal and social consequences as well as how to design more engaging and more effective service provision for vulnerable social groups.

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Confronting the Money Taboo

Most people would agree that talking about money is a social "taboo." Now we have data to back this up. Capital Group's most recent Wisdom of Experience survey of 1,202 Americans has found that people are more comfortable talking about marriage problems, mental illness, drug addiction, race, sex, politics and religion than they are about money. In fact, out of a dozen topics, men and women across all generations ranked household earnings, retirement savings and debt as the most taboo.

The survey found that those most willing to talk about money fall on opposite sides of the financial confidence spectrum; they are either very confident about their finances or they are very insecure. In addition, there are a significant number of people between these two polar extremes that do not talk about money at all. The research shows people are willing to have conversations about money with financial advisors, their spouses and, particularly for millennials, their parents, other family members and friends.

It is important to break the money taboo and turn money, saving and investing from being a source of isolation, stress and anxiety into a more inclusive conversation about how we can all be more secure in our financial lives, particularly in retirement.

To confront the money taboo and address the retirement needs of millions of Americans, we will need to both act and change our behavior. Capital Group's research earlier this year found that people who envision the life they want in retirement recommend saving more of each paycheck in a 401(k) account. Even small changes in retirement savings can help Americans build a bigger nest egg due to the power of compounding over the years and decades leading to retirement.

Capital Group, home of American Funds, is one of the world's largest investment managers focused on delivering superior, consistent results for long-term investors for more than 85 years.

Americans would rather discuss anything besides money

Issues once considered too personal or risqué are now openly discussed among friends and colleagues – or even shared on social media. However, one topic of discussion that continues to buck the trend by a large percentage of Americans is money.

Asked about more than a dozen topics that might be too taboo to discuss with friends, including marital problems, religion, politics, sexual orientation and family disagreements, the top four were all related to personal finances by a significant margin.

What do you consider too taboo (a forbidden topic) for discussing with friends?

	Total (%)	Men (%)	Women (%)
Salary or household income	39	33	45
Size of your retirement savings	38	32	43
How much debt you have	32	27	37
Inheritances, either what you plan to leave your children or expect from your parents	25	20	30
Marital problems	20	20	20
Religious beliefs	19	19	18
Disagreements within your family	18	19	18
Political views	17	16	17
Sexual orientation	16	17	15
Psychiatry or mental illness	16	15	16
Drug use or addiction	14	14	13
Sexual harassment or assault	11	13	8
Racial harmony	8	8	8
None of these	26	26	26

"I was raised in the South – you did not discuss money with others. Rather hilarious that you can discuss sex, drugs and rock 'n' roll, as they say, but it is not polite to discuss money!"

Female baby boomer, Missouri

"It's none of your business" is the prevailing reason given by those who ranked money as the most taboo topic, and many survey respondents also cited awkwardness and concern about creating ill feelings by talking about money with friends.

Although the stereotype is that women are more likely than men to talk about sensitive issues with their friends, the research says differently. When asked about personal matters that might be off-limits such as marital problems, religion, politics, sexual orientation and family disagreements, answers by female and male survey respondents were almost identical.

However, when it came to financial topics such as household earnings, retirement savings and debt, men and women diverged significantly. Women of all generations were much more likely than men of the same age to consider money topics a social taboo.

Who is talking about money – and with whom?

When we asked people what topics they had discussed with friends and peers in the past six months, current events, fitness, health, pop culture and sports topped the list. About one-third of those surveyed – including 30% of men and 40% of women – indicated they had discussed finance-related topics with friends and peers in the last six months.

In the past six months, which topics, if any, have you discussed with your friends and peers?

	Total (%)	Men (%)	Women (%)
Current events, including politics and foreign affairs	53	50	56
Fitness, exercise and well-being	46	39	52
Health issues and solutions	44	39	49
Popular culture, including movies, television, music and books	41	33	48
Sports teams, events and activities	40	43	37
Saving and investing for today and the long term	35	30	40
Cost of owning or renting a home	34	27	40
Job, promotions and career ambitions	32	27	36
Issues involving pay and benefits	27	22	32
Relationship issues and opportunities	26	20	32
Issues involving your children, including health and education	25	20	31
Gender and diversity issues in society	22	18	26
Equal pay for people in similar positions	18	12	23
None of these	9	11	6

Surprisingly, the survey participants who are talking about financial topics fall into two extremes: they either feel totally prepared or totally unprepared to manage a major financial event or decision. That is, those who have high enough confidence in their financial knowledge are likely to share it with others, while those that feel most in need of information and advice are more likely to discuss money topics.

"I think discussing personal finances is a personal matter. However, sharing good financial strategies and information is beneficial to all."

Gen X female, Nevada

Financial advisors and spouses topped the list of those we turn to for advice when faced with a major financial event or decision. Women are much more likely to say they would turn to their spouse or a financial advisor than men.

Half (50%) of women surveyed would turn to a financial advisor when faced with a major financial event or decision, compared to 41% of men. Similarly, 50% of women would turn to a spouse for financial advice compared to only 36% of men, who primarily rely on a financial advisor – or their own knowledge.

Although millennials and Gen Xers were generally less likely than baby boomers to consider subjects taboo, all three generations were in agreement on the topics that were top ranked.

Millennials are the most family-oriented generation. They are nearly twice as likely to turn to friends and extended family as boomers to talk about money. They are also more likely than Gen Xers or baby boomers to turn to their parents, co-workers or articles and online resources for financial advice.

Who would you turn to when faced with a major financial event or decision?

	Millenials (%)	Gen Xers (%)	Baby Boomers (%)
Financial advisor	36	41	59
Spouse or significant other	39	43	47
Rely on my own knowledge	27	33	40
Articles and online resources	29	23	21
Friends	23	20	13
Father	28	19	4
Mother	24	16	3
Extended family member (grandparent, aunt, uncle, cousin)	17	10	8
Sibling	12	13	11
Renowned financial expert	14	11	7
Co-workers	11	9	3

Millennials (ages 21–37), Gen Xers (ages 38–52), baby boomers (ages 53–71)

Conclusion: Four ways to break down the money taboo

Nearly nine out of 10 survey respondents believe Americans need to save more and invest better for their future retirement. It is important to create more inclusive conversations about money in order to make living better in retirement years an achievable goal for as many people as possible. Capital Group's survey findings suggest four ways to encourage conversations and change investor behaviors about money:

1. **Start at home.** Talk to your spouse or significant other about money, and encourage conversations between parents and children. Millennials are almost twice as likely as baby boomers to say they would speak to their children about money at an early age, while many adults say they are still teaching their adult children about financial topics.

2. **Seek advice.** Most investors can benefit from financial advice. Financial advisors can help investors make smart decisions about investing for the long term, and help protect against market downturns. Nearly half of survey respondents said they would feel comfortable turning to an advisor for a major financial decision.

3. **Ask your employer.** Many Americans get their first experience with retirement saving through an employer's 401(k) plan, but our survey finds employers are an under-utilized resource. There is an opportunity for employers and benefits managers to increase employee engagement and productivity with regard to financial planning and other money issues.

4. **Picture your retirement.** Capital Group research earlier this year showed that survey respondents who first envisioned the lives they want to lead in retirement recommended saving 31% more per paycheck in a 401(k) plan than those who did not. This simple insight could be used to promote conversation and innovations to help Americans build a bigger nest egg for their later years.

How the survey was conducted

The survey was conducted by APCO Insight, a global opinion research firm, in April 2018. The research consisted of an online quantitative survey of 1,202 American adults – 402 millennials (ages 21–37), 400 Gen Xers (ages 38–52) and 400 baby boomers (ages 53–71) – of varying income levels who have investment assets and some responsibility for making investment decisions for their families. The overall sample reflects national representation on key demographic measures according to the U.S. Census Bureau.

ALYCIA CHIN, TAYA R. COHEN, AND MARK R. LINDBLAD

Consumer Bankruptcy Stigma: Understanding Relationships with Familiarity and Perceived Control

Bankruptcy stigma is commonly thought to influence debtors' bankruptcy filing decisions. Despite its importance, researchers have not collected direct quantitative measures of bankruptcy stigma, either in terms of attitudes toward bankruptcy or evaluations of filers. Across two empirical studies, we find that (1) attitudes toward bankruptcy and bankruptcy filers are less negative among those with firsthand bankruptcy experience; (2) bankruptcy stigma is a multidimensional construct that includes morality-, warmth-, and competence-related elements; and (3) consistent with psychological models of blame, filers who are perceived to have more control over the circumstances leading to their bankruptcy are more highly stigmatized. By directly investigating bankruptcy stigma, this research can be used to inform models of consumer decisions about bankruptcy filings and bankruptcy policy.

Every day, consumers incur debt to purchase products. While the majority of debts are repaid without incident, some consumers fall behind on their payments. These debtors may neglect their debt and default informally, outside of state and federal legal protections (Dawsey, Hynes, and Ausubel 2013), or discharge their debt by filing for consumer bankruptcy. Since 2008, approximately one million Americans have filed for consumer bankruptcy each year (American Bankruptcy Institute 2016). Yet, bankruptcy filings are far less common than would be expected given financial circumstances. For instance, White (1998) found that 15% of US households in 1992 would have benefited financially from the debt discharge that comes with bankruptcy but only 1% of households actually filed. Similarly, Fay, Hurst, and White (2002) found that between 1984

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and 1995, about 18% of US households would have benefited financially by filing but bankruptcy filing rates were less than 1%.

While there are many possible reasons why debtors do not file for consumer bankruptcy, including the legal fees and transaction costs associated with filing (e.g., Mann and Porter 2010; White 1998), one common explanation is that the stigma surrounding bankruptcy discourages filing. Although we do not directly assess whether bankruptcy stigma affects bankruptcy filings, we nonetheless add to research on bankruptcy by examining the content and correlates of bankruptcy stigma. Through the current studies, we provide the first direct, quantitative measures of bankruptcy stigma by surveying attitudes toward bankruptcy and evaluations of filers.

Our findings reveal three key insights. First, attitudes toward bankruptcy and bankruptcy filers are less negative for those who have firsthand personal experience with bankruptcy. In contrast, familiarity with someone else's bankruptcy is only weakly related to stigma. This latter result differs from prior work that postulates that people who are familiar with others' bankruptcies are less negative toward bankruptcy (Gross and Souleles 2002; Scholnick 2012). Second, bankruptcy stigma is best conceptualized as a multidimensional construct that contains morality-, warmth-, and competence-related elements. Third, consistent with psychological models of blame (Alicke 2000), bankruptcy filers who are perceived to have more control over the circumstances leading to their filing are more highly stigmatized. Conversely, bankruptcy filers who are perceived to have less control over their circumstances are less stigmatized.

By providing insight into bankruptcy attitudes and stigma, this research can be used to inform models of individuals' bankruptcy filing decisions and broader policy questions. Before turning to our studies, we first discuss how we define bankruptcy stigma, past empirical findings related to bankruptcy stigma and familiarity, and the psychological framework we use to understand the relationship between stigma and control.

Defining Bankruptcy Stigma

Literature on stigma is diverse, with contributions from sociologists, psychologists, and researchers who study specific, stigmatizing conditions (Link and Phelan 2001). Across these fields, there is considerable variation in measures of stigma and how it is conceptualized (Link and Phelan 2001). For instance, psychologists tend to define a stigmatized person as one who is "devalued, spoiled, or flawed in the eyes of others" (Crocker 1999, 89; see also Weiner, Perry, and Magnusson 1988). In contrast, researchers concerned with health-related stigma take a wider view of stigma, noting

that "In addition to its application to persons or a group, the discriminatory social judgment may also be applied to the disease or health problem itself" (Weiss, Ramakrishna, and Somma 2006, 280).

Economic and legal work on bankruptcy stigma has typically followed this latter, general approach, conceiving of bankruptcy stigma as "a cost associated with filing for bankruptcy based on injury to reputation or violation of moral standards" (Sullivan, Warren, and Westbrook 2006, 233) or "the psychological pressure to fully pay incurred debts" (Cohen-Cole and Duygan-Bump 2008, 1–2). Similarly, we use the term "bankruptcy stigma" to capture both attitudes toward bankruptcy and evaluations of bankruptcy filers.

Bankruptcy Stigma and Familiarity with Bankruptcy

Existing research on bankruptcy stigma suggests that stigma is weaker among those who are familiar with bankruptcy. Specifically, multiple studies show that a debtor's propensity to file for bankruptcy is higher in areas where others have filed (Gross and Souleles 2002; Scholnick 2012), presumably because debtors who interact with filers become less concerned about filing or gain useful information about bankruptcy procedures. Fay, Hurst, and White (2002) call these processes "information cascade[s]" (710), arguing that variation in filing rates between bankruptcy court districts is consistent with "local trends occurring in which increases in a district's bankruptcy filing rate cause attitudes toward bankruptcy to become more favorable" (716).

Interviews with consumers also suggest that familiarity with bankruptcy may affect bankruptcy stigma (Sousa 2014). In interviews with 58 consumers who filed for bankruptcy between 2006 and 2010, Sousa (2014) found variation in perceived stigma: Some filers voluntarily repaid discharged debts out of embarrassment, while others stated that they were not embarrassed by their bankruptcy. Importantly, the latter group included filers who stated that they were not embarrassed once they discovered that bankruptcy was relatively common, consistent with the idea that familiarity may lessen stigma.

We refine understanding of "familiarity with bankruptcy" by exploring how respondents' own prior filing status and their knowledge of others' filings affect bankruptcy stigma. Based on the past literature, we expect that exposure to bankruptcy reduces stigma. As such, we hypothesize that evaluators who have filed for bankruptcy themselves (firsthand experience) or who know a filer (secondhand experience) should report attitudes and evaluations that are less negative.

Bankruptcy Stigma and Social Perception

Psychological research on social perception finds that evaluations of people and groups can be organized into three overarching dimensions: warmth, competence, and morality (e.g., Brambilla et al. 2011; Cuddy, Fiske, and Glick 2007, 2008; Fiske, Cuddy, and Glick 2007; Leach, Ellemers, and Barreto 2007). Specifically, *warmth* "captures traits that are related to perceived intent" (e.g., friendliness, sociability), *competence* "reflects traits that are related to perceived ability" (e.g., intelligence, skill) (Fiske, Cuddy, and Glick 2007, 77), and *morality* "refers to perceived correctness of social targets (e.g., honesty, sincerity, and trustworthiness)" (Brambilla et al. 2011, 135).[1] Prior work has measured these dimensions in the financial sector, studying how views of the Obama administration relate to attitudes toward the national debt (Chin and Cohen 2014) and how views of corporations vary depending on whether they were involved in the 2008 financial crisis (Kervyn et al. 2014). We extend this research by measuring warmth, competence, and morality for bankruptcy filers, exploring the possibility that there is variation in perceptions of filers across these fundamental dimensions.

Bankruptcy Stigma and the Theory of Culpable Control

Anecdotal evidence suggests that there is a perceived relationship between bankruptcy stigma and circumstances leading to the filing. Stereotypes of filers include the "extravagant bankrupt" who lives a debt-financed life of luxury, and the "repeat filer" who "goes into bankruptcy over and over, slyly running up debts and then taking to the bankruptcy courts when creditors ask for repayment" (Sullivan, Westbrook, and Warren 1989, 191). Such negative views of filers are also found in political rhetoric. For instance, Senator Chuck Grassley asserted that "our current system allows wealthy people to continue to abuse the system at the expense of everyone else. People with good incomes can run up massive debts and then use bankruptcy to get out of honoring them" (Grassley 2005). Former Federal Reserve Chairman Alan Greenspan argued that "Personal bankruptcies are soaring because Americans have lost their sense of shame" (quoted in Zywicki 2005b).

1. Early work by Fiske, Cuddy, and Glick posited that warmth included perceptions of morality, but more recent research separates morality into its own dimension (Brambilla et al. 2011; Goodwin 2015; Goodwin, Piazza, and Rozin 2014; Leach, Ellemers, and Barreto 2007). For instance, Leach, Ellemers, and Barreto (2007) note that "a group may be moral (i.e., honest and trustworthy) without necessarily being sociable (i.e., warm and friendly), and vice versa" (235).

These anecdotes can be understood through the theory of culpable control, which states that an actor's blameworthiness is positively correlated with his or her perceived control over a situation (Alicke 2000). Specifically, control is defined as "the freedom to effect desired behaviors and outcomes or to avoid undesired ones" (Alicke 2000, 557). Control is determined by three factors: the actor's mental state, behaviors, and the consequences of those behaviors. When applied to bankruptcy, the theory of culpable control predicts that a filer who is perceived to have voluntarily accrued debts (i.e., whose mental state and behaviors directly led to indebtedness) is more blameworthy than one who acquires debt because of circumstances outside of his or her control. Consistent with this logic, many bankruptcy filers emphasize that they have "debt of necessity" (Thorne and Anderson 2006) or "legitimate" reasons for filing bankruptcy, including accidental events (Sousa 2014). Those studying bankruptcy also acknowledge the benefits of a fresh start for "honest but unfortunate" debtors (Zywicki 2005a, 1,471).

The theory of culpable control has been applied to many domains, including health and business (e.g., Weiner, Perry, and Magnusson 1988). Our contribution is to extend this theory into the realm of consumer bankruptcy. We do so by testing whether bankruptcy filers who file because of relatively uncontrollable circumstances (e.g., medical problems) are less stigmatized than others. Applying the theory of culpable control toward understanding bankruptcy stigma has the potential to generate insight into how and when bankruptcy filers will be evaluated negatively, and accordingly, the circumstances that may lead different people to file.

The Current Research

We expand on legal, economic, and psychological research to explore three questions related to consumer bankruptcy. First, building on previous research (Gross and Souleles 2002; Scholnick 2012; Sousa 2014), we ask whether bankruptcy attitudes are less negative among people who have first- or secondhand experience with bankruptcy. Our data are important for addressing this question because knowledge of the respondents' actual first- and secondhand bankruptcy experiences is a more precise empirical measure than geographical proximity, which was the only measure available to the existing quantitative literature on this topic. Second, we ask whether bankruptcy stigma is meaningfully analyzed as a multidimensional construct with elements of warmth, competence, and morality. To address this question, we introduce new survey measures that capture evaluations of filers along these dimensions. Third, we ask

TABLE 1
Measures and Predictions

	Expected Relationships	
	Familiarity:	Perceived Control over Filing:
Constructs Measures	Own Filing or Know Filers	Personal Agency (vs. Adverse Events)
Bankruptcy attitudes		
It is morally wrong to file bankruptcy.	−	+
People who file for bankruptcy are judged negatively.	−	+
Filing for bankruptcy is a good decision for people who are in debt.	+	−
Evaluations of filers		
Morality (e.g., responsible, trustworthy)	+	−
Competence (e.g., intelligent, financially savvy)	+	−
Warmth (e.g., likeable, warm)	+	−

Note: This table summarizes measures and predicted direction of relationships between bankruptcy stigma and familiarity and perceived control. Relationships between bankruptcy attitudes and familiarity are tested in Study 1. Relationships with evaluations of filers are tested in Study 2. The relationships between perceived control and bankruptcy attitudes are not analyzed in this paper due to data constraints.

whether bankruptcy stigma varies in a way that is consistent with the theory of culpable control, hypothesizing that debtors who file for more controllable reasons will be more stigmatized as compared to those who file for reasons that are less controllable. In Table 1, we summarize the measures we use and our hypotheses.

STUDY 1

In Study 1, we introduce measures of bankruptcy attitudes using a large national survey. We then explore relationships between respondents' demographic characteristics and their bankruptcy attitudes. Specifically, we analyze whether respondents who are more familiar with bankruptcy (as measured by both first- and secondhand experience) have less negative attitudes toward bankruptcy. Finally, to provide a point of comparison for Study 2, we estimate the incidence of different reasons for bankruptcy filings among actual filers.

Method

Respondents

We use the 2012 wave of the Community Advantage Panel Survey (CAPS), an annual survey of households nationwide who met low-to-moderate income criteria (i.e., having <80% of the Area Median

Income) in 2003–2004 when the baseline survey was completed (Riley, Ru, and Quercia 2009). CAPS respondents have been compared to low-income households in two nationally representative surveys, the Current Population Survey (CPS) and the American Housing Survey (AHS) (Riley 2015a, 2015b).[2] CAPS respondents are somewhat more educated, more attached to the labor force, and more likely to be located in the South when compared with the general low-income and minority population. Yet overall, CAPS samples are largely representative of low-income and minority homeowner and renter populations in the United States. This composition is important because low-to-moderate income households are more likely than the general population to have debt and file for bankruptcy (Garrett 2006).[3] We analyze the CAPS data to take advantage of this fit and because, to our knowledge, it is the only national survey that directly measures bankruptcy attitudes.

In 2012, CAPS was administered from July to November using telephone and in-person data collection. We analyzed data from the 2,574 US households for which we had complete data on demographics and bankruptcy attitudes. The final sample was 45.0 ($SD = 11.3$) years old, on average; 58.2% of the respondents were women. The median education level was an Associate's degree or trade school certificate and 31.3% of respondents had a Bachelor's degree or higher. Median annual household income was \$45,000 ($M = \$53{,}000$, $SD = \$38{,}300$). Regarding race, 59.2% of respondents were Caucasian, 24.6% were African American, and 12.5% were Hispanic. The remaining 3.7% were classified as "Other/multiracial."

Variables

Bankruptcy Filing Experience. The survey identifies bankruptcy filings by asking "Since we last talked to you in [date], have you filed for personal bankruptcy?" To determine which households had ever filed for bankruptcy, we merged the 2012 CAPS data with all prior CAPS records. In total, 552 households reported filing for bankruptcy in 2012 or earlier.

Reasons for Filing. Starting in 2007, respondents who said that they filed for bankruptcy were asked why they filed ("People file bankruptcy for a

2. The CPS collects information on demographics and other household characteristics, and is designed to be representative of the noninstitutionalized civilian population in the United States. The AHS is a nationally representative survey of housing units that is administered by the Census Bureau and captures information about the characteristics of the US housing stock, as well as the demographic characteristics of the people who inhabit each of the targeted housing units.

3. Garrett (2006) writes that "The typical person who files for bankruptcy is a blue collar, high school graduate who heads a lower middle-income class household and who makes heavy use of credit."

number of different reasons. Why did you file for bankruptcy?"). Respondents then selected from among the following forced-choice options: "job problems," "medical problems," "problems controlling spending," "may lose home," "aggressive collection efforts by creditor," "divorce or family breakup," and an open-ended "other" option. Respondents could select more than one reason. We content coded the open-ended "Other" responses and combined them with the other response categories when appropriate. Of all the households who reported ever filing, 325 reported at least one reason for filing; the remaining 227 did not give a reason or were not asked for a reason because they filed prior to 2007.

Bankruptcy Attitudes. The 2012 CAPS survey contained three statements measuring bankruptcy attitudes: "It is morally wrong to file for bankruptcy," "People who file for bankruptcy are judged negatively," and "Filing for bankruptcy is a good decision for people who are in debt." Respondents indicated their agreement with each statement on a 4-point scale: "strongly disagree" (coded 1), "disagree" (coded 2), "agree" (coded 3), and "strongly agree" (coded 4). We interpret agreement with the first two statements and disagreement with the third statement as representing negative bankruptcy attitudes.

Familiarity with Another's Bankruptcy. Respondents were asked, "How many people do you know who have filed for bankruptcy?" and could report a number from 0 to 99. We created an indicator variable representing familiarity with at least one other filer. In the 2012 CAPS survey, 1,791 respondents (69.5%) reported knowing at least one filer. The majority of bankruptcy filers (82.4%) reported knowing another filer (median = 1), whereas the majority of nonfilers (66.0%) reported not knowing any.

Demographic Variables. In addition to these primary variables of interest, we collected information on respondents' demographic characteristics, including education (measured 1 to 7 with the levels of: less than high school, high school degree or GED, some college, 2-year college, 4-year college [Bachelor's degree], Master's degree, and Doctorate or professional degree), income, age, race, homeownership, and geographic location.

Results

Bankruptcy Attitudes

The top panel of Table 2 shows average responses to each of the three statements measuring bankruptcy attitudes. As shown, there was variation

TABLE 2
Descriptive Statistics on Bankruptcy Attitudes and Evaluations of Filers

	Mean	*SD*	*N*	*α*
Study 1: bankruptcy attitudes				
1. It is morally wrong to file bankruptcy.	2.10	0.65	2,574	—
2. People who file for bankruptcy are judged negatively.	2.83	0.66	2,574	—
3. Filing for bankruptcy is a good decision for people who are in debt.	2.23	0.73	2,574	—
Study 2: evaluations of filers				
Morality evaluations (social correctness)				
1. Medical problems	3.57	0.70	985	.93
2. Family problems	3.08	0.72	985	.92
3. Job problems	3.06	0.76	984	.92
4. Aggressive collection efforts	2.51	0.85	971	.93
5. Problems controlling spending	2.05	0.62	984	.85
Competence evaluations (ability)				
1. Medical problems	3.33	0.69	984	.81
2. Family problems	2.92	0.69	985	.81
3. Job problems	2.87	0.74	984	.81
4. Aggressive collection efforts	2.58	0.89	981	.86
5. Problems controlling spending	1.94	0.70	985	.77
Warmth evaluations (intent)				
1. Medical problems	3.50	0.73	985	.87
2. Family problems	3.11	0.76	984	.85
3. Job problems	3.19	0.65	983	.83
4. Aggressive collection efforts	2.86	0.79	979	.86
5. Problems controlling spending	2.79	0.75	984	.80

Note: Responses to Study 1 variables ranged from "strongly disagree" (coded 1) to "strongly agree" (coded 4). Study 2 variables were composite measures with a possible range from 1 to 5.

across the measures. While respondents disagreed on average that it is morally wrong to file for bankruptcy (79.8% said "disagree" or "strongly disagree"), they agreed that bankruptcy filers are judged negatively (73.3% said "agree" or "strongly agree"). Additionally, most respondents disagreed that filing for bankruptcy is a good decision for people who are in debt (65.5% said "disagree" or "strongly disagree"). Thus, respondents generally reported negative bankruptcy attitudes without explicitly saying that bankruptcy was morally wrong.

There was a negative correlation between the statement that it is morally wrong to file and the statement that filing is a good decision ($r = -0.21$, $p < .001$), and a small positive correlation with the statement that bankruptcy filers are judged negatively ($r = 0.09$, $p < .001$). There was a small negative correlation between the statements that filing for bankruptcy is a good decision and that people are judged negatively ($r = -0.07$, $p < .001$). These correlations suggest some consistency between respondents' bankruptcy attitudes, but the magnitude of these correlations suggests the shared variance among the items is limited.

Bankruptcy Attitudes and Familiarity with Bankruptcy

To determine the relationship between bankruptcy attitudes and familiarity with bankruptcy, we examined agreement with the attitudinal statements using regression analyses. The variables of interest were first- and secondhand experience with bankruptcy (i.e., filer and familiar with another's bankruptcy; Table 3).

As shown, bankruptcy filers were less likely than nonfilers to say that filing is morally wrong and more likely to say that filing is a good decision for people who are in debt. They did not report significantly different levels of agreement with the statement that filers are judged negatively. Contrary to our hypothesis and existing literature (Gross and Souleles 2002; Scholnick 2012), familiarity with another's bankruptcy was not significantly related to bankruptcy attitudes on any of the three measures (Table 3).[4]

Our regressions also controlled for demographic characteristics. These results show racial/ethnic differences in attitudes, with African Americans being less likely to agree that it is morally wrong to file, less likely to say that filers are judged negatively, and more likely to say that bankruptcy is a good decision for people who are in debt. Additionally, Hispanics were more likely to say that bankruptcy is morally wrong and those in the Other/Multiracial category were more likely to say that bankruptcy is a good decision for people who are in debt. We return to the these findings in the General Discussion section.

Reasons for Filing for Bankruptcy

Bankruptcy filers in the CAPS data most often reported filing due to job problems, aggressive debt collection by creditors, and medical problems (see Figure 1; Table 4). Spending problems were cited less often. Thus, filers were more likely to explain their bankruptcy by citing less stigmatized, relatively uncontrollable circumstances. This finding is consistent with the theory of culpable control that we explore in Study 2.

Discussion

Most prior research on the relationship between bankruptcy stigma and familiarity has used geographic regions to infer familiarity—an approach that does not allow researchers to distinguish whether particular individuals are familiar with bankruptcy. In contrast, we measure firsthand and

4. The same patterns were found with three alternate specifications of familiarity: the number of people known to have filed, the log of that number (adjusted up by 1), and the combination of all respondents who either filed for bankruptcy themselves or knew another person who filed.

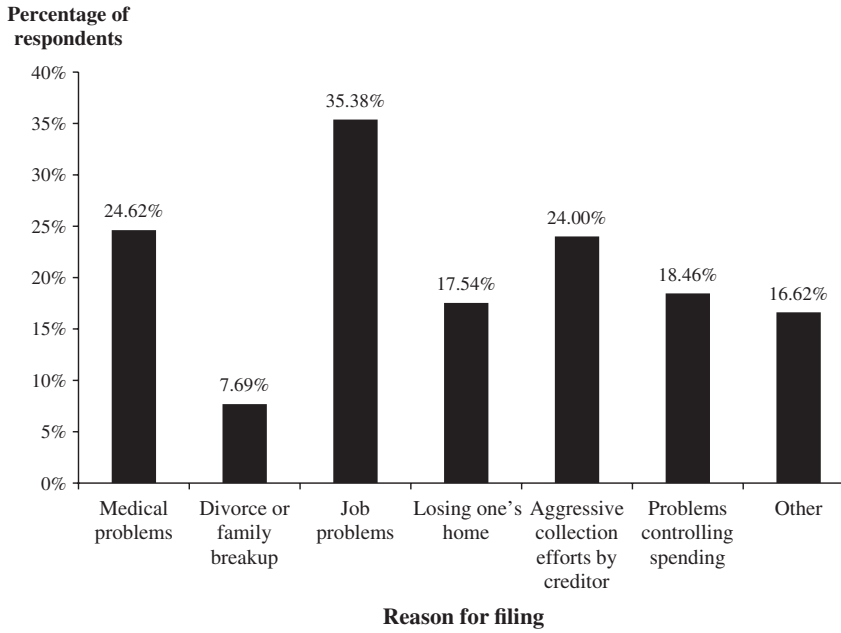
TABLE 3
Regression Analyses of Bankruptcy Attitudes (Study 1)

	It Is Morally Wrong to File for Bankruptcy		People Who File for Bankruptcy Are Judged Negatively		Filing for Bankruptcy Is a Good Decision for People Who Are in Debt	
	B	*SE*	*B*	*SE*	*B*	*SE*
Filer	−0.24***	0.03	0.06	0.03	0.31***	0.04
Familiar with another's bankruptcy	−0.04	0.03	0.01	0.03	0.03	0.03
Demographics						
African American	−0.13***	0.03	−0.15***	0.03	0.14***	0.04
Hispanic	0.15***	0.04	0.00	0.04	0.08	0.05
Other/Multiracial[a]	0.02	0.07	−0.11	0.07	0.21***	0.08
Female	−0.11***	0.03	0.04	0.03	0.02	0.03
Education	−0.01	0.01	0.03***	0.01	−0.01	0.01
Annual income ($10,000s)	0.00	0.00	0.01*	0.00	−0.01*	0.00
Age/10	0.01	0.00	−0.01	0.00	0.02*	0.00
Homeowner	0.05	0.03	−0.04	0.03	−0.14***	0.03
New England	−0.03	0.16	−0.01	0.16	0.11	0.17
Middle Atlantic	−0.20*	0.09	0.02	0.09	0.04	0.10
East North Central	0.01	0.04	0.01	0.04	−0.04	0.04
West North Central	−0.07	0.07	−0.08	0.07	−0.10	0.08
East South Central	−0.05	0.08	−0.15	0.08	−0.13	0.09
West South Central	0.02	0.04	−0.05	0.04	−0.10**	0.04
Mountain	0.07	0.06	−0.05	0.06	0.02	0.06
Pacific	0.02	0.07	−0.10	0.07	0.10	0.08

Note: This table reports regression results of bankruptcy attitudes on individual characteristics. *B* values represent unstandardized regression coefficients. Responses to variables ranged from "strongly disagree" (coded 1) to "strongly agree" (coded 4). Respondents' race was recorded as one of four categories: Caucasian, African American, Hispanic, and Other/Multiracial. Education was a variable ranging from 1 to 7 (the levels were: less than high school, high school degree or GED, some college, 2-year college, 4-year college [Bachelor's degree], Master's degree, and Doctorate or professional degree). Age was rescaled so that a one-unit change in age represents a 10-year increase. Homeownership status was assessed by asking respondents, "Do you own or rent the home that you live in?" For location, respondents' home addresses were recoded into the nine geographic divisions defined by the US Census Bureau, with the South Atlantic division as the comparison group.
[a]In Study 1, four racial categories were assessed. The reference category is Caucasian.
***$p < .001$, **$p < .01$, *$p < .05$.

secondhand filing experiences. Consistent with our expectations, we found that *firsthand* experience with bankruptcy is associated with less negative attitudes. However, with this cross-sectional analysis, we cannot determine whether less negative attitudes increase the likelihood of filing for bankruptcy or whether filing for bankruptcy makes filers' attitudes less negative. We suspect that we would find evidence for both of these causal

FIGURE 1
Reasons for Filing for Bankruptcy as Reported in CAPS Data (Study 1)



Note: $N = 325$ bankruptcy filers who reported reasons. The percentages represent the percentage of filers reporting each reason. Filers could report multiple reasons, so the sum of the percentages is greater than 100. We were unable to classify open-ended responses from 54 households in the "other" category who gave idiosyncratic reasons that did not fit into any of the pre-existing categories.

paths if we were able to disentangle them. We also found, surprisingly, that *secondhand* experience only weakly correlated with attitudes, at a level that was not statistically significant. This finding is in contrast to previous work that suggests that when filing for bankruptcy is familiar, bankruptcy attitudes become less negative (e.g., Gross and Souleles 2002; Scholnick 2012). We return to this finding and additional demographic differences in the General Discussion section.

STUDY 2

In Study 2, we examine evaluations of the warmth, competence, and morality of bankruptcy filers (see e.g., Brambilla et al. 2011; Cuddy, Fiske, and Glick 2007, 2008; Fiske, Cuddy, and Glick 2007; Goodwin 2015; Goodwin, Piazza, and Rozin 2014; Leach, Ellemers, and Barreto 2007)—as such, this study measures bankruptcy stigma in terms of filers'

TABLE 4
Frequency Estimates for Reasons for Filing for Bankruptcy and Associated Frequencies

Estimated number of people filing	Study 2			CAPS (Filing Percentages in Study 1)
	N	*Mean*	*SD*	
To avoid losing their home	984	58.12	23.43	17.54
From job problems	985	58.00	23.31	35.38
To end aggressive collection efforts by creditors	985	55.71	26.21	24.00
From problems controlling spending	984	52.60	27.77	18.46
To get a "fresh start"	984	46.95	29.97	
From medical problems	985	44.50	23.45	24.62
From student loan debt	985	39.28	25.80	
From divorce or family breakup	984	37.04	22.40	7.69
To avoid paying bills	983	33.68	26.85	
Average of subset of reasons		51.00		21.28

Note: Not all reasons from Study 2 were measured in CAPS. Estimates from Study 2 were given on a 0–100 scale. Estimates from CAPS sum to more than 100 because respondents could report more than one reason for their bankruptcy.

intent, ability, and social correctness. To add to our findings from Study 1, we explore the relationship between these evaluations and demographic characteristics, including familiarity with bankruptcy. In addition, we explore our third research question: whether variation in bankruptcy stigma is consistent with the theory of culpable control (Alicke 2000). To do so, we use a within-subjects experiment and ask respondents to evaluate bankruptcy filers whose bankruptcies were caused by controllable and uncontrollable events. We hypothesize that filers who are perceived to have more control over the circumstances that led to their filing will be evaluated more negatively than those who filed for reasons perceived to be outside their control.

Method

Respondents

In June 2012, we recruited 1,026 US residents online using Amazon's Mechanical Turk website (www.mturk.com) (see Buhrmester, Kwang, and Gosling 2011 for a description of this tool). These data are a convenience sample and are not intended to be representative of the general US population. Eligible respondents were those that had a 95% approval rating or higher on previous tasks. Applying predetermined data cleaning criteria allowed us to retain data from 985 respondents,[5] of which 32.9% were

5. We used an attentiveness check to determine whether respondents read our instructions (recommended by Meade and Craig 2012). Specifically, at a random point in the survey, respondents were

women and 41.1% had at least a Bachelor's degree. Respondents were 27.3 ($SD = 10.1$) years old, on average. The median annual income was between $20,000 and $30,000 (*range* = $0 to above $150,000). Regarding race, 73.9% of respondents self-identified as Caucasian, 11.2% as Asian, 4.6% as Hispanic, 3.1% as African American, and 7.2% as "Other" or multiracial.

Variables

Frequency Estimates. Respondents first described common causes of bankruptcy and their opinions of bankruptcy filers in response to open-ended questions. Next, they estimated the number of filers, out of 100 who filed because of the following reasons (presented in a randomized order): "job problems (unemployment, etc.)," "medical problems," "problems controlling spending," "divorce or family breakup," and "student loan debt." Respondents also estimated how many people out of 100 declared bankruptcy "to avoid losing their home" and "to end aggressive collection efforts by creditors." We chose these categories based on CAPS (described in Study 1) and positions used in debates over bankruptcy policy.

Evaluations of Bankruptcy Filers. Next, respondents were asked to evaluate five hypothetical bankruptcy filers (presented in a randomized order) who declared bankruptcy because of job problems, medical problems, problems controlling spending, family problems, or aggressive collection efforts. Although bankruptcy filings are often caused by many inseparable factors, by experimentally isolating specific reasons for bankruptcy, we can test the relationship between perceived control and evaluations. We included only these reasons due to concerns about survey length and the repetition that comes from a within-subjects experimental design.

Respondents were asked: "Imagine that you learn someone had declared bankruptcy because of [*job problems*]. Using these adjectives, how would you describe this person?" Respondents rated each filer on 11 dimensions (in a randomized order), each on a 5-point semantic differential scale. We grouped the dimensions into three evaluation indexes by averaging the relevant ratings: *morality*

asked to check a box indicating that they were paying attention ("It is important for our research that you read each question carefully. To let us know that you are paying attention right now, please select box number 2"). Seventeen respondents (1.66%) failed the check and were excluded from our analysis. To eliminate concerns about nonindependent observations, we also excluded eight observations from duplicate IP addresses. Finally, we excluded 16 respondents who did not report their state of residence or who reported living outside the United States.

(irresponsible–responsible, untrustworthy–trustworthy, unethical–ethical, immoral–moral, undependable–dependable, lazy–hardworking); *competence* (unintelligent–intelligent, financially ignorant–financially savvy, incompetent–competent); and *warmth* (unlikeable–likeable, cold–warm). Our morality measure captures social correctness, competence measures ability, and warmth measures intent.

Bankruptcy Filing Experience. We asked respondents whether they had ever filed for bankruptcy with response options of "Yes" or "No." We created an indicator variable representing anyone who answered "Yes." The majority of respondents ($n = 934$; 94.8%) had not filed for bankruptcy; 51 respondents (5.2%) had filed.

Familiarity with Bankruptcy. Respondents were asked "How many people do you personally know who have filed for bankruptcy?" and could fill in any number. Respondents who said one or more were coded as being familiar with another's bankruptcy. A total of 536 respondents (54.4%) reported knowing at least one bankruptcy filer (median = 2); 449 respondents (45.6%) reported knowing no filers. Almost all (96.1%) filers reported knowing someone else who had filed for bankruptcy, whereas 52.1% of nonfilers knew a filer.

Demographic Variables. We collected additional demographic variables including education, income, age, race, and geographic location.

Results

Control and Estimates of Bankruptcy Prevalence

The culpable control model predicts a positive link between an actor's control over a situation and their blameworthiness (Alicke 2000). To gather initial evidence on whether perceived control is a factor in bankruptcy perceptions, we analyzed respondents' frequency estimates for different causes of bankruptcy (see Table 4 for descriptive statistics), asking whether respondents tended to view all "uncontrollable" bankruptcies as uncommon and all "controllable" bankruptcies as common, or vice versa.

To reveal these patterns, we conducted an exploratory factor analysis with oblique (promax) rotation. This analysis resulted in two factors with eigenvalues over 1.0, and clear simple structure that is consistent with perceptions of control (Table 5). The first factor (eigenvalue = 3.28) included estimates for relatively controllable events: filing to avoid paying bills, because of spending problems, and to get a fresh start (hereafter, the *personal agency* factor). The other factor (eigenvalue = 1.25)

TABLE 5
Factor Loadings from Exploratory Factor Analysis of Frequency Estimates (Study 2)

	Factor	
Estimates for Number of People Filing	Personal Agency (Controllable Events)	Adverse Events (Uncontrollable Events)
To avoid paying bills	**0.82**	−0.21
From spending problems	**0.61**	0.11
To get a "fresh start"	**0.40**	0.23
From medical problems	−0.19	**0.66**
Fom divorce or family breakup	0.10	**0.63**
From student loan debt	0.05	**0.55**
From job problems	−0.01	**0.54**
To avoid losing their home	0.05	**0.50**
To end aggressive collection efforts	0.29	**0.37**

Notes: Extraction method: maximum likelihood. Rotation method: promax with Kaiser normalization. Bold values represent the factor with the higher factor loading.

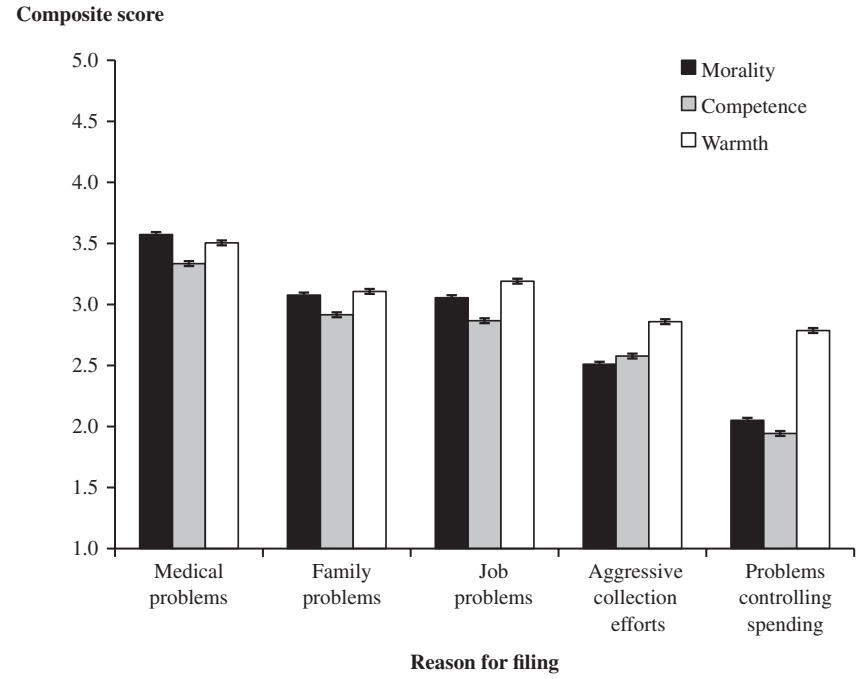
included relatively uncontrollable events: medical bills, family problems, education loans, job problems, avoiding foreclosure, and aggressive collection efforts (hereafter, the *adverse events* factor). The correlation between the two factors was $r = .54$. While the majority of items load on one dominant factor, there was a double loading for aggressive collection efforts.

Control and Evaluations of Bankruptcy Filers

We next explored whether respondents' evaluations of bankruptcy filers were consistent with the theory of culpable control. Table 2 shows descriptive statistics for the warmth, competence, and morality indexes, separated by the five reasons for filing for bankruptcy that we assessed (medical problems, family problems, job problems, aggressive collection efforts, and problems controlling spending). All of the indexes showed acceptable reliability (Table 2).

The pattern of ratings over the different reasons for filing is consistent with the theory of culpable control. Specifically, those who had filed for bankruptcy because of medical problems (an uncontrollable, adverse event) were rated as the most moral, competent, and warm while those who had filed for bankruptcy because of problems controlling spending (a personal agency reason) were rated as the least moral, competent, and warm (see Figure 2 and Table 2). However, the warmth ratings did not deviate as much (i.e., were not as negative) as the morality and competence ratings, which we speculate may be linked to pity.

FIGURE 2
Evaluations of Bankruptcy Filers (Study 2)



Note: $N = 985$. Study 2 variables were composite measures with a possible range from 1 to 5. Higher scores indicate more positive (less negative) evaluations of morality (social correctness), competence (ability), and warmth (intent). Error bars represent one standard error above and below the sample mean.

Finally, we looked for consistency between respondents' frequency estimates and their evaluations of filers. To do so, we first estimated the relative weight that each respondent gave to controllable bankruptcies by calculating the estimated frequency difference across the two factors (i.e., personal agency average frequency *less* adverse events average frequency). We then correlated this difference score with the morality, competence, and warmth evaluations. As shown in Table 6, with the exception of one correlation that was not statistically significant, all of the correlations were negative. In other words, respondents who believed that most bankruptcy filings came from controllable circumstances evaluated *all* bankruptcy filers more negatively, regardless of the individual debtor's reason for filing.

Evaluations of Bankruptcy Filers and Familiarity with Bankruptcy

To gauge the relationship between familiarity with bankruptcy and evaluations of filers, we predicted evaluations using respondent characteristics.

TABLE 6
Correlations between Evaluations and Average Frequency Estimates (Study 2)

	Personal Agency and Adverse Events Difference
Morality evaluations (social correctness)	
1. Medical problems	−0.14***
2. Family problems	−0.19***
3. Job problems	−0.17***
4. Aggressive collection efforts	−0.25***
5. Problems controlling spending	−0.16***
Competence evaluations (ability)	
1. Medical problems	−0.13***
2. Family problems	−0.16***
3. Job problems	−0.17***
4. Aggressive collection efforts	−0.23***
5. Problems controlling spending	−0.09**
Warmth evaluations (intent)	
1. Medical problems	−0.06
2. Family problems	−0.10***
3. Job problems	−0.13***
4. Aggressive collection efforts	−0.24***
5. Problems controlling spending	−0.15***

Note: The difference was calculated as the average "personal agency" (controllable) frequency less the average "adverse events" (uncontrollable) frequency. The difference was then correlated with each of the evaluation indexes.
***$p < .001$, **$p < .01$, *$p < .05$.

We performed three repeated-measures ANOVAs, one each for morality, warmth, and competence (Table 7).[6] Between-subjects factors included whether the respondent had ever filed for bankruptcy, familiarity with another's bankruptcy, and demographic characteristics. Within-subject factors included the reason for filing and associated interactions.

The results for between-subjects factors show whether evaluations differed by respondent characteristics, whereas the results for within-subject factors show whether evaluations differed depending on the target's reason for filing. For instance, whether respondents with firsthand experience with bankruptcy gave different evaluations than those without experience (regardless of the target's reason for filing) is represented by the between-subjects factor for filers. In contrast, whether firsthand experience differentially affected evaluations across reasons for filing is represented by the Reasons × Filer interaction. To show the magnitude of any differences, we present group means, either for each reason or (when differences do not vary across the reasons for filing) collapsed across reasons.

6. Although our dependent variables were not normally distributed, nonparametric tests showed the same results. For ease of presentation (and because ANOVA tests are generally robust in regard to normality violations), standard ANOVA tests are reported in the text and tables.

TABLE 7
Repeated Measures ANOVAs for Morality, Competence, and Warmth Evaluations (Study 2)

		Morality (Social Correctness)		Competence (Ability)		Warmth (Intent)	
	df	*F*	*p*	*F*	*p*	*F*	*p*
Between-subjects factors							
Filer	1	25.063	**<.001**	21.126	**<.001**	19.157	**<.001**
Familiar with another's bankruptcy	1	4.17	**.041**	3.83	.051	8.88	**.003**
Demographics							
African American	1	9.60	**.002**	14.52	**<.001**	8.94	**.003**
Hispanic	1	1.57	.211	0.66	.416	0.35	.555
Asian	1	3.98	**.046**	0.67	.414	4.37	**.037**
Other/Multiracial	1	0.86	.353	1.30	.254	0.60	.440
Female	1	3.17	.075	2.24	.135	3.90	**.048**
Education	1	13.23	**<.001**	12.06	**.001**	12.44	**<.001**
Income	1	2.60	.107	0.37	.546	0.02	.880
Age	1	28.45	**<.001**	21.22	**<.001**	8.83	**.003**
New England	1	2.54	.111	0.53	.468	5.77	**.017**
Middle Atlantic	1	0.00	.971	0.04	.844	0.11	.746
East North Central	1	6.87	**.009**	1.45	.229	9.30	**.002**
West North Central	1	0.20	.659	0.22	.642	0.00	.968
East South Central	1	0.01	.925	0.00	.984	0.50	.481
West South Central	1	2.71	.100	0.15	.702	2.52	.113
Mountain	1	0.36	.550	0.05	.822	0.00	.985
Pacific	1	0.59	.442	0.21	.649	1.16	.282
Mean square error	962						
Within-subject factors							
Reasons	4	43.66	**<.001**	46.84	**<.001**	13.22	**<.001**
Reasons × Filer	4	1.78	.130	0.33	.857	1.03	.388
Reasons × Familiar with another's bankruptcy	4	1.25	.287	0.45	.771	1.54	.189
Demographics							
Reasons × African American	4	1.90	.107	1.28	.276	1.29	.273
Reasons × Hispanic	4	0.94	.439	0.15	.963	0.95	.431
Reasons × Asian	4	1.31	.262	0.53	.714	1.18	.316
Reasons × Other/Multiracial	4	0.84	.502	3.74	**.005**	0.46	.768
Reasons × Female	4	7.58	**<.001**	7.99	**<.001**	4.72	**.001**
Reasons × Education	4	2.22	.064	3.88	**.004**	0.35	.845
Reasons × Income	4	0.71	.587	0.64	.634	0.11	.980
Reasons × Age	4	4.38	**.002**	3.43	**.008**	0.68	.605
Reasons × New England	4	0.72	.577	1.17	.324	0.40	.811
Reasons × Middle Atlantic	4	2.14	.074	1.13	.343	1.29	.270
Reasons × East North Central	4	1.64	.161	1.83	.120	2.51	**.040**

TABLE 7
(Continued)

		Morality (Social Correctness)		Competence (Ability)		Warmth (Intent)	
	df	*F*	*p*	*F*	*p*	*F*	*p*
Reasons × West North Central	4	1.67	.154	0.95	.432	1.58	.178
Reasons × East South Central	4	0.80	.528	1.57	.179	0.31	.872
Reasons × West South Central	4	2.39	.048	1.24	.291	1.52	.194
Reasons × Mountain	4	1.08	.361	1.95	.100	1.11	.349
Reasons × Pacific	4	2.02	.089	0.89	.471	3.04	**.016**
Mean square error	3,848						

Notes: This table reports results of repeated measure ANOVAs on evaluations. Outcome variables were composite measures with a possible range from 1 to 5. Respondents reported race in eight categories. We combined respondents giving one of the following responses into a single Multiracial/Other category: American Indian or Alaska Native, Middle Eastern, Native Hawaiian or Pacific Islander, Other, and respondents who reported more than one race. Education was a variable ranging from 1 to 7 (the levels were: less than high school, high school degree or GED, some college, 2-year college, 4-year college [Bachelor's degree], Master's degree, and Doctorate or professional degree). For location, respondents' state of residence was recoded into the nine geographic divisions defined by the US Census Bureau, with the South Atlantic division as the comparison group.

To assess the relationship between familiarity and stigma, we first examined firsthand experience with bankruptcy (i.e., Filer). As expected, and consistent with Study 1, evaluations were less negative among respondents who had previously filed for bankruptcy. These respondents gave higher competence and warmth evaluations, with no significant interactions between reasons and filing experience (competence: M filers = 3.31, SD = .54; M nonfilers = 2.70, SD = .50; warmth: M filers = 3.58, SD = .56; M nonfilers = 3.06; SD = .48). There was a significant Reasons × Filer interaction for morality evaluations; while filers were less negative on all reasons, the biggest difference was for a filer with job problems, and the smallest was for a filer with problems controlling spending (Table 8).

Our second measure of familiarity with bankruptcy was secondhand experience (i.e., familiar with another's bankruptcy). Contrary to Study 1, but consistent with the notion that familiarity with bankruptcy reduces stigma, evaluations were less negative among respondents who reported knowing a bankruptcy filer (Table 7; morality: M familiar = 2.93, SD = 0.52; M not familiar = 2.76; SD = 0.47; competence: M familiar = 2.80, SD = 0.53; M not familiar = 2.64; SD = 0.49; warmth: M familiar = 3.17, SD = 0.52; M not familiar = 2.99; SD = 0.46). There were

TABLE 8
Mean Evaluations of Morality by Filing Experience (Study 2)

		Filers		Non-filers		
		M	*SD*	*M*	*SD*	Difference
	Morality evaluations (social correctness)					
1.	Medical problems	4.11	0.70	3.54	0.68	.57***
2.	Family problems	3.67	0.80	3.04	0.70	.63***
3.	Job problems	3.85	0.85	3.01	0.73	.84***
4.	Aggressive collection efforts	3.20	0.89	2.47	0.84	.73***
5.	Problems controlling spending	2.37	0.61	2.03	0.62	.34***

Note: Study 2 outcome variables were composite measures with a possible range from 1 to 5.
***$p < .001$, **$p < .01$, *$p < .05$.

no significant interactions, indicating that this change in evaluations did not vary across the reasons for filing.[7]

Our analyses also revealed differences across demographic groups. Given the number of comparisons, we concentrate on patterns that are consistent across two or more items. We find that, as compared to Caucasian respondents, African Americans are less negative toward bankruptcy filers while Asians are more negative (Table 7; morality: *M* Caucasian = 2.86, *SD* = .50; *M* African American = 3.25; *SD* = .63; *M* Asian = 2.68; *SD* = .48; competence: *M* Caucasian = 2.72, *SD* = .52; *M* African American = 3.19; *SD* = .61; *M* Asian = 2.61; *SD* = .51; warmth: *M* Caucasian = 3.10, *SD* = .49; *M* African American = 3.45; *SD* = .57; *M* Asian = 3.10; *SD* = .50). Additionally, women are less negative toward filers who filed due to a medical, family, or job problems (Table 9). More educated respondents rated bankruptcy filers lower on morality and warmth, with the magnitude of this difference being approximately equal across all of the reasons. Higher education was also linked to more negative ratings of competence, except when the target filed because of problems controlling spending (Table 10). While the relationship between and age and ratings was positive for all evaluations and reasons, the magnitude of this difference varied. Specifically, older respondents were relatively less negative toward those who had filed because of job problems and relatively more negative toward those that had filed because of problems controlling spending (Table 10).

7. The same patterns were found with three alternate specifications of familiarity: the raw number of people known to have filed, the log of that number (adjusted up by 1), and the combination of all respondents who either filed for bankruptcy themselves or knew another person who filed.

TABLE 9
Mean Ratings of Morality, Competence, and Warmth by Gender (Study 2)

		Women		Men		
		M	*SD*	*M*	*SD*	Difference
	Morality evaluations (social correctness)					
1.	Medical problems	3.72	0.72	3.50	0.67	0.22***
2.	Family problems	3.23	0.74	3.00	0.70	0.23***
3.	Job problems	3.27	0.82	2.95	0.71	0.32***
4.	Aggressive collection efforts	2.53	0.92	2.50	0.82	0.03
5.	Problems controlling spending	2.06	0.62	2.05	0.63	0.01
	Competence evaluations (ability)					
1.	Medical problems	3.51	0.72	3.25	0.66	0.26***
2.	Family problems	3.00	0.76	2.87	0.64	0.13*
3.	Job problems	3.06	0.80	2.77	0.70	0.29***
4.	Aggressive collection efforts	2.57	0.88	2.58	0.89	−0.01
5.	Problems controlling spending	2.00	0.65	1.92	0.72	0.08
	Warmth evaluations (intent)					
1.	Medical problems	3.62	0.74	3.45	0.72	0.17**
2.	Family problems	3.28	0.75	3.02	0.75	0.26***
3.	Job problems	3.31	0.74	3.13	0.60	0.18***
4.	Aggressive collection efforts	2.89	0.82	2.85	0.78	0.04
5.	Problems controlling spending	2.83	0.79	2.76	0.73	0.07

Note: Study 2 outcome variables were composite measures with a possible range from 1 to 5.
***$p < .001$, **$p < .01$, *$p < .05$.

Discussion

In this study, we expanded our investigation of bankruptcy stigma by measuring evaluations of morality, warmth, and competence across different reasons for filing. In contrast to Study 1, but consistent with literature on the relationship between bankruptcy filings and familiarity with bankruptcy (e.g., Gross and Souleles 2002; Scholnick 2012), we found that both firsthand and secondhand experience with bankruptcy were correlated with bankruptcy stigma. Specifically, respondents who were familiar with bankruptcy gave less negative evaluations of bankruptcy filers across all three fundamental dimensions of person perception (warmth, morality, and competence). Notably, however, the estimated relationship between familiarity and stigma was much stronger for firsthand experience than for secondhand experience, with differences in evaluations being much larger for filers than for those who simply knew someone else who had filed for bankruptcy. We further discuss this finding and other demographic differences in the General Discussion section.

TABLE 10
Parameter Estimates by Education and Age

		Education		Age/10	
		B	*SE*	*B*	*SE*
	Morality evaluations (social correctness)				
1.	Medical problems			.09**	0.03
2.	Family problems			.08**	0.03
3.	Job problems			.18***	0.03
4.	Aggressive collection efforts			.10**	0.03
5.	Problems controlling spending			.05*	0.02
	Competence evaluations (ability)				
1.	Medical problems	−.05**	0.02	.06*	0.03
2.	Family problems	−.06**	0.02	.08**	0.03
3.	Job problems	−.06**	0.02	.16***	0.03
4.	Aggressive collection efforts	−.06**	0.02	.09**	0.03
5.	Problems controlling spending	.01	0.02	.06*	0.03

Notes: Unstandardized parameter estimates (*B*) with standard errors (SE) are presented. Estimates based off of full model (presented in Table 7). Age was rescaled so that a one-unit change in age represents a 10-year increase.
***$p < .001$, **$p < .01$, *$p < .05$.

Study 2 also revealed that, consistent with psychological theory (Alicke 2000), perceived control was a factor underlying estimates of bankruptcy prevalence and evaluations of filers. Specifically, respondents' estimates of the prevalence of filings were meaningfully grouped into two categories which split along their controllability. Respondents who estimated that there were more controllable, personal agency filings also tended to evaluate all bankruptcy filers more negatively. Additionally, bankruptcy filers were less stigmatized when they filed for relatively uncontrollable reasons (e.g., medical problems). Together, these findings suggest that perceived control over a bankruptcy filing is an important factor in bankruptcy stigma.

GENERAL DISCUSSION

Summary of Contribution

The current studies explore attitudes toward bankruptcy and evaluations of bankruptcy filers. Our first contribution is to explore the link between bankruptcy stigma and familiarity with bankruptcy (discussed in e.g., Fay, Hurst, and White 2002; Gross and Souleles 2002; Scholnick 2012; Sousa 2014). As opposed to most research on this relationship, which has used geographic regions to infer familiarity, we measure familiarity using firsthand experience with bankruptcy (i.e., previous filing) and secondhand experience (i.e., knowing someone else who filed). Those with firsthand

experience are less negative toward bankruptcy (Study 1) and bankruptcy filers (Study 2). Possibly, filers' attitudes and evaluations are driven by a desire to justify their past behavior, or are informed by their experiences with consumer bankruptcy and the difficulties facing debtors. Further research is needed to identify the direct link between bankruptcy stigma and filing behavior.

In contrast, secondhand experience with bankruptcy does not reliably predict attitudes toward bankruptcy (Study 1). Secondhand experience does predict evaluations of filers (Study 2); however, the magnitude of the differences was not as large as we expected, estimated as approximately 20–30% of the effect size for firsthand experience. Together, these findings suggest there is weak evidence that familiarity with another's bankruptcy is associated with reduced bankruptcy stigma. Given the relatively weak relationship, this finding implies that future research should explore mechanisms other than stigma to explain the relationship between aggregate filing rates and filing propensity. For instance, it may be the case that filers pass on information about bankruptcy procedures or legal services rather than modified attitudes toward bankruptcy (see Fay, Hurst, and White 2002).

Our second contribution is to introduce new measures of bankruptcy stigma, allowing us to find that bankruptcy stigma is not a unitary construct. Instead, consistent with other psychological research and theory (e.g., Brambilla et al. 2011; Goodwin 2015) bankruptcy stigma can be broken down into elements of warmth, competence, and morality. The distinction between these evaluations is important because morality (e.g., responsible, honest, trustworthy) is more consequential than warmth (e.g., agreeable, easygoing, enthusiastic) in forming impressions of others (Goodwin 2015; Goodwin, Piazza, and Rozin 2014). Across different reasons for filing for bankruptcy, warmth evaluations of filers do not vary as much as morality and competence evaluations, possibly because people feel some pity for bankruptcy filers; pity has previously been linked to warmth (Fiske, Cuddy, and Glick 2007).

Our third contribution is to explore the link between bankruptcy stigma and perceptions of filers' control over the circumstances that led to their filing. We found three indications of this relationship in Study 2: respondents' estimates of the prevalence of different causes of bankruptcy separated along the lines of controllability (personal agency vs. adverse events); evaluations of filers were more negative when they had filed for a personal agency reason (e.g., problems controlling spending) as opposed to an adverse events reason (e.g., medical problems); and respondents who believed that personal agency bankruptcies were more common viewed *all* bankruptcy filers more harshly. As such, these results suggest that

perceived control is an important factor for understanding bankruptcy stigma.

Policy Implications

Researchers believe that bankruptcy stigma inflicts a cost on debtors, discouraging them from filing for bankruptcy when doing so would benefit them financially (Mann and Porter 2010; Thorne and Anderson 2006; White 1998). Unfortunately, debtors who postpone filing for bankruptcy may suffer through aggressive debt collection efforts and experience shame or embarrassment in the period leading up to their filing (Mann and Porter 2010; Thorne and Anderson 2006). In attempting to resolve their financial difficulties, debtors may withdraw money from retirement savings accounts, borrow against insurance annuities, or even consider suicide (Thorne and Anderson 2006). Our research finds that bankruptcy stigma varies according to the perceived underlying cause of the bankruptcy, with greater stigma attached to filers who filed because of relatively controllable reasons. We suspect that, because of the associated stigma, debtors viewed as having problems controlling spending will be more reluctant than those viewed as having job problems to reveal that they have filed for bankruptcy. Moreover, the stigma that comes from having financial problems rooted in controllable factors may be a strong deterrent, keeping debtors from filing even when it would be in their financial best interest to do so.

By concentrating on stigma, we have arguably focused on an indicator of willingness to file for bankruptcy, ignoring debtors' ability to file. Some debtors may not be able to raise the funds required for legal fees and transaction costs associated with filing (e.g., Mann and Porter 2010; White 1998), which may also deter them from filing. It is unclear whether stigma and financial constraints are complementary, with wealthier individuals perceiving less bankruptcy stigma, or contrasting, with debtors who have financial constraints also feeling more stigma. Furthermore, it is unclear whether there are changes in attitudes toward bankruptcy for debtors who have long-lasting difficulties raising legal fees. Future research should explore the relationship between these factors.

Beyond consequences for individual debtors, a better understanding of bankruptcy stigma also provides insights into potential policy and regulatory changes. Human behavior can be shaped by both formal policy and informal rules, including norms and stigma (Ulen 2014), and indebtedness is no exception (Sotiropoulos and D'Astous 2012). Bilz and Nadler (2014) argue that policies can affect people by "either normalizing or demonizing" behaviors (242). For example, they argue that a large part of the historical

decline in cigarette smoking can be traced to smoking being framed as an immoral activity that causes harm to others. By exploring whether bankruptcy is perceived as immoral, and how these perceptions vary across demographic groups, researchers and policymakers may be able to better understand the interplay between bankruptcy filings and bankruptcy policy.

Limitations and Future Directions

Omitted variable bias is perhaps the greatest threat to the validity of our findings. One limitation of our analysis is that we do not include household debt in either study, despite the fact that the financial benefits of bankruptcy largely depend on the extent of indebtedness. Measuring debt is complex because it requires distinguishing between secured loans where property serves as collateral, such as auto loans and home mortgages, and unsecured debts without collateral, such as those from credit cards. Additionally, treatment of debts varies in bankruptcy proceedings according to state and federal laws. Future research would ideally incorporate the "financial benefit of filing" for bankruptcy, as put forth by Fay, Hurst, and White (2002), because this measure considers state laws and exemptions as they relate to household debt and bankruptcy.

The omission of household debt could help explain some of the demographic differences in bankruptcy stigma that we find in the current research. For instance, in Study 1, Hispanics were more likely than Caucasian respondents to agree that it is morally wrong to file for bankruptcy, and in Study 2, Asians were more negative toward bankruptcy filers. Additionally, in both studies, African American respondents gave less negative ratings than Caucasian respondents. One potential explanation for these differences is that they reflect varying levels of net worth among respondents from different racial/ethnic groups.

A second limitation is that we do not attempt to distinguish between consumer bankruptcy "chapters," despite the fact that the chapters have different requirements. A discussion of the legal intricacies of the bankruptcy chapters is beyond the scope of this paper. However, in brief, scholars argue that Chapter 7 bankruptcies are more strongly associated with a "fresh start," as they allow for an immediate discharge of unsecured debts (see Braucher, Cohen, and Lawless 2012; Cohen and Lawless 2012; Lefgren, McIntyre, and Miller 2010; Miller 2015; White 2007). In contrast, Chapter 13 bankruptcies are infused with a symbolic, "moral statement in favor of honoring one's commitments" (Jacoby 2001, 229) because they require debtors to undergo a 3- to 5-year payment plan. The benefits of the chapters vary depending on an individual debtor's circumstances (Sullivan

and Worden 1990). In practice, African American debtors are more likely than Caucasian debtors to file for Chapter 13 bankruptcies, meaning that they are also more likely to have debt repayment plans (Braucher, Cohen, and Lawless 2012; Cohen and Lawless 2012; Lefgren, McIntyre, and Miller 2010; ProPublica 2017). Collecting race and ethnicity data during bankruptcy cases would facilitate greater understanding of racial and ethnic patterns in bankruptcy and bankruptcy stigma (Braucher, Cohen, and Lawless 2012).

CONCLUSION

Understanding consumer bankruptcy filings requires exploring the legal, financial, social, and psychological issues that debtors face. Debtors considering filing for bankruptcy must balance their current circumstances, which may include significant financial and emotional stress (Thorne and Anderson 2006), against the fees and requirements involved in filing for bankruptcy and potentially diminished prospects for hiring and earnings afterwards (Marot 2012). To better understand these considerations, we have explored bankruptcy stigma in terms of bankruptcy attitudes and evaluations of bankruptcy filers. We analyzed how stigma varies by filer and evaluator characteristics. Our findings imply that two key factors underlying bankruptcy stigma are perceived control over the source of debt and the respondent's firsthand experience with bankruptcy. The findings also suggest that familiarity with bankruptcy is associated with less negative evaluations of bankruptcy filers, but the weakness of this relationship suggests that more research is needed to understand the relationship between aggregate filing rates and the propensity to file. Our research leaves open the important question of the *causal* mechanism between bankruptcy stigma and actual filing behavior: Do expectations of stigma influence actual filing decisions? Specifically, are individuals who anticipate lower amounts of stigma from indebtedness caused by uncontrollable events (e.g., unforeseen medical expenses) more likely to file than those who anticipate higher amounts of stigma from indebtedness caused by controllable events (e.g. excessive spending behavior)? We hope that future research will explore this relationship to gain greater understanding of consumer bankruptcy.

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"When You're in a Crisis Like That, You Don't Want People to Know": Mortgage Strain, Stigma, and Mental Health

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Objectives. We analyzed experiences of stigmatization, concealment, and isolation among African American homeowners who were experiencing mortgage strain.

Methods. We conducted semistructured interviews between March 2012 and May 2013 with 28 African American homeowners in a northeastern US city who were experiencing mortgage strain. We coded all of the transcripts and reviewed data for codes relating to stigma, sharing information, social support, social isolation, and the meaning of homeownership.

Results. Our data showed that mortgage strain can be a concealable stigma. Participants internalized this stigma, expressing shame about their mortgage situation. Additionally, some participants anticipated that others would view them as less worthy given their mortgage trouble. In an effort to avoid stigmatization, many concealed their mortgage trouble, which often led to isolation. This stigmatization, concealment, and isolation seemed to contribute to participants' depression, anxiety, and emotional distress.

Conclusions. Stigma may exacerbate stress associated with mortgage strain and contribute to poor mental health, particularly among upwardly mobile African Americans who have overcome significant structural barriers to home ownership. Reducing stigma associated with mortgage strain may help to reduce the health consequences of this stressful life event. (*Am J Public Health.* 2015;105:1008–1012. doi:10.2105/AJPH.2014.302400)

Between 2007 and 2010, foreclosure rates grew to unprecedented levels—from around 650 000 in 2007 to a record 2.9 million homes in 2010.[1] The recent home foreclosure crisis is also a health crisis.[2–4] In particular, recent studies have found that mortgage strain and foreclosure can lead to depression, anxiety, and poor mental health.[5–7] The material hardship and potential housing instability inherent to mortgage strain are themselves likely to be health demoting.[6] In addition, mortgage strain may threaten the pride and status that are associated with financial independence, and home ownership in particular, resulting in stigma.[7] These experiences of stigma may exacerbate stress associated with mortgage strain and contribute to poor mental health.

The relationship between stigma and poor mental health is well established and is likely to operate through several pathways.[8] For one, individuals may incorporate stigma into their identities, and this process of internalization can lead to emotion dysregulation, low self-esteem, and interpersonal problems, all of which can contribute to poor mental health.[9] Anticipation of stigmatization also may produce stress that confers a risk to mental health.[10,11] Active discrimination, or enacted stigma, can be another source of health-demoting stress.[12,13]

Mortgage strain is an example of a stigma that can be concealed. Concealable stigmas can result in unique stressors related to the challenges that individuals face in deciding whether and when to disclose their stigmatized identities and to vigilance and fear associated with the possibility of unwanted discovery.[8,11,14,15] Those who possess a concealable stigma may isolate themselves to avoid disclosure, and this concealment may prevent them from obtaining social support.[8] Social isolation is a well-established risk factor for poor mental health.[16,17] Likewise, social support is an important buffer to the relationship between stress and mental health.[16,17] This buffering role may be particularly important for the mental health of those who are experiencing a stressful life event such as mortgage strain.

Relative to White homeowners, African American homeowners were more likely to experience mortgage strain during the recent recession.[18] The pride associated with homeownership and experiences of stigma related to its threatened loss may be particularly pronounced for African American homeowners who have faced a long history of barriers to the acquisition of credit, property, and equity.[19,20] Prior to the 1970s, many African Americans were denied mortgages as a result of redlining, which designated many predominantly African American neighborhoods as ineligible for government-backed Federal Housing Authority loans.[21] Fair housing legislation expanded homeownership opportunities for African American homeowners but was followed by deregulation of the mortgage industry and an explosion of risky subprime lending that disproportionately targeted African American communities.[22] Many African American homeowners who faced foreclosure during the recent recession were among the first in their families to own homes, having taken advantage of fair housing legislation in the 1970s or the expansion of risky alternative loan products in the 1990s.[22]

We analyzed data from 28 in-depth interviews that we conducted with working-class African American homeowners who were experiencing mortgage strain. We examined how mortgage strain may threaten positive identities associated with homeownership and manifest itself as a source of stigma. Stigma emerged as a prominent theme in our interviews, and our data suggest that stigma plays a role in the experiences of emotional distress, anxiety, and depression that have been reported among homeowners facing mortgage strain.[7,23,24]

METHODS

This study took place in Locust Park (pseudonym), a working-class and almost exclusively

(97%) African American neighborhood in a northeastern city.[25] Locust Park is approximately 80% owner occupied.[25] Many of its residents are long-term homeowners who purchased their homes in the 1960s and 1970s from White homeowners who were moving en masse to the suburbs.

Locust Park's poverty rate is relatively low compared with other predominantly African American neighborhoods in the city, but fewer than 10% of its residents have a bachelor's degree, and the median household income is approximately $40 000, about $11 000 less than the national median.[25]

Recruitment and Sample

A local mortgage counseling agency helped us to recruit an initial group of participants by sending recruitment letters to its former clients who resided in our study area (n = 19). We recruited additional participants through snowball sampling techniques (n = 9). Our sampling frame included Locust Park homeowners who were experiencing mortgage strain. This deliberately broad category included those who were currently behind on their housing payments (n = 14) and those individuals who had recently caught up on their mortgage payments but were still facing financial difficulties (n = 11). We also interviewed participants (n = 2) who had never missed a mortgage payment but were paying the mortgage at the expense of other basic necessities and were concerned about default. One participant had avoided default by taking out a reverse mortgage, which allows older homeowners to draw on their home equity and defer loan payments until they die or move out of the home.

The sample was entirely African American and included many older and long-term homeowners. It was also predominantly female, which reflects the overrepresentation of women among those experiencing mortgage strain.[26] Participants held or had held jobs in a range of service and blue-collar professions. They were nurses, certified nurse assistants, home health aides, line-order cooks, teachers, maintenance personnel, and factory workers. Nine participants were employed at the time of the interview, and an additional 13 were receiving Social Security benefits for either age (4) or disability (9). Table 1 describes the sample's demographics more fully.

Data Collection and Analysis

We conducted semistructured interviews between March 2012 and May 2013, which covered broad themes related to residential history, buying and maintaining a home, securing a loan, navigating default, making ends meet, and neighborhood context. The interviews also included a short set of closed-ended questions about health, mental health, and health care.

Most interviews took place in participants' homes. Interviews lasted 1 to 4 hours, and participants were compensated $50. The first author (D. E. K.) conducted 23 interviews, and the third author (A. C. B.) conducted 5 interviews.

Following a grounded theory approach,[27] our analysis was an ongoing process that cooccurred with data collection. We wrote thematic summaries after each interview and frequent memos about developing concepts. The concept of stigma emerged in this early review of the data after the first few interviews. In response to the emergence of this theme, we prompted subsequent participants about how they shared or concealed information about their mortgage trouble.

Once interviews were completed and transcribed, we used our memos and group discussion to collaboratively develop a codebook, which we then revised after applying it to a subset of transcripts. We then coded all of the transcripts according to this finalized codebook with ATLAS.ti software (Scientific Software Development GmbH, Berlin, Germany). The third author (A. C. B.) primarily conducted the coding and wrote frequent memos about coding decisions. The first author (D. E. K.) reviewed coding memos and coded transcripts, and discrepancies were discussed. For the analysis presented in this article, all 3 authors extracted and reviewed data for codes relating to stigma, sharing information, social support, social isolation, and the meaning of homeownership. We also reviewed full transcripts to contextualize these quotes within participants' broader narratives. Ongoing memo writing and group discussion during our review of the coded data allowed us to check our interpretations against one another and the data. We use pseudonyms when presenting our results.

RESULTS

Our data showed how mortgage strain can act as a concealable stigma. Participants described how their mortgage trouble threatened the pride and status that their homeownership conferred. They described feeling ashamed and embarrassed by their troubles, an indication that they had internalized the stigma of mortgage strain. Some participants anticipated that other people would view them negatively; in an effort to avoid this, they concealed their struggles. This concealment often created barriers to obtaining social support. These processes of stigmatization, concealment, and isolation seemed to exacerbate the emotional distress that accompanied participants' financial struggles.

Mortgage Strain as Stigma

For many participants, mortgage strain seemed to endanger the dignity that accompanied their homeownership. For example, Carla Lyons, aged 50 years, who had recently caught up on her mortgage after a recession-related job loss led her to the brink of foreclosure, described becoming a homeowner as a "proud thing." She said, "Yeah, I mean it's just it's a symbol of independence, but it's just like, 'Okay wow, I can do it,' you know? I can do it, so that's how I felt, kind of triumphant, you know." When she lost her job and fell behind on her mortgage, this pride slipped away. She said, "When that happened, that was kinda like, wow, you're failing, so that's how . . . I kinda felt like I not only let me down, but my family, my older two kids who still kinda look up to me."

TABLE 1—Sample Characteristics: Locust Park Homeowners Experiencing Mortgage Strain

Characteristic	No.
African American	28
Female	23
Older than 50 y	18
In home > 30 y	11
In home > 10 y	18
Refinanced original mortgage	11
Employed	9
Receiving Social Security	
Retired worker	4
Disabled worker	9
Self-rated health poor or fair	13
Depressed (Physician Health Questionnaire-2)	13

Note. The sample size was n = 28.

Many participants were raised in rent-assisted households or public-housing projects and were the first homeowners in their families. The achievement of homeownership marked them as members of a deserving and financially self-sufficient middle-class, and mortgage trouble introduced a shame of dependency.

For example, Bria Johnson, aged 32 years, noted that it was hard to ask for financial assistance when she lost her job and was unable to pay her mortgage. She said, "My parents really made me an independent person, you know, and so the fact that I had to rely on assistance, that really—I think that bothered me more than anything else."

Keith Stanley, aged 40 years, who at the time of the interview was facing foreclosure after losing his job, described a similar threat to his self-sufficiency using the word *embarrassed* to indicate a sense of shame and internalized stigma. He said,

> It's embarrassing. It's very embarrassing. But, I mean, I know it is understandable [to have to rely on help from others], but it's embarrassing not to be able to provide like I'm used to.

Likewise, Nicole Lewis, aged 44 years, explained that as someone who was the "backbone" of a large family network, it was also "embarrassing" to have to ask other people for assistance when her husband lost his job and they fell behind on their mortgage. She said, "It was embarrassing not having and having to ask somebody to help me. That was the embarrassing piece right there. That was it in a nutshell. Havin' to ask for a helpin' hand."

Other participants feared that people would judge them for their mortgage trouble; in other words, they anticipated stigma. For example, when asked why she hadn't told her live-in partner about the fact that her mortgage was in default, Nathalie Carson, aged 26 years, said, "He might think I'm irresponsible. I don't know what he might think of me." Bria feared that her friends would view her differently if they found out about her mortgage trouble. She said,

> Because people know that I'm like a no-nonsense—like if I say I'm going to do something, I do it, you know, so it's to kind of fall back on, you now, on that [her mortgage]. At the time, it was just awful.

Despite these expressions of shame and the anticipation of stigma, participants generally did not describe being actively stigmatized by other people as a result of their mortgage trouble. However, several participants described being harassed and "dehumanized" by debt collectors. Although these interactions may have been driven by financial motives rather than stigma, these participants nonetheless described being treated as stigmatized others and without compassion or decency. These experiences contributed to emotional distress. As Alice Coles, aged 55 years, recounted:

> I came home, and the phone was ringing off the hook. Pick up, people hanging up, and "you'd better pay this, you better pay that." I went to bed and woke up, and I started crying, and I couldn't stop crying because I have always paid my bills.

Concealment and Isolation

As is a common strategy when faced with a concealable stigma, many participants kept their mortgage trouble to themselves. Nicole, for instance, described the profound sense of isolation she felt during the months that she and her husband struggled to avoid foreclosure. She explained that while her friends and coworkers knew that she was "going through something," they did not know what she was going through because she "wasn't letting nobody know [her] business."

Carla echoed the guardedness and isolation that Nicole expressed. She explained,

> I mean, I didn't really even discuss it with many people, you know? I have close friends, but I just have a small circle of friends that I kinda invite in, so I was just dealing with it by myself pretty much.

For a few participants, this guardedness contributed to a complete withdrawal from social relationships. For example, Missy Newell, aged 49 years, described herself as a "loner." She said,

> I stay in my room a lot. I really don't have any friends that I socialized with, and I don't go out a lot, and I'm always thinking about, "What if I don't have my home, I'm on the street."

When asked whether she was always a loner, Missy explained, "It's new since the fear came in my life" (referring to her recent mortgage default). Likewise, Felicia Reed, aged 51 years, who was facing foreclosure at the time of the interview, explained, "I actually even stopped talking to people that I considered my friends. . . . [W]hen you're in a crisis like that, you don't want people to know."

Shame and stigma were not the only reasons that participants kept their mortgage trouble to themselves. In some cases, they did not want to burden friends and family members who were also struggling with financial issues. However, other participants kept their mortgage trouble a secret, even from those who could provide much-needed financial assistance. For example, Sandra Nelson, aged 58 years, explained that she did not tell her father about her mortgage trouble until 2 days before the house was to be sold at a foreclosure auction. At this point, she reached out to him, and he was able to provide her with funds to save her home. The desire to conceal a stigmatized situation, as described by other participants, may have contributed to the delay of her request.

Stigma, Suicide, and Mental Health

Nearly half of our participants met the diagnostic criteria for depression on the basis of a validated 2-question screen (Physician Health Questionnaire-2). Additionally, experiences of hopelessness, anxiety, and insomnia were common in participants' narratives. Furthermore, 4 participants, without prompting, described having experienced suicidal thoughts while in the midst of their mortgage troubles. Our interviews suggest that stigma, concealment, and isolation contributed to these experiences of emotional distress.

For example, Nicole described how the stigma and shame that she felt during the period when she and her husband were unable to pay their mortgage contributed to her despair and suicidal thoughts. She said,

> Really, I was so ashamed. I really felt like that, like hurnin' myself so they can get the insurance money so that everything could be taken care of and that's a shame. No one should feel like that to hurt they self to take care of—to pay the mortgage.

For Alice, concealment and isolation seemed to exacerbate the emotional challenges of mortgage strain as she struggled to resolve her mortgage trouble with few sources of support. She explained,

> Emotionally, I tell you, I wanted to kill myself. I wanted to blow my brains out, just an easy way to get out of everything, you know, because it was too much. *One person* can't handle a lot of things, and I'm telling you when you're under emotional stress, pain don't go away.

Several participants (including all 4 of those who described suicidal thoughts) turned to health care professionals to relieve the

depression and anxiety that they experienced. For some participants, therapy offered a way to obtain emotional support without having to disclose a predicament that was interpreted as stigmatizing. For example, as Missy said in regard to her decision to see a therapist, "I needed somebody to talk with that don't know me."

Carla also explained that seeing a therapist was helpful in both addressing her depression and alleviating some of the isolation that she was experiencing as she dealt with her mortgage trouble. She said of her counseling experience, "It was because I was able to get it out more than anything, you know? Sometimes it's just internalized stuff, and that's what I had been doing."

Therapy may have been helpful for some, but other participants were reluctant to participate because of their anticipation of stigma. For example, recognizing that she was deeply depressed, Nicole got a referral for counseling but never went, instead relying on antidepressants provided by her primary care physician. She explained,

> Sometimes you feel like you don't wanna tell people what's really goin' on. I coulda' went, but I was feelin' like I don't want nobody to know my business and stuff like that, which is why I didn't go.

In this sense, stigma may not only mediate the relationship between mortgage strain and poor mental health but also act as a barrier to clinical intervention.

DISCUSSION

Our respondents were keenly aware of the stigmatizing potential of mortgage strain—they internalized and anticipated it. The stress that they experienced as a result of this stigma likely had consequences for both their mental and their physical health.[13] Additionally, their management of this stigma through concealment likely contributed to the depression and anxiety that they experienced. Concealment itself is associated with unique stressors that can lead to poor mental health. For example, the challenges of negotiating disclosure and fears of unwanted discovery can lead to intrusive thoughts and mental fatigue.[8,14,15,28] Furthermore, participants described withdrawing from social connections as a way to conceal their mortgage trouble and avoid experiences of shame and embarrassment. As a result, they likely reduced their access to social support, which is a well-established buffer to the effect of stress on depression.[17]

Many of our participants were upwardly mobile, having moved to Locust Park from poorer neighborhoods. Several were the first in their families to own homes. They prided themselves in their status as homeowners, and their mortgage trouble threatened this status. Even though many experienced mortgage trouble as a result of illness, recession-related job loss, and other factors beyond their control, many felt ashamed of their situation or feared that other people would judge them negatively. Although other aspects of their financial troubles such as unemployment also may have been stigmatizing, our data point to a distinct stigma associated with mortgage strain.

Our sample was entirely African American and predominantly working class. We do not know whether these experiences would be shared by other demographic groups. However, observations from other studies conducted among different populations also point to shame and embarrassment associated with mortgage strain, indicating that our findings may have broader implications.[7,23] Furthermore, the stigma surrounding mortgage strain may affect willingness to participate in studies such as this one.[23] If that is the case, stigma is likely to be more common in the broader population than among our participants. Future research that explores the prevalence of stigma among representative samples of at-risk homeowners will be an important addition to the literature.

Mortgage strain stigma may not be specific to African American homeowners, but the pride associated with homeownership and experiences of stigma related to its threatened loss may be particularly pronounced for African Americans given a long history of racial barriers to property acquisition.[19,20] Furthermore, understanding how African American homeowners experience mortgage strain has important implications for thinking about the social and economic determinants of health inequality. African Americans are at increased risk for mortgage strain as a result of societal structures that limit their wealth, threaten their health, and make them targets for predatory lending practices.[20] They are, as a result, more subject to the deleterious consequences of mortgage strain, including stigma.

In our study, the concealment of mortgage strain meant that participants often turned to public sources, rather than friends and family, when looking for ways to resolve their struggles. Although they often found legitimate sources of aid, they were also likely vulnerable to predatory scams that frequently target struggling homeowners.[23,29] Furthermore, the aid that participants found did not address their isolation and sometimes reinforced stigmatization by emphasizing the contribution of personal behaviors to mortgage trouble, such as lack of budgeting skills. Foreclosure prevention campaigns that counter this individualized framing by emphasizing the structural causes of this common experience (such as job loss and predatory lending) may help to reduce stigma and improve mental health. For example, Project No One Leaves[30] has taken on foreclosures in disadvantaged urban areas as a community-wide human rights issue and works to empower at-risk homeowners through grassroots organizing and legal education. Programs such as these that bring groups of distressed homeowners together may also help to reduce social isolation that can result from stigma. Support groups provided by respected community organizations, such as local churches, also may be a safe place for homeowners to share their stories and learn that they are not alone. ■

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D. E. Keene conceptualized the study and led the data collection, data analysis, and writing of the article. S. K. Cowan contributed to the conceptualization of the study, the analysis of the data, and the writing of the article. A. Castro Baker contributed to the data collection and analysis and provided comments on drafts of the article.

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On the Relation Between Over-Indebtedness and Well-Being: An Analysis of the Mechanisms Influencing Health, Sleep, Life Satisfaction, and Emotional Well-Being

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This paper aims to explore the association between over-indebtedness and two facets of well-being – life satisfaction and emotional well-being. Although prior research has associated over-indebtedness with lower life satisfaction, this study contributes to the extant literature by revealing its effects on emotional well-being, which is a crucial component of well-being that has received less attention. Besides subjective well-being (SWB), reported health, and sleep quality were also assessed. The findings suggest that over-indebted (compared to non-over-indebted) consumers have lower life satisfaction and emotional well-being, as well as poorer (reported) health and sleep quality. Furthermore, over-indebtedness impacts life satisfaction and emotional well-being through different mechanisms. Consumers decreased perceived control accounts for the impact of over-indebtedness on both facets of well-being (as well as on reported health and sleep). Financial well-being (a specific component of life satisfaction), partly mediates the impact of indebtedness status on overall life satisfaction. The current study contributes to research focusing on the relationship between indebtedness, well-being, health, and sleep quality, and provides relevant theoretical and practical implications.

Keywords: debt, over-indebtedness, subjective well-being, life satisfaction, net affect

INTRODUCTION

Being indebted at certain stages of life may be a means of consumption smoothing across the lifecycle, improving households' economic welfare (e.g., Hall, 1978; Lombardi et al., 2017). However, debt becomes most problematic when it leads to over-indebtedness, that is, when it exceeds household resources leading to the inability to meet all payment obligations and to cover living expenses over long time periods. Indeed, the burden of over-indebtedness has

been shown to have a negative impact on several indicators of psychological and physical health.

This study seeks to contribute to the extant literature by focusing on the relationship between debt and subjective well-being (SWB). Specifically, we explore how being over-indebted (vs. not being over-indebted) affects two different facets of SWB: life satisfaction and emotional well-being. In addition, the current study also compares over-indebted and non-over-indebted consumers on measures of reported health and sleep quality.

Finally, the mediating role of (a) consumers' financial well-being (a specific component of life satisfaction); (b) financial anxiety; and (c) perceived sense of control, is explored in order to look for empirical evidence on the underlying processes of the relationship between debt and SWB as well as the relationship between debt and measures of health and sleep quality.

In what follows, we begin by briefly reviewing different concepts of over-indebtedness. We then notice that while there is a substantial amount of literature on the detrimental effects of over-indebtedness, there is a relative shortage of studies on the impact of over-indebtedness on SWB. Finally, the goals and hypotheses of the study here reported are presented.

Several different definitions of over-indebtedness and consequently different ways on how to measure it have been proposed in the literature (Berthoud and Kempson, 1992; Bridges and Disney, 2004; Kempson et al., 2004; European commission, 2008; D'Alessio and Iezzi, 2013; Angel, 2016). Nevertheless, research has been converging on a shared set of indicators (Keese, 2009; BIS–Department for Business, Innovation and Skill, 2010) that broadly refer to four features of over-indebtedness: making high repayments relative to income (e.g., households spending more than 30% of their gross monthly income on unsecured repayments), having a high number of credit commitments (e.g., four or more credit loans), being in arrears, and the subjective perception of debt as a burden (D'Alessio and Iezzi, 2013).

All of these indicators of debt difficulties provide potentially valuable information but suffer from some drawbacks. The first two set fixed limits – of repayment-to-income ratios and of number of credit commitments – to define and measure over-indebtedness. However, such limits depend on income level and household assets. For instance, debt (relative to income) and number of credits can increase above defined limits for households with high levels of income, without this necessarily making debt management problems more acute.

By using information on household arrears in making payments, the third feature is less vulnerable to the problem of setting arbitrary limits. However, the definition of the point where over-indebtedness begins based on arrears depends on the judged seriousness of the arrears, which, in turn, is likely to be dependent on the financial circumstances of the household, among other variables.

Given these limitations associated with the first three indicators, D'Alessio and Iezzi (2013) argued that a better way to identify over-indebtedness may be to enquire households on whether or not they are facing debt repayment difficulties. The downside of this type of subjective indicator is that the interpretation of terms such as "heavy repayment difficulties" is likely to vary among households (Drentea and Lavrakas, 2000) and to be sensitive to consumer's individual differences.

Finally, other objective indicators of over-indebtedness, such as judicial decisions declaring personal bankruptcy (or other court arranged solutions for resolution), are likely to be too narrow in the identification of over-indebted households failing to capture several, if not most, circumstances of over-indebtedness (D'Alessio and Iezzi, 2013).

One way to attenuate this problem is to check for the existence of more than one indicator when looking into potential cases of over-indebtedness (Białowolski, 2019). In the study, here presented, over-indebted households are consumers who voluntary looked for the help of debt advise experts, reporting an inability to meet recurrent expenses, and who in general spent more than 30% of their gross monthly income on total borrowing repayments (secured and unsecured).

The reviewed indicators of over-indebtedness mostly refer to the process of becoming over-indebted, rather than the outcomes associated with having problems with debts. However, being over-indebted has considerable negative impacts on households. From an economical perspective, over-indebted households often face liquidity constrains (Attanasio, 1995; Crook, 2003) as they become unable to borrow against future earnings, making it increasingly challenging to accommodate their financial needs.

From a socio-psychological perspective, individuals with unmet loan payments have been shown to display more suicidal ideation and are at a higher risk of depression than those without such financial difficulties (e.g., Hintikka et al., 1998; Gathergood, 2012; Turunen and Hiilamo, 2014). Unpaid financial obligations have also been associated with poorer subjective health, deterioration of health-related behavior, and physical illness (Lenton and Mosley, 2008; Bridges and Disney, 2010; Chmelar, 2013; Guiso and Sodini, 2013; Sweet et al., 2013; Turunen and Hiilamo, 2014; Clayton et al., 2015). Confirming this pattern, a recent longitudinal study of Finnish adults found an association between over-indebtedness and an increased incidence of various chronic diseases (Blomgren et al., 2016). More recently, Warth et al. (2019) found a negative relationship between over-indebtedness and sleep quality. Notably, poor sleep plays a major role in a variety of health problems, from hypertension (Gangwisch et al., 2006; Buxton and Marcelli, 2010; Meng et al., 2013) to diabetes (Buxton and Marcelli, 2010; Morselli et al., 2012; Zizi et al., 2012; Grandner et al., 2014) and mortality (Gallicchio and Kalesan, 2009; Grandner and Patel, 2009; Cappuccio et al., 2010; Grandner et al., 2010).

Taken together, such detrimental consequences are worrisome given the increasing number of over-indebted households across Europe and around the world (e.g., Betti et al., 2007; Barba and Pivetti, 2009; Harvey, 2011; Kempson, 2015), and serve to highlight the importance of further research to better understand the relationship between over-indebtedness and different indicators of well-being and health.

While there is a large body of literature on the risk factors, remedies, and detrimental effects of over-indebtedness, there is a relative lack of research on the impact of debt on SWB.

This is surprising given the longstanding research interest in the relationship between finances and SWB (e.g., Diener and Biswas-Diener, 2002; Howell and Howell, 2008). Recently, Tay et al. (2017) conducted a systematic review and meta-analysis of the literature on debt and different aspects of SWB, including overall well-being (e.g., life satisfaction), domain-specific (e.g., financial well-being), and emotional well-being (i.e., positive and negative feelings). Although only a relatively small number of empirical studies were found, results suggest a negative, but somewhat weak association between debt and SWB (but see Białowolski et al., 2019). Several reasons may contribute to this. First, only seven studies of the 19 identified by Tay et al. (2017) met their criteria for meta-analysis. Second, according to the hedonic treadmill hypothesis (Brickman and Campbell, 1971), people rapidly adapt to change. This suggests that the deteriorated life circumstances associated with indebtedness could have an attenuated effect on life satisfaction with the passage of time. Indeed, prior research indicates that most life circumstances quickly cease to influence global reports of SWB (Easterlin, 1995; Kahneman et al., 2004).

Third, Tay et al. (2017) did not distinguish between being the holder of manageable debt and being over-indebted (although their meta-analysis showed that variables, such as level of debt and overall financial resources, play a critical role as moderators of the relationship between debt and SWB).

In line with other research (Angel, 2016; Białowolski et al., 2019), the present study considers this crucial distinction, as being over-indebted is not merely a function of debt but it may involve, as aforementioned, several other features. Moreover, since over-indebtedness is often associated with careless consumer behavior and financial imprudence (Disney et al., 2008; Anderloni and Vandone, 2010), being over-indebted is often a source of social stigma and prejudice, which puts additional pressure on these consumers' already difficult living conditions.

Furthermore, although prior research (e.g., O'Neill et al., 2005; Zhang and Kemp, 2009; Drentea and Reynolds, 2012; Hogan et al., 2013; Olson-Garriott et al., 2015; see Tay et al., 2017, for a review) has used different measures of well-being to understand how people think and feel about their lives, it has not clearly distinguished between the impact of over-indebtedness on two qualitatively different facets of SWB: life satisfaction (based on a global evaluation by the individual of his/her life) and emotional well-being (the affect experienced by an individual on a more day-to-day basis; Pavot and Diener, 1993; Kahneman and Riis, 2005). Nonetheless, life satisfaction and emotional well-being are different constructs with moderate to high discriminant validity (Lucas et al., 1996; see also Dolan et al., 2017). For instance, United States consumers who earn above $75,000 annually are increasingly more satisfied with their lives (life satisfaction) but they do not have higher emotional well-being (based on experienced feelings; Kahneman and Deaton, 2010).

In this paper, the effect of being over-indebted (vs. not being over-indebted) on life satisfaction and emotional well-being is explored. In addition, the current study also includes measures of global subjective health and sleep quality in which over-indebted and non-over-indebted consumers are also compared. The goal is to ascertain whether over-indebted consumers show lower levels of SWB (both life satisfaction and emotional well-being) than non-over-indebted consumers. Based on prior cited research, over-indebted consumers are further expected to have poorer reported health and sleep quality, in addition to increased sleep-related disturbances, than their non-over-indebted counterparts.

Furthermore, two possible but not mutually exclusive accounts are considered for why over-indebted consumers might show lower SWB (as well as lower quality of health and sleep) than non-over-indebted consumers. First, given that financial well-being is one of the key life domains that inform SWB (Diener et al., 1999; Kahneman, 1999), becoming over-indebted may adversely affect financial well-being, and thus contribute to decreasing SWB. However, since financial well-being is defined as personal satisfaction with one's financial status (i.e., a specific component of life satisfaction), the mediating role of financial well-being is expected to occur for life satisfaction but not for emotional well-being.

Second, being indebted greatly limits the extent to which consumers may attain their life goals, calling into question the fulfillment of fundamental needs of autonomy and self-control, which are crucial for promoting SWB (Sheldon et al., 2010; Tay and Diener, 2011). Hence, by leading to the depletion of financial resources, over-indebtedness may not only create financial anxiety but also reduce consumers' perceived self-control over their own lives. Both aspects (financial anxiety and reduced self-control) could be expected to lower SWB.

Since financial anxiety and perceived self-control are likely to affect not only the global attainment of one's life goals but also consumers' daily emotional experience, these factors are expected to mediate both life satisfaction and SWB.

We further expect to find that financial satisfaction, perceived control, and financial anxiety mediate the relationship between over-indebtedness and both health and sleep. Such expectation is in line with previous literature. Indeed, financial satisfaction has been found to be associated to both health (Kostelecky, 1994; Hsieh, 2001; Hansen et al., 2008) and sleep quality (Summers and Gutierrez, 2018). Perceived control has also been shown to have a significant impact on health and sleep (Bobak et al., 1998; Bosma et al., 1999; Gerstorf et al., 2011; Adachi et al., 2013; Gould et al., 2016). Finally, stress (Keller et al., 2012) and anxiety (Gould et al., 2016) both have a negative impact on one's health and sleep.

MATERIALS AND METHODS

Participants

Three hundred and sixty-five Portuguese consumers responded to the study questionnaire, of which 236 were over-indebted and 129 were non-over-indebted. The questionnaire was created and applied in the context of a research project on over-indebtedness funded by the Portuguese science foundation with the collaboration of the debt advice department of an NGO for the Consumer Defense (DECO). DECO's debt advice experts offer counseling to over-indebted households who contact them free of charge. Households may contact DECO

online (by email or through their website) or directly in their offices. Over-indebted consumers (i.e., consumers reporting an inability to meet recurrent expenses, and who in general spent more than 30% of their gross monthly income on total borrowing repayments – secured and unsecured) who contacted DECO between 2017 and 2018 were invited to voluntarily participate in the study by filling the questionnaire. Data from non-over-indebted consumers were collected during the same time period through convenience sampling from different sources (e.g., part-time courses on different areas of education and development promoted by the city governments and other NGO platforms of social action). Six participants of this sample reported being over-indebted and their data were included in the sample of over-indebted consumers. A summary of the socio-demographic measures of both over-indebted and non-over-indebted groups are displayed in **Table 1**. Apart from variables pertaining to debt, which were expected to differ between the groups, income, and education also differed significantly between the over-indebted and the non-over-indebted groups.

TABLE 1 | Socio-demographic characteristics of over-indebted and non-over-indebted samples of participants.

	Over-indebted	Non-over-indebted
Age		
M (*SD*)	52.30 (11.66)	48.93 (17.61)
Valid N	86	128
Income (monthly) in Euros**		
M (*SD*)	1100.65 (662.54)	2103.60 (2176.07)
Valid N	154	120
Income (monthly) per capita in Euros**		
M (*SD*)	597.97 (372.34)	1042.84 (825.00)
Valid N	147	119
Debt in Euros**		
M (SD)	733.88 (944.51)	170.26 (222.74)
Valid N	149	113
Debt to income ratio*		
M (*SD*)	0.83 (1.89)	0.20 (0.17)
Valid N	140	55
Debt+expenses to income ratio*		
M (*SD*)	1.61 (2.19)	0.81 (0.50)
Valid N	83	55
People in the household*		
M (*SD*)	2.10 (1.00)	2.40 (1.27)
Valid N	152	126
Schooling (absolute and relative frequencies)		
1st cycle (6–9 years old)	20 (12.82%)	3 (2.34%)
2nd cycle (10–11 years old)	13 (8.33%)	8 (6.25%)
3rd cycle (12–14 years old)	35 (22.43%)	26 (20.31%)
Secondary and Vocational ed. (15–17 years old)	63 (40.38%)	42 (32.81%)
Higher education	25 (16.03%)	49 (38.28%)
Valid N	156	128
Marital status (absolute and relative frequencies)		
Single	37 (23.56%)	31 (24.21%)
Divorced/Separated	45 (28.66%)	23 (17.97%)
Married/Domestic partnership	64 (40.76%)	54 (42.18%)
Widowed	11 (7%)	20 (15.62%)
Valid N	157	128
Professional status (absolute and relative frequencies)		
Unemployed	31 (19.87%)	18 (14.4%)
Informal jobs	3 (1.92%)	7 (5.6%)
Retired	34 (21.79%)	41 (32.8%)
(Self-)Employed	88 (56.41%)	59 (47.20%)
Valid N	156	125

*The debt is the total paid monthly for all types of credit. *$p < 0.05$; **$p < 0.001$.*

Materials

The questionnaire included (a) socio-demographic items (e.g., marital status, schooling, professional status, and number of people in the household); (b) questions on financial aspects of the respondent's life (e.g., income, monthly expenses, and monthly installments of loans); and (c) the main dependent measures of the current study: life satisfaction, emotional well-being, sleep quality, and reported health. Perceived control, financial anxiety, and financial well-being were also assessed as potential mediators. Finally, the questionnaire included other measures collected for different research purposes, which will not be addressed herein.

Life Satisfaction

Life Satisfaction was assessed using the Cantril Self-Anchoring Striving Scale (Cantril, 1965). Participants were asked to imagine a ladder with steps from 0 to 10, where 0 was the worst possible life for them and 10 the best possible life for them. They were then asked to indicate the step on which they saw their lives at that particular time and the step on which they envisaged their lives 5 years from then.

Emotional Well-Being

Emotional well-being was assessed using a simplified version of the Day Reconstruction Method (DRM – Kahneman et al., 2004), in which participants were required to indicate on a five-point rating scale (1 – not at all, 5 – extremely) how intensely they had felt a set of negative and positive emotions (used in the original DRM questionnaire) during the morning, afternoon, and evening of the previous day. The negative emotions included: frustrated, angry, depressed, hassled, and criticized. The positive emotions included: happy and competent. Mean responses for positive and negative emotions were obtained for each moment of the day and in total. Four scores of net affect (composed of the subtraction of the mean negative emotions from the mean positive ones) were computed, one for each part of the day (morning, afternoon, and evening) and one global score (entire day). Positive values represent positive net affect, and negative values represent negative net affect (Kahneman et al., 2004).

Reported Health

Health was evaluated by means of two questions: "Globally, how do you evaluate your health?" and "How do you evaluate your health compared to other people of your age?" based on the same rating scale (1 – Excellent, 2 – Good, 3 – Fair, 4 – Poor, and 5 – Very poor). Individual responses to these

questions were averaged in a composite measure of self-reported health (Cronbach's alpha = 0.91).

Sleep Quality

Subjective quality of sleep and sleep-related disturbances were measured using four questions from the Pittsburgh Sleep Quality Index (PSQI – Buysse et al., 1989). Three components of the PSQI were assessed: subjective sleep quality ("During the past month, how would you rate your sleep quality overall?," using a four-point rating scale: 1 – Very good, 2 – Fairly good, 3 – Fairly bad, and 4 – Very bad); sleep duration ("During the past month how many hours of actual sleep have you managed to get at night? – This may differ to the number of hours you have spent in bed," by means of the following four-point rating scale: (>7 h, 6–7 h, 5–6 h, and <5 h – where >7 = 1, 6–7 = 2, 5–6 = 3, and <5 = 4); and daytime dysfunction ("During the past month, how often have you had trouble staying awake while driving, eating meals, or engaging in social activity?," measured with the following rating scale: 1 – Not at all during the past month; 2 – Less than once a week; 3 – Once or twice a week; and 4 – Three or more times a week and "During the past month, how much of a problem has it been for you to keep up enough enthusiasm to get things done?," measured with the following scale: 1 – No problem at all; 2 – Only a slight problem; 3 – Somewhat of a problem; and 4 – A very big problem). A confirmatory factor analysis was performed to evaluate how well these four items defined an underlying sleep quality factor. Results of this analysis revealed a good model fit, $\chi^2(2) = 9.18$, $p = 0.01$; CFI = 0.98; TLI = 0.94; SRMR = 0.03). All factor loadings were highly significant (i.e., $p < 0.001$) and higher than 0.50. We then used the standardized factor loadings to calculate the composite reliability or coefficient omega (Ω), which was above the 0.70 benchmark for acceptable reliability ($\Omega = 0.78$; Nunnally and Bernstein, 1994).

Perceived Control

Perceived control was measured with two questions adapted from the perceived stress scale of Cohen et al. (1983): "How often have you been feeling you do not have control over the important things in your life?" and "How often have you been feeling you are not able to deal with everything you have to do?" (Both using the following rating scale: 1 – Never, 2 – Hardly ever, 3 – Sometimes, 4 – Frequently, and 5 – Very frequently). Individual responses to these questions were averaged in a composite measure of perceived control (Cronbach's alpha = 0.82).

Financial Anxiety

Financial anxiety was assessed using nine items from the Financial Anxiety Scale (FAS; Shapiro and Burchell, 2012, Study 1). Participants responded to the statements on a five-point rating scale from 1 (Totally disagree) to 5 (Totally agree). Examples of the FAS are: "Thinking about my personal finances can make me feel guilty," "Thinking about my personal finances can make me feel anxious," and "Discussing my finances can make my heart race or make me feel stressed" (Cronbach's alpha = 0.86).

Financial Well-Being

Financial well-being was assessed by questioning participants on how satisfied they were with their financial status compared to their friends. Participants answered using a rating scale from 0 (Not satisfied at all) to 10 (Very satisfied).

Procedure

Over-indebted consumers responded to the questionnaire either in a paper form (while waiting for their individual appointment with DECO experts) or in an editable computer file sent to them by email (those who contacted the consumer defense association through its website or by email). Non-over-indebted consumers responded to the questionnaire on paper. Participants did not always respond to all the questions. As a consequence, there is some variation in the number of participants for each analysis. The questionnaire was approved by the ethics committee of the Faculdade de Psicologia of Universidade de Lisboa. Data from consumers were used with their informed consent and always anonymously.

RESULTS

Comparing Between Over-Indebted and Non-over-Indebted Consumers

The following analyses tested for differences between over-indebted and non-over-indebted consumers in the measures of interest (life satisfaction, emotional well-being, sleep, and health). As the two samples were not fully matched in terms of education, monthly income, employment status, and marital status (**Table 1**), we controlled for the effect of these variables by creating a propensity score indicating the predicted probability of being over-indebted vs. non-over-indebted, given these four potentially confounding variables.

Life Satisfaction

Using the valid data from 219 participants (104 over-indebted and 115 non-over-indebted), a repeated measures ANCOVA was conducted with Indebtedness Status (over-indebted, non-over-indebted) as a between-participants factor; Time of life satisfaction (current life satisfaction; predicted future life satisfaction) as a within-participants factor; and the propensity score as a covariate. The dependent variable was participant's assessment of their own life satisfaction using ladder of Cantril (1965).

The ANCOVA yielded two main effects and one interaction (**Figure 1**). A main effect of Indebtedness Status, $F(1, 216) = 47.64$, $p < 0.001$, $\eta_p^2 = 0.18$, such that over-indebted participants reported poorer overall life satisfaction [$M = 5.18$, $SE = 0.19$, 95% CI (4.81, 5.55)] than their non-over-indebted counterparts [$M = 7.00$, $SE = 0.18$, 95% CI (6.68, 7.37)]. A main effect of Time of life satisfaction, $F(1, 216) = 4.46$, $p = 0.04$, $\eta_p^2 = 0.02$, such that all participants reported higher

predicted future life satisfaction [M = 6.85, SE = 0.16, 95% CI (6.55, 7.16)] than current life satisfaction [M = 5.35, SE = 0.13, 95% CI (5.10, 5.61)]. An interaction between Indebtedness Status and Time of life satisfaction, $F(1, 216) = 35.35$, $p < 0.001$, $\eta_p^2 = 0.14$, indicating that although non-over-indebted consumers reported an increase from current [M = 6.77, SE = 0.19, 95% CI (6.40, 7.14)] to predicted future life satisfaction [M = 7.28, SE = 0.22, 95% CI (6.81, 7.72)], $F(1, 216) = 5.43$, $p = 0.021$, $\eta_p^2 = 0.02$, for their over-indebted counterparts, this increase between current [M = 3.94, SE = 0.20, 95% CI (3.55, 4.33)] and predicted future life satisfaction [M = 6.43, SE = 0.24, 95% CI (5.96, 6.89)] was considerably steeper, $F(1, 218) = 115.69$, $p < 001$, $\eta_p^2 = 0.35$.

As expected, over-indebted consumers clearly presented overall lower levels of life satisfaction (i.e., across current and predicted future measures of life satisfaction) compared to non-over-indebted consumers. The current life satisfaction of over-indebted consumers is particularly low (below the midpoint of Cantril's ladder). Interestingly, the reported interaction between current vs. predicted future life satisfaction and over-indebted vs. non-over-indebted consumers suggests that regardless of their difficult financial conditions, over-indebted consumers appear to believe in a better (financial) future as they anticipate a steeper increase in their predicted future life satisfaction.

Emotional Well-Being

Using the valid data from 209 participants (96 over-indebted and 113 non-over-indebted), a repeated measures ANCOVA was conducted with Time of the day (morning, afternoon, and evening) as a within-participants factor, Indebtedness Status (over-indebted, non-over-indebted) as a between-participants factor, and the propensity score as a covariate. The dependent variable was the net affect (composed of the subtraction of the mean negative emotions from the mean positive ones).

The ANCOVA yielded one main effect of Indebtedness Status, $F(1, 206) = 29.91$, $p < 0.001$, $\eta_p^2 = 0.13$, such that over-indebted consumers reported lower emotional well-being [M = −0.29, SE = 0.134 95% CI (−0.95, 0.37)] than their non-over-indebted counterparts [M = 1.15, SE = 0.43, 95% CI (0.30, 2.00)]. The interaction between indebtedness status and net affect suggests that the net affect of over-indebted consumers tended to deteriorate from morning to evening, while the net affect for non-over-indebted consumers tended to improve. However, this interaction did not reach statistical significance $F(2, 412) = 2.39$, $p = 0.093$, $\eta_p^2 = 0.01$ (**Figure 2**).

As expected, emotional well-being (operationalized in terms of net affect), was lower for over-indebted consumers compared to non-over-indebted consumers. Furthermore, over-indebted consumers experienced more negative emotions (relative to positive emotions) than non-over-indebted consumers, and this difference tends to become more pronounced from morning to evening.

Sleep

Using the valid data from 211 participants (100 over-indebted and 111 non-over-indebted), a repeated measures ANCOVA was conducted with Indebtedness Status (over-indebted, non-over-indebted) as a between-participants factor, Sleep (sleep time, sleep quality, and daytime dysfunction) as a within-participants factor, and with the propensity score as a covariate.

FIGURE 1 | Mean evaluations of current and future life satisfaction (with SEs) in over-indebted and non-over-indebted groups.

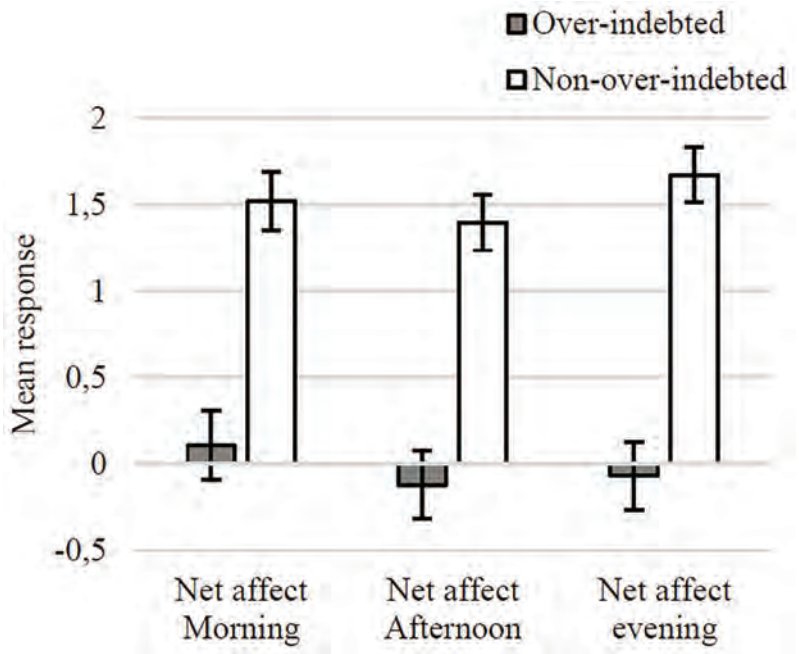

FIGURE 2 | Mean evaluations of net affect on the previous day (with SEs) in over-indebted and non-over-indebted groups.

The ANCOVA yielded a main effect of Indebtedness Status, $F(1, 208) = 54.60$, $p < 0.001$, $\eta_p^2 = 0.21$, indicating that over-indebted consumers report worse sleep overall [$M = 2.87$, $SE = 0.13$, 95% CI (2.61, 3.11)] than non-over-indebted consumers [$M = 2.13$, $SE = 0.16$, 95% CI (1.81, 2.45)]. There was also a main effect of Sleep, $F(2, 416) = 6.15$, $p = 0.002$, $\eta_p^2 = 0.03$ [$M_{\text{Sleep Time(ST)}} = 2.73$, $SE_{ST} = 0.14$, 95% CI (2.45, 3.01), $M_{\text{Sleep Quality(SQ)}} = 2.61$, $SE_{SQ} = 0.14$, 95% CI (2.33, 2.89), and $M_{\text{Daytime Dysfunction(DD)}} = 2.14$, $SE_{DD} = 0.14$, 95% CI (1.86, 2.42)], suggesting lower levels of day time dysfunction compared to the sleep time and sleep quality components (**Figure 3**).

In short, over-indebtedness appears to have substantial negative effects on different aspects of sleep. Over-indebted consumers sleep less and worse than non-over-indebted consumers and have poorer daytime functioning.

Reported Health

Using the valid data from 226 participants (110 over-indebted and 116 non-over-indebted), a one-way ANCOVA was conducted with Indebtedness Status (over-indebted, non-over-indebted) as a between-participants variable and with the propensity score as covariate. The dependent variable was participants reported health.

The ANCOVA yielded a main effect of Indebtedness Status, $F(1, 223) = 34.32$, $p < 0.001$, $\eta_p^2 = 0.13$, such that over-indebted consumers reported poorer health [$M = 3.00$, $SE = 0.08$, 95% CI (2.85, 3.16)] than their non-over-indebted counterparts [$M = 2.33$, $SE = 0.08$, 95% CI (2.18, 2.48)].

Over-indebted consumers' reported health was close to the rating scale point "fair" and significantly worse than non-over-indebted consumers' health (which was closer to the point "good").

Mediation Analysis

In this section, the results of the mediation analysis between indebtedness status (over-indebted and non-over-indebted) and the dependent variables, such as life satisfaction (current), global score of emotional well-being (aggregating for the morning, afternoon, and evening), and health and sleep (aggregating sleep time, sleep quality, and daytime dysfunction) are presented. We controlled for education, income, marital status, and employment status, *via* the propensity score created. Perceived control, financial anxiety, and financial well-being were included as possible mediators. The following analyses were performed using *MPlus* 7.2 (Muthén and Muthén, 1998–2012). Based on theoretical assumptions, significant correlations among mediators and among criterion variables were included in the model. To test the mediation hypotheses, bootstrap estimation was used with 5,000 subsamples to derive the 95% CI for the indirect effects (Preacher and Selig, 2012). The following fit indexes and criteria were used as indicative of a good model fit: the comparative fit index (CFI) and the Tucker-Lewis Index (TLI) higher than 0.95, the root mean square error of approximation (RMSEA) and standardized root mean residual (SRMR) lower than 0.08 (Hu and Bentler, 1999; Kline, 2011).

The multi-mediator path analysis model examining the indirect effects of indebtedness on life satisfaction, emotional well-being, health, and sleep, through perceived control, financial anxiety, and financial well-being, controlling for level of education, income, marital status, and employment status (through the propensity score) presented a good fit to the data: $\chi^2(2) = 6.09$, $p = 0.048$; CFI = 0.995; RMSEA = 0.095, 90% CI: (0.008, 0.185); SRMR = 0.013. The RMSEA index is slightly above the cutoff value of 0.08, but still under the

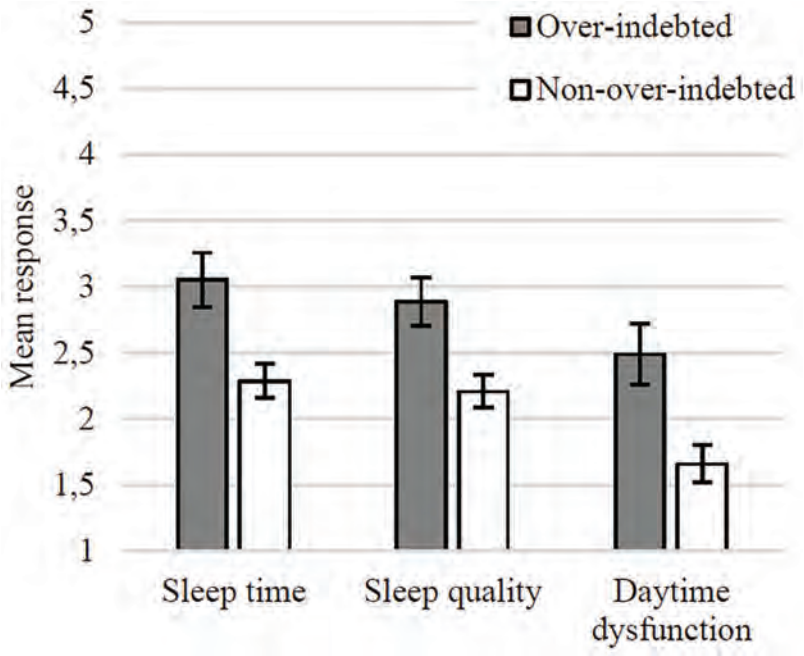

FIGURE 3 | Mean evaluations of sleep time and quality and daytime dysfunction (with SEs) in over-indebted and non-over-indebted groups.

0.10 cutoff value for acceptable fit (Chen et al., 2008). Mode results are depicted in **Figure 4**.

Results revealed significant indirect effects of indebtedness on: (1) life satisfaction, through financial well-being, $B = -1.30$, $SE = 0.30$, $p < 0.001$, 95% CI: (−1.90, −0.76) and perceived control, $B = -0.48$, $SE = 0.16$, $p = 0.002$, 95% CI: (−1.61, −0.24); (2) emotional well-being, through perceived control, $B = -0.91$, $SE = 0.17$, $p < 0.001$, 95% CI: (−1.27, −0.60); (3) sleep quality, also through perceived control, $B = 0.36$, $SE = 0.07$, $p < 0.001$, 95% CI: (0.24, 0.49); and (4) reported health, through financial well-being, $B = 0.22$, $SE = 0.08$, $p = 0.010$, 95% CI: (0.05, 0.38) and perceived control, $B = 0.36$, $SE = 0.08$, $p < 0.001$, 95% CI: (0.21, 0.53).

More specifically, over-indebtedness was associated with: (1) lower levels of perceived control, which in turn predicted lower levels of life satisfaction, emotional well-being, sleep quality, and reported health; and (2) lower levels of financial well-being, which in turn predicted lower levels of life satisfaction and reported health. Although higher levels of financial anxiety were also predicted by over-indebtedness, financial anxiety did not emerge as a significant mediator in the model.

As shown in **Figure 4**, both total and direct effects of indebtedness on life satisfaction and sleep quality were significant, although the direct effects were lower than the total effect. In contrast, the direct effect of indebtedness on emotional well-being and on reported health was not significant. Thus, perceived control and financial well-being partially mediated the association between indebtedness status and life satisfaction, and fully mediated the association between indebtedness status and reported health. Finally, perceived control also fully mediated the association between indebtedness status and emotional well-being and partially mediated the association between indebtedness status and sleep quality. The propensity score did not predict any of the mediating or criterion variables.

Given the cross-sectional nature of the data, we tested four alternative models to exclude the possibility of other plausible pathways: (1) a model that was the "reverse" of our hypothesized model, examining the proposed criterion variables (i.e., life satisfaction, emotional well-being, sleep, and health) as predictors of indebtedness status, *via* the proposed mediators (i.e., perceived control, financial anxiety, and financial well-being; Alternative model 1); (2) a model examining indebtedness status as predictor, the proposed criterion variables as mediators, and the proposed mediators as criterion variables (Alternative model 2); and (3) a model examining the proposed mediators as predictors of the proposed criterion variables, *via* indebtedness status (Alternative model 3); and (4) a model examining perceived control as predictor of the proposed criterion variables, *via* indebtedness status, financial well-being, and financial anxiety (Alternative model 4). We then compared the fit of all models against one another to see which best fit the data. As shown in **Table 2**, the comparison of the fit indices of all models showed that the hypothesized model fit the data better than all four alternative models. In the next section, we thus focus on this model when discussing the mediational analysis results.

DISCUSSION

This paper sought to assess and further explore the association of over-indebtedness to SWB, examining two of its components – life satisfaction and emotional well-being. This is an important

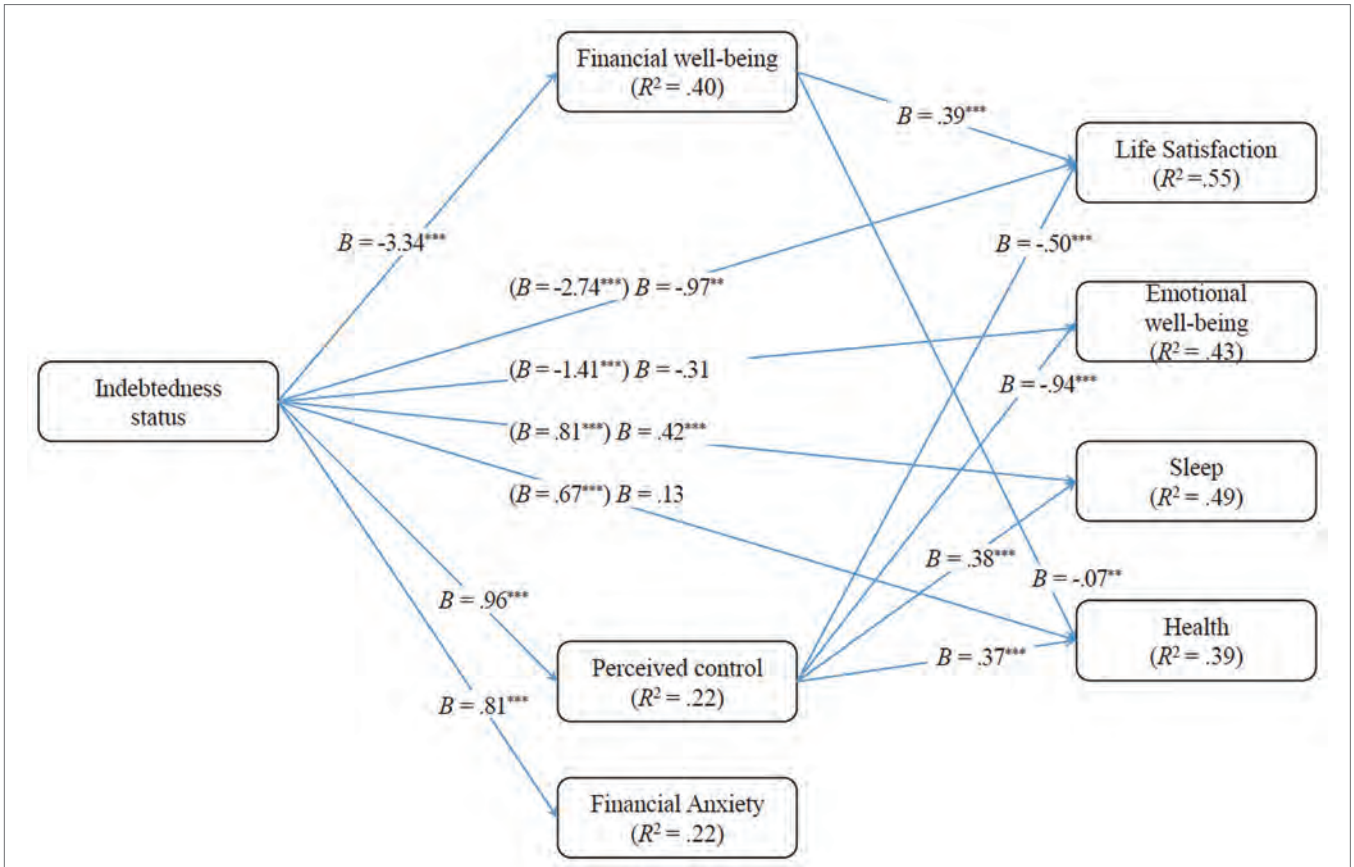

FIGURE 4 | Mediation model for the effect of indebtedness status on life satisfaction, emotional well-being, sleep, and health *via* perceived control, financial well-being, and financial anxiety.

TABLE 2 | Model fit comparison between the proposed model and the alternative models.

Model	χ^2	*p* value	*df*	χ^2/df	CFI	TLI	RMSEA	SRMR
Proposed model	6.09	0.048	2	3.04	0.995	0.916	0.095	0.013
Alternative model 1	11.28	<0.001	1	11.28	0.982	0.539	0.218	0.020
Alternative model 2	7.82	0.020	2	5.64	0.993	0.880	0.113	0.014
Alternative model 3	18.01	<0.001	3	10.63	0.979	0.792	0.151	0.027
Alternative model 4	56.24	<0.001	5	11.25	0.942	0.593	0.213	0.071

χ^2/df, ratio of chi-square to degree of freedom; CFI, Comparative Fit Index; TLI, Tucker-Lewis Index; RMSEA, Root Mean Square Error of Approximation; and SRMR, Standardized Root Mean Square Residual.

issue for several reasons. First, although recent research has confirmed the negative outcomes of over-indebtedness in terms of mental and physical health (e.g., Emami, 2010; Gathergood, 2012; Angel, 2016), there is less research on the impact of debt on SWB. Second, although meta-analysis of Tay et al. (2017) found a negative association between debt and well-being, they did not distinguish between the two facets of well-being here considered. Furthermore, some prior research on well-being suggested that individuals rapidly adapt to life changing events and that most life circumstances have little influence on measures of SWB (Easterlin, 1995; Kahneman et al., 2004). Thus, the extent to which deteriorated life circumstances associated with over-indebtedness lead to decreased life satisfaction and/or emotional well-being is still an important research issue.

In our study, over-indebtedness was associated with lower life satisfaction, adding to the findings of Tay et al. (2017), but also with lower emotional well-being, a crucial component of SWB which has received less attention. Furthermore, the over-indebted consumers in our study were, for the most part, medium to long-term cases of over-indebtedness, who requested the assistance of a consumer defense NGO (DECO) following a lengthy period of financial hardship, and often as a last resort. This suggests that, in contrast with other life changing circumstances, the detrimental effects of over-indebtedness on life satisfaction and emotional well-being do not fade away, as proposed by the hedonic

treadmill hypothesis (Brickman and Campbell, 1971). These results are in line with other findings that point to circumstantial changes that have more than just transitory effects. Among these changes are, for example, the effects of unemployment (often a main cause of indebtedness) and chronic pain (Lucas et al., 2004).

Our study further considered three potential mediators of the relationship between indebtedness status and the two facets of SWB: perceived control, financial anxiety, and financial well-being. The relationship between indebtedness status and life satisfaction was partly mediated by perceived control and financial well-being, that is, over-indebted consumers' lower levels of perceived control and financial well-being partly explained their lower life satisfaction when compared to non-over-indebted consumers. As for emotional well-being, perceived control over one's life fully explained the relationship between over-indebtedness and emotional well-being.

The partial mediation of financial well-being of the relationship between indebtedness and life satisfaction is in line with previous research (Diener et al., 1999; Kahneman, 1999; Tay et al., 2017) and provides some support for the first explanatory mechanism presented in the introduction, according to which life satisfaction is influenced by smaller life domains, one of them being financial well-being. Moreover, finding that financial well-being matters for life satisfaction but not for emotional well-being reaffirms the importance of considering separate measures of these two facets of well-being by confirming that they are different constructs with distinct determinants and consequences (Kahneman and Krueger, 2006).

The second explanation advanced in the introduction argues that a lack of financial resources limits the extent to which consumers may attain their goals, calling into question autonomy and self-control, which are crucial for well-being. The current results provide some support for this account by showing that over-indebtedness reduces consumers' perceived self-control over their own lives. Reduced self-control then lowers both life satisfaction and emotional well-being.

This study also investigated whether indebtedness status predicted health and sleep quality. Confirming previous findings (e.g., Summers and Gutierrez, 2018), over-indebted consumers reported poorer overall health, worse sleep, and more sleep-related disturbances. These are important risk factors to consider. Self-ratings of health, for instance, have been found to be a strong predictor of mortality over the years (Mossey and Shapiro, 1982; Idler and Benyamini, 1997).

The mediating role of the same three variables (perceived control, financial anxiety, and financial well-being) on the impact of over-indebtedness on health and sleep were also explored. Perceived control and financial well-being emerged as the only significant mediators, with both fully mediating the relationship between indebtedness status and health, and perceived control partially mediating the relationship between indebtedness status and sleep quality.

It is noteworthy that perceived control emerged as a consistent mediator of the relationship between over-indebtedness and all dependent variables (life satisfaction, emotional well-being, health, and sleep). In other words, a lack of control over one's life not only contributes to fully explaining the relationship between over-indebtedness and emotional well-being, but also partially explained the relationship between indebtedness status and life satisfaction. Furthermore, perceived control was also found to partially explain sleep quality and to fully explain reported overall health. These results are in line with recent findings by Białowolski et al. (2021), which show that financial control has a substantial impact on well-being (which is greater than being in a financially fragile situation). The authors found that financial control has a protective role on well-being through the promotion of (positive) emotional well-being outcomes and a protective one against emotional ill-being outcomes, which in turn translates into improved physical health and sleep.

Perceived control is a central motivator of individuals' decision-making and behavior (e.g., Miller, 1979; Leotti et al., 2010; Higgins, 2012). It has been defined as "the belief that one can determine one's own internal states and behavior, influence one's environment, and/or bring about desired outcomes" (Wallston et al., 1987, p. 5). Individuals are highly motivated to believe they have control over their lives (e.g., Kelly, 1955; Burger and Cooper, 1979; Rothbaum et al., 1982) and to re-establish it in various ways. Thus, interventions aimed at promoting over-indebted consumers' perceived control may be of relevance to improve their SWB.

Helzer and Jayawickreme (2015) explored the relationship between primary and secondary control strategies and the same two facets of well-being assessed in the present work. They defined primary control as the tendency to achieve mastery over circumstances *via* goal striving, and secondary control as the tendency to achieve mastery over circumstances *via* sense-making. Their findings indicated that primary control was more consistently associated with emotional well-being, whereas secondary control was associated with life satisfaction.

Taken together, the present findings and Helzer and Jayawickreme (2015) results suggest that the different strategies over-indebted consumers may use to re-establish control over their lives will differentially affect well-being. Thus, guidelines for interventions and the provision of support for over-indebted consumers should focus not only on primary control strategies, *via* measures that facilitate consumers' efforts to recover from their severe financial difficulties (e.g., renegotiation of debt payment conditions), but also on secondary control strategies. In the latter case, this would involve helping over-indebted consumers to make sense of their challenging and complex social and financial situation (e.g., facing social discrimination, changing consumer habits) in order to better deal with it. This is particularly relevant for the cases in which increasing primary control might not be immediately feasible.

Finally, identifying over-indebtedness as a long-lasting threat to one's SWB should be taken as a cautionary note for policymakers and practitioners alike. We suggest that the assessment of policies to fight over-indebtedness and empower consumers could include measures of life-satisfaction and emotional well-being. In other words, Government and NGO's educational programs of financial guidance (e.g., financial literacy and financial decision-making courses) as well as specific legislation to protect and empower over-indebted consumers

could include the improvement of consumers' SWB among their standard goals.

Limitations

Although our results unveil the stark consequences that over-indebtedness brings to one's life, this study has several limitations that need to be considered.

First, a cross-sectional design was used, which prevents us from drawing strong conclusions that the individual differences in SWB (sleep quality and health) are due to over-indebtedness status. Nevertheless, the comparison of the proposed model with the alternative ones supported the hypothesized direction of effects over the other possible causal directions. Despite this, it is always possible that other variables (besides those we controlled for) also have predictive value over SWB.

Second, our measure of financial well-being was composed of a single item. Although single item measures have been used before (e.g., Johnson and Krueger, 2006; Switek, 2013), they fail to capture the multi-dimensional nature of financial well-being (Iannello et al., 2020). Future research should thus rely on multiple-item instruments that account for the different dimensions (cognitive, behavioral, materialistic, and relational) of financial well-being (e.g., Sorgente and Lanz, 2019; Iannello et al., 2020).

Third, our procedure classified all cases of over-indebted participants under the same conceptual umbrella, which is likely to be an oversimplification. In other words, not all over-indebted households should be considered equal (Ferreira et al., 2020). The diversity of risk factors of over-indebtedness strongly suggests that there are different over-indebted profiles associated to distinguishable causes (e.g., work loss, disease, low financial literacy, poor decision-making, and financial imprudence). A more fine-grained analysis of the impact of over-indebtedness on well-being should thus distinguish among these causes.

Fourth, although the present research acknowledged the multifaceted nature of well-being by measuring both life satisfaction and emotional well-being, a multidimensional perspective of well-being (Keyes et al., 2002; Iannello et al., 2020) further considers the concept of psychological well-being, which entails the perception of engagement with existential life challenges (Keyes et al., 2002) and is often assessed through the concept of flourishing (Diener et al., 2010). Hence, in order to better evaluate the impact of over-indebtedness on the multiple dimensions of well-being, future research should also include operationalizations of psychological well-being (Ryff and Keyes, 1995).

Future research should ideally replicate these findings using better and more comprehensive measures of well-being and using new matched samples of over-indebted and non-over-indebted households. Furthermore, longitudinal designs with at least two waves of data collection are crucial to clarify causal links and more clearly disentangle alternative mediating directions.

CONCLUSION

In sum, the reported findings (and their limitations) should not be evaluated in isolation but rather as another research effort, contributing to a literature concerning the effects of debt on consumers' well-being. Our results are well-aligned with prior research on the psychological and physical implications of over-indebtedness (replicating several previous findings) and provide some new insights in terms of the underlying mechanisms that link indebtedness to well-being. Moreover, to our knowledge, these are among the first findings specifically focusing on over-indebtedness and different facets of well-being (but see also Angel, 2016; Białowolski et al., 2019) and the first within the Portuguese context. Hopefully, they will contribute to set the stage for further research on these mechanisms and their boundary conditions.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by Ethics committee of the Faculty of Psychology, University of Lisbon. The participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

MF, FA, and JS contributed equally to the conceptualization, data collection and analysis, manuscript writing, and thus sharing first co-authorship. DP, MH, and CS provided the indispensable analysis and inputs on results and discussion. All authors contributed to the article and approved the submitted version.

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Over-indebtedness and its association with pain and pain medication use

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ABSTRACT

In developed countries, millions of households are over-indebted, and the number continues to rise. Studies have found an increased risk of adverse health effects among individuals that cannot cover payment obligations with available assets persistently. However, little is known about the role of over-indebtedness in pain. This study examined the association between over-indebtedness and pain and pain medication use.

A cross-sectional study conducted among over-indebted individuals in 70 debt advisory centres in Germany (OID-survey; n = 699) was linked to the nationally representative German Health Interview and Examination Survey for Adults (DEGS1; n = 7987). Descriptive statistics and logistic regression analyses were used to examine the association between over-indebtedness and pain and pain medication use among participants with valid data on both outcome variables (n = 7560).

Pain was experienced by over-indebted individuals more frequently (71.3%) compared to the general population (59.6%) whereas the prevalence of pain medication use was similar in both samples (DEGS1 12.6% vs. OID-survey 13.1%). Over-indebtedness significantly increased the odds of pain (aOR 1.30; 95%-CI 1.07–1.59) after adjusting for socioeconomic, demographic and health factors. The over-indebted were significantly less likely to use pain medication compared to the general population after adjustment (aOR 0.76; 95%-CI 0.58–0.99).

Taking over-indebtedness into account as risk factor for pain and restricted pain medication use in research and clinical practice will help to advance the understanding of pain disparities, develop suitable interventions for preventive action and promote accessible pain management among those at risk.

1. Introduction

The number of over-indebted households has been increasing across high-income countries (Betti et al., 2007; Barba and Pivetti, 2008; Angel and Heitzmann, 2015; European Commission, 2010). 6.9 million individuals are estimated to be over-indebted in Germany alone, in terms of a continuous inability to cover payment obligations with available assets (Creditreform Wirtschaftsforschung, 2018).

Adverse health effects of low socioeconomic status (SES) – most commonly measured by income, education and occupation – have been well established (Adler and Ostrove, 1999; Mackenbach et al., 2008) whereas the role of over-indebtedness is still understudied (Drentea and Lavrakas, 2000; Richardson et al., 2013; Turunen and Hiilamo, 2014). However, individuals across all socioeconomic positions may be over-indebted (Betti et al., 2007). As a source of severe economic hardship, psychological distress, social exclusion and stigmatization (Clayton et al., 2015; Sweet, 2018), over-indebtedness has been associated with an increased risk of poor health outcomes, including depression (Bridges and Disney, 2010; Alley et al., 2011; Drentea and Reynolds, 2012; Gathergood, 2012; Meltzer et al., 2013), diabetes (Blomgren et al., 2016) and obesity (Münster et al., 2009), independent of conventional SES measures. However, the only study (Ochsmann et al., 2009) that has examined the association between over-indebtedness and pain found increased odds of back pain in over-indebted individuals compared to the German general population after adjustment for socioeconomic and health-related characteristics (aOR: 10.92; 95% CI: 8.96–13.46).

Pain reflects a major global health problem, and exacts a substantial

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societal burden (Goldberg and McGee, 2011; Breivik et al., 2006). Chronic pain accounts for a large proportion of primary care consultations (Deyo et al., 2006; Friessem et al., 2009; Jank et al., 2017), and analgesics are widely used for the treatment of pain (Turunen et al., 2005; Berterame et al., 2016). There is strong evidence showing that pain is distributed unequally across population groups: Those in low socioeconomic positions were shown to have a significantly increased risk of pain (Johannes et al., 2010; Azevedo et al., 2012; Grol-Prokopczyk, 2017), and pain medication use in a few studies (Turunen et al., 2005; Chou et al., 2016). Beyond conventional SES measures, few studies have detected a significant association between ongoing financial strain (Marshall et al., 2018; Jablonska et al., 2006), economic hardship (Rios and Zautra, 2011), deprivation (Morgan et al., 2011) and economic insecurity (Chou et al., 2016) and pain outcomes after adjustment.

In line with evidence on the biopsychosocial model, neurophysiological as well as psychosocial factors influence the experience of pain (Owen et al., 2018; Miller and Kaiser, 2018). These might contribute to increased pain vulnerability, disability and poorer treatment outcomes among over-indebted individuals. Therefore, the objective of this study was to examine the association between over-indebtedness, pain and pain medication use.

2. Methods

A cross-sectional study among over-indebted individuals (OID-survey; German: ArSemü) (Münster et al., 2019) was merged with the first wave of the nationally representative German Health Interview and Examination Survey for Adults (DEGS1) (Robert Koch Institute, 2015).

Between July and October 2017, an anonymous survey was conducted among clients of 70 approved debt advisory centres in North Rhine-Westphalia in western Germany using a standardized self-administered written health questionnaire developed for this study. Eligible participants were required to have completed at least an initial consultation considered necessary to build trust. One respondent within each household, individuals aged 16 years and above, and all nationalities were considered eligible. Sufficient language, reading and writing skills were required to complete the questionnaire. Each debt advisory centre received a specific number of questionnaires and stamped addressed envelopes according to self-reported available resources for recruitment. A comprehensive information letter introduced study objectives and procedures to debt advisors that identified eligible clients and handed out the study material to clients. Of 1393 clients, 699 returned the questionnaire with complete data on sex and age (response rate: 50.2%). The ethical committee of the University Medical Faculty in Bonn, Germany, approved the survey (No. 167/17).

Data on the over-indebted population group were merged with the nationally representative data on adults aged 18 to 79 years (Supplementary file 1). Between 2008 and 2011, the national public health agency, Robert Koch Institute (RKI), conducted DEGS1 as part of the health-monitoring programme. Further details of the methodology of DEGS1 have been published elsewhere (Scheidt-Nave et al., 2012; Kamtsiuris et al., 2013). Data on 7987 individuals randomly selected from local population registries were available for public use.

So far there is a lack of a broadly accepted definition of over-indebtedness (European Commission, 2008). In Germany, approved debt advisory centres offer counselling for over-indebted private households and have a mandated role in national legal provisions on consumer insolvency proceedings. Thus, we considered eligible clients of debt advisory centres as over-indebted and DEGS1 respondents as non-over-indebted. All debt advisory centres in this study were associated with the local German Consumer Organisation or one of the member organisations of the 'Expert Committee Debt Counselling of Non-statutory Welfare NRW' (German: Fachausschuss Schuldnerberatung der Freien Wohlfahrtspflege NRW). Due to missing data on outcome variables, 1126 individuals were excluded from analyses (OID-survey: n = 71; DEGS1: n = 1055). On this basis, the merged dataset comprised 7560 individuals (OID-survey: n = 628; DEGS1: n = 6932). Exclusion of participants with missing outcome data could yield biased estimates but complete case analysis showed stable results.

Both surveys captured self-reported experiences of pain for the last four weeks: In the OID-survey, respondents rated the frequency of pain on a 4-point scale (not at all; less than once a week; once or twice a week; three or more times per week). In DEGS1, severity of pain (no pain; very mild; mild; moderate; strong; very strong) and the interference with daily activities due to pain (not at all; little; somewhat; strong; very strong) were assessed. However, data on pain among DEGS1 respondents was available for public use only in the form of a transformed variable that combined these two measures into a continuous variable ranging from 100 (absence of pain) to 0 (very strong pain and/or interference with daily activities). Available data were dichotomized into presence versus absence of any pain for subsequent analyses. In the OID-survey, those individuals reporting to have experienced pain 'not at all', and DEGS1 respondents with a transformed value of 100, i.e. no pain and interference with daily activities due to pain, were classified as reference group.

Pain medication in the last seven days was identified by the 'Anatomical Therapeutic Chemical' (ATC) code 'N02'. OID-survey respondents self-reported any medication use and underlying complaints whereas DEGS1 respondents were asked to bring all packages of pharmaceuticals they had used to the medical examination (Knopf and Grams, 2013). In the OID-survey, the ATC code was derived from the self-reported name of the medical product based on the national database of medicinal drugs, substances and drug-related information (ABDA database) offered by the German Institute of Medical Documentation and Information (DIMDI). In DEGS1, the 'Central Pharmaceutical Number' (PZN) that identifies medical products in Germany or the brand name was recorded at the study centre to identify ATC classification. Missing information was acquired by further inquiry via phone or mail (Knopf and Grams, 2013).

Based on previous research, sociodemographic variables, including sex, age, educational attainment, employment and marital status were considered as covariates in logistic regression analyses to control for potential confounding and to examine systematic differences between the two study populations. Age was classified into four age groups (18–29; 30–49; 50–64; 65–79 years) to differentiate phases of life. Educational level was classified into three categories (low, medium, high) according to the International Standard Classification of Education (ISCED) (.UNESCO, 2011). The current employment status was dichotomized a priori: "Unemployment" (student; volunteer; intern; vocational training; retired; homemaker; unemployed; unable to work) and "employment" (full-time; part-time; minor employment; temporary leave). Marital status was classified into three groups: married, divorced or widowed, and single.

Individuals' health status was considered based on the assessment of ongoing chronic health conditions. In DEGS1, participants reported the presence or absence of chronic diseases only (yes; no; I don't know) whereas over-indebted individuals in the OID-survey were asked to specify chronic illnesses if applicable (no; yes, namely: …; I don't know). Chronic illnesses reported by over-indebted individuals were verified and classified according to ICD-10-GM (German adaptation of the International Statistical Classification of Diseases and Related Health Problems). We also assumed a chronic disease when participants' self-reported medication regimen could be attributed to a chronic health condition by medical experts.

Individuals' mental health status was taken into account to control for the potential disease-specific impact of depression and anxiety disorders on pain (Tsang et al., 2008). In DEGS1, available data on psychological disorders comprised the self-reported prevalence of diagnosed depression and anxiety disorders in the previous 12-month. In the OID-survey, information on the 12-month prevalence of psychological

Table 1
Study population characteristics (n = 7560).

Variable	Full sample (n = 7560)		DEGS1[†] (n = 6932)		OID-survey[‡] (n = 628)	
Sex (n, %)						
Male	3600	47.6	3309	47.7	291	46.3
Female	3960	52.4	3623	52.3	337	53.7
Age (n, %)						
18–29 years	1167	15.4	1059	15.3	108	17.2
30–49 years	2415	31.9	2096	30.2	319	50.8
50–64 years	2177	28.8	2015	29.1	162	25.8
65–79 years	1801	23.8	1762	25.4	39	6.2
Marital status (n, %)						
Married	4687	62.0	4503	65.0	184	29.3
Single	1800	23.8	1562	22.5	238	37.9
Divorced or widowed	1017	13.5	822	11.9	195	31.1
Missing	56	0.7	45	0.6	11	1.8
Education level (n, %)						
Low	1211	16.0	948	13.7	263	41.9
Medium	4044	53.5	3719	53.6	325	51.8
High	2276	30.1	2245	32.4	31	4.9
Missing	29	0.4	20	0.3	9	1.4
Employment status (n, %)						
Employment	4461	59.0	4133	59.6	328	52.2
Unemployment	2974	39.3	2740	39.5	234	37.3
Missing	125	1.7	59	0.9	66	10.5
Chronic illness (n, %)						
Yes	2584	34.1	2200	31.7	384	61.1
No	4594	61.2	4377	63.1	217	34.6
Missing	382	5.1	355	5.1	27	4.3
Depression/anxiety (n, %)						
Yes	533	7.1	434	6.3	99	15.8
No	6915	91.5	6433	92.8	482	76.8
Missing	112	1.5	65	0.9	47	7.5

[†] DEGS1, Germany (2008–2011).
[‡] OID-survey, Germany (2017).

disorders was categorized accordingly, i.e. presence or absence of a depression or anxiety disorder.

First, descriptive statistics were used to illustrate population characteristics and the prevalence of pain and pain medication use. Second, multiple logistic regression analyses were used to identify factors that predict pain and pain medication use. All independent variables were entered into the model simultaneously. The reference group for covariates was defined as the most frequent category, except for the reference categories of sex (male) and age (youngest age group) to simplify interpretation. Within covariates, missing values that were below a threshold of 5% were assigned to the most frequent category in the full sample. Missings above this threshold were assigned to a separate category. The level of statistical significance was set at 0.05. Analyses were carried out using IBM SPSS (version 25).

3. Results

The full sample of 7560 individuals aged 18 to 79 years, comprised females (52.4%) and males (47.6%) in nearly equal shares (Table 1). The majority of over-indebted respondents (OID-survey: 68.0%) was under 50 years of age (DEGS1: 45.5%). A smaller share of over-indebted individuals than the general population was married (OID-survey: 29.3%; DEGS1: 65.0%). Educational attainment in the over-indebted was lower than in the general population. The majority of both OID-survey (52.2%) and DEGS1 (59.6%) respondents was employed. The prevalence of chronic illness and depression and anxiety disorders was higher in the OID-survey than in DEGS1.

The prevalence of pain during the last four weeks was higher in the over-indebted sample (71.3%) than in the general population (59.6%) (Table 2). The prevalence of pain medication use during the last four weeks was 13.1% in the OID-survey and 12.6% in DEGS1.

Table 2
Prevalence of pain and pain medication use (n = 7560).

Variable	Full sample (n = 7560)		DEGS1[†] (n = 6932)		OID-survey[‡] (n = 628)	
Pain[a] (n, %)						
Yes	4582	60.6	4134	59.6	448	71.3
No	2978	39.4	2798	40.4	180	28.7
Pain medication use[b] (n, %)						
Yes	956	12.6	874	12.6	82	13.1
No	6604	87.4	6058	87.4	546	86.9

[†] DEGS1, Germany (2008–2011).
[‡] OID-survey, Germany (2017).
[a] Pain in the last four weeks.
[b] Pain medication use in the last 7 days.

Table 3
Unadjusted and adjusted odds ratios (OR/aOR) and 95% confidence intervals (CI) of pain and pain medication use (n = 7560).[*]

	Pain[a]		Pain medication use[b]	
	OR	95%-CI	OR	95%-CI
Over-indebtedness[c]	1.69	1.41–2.02	1.04	0.82–1.33

	Pain[a]		Pain medication use[b]	
	aOR	95%-CI	aOR	95%-CI
Over-indebtedness[c]	1.30	1.07–1.59	0.76	0.58–0.99
Pain[a]	–	–	2.46	2.08-2.92
Female[d]	1.35	1.22–1.49	1.39	1.21–1.61
Age				
18–29 years	Reference (Ref.)	Ref.	Ref.	Ref.
30–49 years	1.51	1.28–1.80	0.90	0.69–1.15
50–64 years	1.99	1.64–2.40	0.71	0.54–0.94
65–79 years	2.03	1.64–2.51	0.69	0.50–0.93
Marital status				
Married	Ref.	Ref.	Ref.	Ref.
Single	0.90	0.78–1.04	0.96	0.78–1.19
Divorced/widowed	1.09	0.93–1.28	1.03	0.84–1.27
Education level				
Low	1.12	0.97–1.30	0.99	0.81–1.20
Medium	Ref.	Ref.	Ref.	Ref.
High	0.90	0.81–1.01	0.91	0.77–1.08
Unemployment[e]	1.16	1.02–1.32	1.02	0.85–1.21
Chronic illness				
No	Ref.	Ref.	Ref.	Ref.
Yes	2.36	2.10–2.65	1.44	1.23–1.68
Missing	2.24	1.78–2.82	1.26	0.93–1.71
Depression/anxiety[f]	2.38	1.87–3.02	1.28	1.01–1.62

[*] Full sample: DEGS1, Germany (2008–2011), OID-survey, Germany (2017).
[a] Pain in the last four weeks.
[b] Pain medication use in the last 7 days.
[c] Not over-indebted (Ref.).
[d] Male (Ref.).
[e] Employment (Ref.).
[f] Absence of depression/anxiety (Ref.).

As shown in Table 3, crude logistic regression analysis demonstrated significantly higher odds of pain among the over-indebted (OR 1.69; 95%-CI 1.41–2.02) compared to the general population. After adjustment for sociodemographic and health factors, over-indebtedness remained significantly associated with pain. The over-indebted had 1.30 greater odds of experiences of pain (95%-CI 1.07–1.59) compared to the general population. Sociodemographic characteristics had a significant effect on the experience of pain. Women (aOR 1.35; 95%-CI 1.22–1.49) and individuals aged 30 years and above (aOR 1.51–2.03; 95%-CI

1.28–2.51 across age groups) had higher odds of experiencing pain. In the adjusted model, unemployed individuals had significantly higher odds of experiencing pain (aOR 1.16; 95%-CI 1.02–1.32). The associations between the chronic illness (aOR 2.36; 95%-CI 2.10–2.65) and psychological disorder (aOR 2.38; 95%-CI 1.87–3.02) and the presence of pain were statistically significant.

In the crude analysis, there was no statistically significant association between over-indebtedness and pain medication use (Table 3). After adjustment the over-indebted had reduced odds of pain medication use compared to the general population (aOR 0.76; 95%-CI 0.58–0.99) whereas other socioeconomic measures, i.e. educational level and unemployment were not significantly related to pain medication use.

Female sex (aOR 1.39; 95%-CI 1.21–1.61) was associated with significantly increased odds of using pain medication. Individuals aged 50 years and above had significantly lower odds of using pain medication compared to the youngest age group (aOR 0.69–0.71; 95%-CI 0.50–0.94 across age groups). Health factors that comprised pain (aOR 2.46; 95%-CI 2.08–2.92), chronic illness (aOR 1.44; 95%-CI 1.23–1.68) and depression and anxiety (aOR 1.28; 95%-CI 1.01–1.62) were positively associated with pain medication use.

4. Discussion

The present study revealed significantly increased odds of pain (aOR 1.30; 95%-CI 1.07–1.59) for over-indebted individuals compared to the general population. Nevertheless, the over-indebted were less likely to use pain medication for symptom relief (aOR 0.76; 95%-CI 0.58–0.99). A key finding was that the association between over-indebtedness, pain and pain medication was significant after adjustment for conventional socioeconomic measures, i.e. educational attainment and unemployment, physical and mental health status and sociodemographic characteristics.

In view of the millions of individuals that are continuously unable to repay their debts with available assets, the findings of this study suggest that pain among the over-indebted is an important public health issue (Betti et al., 2007; Angel and Heitzmann, 2015; European Commission, 2008). Until today, insights into determinants of pain disparities, best practices for pain treatment and effective interventions to address disparities in pain management are limited (Goldberg and McGee, 2011; Campbell et al., 2012). This study adds to the small but growing literature that indicates a significant association between measures of financial stress and pain, and in part, frequent use of analgesics independent of the well-established association with SES (Johannes et al., 2010; Azevedo et al., 2012; Grol-Prokopczyk, 2017; Chou et al., 2016). Recently, a significant association between ongoing financial strain and difficulty paying bills, and severe pain was shown in a representative US sample of older men (Marshall et al., 2018). Based on daily assessments for 30 days a study among women with chronic pain found a significant association between both day-to-day financial worry and economic hardship and daily pain severity even after adjustment for sociodemographic factors and personality (Rios and Zautra, 2011). A single cross-sectional study (Ochsmann et al., 2009) found that over-indebted individuals were eleven times more likely to suffer from back pain compared to the general population (aOR 10.92; 95%-CI 8.96–13.46) independent of other socioeconomic and health factors.

The available literature suggests that even minor or short-term financial strain can adversely affect pain in different ways. The experience of pain depends on both nociception which reflects stimulation of nerves due to potential tissue damage and the subjective perception of pain that relates to affective and behavioural responses to pain (Gatchel et al., 2007). Thus, biopsychosocial mechanisms may explain the association between over-indebtedness and pain outcomes. These can be linked to the increased risk of diseases found in this population group (Richardson et al., 2013; Turunen and Hiilamo, 2014) as well as the subjective experience of pain, beliefs about pain, suffering and coping (Gatchel et al., 2007). More specifically, over-indebted individuals might be more vulnerable to experience pain due to comorbid disorders. Moreover, the over-indebted possibly perceive pain sensations as more intense and less controllable than those who are not over-indebted when facing ongoing debt-related stress and negative feelings such as lack of control, shame or hopelessness (Turunen and Hiilamo, 2014; Wang, 2010; Meltzer et al., 2011). Beliefs about self-efficacy or effectiveness of pain management might prevent pain rehabilitation and reflect perpetuating factors (Gatchel et al., 2007).

A larger share of the over-indebted than the general population in this study had a low SES which may reflect increased physical demands at the workplace that have been associated with pain outcomes (Courvoisier et al., 2011). Educational attainment, however, was not associated with experiences of pain whereas a significant association between unemployment and pain was shown. In this context, the independent association between over-indebtedness and pain suggests that this concept goes beyond previously considered socioeconomic indicators (Braveman et al., 2005; Fliesser et al., 2017).

Research on socioeconomic disparities in pain management, specifically in the presence of persistent financial stress is relatively sparse. Some studies have identified a positive association between unemployment (Chou et al., 2016), low educational level (Turunen et al., 2005), and analgesics use. These findings have been related to potentially greater exposure to pain, and consequently higher familiarity with pain medication use among those in lower socioeconomic positions (Chou et al., 2016; Hong et al., 2016). However, other studies have suggested that analgesics are more affordable and accessible for those with higher SES: In a representative sample of the German population low SES has been associated with significantly more prescribed analgesics use but not over-the-counter (OTC) analgesics use (Sarganas et al., 2015). Based on the 2009 European Health Interview Survey for Spain, higher educational attainment and monthly income was associated with increased odds of analgesic self-medication (Carrasco-Garrido et al., 2014). There are a few studies that have found general medication non-adherence related to different types of debt (Alley et al., 2011; Kalousova and Burgard, 2014).

In contrast to these findings, none of the conventional socioeconomic measures considered in the present study, i.e. educational attainment and unemployment, showed a consistent significant association with pain medication use. However, over-indebtedness was significantly associated with reduced odds of pain medication use (aOR 0.76; 95%-CI 0.58–0.99). Persistent unmanageable debt may adversely affect affordability of both prescription and OTC medication that require (co-)payments in Germany (Turunen and Hiilamo, 2014; Israel, 2016). In Germany, copayments range from EUR5 to EUR10 for each prescribed medication for adults covered by statutory health insurance, and any cost related to OTC medications according to the Social Security Code (SGB, Book V). Thus, over-indebted individuals may be less likely to use analgesics than the general population when experiencing pain due to costs of medications. National legal regulations on debt and co-payments for medications differ which may contribute to inconsistent findings across countries. However, when recognizing access to pain management as a fundamental human right as proposed by the United Nations and other international organisations (Cousins and Lynch, 2011; Brennan et al., 2016), the latter finding highlights the urgent need for intervention among those at risk.

4.1. Limitations

Although assumptions are strong that over-indebtedness precedes pain and medication use rather than vice versa, the direction of the observed associations cannot be established due to the cross-sectional study design. Due to the lack of information on debts in DEGS1, possible misclassification of respondents as ‘non-over-indebted’ could have attenuated the observed effect sizes. We statistically controlled for key sociodemographic characteristics to account for potential differences

between the OID and DEGS1 samples. However, due to a lack of data, we did not consider additional covariates such as participants' ethnic origin which might induce unmeasured confounding.

The prevalence of pain during the last four weeks in the general population was higher in the present study than previous estimates across populations in developed countries because these have mainly quantified chronic pain persisting for at least three to six months (Tsang et al., 2008; Andrews et al., 2018). Due to the subjective experience of pain, the more detailed pain assessment in DEGS1 may lead to bias toward the null for over-indebtedness. However, the assessment period was equivalent, and comparability of the indicators of pain enhanced by dichotomizing the experience of pain a priori. Therefore, differences in pain indicators between the OID-survey and DEGS1 might introduce a minor bias.

Information on medication intake in the OID-survey exclusively relied on self-reported data whereas records of medicines in DEGS1 were based on a more comprehensive documentation of pharmaceutical products at study centres (Knopf and Grams, 2013). When assuming that underreporting of analgesics use possibly played a more important role in the over-indebted sample, the negative association between over-indebtedness and pain medication use might be attenuated. However, due to the major impact of chronic pain on patients' life (Dueñas et al., 2016), it is likely that over-indebted respondents have reported recent analgesics use when applicable.

5. Conclusions

The present study is the first to demonstrate that the over-indebted population group is at increased risk of suffering from pain but less likely to use pain medication compared to the general population. The results contribute to the mounting evidence on pain disparities in disadvantaged groups. These disparities need to be tackled in order to avert escalating societal costs of pain, to minimize unrelieved pain and pain-related disability among risk groups. It might help to increase awareness of over-indebtedness as a potential risk factor for pain and undertreatment of pain to overcome barriers to recognition, effective treatment and management of pain among stakeholders in the field of clinical practice, social policy and research. The findings suggest that interdisciplinary interventions, which comprise physical, psychosocial and pharmacological approaches, may be useful to address pain disparities and to promote access to pain management for all.

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Declaration of competing interest

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Over-indebtedness and its association with sleep and sleep medication use

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Abstract

Background: Over indebtedness is currently rising in high income countries. Millions of citizens are confronted with the persistent situation when household income and assets are insufficient to cover payment obligations and living expenses. Previous research shows that over indebtedness increases the risk of various adverse health effects. However, its association with sleep problems has not yet been examined. The objective of this study was to investigate the association between over indebtedness and sleep problems and sleep medication use.

Methods: A cross sectional study on over indebtedness (OID survey) was conducted in 70 debt advisory centres in Germany in 2017 that included 699 over indebted respondents. The survey data were combined with the nationally representative German Health Interview and Examination Survey for Adults (DEGS1; $n = 7987$). We limited analyses to participants with complete data on all sleep variables (OID: $n = 538$, DEGS1: $n = 7447$). Descriptive analyses and logistic regression analyses were used to examine the association between over indebtedness and difficulty initiating and maintaining sleep, and sleep medication use.

Results: A higher prevalence of sleep problems and sleep medication use was observed among over indebted individuals compared to the general population. After adjustment for socio economic and health factors (age, sex, education, marital status, employment status, subjective health status and mental illness), over indebtedness significantly increased the risk of difficulties with sleep onset (adjusted odds ratio (aOR) 1.79, 95% confidence interval (CI) 1.45–2.21), sleep maintenance (aOR 1.45, 95% CI 1.17–1.80) and sleep medication use (aOR 3.94, 95% CI 2.96–5.24).

Conclusions: Evidence suggests a strong association between over indebtedness and poor sleep and sleep medication use independent of conventional socioeconomic measures. Considering over indebtedness in both research and health care practice will help to advance the understanding of sleep disparities, and facilitate interventions for those at risk.

Trial registration: German Clinical Trials Register: DRKS00013100 (OID survey, ArSemü); Date of registration: 23.10.2017; Date of enrolment of the first participant: 18.07.2017, retrospectively registered.

Keywords: Over indebtedness, Financial problems, Financial strain, Debt, Sleep problems, Insomnia, Medication use, Hypnotics, Socioeconomic status, Epidemiology

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Background

Over-indebtedness has been increasing steadily across Europe [1], and beyond [2]. In Germany alone, currently 6.9 million individuals are estimated to be over-indebted, defined as the situation when household income and assets are insufficient to both meet all payment obligations and cover living expenses over a longer period of time [3]. Those affected are facing severe financial stress and are prone to experience social exclusion and stigmatization [4]. While negative consequences of common measures of socioeconomic status (SES), i.e. income, educational attainment and occupation, on health have been well documented [5, 6], over-indebtedness has been largely neglected in health research [7]. Contrary to common belief, however, over-indebtedness is not limited to those in lower socioeconomic positions but may affect individuals at all income and education levels or occupational status [1, 4]. Recent research has revealed that over-indebtedness is a relevant determinant of health independent of conventional socioeconomic measures. Available studies indicate an association between over-indebtedness and mental and physical morbidity [8], such as depression [9], diabetes [10], obesity [11, 12], and back pain [13]. More specifically, a first longitudinal register-based study of 48778 Finnish adults during 1995–2010 has recently shown an association between over-indebtedness and an increased incidence of various chronic diseases [10]. Thus, over-indebtedness has been shown to increase the risk of serious adverse health effects, but its association with sleep problems and associated sleep medication use has not yet been examined.

Recent population studies suggest a steady increase in sleep problems as well as the use of sleep medication in industrialized countries [14–19]. Common sleep disturbances and sleep disorders such as insomnia encompass problems with initiating sleep, remaining asleep, poor sleep quality or insufficient sleep duration [20, 21]. The prevalence rate of these symptoms amounts to approximately 30% whereas specific sleep disorders affect 5 to 10% of adult populations [22–26]. In clinical practice, sedative medications such as hypnotics have a long-standing history in the treatment of sleep problems [27–29]. Between 4 and 10% of adult populations report chronic and current use of sleep medications [29, 30].

Although a growing body of evidence supports an association between physical, psychological as well as socioeconomic parameters and sleep problems and sleep medication use, none of the previous studies has yet considered the potential influence of over-indebtedness.

Sleep is an essential requisite for physical and mental well-being and functioning [21, 56]. Therefore, it is a highly relevant public health issue to address the complexity of socioeconomic disparities in sleep that are assumed to go beyond common measures of socioeconomic status or temporary economic difficulties: Substantial societal cost have been suggested to arise from sleep problems in terms of accidents [57] and occupational injuries [58], absenteeism, productivity [59–66] as well as health care utilization [67, 68]. Moreover, studies have identified associations between sleep problems and a wide range of adverse health effects: Poor sleepers have been shown to have an increased risk of weight gain and obesity [69, 70], hypertension [71–73]; hyperlipidaemia [74, 75]; inflammation [76]; diabetes [71, 74, 77, 78], stroke [75, 79], heart attack [75, 80] mortality [54, 81–83], and reduced quality of life [84].

The aim of this study was to examine the association between over-indebtedness and sleep problems as well as sleep medication use, to contribute to broadening the understanding of underlying mechanisms of sleep disparities. In order to understand the role of over-indebtedness with regards to difficulties with sleep, the prevalence and factors associated with sleep complaints and sleep medication use among over-indebted individuals are assessed, and compared to nationally representative data from the German population.

Methods

The present study is based on a cross-sectional survey among over-indebted individuals (OID survey) [85] that was combined with to the first wave of the German Health Interview and Examination Survey for Adults (DEGS1) [86] (see detailed comparison in Fig. 1).

An anonymous health survey using a self-administered written questionnaire was conducted among clients visiting approved debt advisory centres in North Rhine-Westphalia (NRW), Germany, between July and October 2017. Of 145 non-profit debt advisory centres that were invited to act as recruiters by their umbrella organisation, 70 centres agreed to participate. All debt advisory centres were associated with the local German Consumer Organisation or one of the member organisations of the 'Expert Committee Debt Counselling of Non-statutory Welfare NRW' (German: Fachausschuss Schuldnerberatung der Freien Wohlfahrtspflege NRW). Counselling services offered by debt advisory centres across Germany are similar. North Rhine-Westphalia is the most populous of the 16 federal states in Germany (17.5 million inhabitants, 2011). Its demographic structure (gender, age distribution, foreigners) is similar to the national average [87]. We chose to invite advisory centres in North Rhine-Westphalia to participate in the study due to the location of our study centre in that federal state which facilitated contact to both the local umbrella organisations and advisory centres.

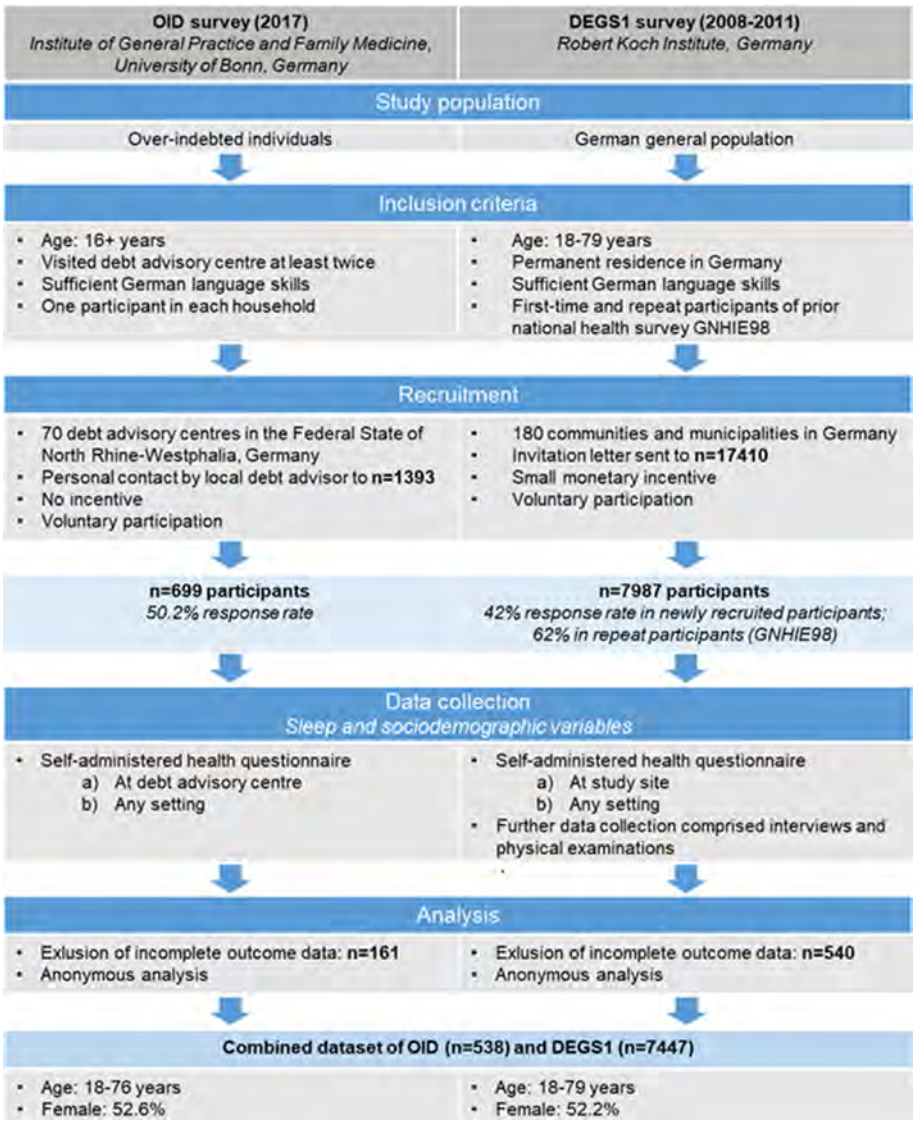

Fig. 1 Methods of the OID and DEGS1 survey

Eligibility criteria comprised a minimum age of 16 years due to limited contractual capability. Eligible persons were invited to participate in the survey by debt advisors as of the second consultation because the initial counselling interview reflects a sensitive moment required to build trust. All nationalities were considered but only one respondent within each household. Language, reading and writing skills were required due to the data collection method. Debt advisors received both the study material and a comprehensive information letter which illustrated the study objectives, procedures and eligibility criteria in order to standardise the recruitment and survey. The anonymous self-administered questionnaire that was specifically developed for the target group and stamped addressed envelopes were handed to eligible clients by the debt advisors. The health survey focused on the assessment of medication use and self-medication use among over-indebted individuals. Sociodemographic parameters, including age, sex, education, and measures of over-indebtedness, as well as health status, illnesses and utilization of health care services were assessed. Only respondents who reported sex and age were included for analyses. In the OID survey, a total of 1393 individuals were offered the study material by debt advisors. 699 of these returned the questionnaire with complete data on sex and age which reflects a response rate of 50.2%. This study was approved by the ethical committee of the University Medical Faculty in Bonn (No. 167/17).

The data collected among over-indebted individuals was combined with nationally representative health data.

As part of the German health-monitoring programme by the national public health agency, the Robert Koch Institute (RKI), data on adults aged 18 to 79 years was collected in DEGS1 between 2008 and 2011. Methodological considerations of DEGS1 have been published depicting recruitment of participants, data collection and data management in great detail [88, 89]. The random DEGS1 sample selected from local population registries comprised 7987 individuals that were available for public use. While the response rate among newly recruited study participants was 42%, the response rate among adults that had already participated in a previous national health survey in 1997–1999 (German National Health Interview and Examination Survey 1998, GNHIES98) was 62% [88]. The DEGS1 study protocol was approved by the Charité-Universitätsmedizin Berlin ethics committee in September 2008 (No. EA2/047/08).

A broadly accepted definition of over-indebtedness is not yet available. However, over-indebtedness commonly refers to a household's persistent and ongoing difficulties meeting financial commitments that can be measured by using data on arrears, debt settlement, financial burden or consulting debt counselling services [90]. In our study, we classified all clients of debt advisory centres that were eligible to participate in the survey as over-indebted whereas all participants of the DEGS1 survey were classified as non-over-indebted. Due to the lack of information on debts in the DEGS1 survey, just as in other available population-based surveys, this procedure may introduce attenuation in terms of a bias toward the null. We limited analyses to participants with complete data on all sleep variables (OID: $n = 538$; DEGS1: $n = 7447$). Thus, all participants of the OID survey and DEGS1 with missing data on sleep-related outcome variables, i.e. problems concerning sleep onset, sleep maintenance and/or sleep medication use (OID survey: $n = 161$; DEGS1: $n = 540$) were excluded from analyses. Following the merging of data from the OID survey ($n = 538$) and the DEGS1 survey ($n = 7447$), the combined dataset used for analysis comprised 7985 individuals in total.

Both surveys captured the key outcomes frequency of sleep problems and sleep medication use by the same items: Sleep problems were assessed in terms of difficulties with sleep onset and sleep maintenance in the previous four weeks. The frequency of these sleep problems was rated on a 4-point scale (not at all, less than once a week, once or twice a week, three or more times per week). Likewise, self-reported sleep medication use in the past four weeks was assessed. For logistic regression analysis, the outcome variables were dichotomised referring to the experience of problems with sleep onset, sleep maintenance and sleep medication use (not at all, yes) to assess any complaints related to sleep problems and sleep medication use rather than to identify insomnia disorder.

Based on previous studies, sociodemographic variables were included as covariates in logistic regression analyses to control for potential confounding and systematic differences between the two study populations: Besides sex, age that was classified into four age groups (18–29 years, 30–49, 50–64 and 65–79 years) to differentiate phases of life was considered. Educational level according to the International Standard Classification of Education (ISCED) [91] was classified into three categories (low, medium, high). We dichotomized current employment status as "employed" or "unemployed" to control for occupational factors such as work stress, workload and unemployment that might influence sleep. The data on the current employment status of OID and DEGS1 respondents were derived from multiple answers questions. When participants reported any kind of full or part-time employment, we considered these as currently employed. Marital status was classified into three groups a priori: we compared the married that were cohabiting (Reference) with individuals that were divorced, widowed or living separately and singles to account for potential differences in the frequency of regularly sleeping in a shared bed and the effect of socioeconomic advantages of marriage. Moreover, the subjective health status was included as potential confounder and dichotomised a priori into two groups, i.e. "good" to "very good" versus "fair" to "(very) poor". The presence of a psychological disorder (absent versus present) was also considered in order to control for the potential impact of such conditions on sleep. In DEGS1, available data on psychological disorders comprised the self-reported 12-month prevalence of diagnosed depression and anxiety disorder. In the OID survey data on both self-reported chronic illnesses and medical indication for medication use in the last seven days was used to capture the presence of a psychological disorder according to the assessment in DEGS1. These data were first classified according to ICD-10-GM (German adaptation of the International Statistical Classification of Diseases and Related Health Problems) by medical professionals. Subsequently, illnesses were further classified to indicate presence or absence of a depression (F32, 33) or anxiety disorder (F40, 41).

Descriptive statistics were used to illustrate population characteristics and to examine differences in the distribution of sociodemographic and health characteristics between the OID and DEGS1 samples using chi-squared test. The prevalence of sleep problems and sleep medication use associated with over-indebtedness was calculated. Multiple logistic regression analysis was used to identify factors that predict sleep problems and use of sleep medication (see Additional file 2: Tables S2 for

further analysis). Within covariates missing values that were all below a threshold of 5% were assigned to the most frequent category in the combined dataset of the OID ($n = 538$) and DEGS1 ($n = 7447$) sample. As a sensitivity analysis, we conducted complete case analysis to validate the approach to handle missing data (Additional file 1: Table S1). All independent variables were entered into the model simultaneously. The reference group was defined as the most frequent category, except for the reference category of sex (male) and age (youngest age group) to simplify interpretation. The level of statistical significance was set at 0.05 for all analyses. Analyses were carried out using IBM SPSS statistics (version 25).

Results

Altogether 7985 persons, aged 18 to 79 years, were included in the combined dataset of the OID ($n = 538$) and DEGS1 ($n = 7447$) samples. Female and male participants were represented in both samples in nearly equal shares (Table 1).

The sample of over-indebted individuals and the DEGS1 sample differed with regards to a number of sociodemographic variables. The over-indebted individuals were significantly younger (70.8% 18–49 years) than the nationally representative sample (46.9% 18–49 years). Educational attainment in the over-indebted was significantly lower whereas the majority of participants in both samples was employed. In contrast to the DEGS1 sample, the majority of over-indebted individuals was not married but single, divorced or widowed (OID survey: 71.4%; DEGS1: 33.9%). Over-indebted individuals had a significantly poorer subjective health status than the general population. Accordingly, the over-indebted population had a significantly higher prevalence of psychological disorders in the form of depression and/or anxiety (16.2%) compared to the general population (6.3%).

Prevalence of sleep problems and sleep medication use

The prevalence of sleep problems associated with sleep onset (72.3%) and sleep maintenance (74.0%) during the last four weeks was significantly higher among over-indebted individuals than in the general population (52.4 and 65.2%, respectively) (Table 1). Likewise, sleep medication use was significantly more frequent in the over-indebted population (21.6%) than in the general population (6.0%).

In the combined dataset of OID and DEGS1 participants ($n = 7985$), 39.5% ($n = 3154$) participants reported both problems with sleep onset and sleep maintenance (Fig. 2). Of all participants included in the study, 5.9% ($n = 471$) reported problems with sleep onset and sleep maintenance as well as sleep medication use.

Table 2 illustrates the distribution of sleep problems and sleep medication use by sociodemographic and health characteristics among those affected in the combined dataset of the OID and DEGS1 sample.

Logistic regression analyses evaluated associations between over-indebtedness and sleep problems as well as sleep medication use (Table 3). After adjusting for socio-economic and health factors, including age, sex, education, marital status, employment status, subjective health status and mental illness in the form of depression or anxiety, over-indebtedness significantly increased the risk of sleep problems and sleep medication use.

Sleep onset

Compared to the general population, over-indebted individuals had a higher risk of problems related to sleep onset whereas the relationship between other socioeconomic factors, i.e. educational attainment or employment status, and difficulty initiating sleep was not significant. Those with a poorer subjective health and/or depression or anxiety had an increased risk of sleep onset problems as compared to those reporting better health or those who did not report these mental disorders, respectively. Female sex was associated with a significantly higher risk of problems with sleep onset. Moreover, singles had a significantly higher risk of difficulty initiating sleep compared to the married.

Sleep maintenance

Over-indebtedness was also associated with a significantly increased risk of sleep maintenance problems. While individuals with high educational attainment had an increased risk of difficulty maintaining sleep, those with low educational attainment had a lower risk of such sleep problems compared to individuals with a medium education level. The relationship between unemployment and sleep maintenance problems, however, was not significant. Sleep maintenance problems were significantly associated with poorer subjective health and the presence of a psychological disorder. Female sex and age above 29 years were also associated with an increased risk of these sleep problems.

Sleep medication use

In contrast to over-indebtedness, educational attainment and employment status were not significantly associated with sleep medication use. The use of sleep medication was associated with health factors, i.e. poorer subjective health and the presence of a psychological disorder as well as sociodemographic factors including female sex and age above 29 years.

Table 1 Study population characteristics and prevalence of sleep problems and sleep medication use, 4 weeks ($n = 7985$)

	OID survey[a] $n = 538$		DEGS1[b] $n = 7447$		Differences between samples[†]
	n	%	*n*	%	*p* value
Sex					$p = 0.846$
Female	283	52.6	3885	52.2	
Male	255	47.4	3562	47.8	
Age					$p < 0.001$
18 29 years	103	19.1	1047	14.1	
30 49 years	278	51.7	2444	32.8	
50 64 years	130	24.2	2151	28.9	
65 79 years	27.0	5.0	1805	24.2	
Marital status					$p < 0.001$
Married	112	20.8	4730	63.5	
Separated/Divorced/Widowed	205	38.1	1012	13.6	
Single	214	39.8	1642	22.0	
Missing	7	1.3	63	0.8	
Education level					$p < 0.001$
Low	220	40.9	959	12.9	
Medium	281	52.2	3994	53.6	
High	30	5.8	2473	33.2	
Missing	7	1.3	21	0.3	
Employment status					$p = 0.927$
Not employed	188	34.9	2830	38.0	
Employed	300	55.8	4556	61.2	
Missing	50	9.3	61	0.8	
Depression/anxiety					$p < 0.001$
No	408	75.8	6881	92.4	
Yes	87	16.2	471	6.3	
Missing	43	8.0	95	1.3	
Subjective health status					$p < 0.001$
(Very) good	224	41.6	5539	74.4	
Fair/(very) poor	311	57.7	1878	25.3	
Missing	3	0.6	30	0.4	
Problems with sleep onset					$p < 0.001$
No	149	27.7	3539	47.5	
Yes	389	72.3	3908	52.4	
Problems with sleep maintenance					$p < 0.001$
No	140	26.0	2590	34.8	
Yes	398	74.0	4857	65.2	
Sleep medication use					$p < 0.001$
No	422	78.4	7003	94.0	
Yes	116	21.6	444	6.0	

[a]Over indebted sample, Germany (2017); [b]General population sample, Germany (2008 2011)
[†]Chi squared test

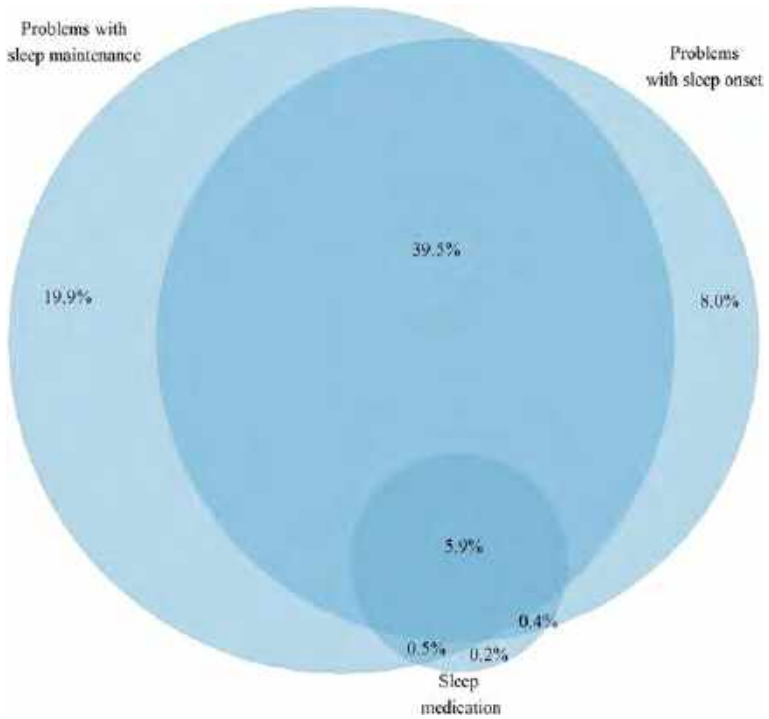

Fig. 2 Proportional distribution of sleep problems and sleep medication use ($n = 7985$)

Discussion

In the present study, an increased risk of problems with sleep onset and sleep maintenance as well as sleep medication use was observed for over-indebted individuals compared to the general population.

In view of the increasing trend of over-indebtedness of individuals across high-income countries and adverse health effects of inadequate sleep, the study results highlight over-indebtedness as a public health concern. Until today, this is the first study that considers over-indebtedness as a determinant of sleep problems and sleep medication use in health research at the global level. The results suggest that conventional measures of socioeconomic status are insufficient to describe the complexity of financial hardship with regards to its association with health, and sleep specifically.

Comparison with previous studies

In agreement with previous studies, a high prevalence of sleep problems was found in the present study. Like studies in other high-income countries, sleep problems were more common in women than in men [33], and the share of individuals suffering from disturbed sleep that reported sleep medication use was comparably small [29]. Comorbidity was consistently linked to sleep problems and medication use in this study [31, 32].

Financial difficulties

Due to the lack of previous studies on the impact of over-indebtedness on sleep difficulties and sleep medication use specifically, comparability of the present findings is limited. A link between socioeconomic circumstances, typically assessed by education, income and occupational class, and sleep problems has been well established by previous research [46–48, 92, 93]. Evidence on the role of socioeconomic parameters with regards to sleep medication use is rather inconclusive [29, 34, 49, 50]. Lower socioeconomic status has mainly been associated with more frequent sleep problems in terms of general sleep disturbance or specific symptoms (e.g. sleep latency, continuity, duration). Although the prevalence of over-indebtedness is increased in lower socioeconomic positions, however, individuals at all income, education or occupation levels can be over-indebted for various reasons. The small number of available cross-sectional studies and few prospective studies that assess the role of unconventional measures of socioeconomic circumstances illustrate a similar trend: Studies have identified associations between socioeconomic deprivation [53], (ongoing) financial strain [52], as well as past and present economic difficulties [51, 55], and sleep problems. However, socioeconomic indicators including economic difficulties or financial strain are not interchangeable with over-indebtedness.

Table 2 Distribution of sleep problems and sleep medication use by sociodemographic and health characteristics

	Problems with sleep onset		Problems with sleep maintenance		Sleep medication use	
	n	%	*n*	%	*n*	%
Total	4297	100.0	5255	100.0	560	100.0
Sex						
Female	2449	57.0	2861	54.4	375	67.0
Male	1848	43.0	2394	45.6	185	33.0
Age						
18 29 years	634	14.8	607	11.6	35	6.3
30 49 years	1350	31.4	1709	32.5	141	25.2
50 64 years	1267	29.5	1648	31.4	176	31.4
65 79 years	1046	24.3	1291	24.6	208	37.1
Marital status						
Married	2476	57.6	3239	61.6	310	55.4
Separated/Divorced/Widowed	741	17.2	881	16.8	149	26.6
Single	1035	24.1	1085	20.6	94	16.8
Missing	45	1.0	50	1.0	7	1.3
Education level						
Low	703	16.4	733	13.9	130	23.2
Medium	2354	54.8	2782	52.9	291	52.0
High	1218	28.3	1716	32.7	135	24.1
Missing	22	0.5	24	0.5	4	0.7
Employment status						
Not employed	2447	56.9	3110	59.2	227	40.5
Employed	1774	41.3	2062	39.2	312	55.7
Missing	76	1.8	83	1.6	21	3.8
Depression/anxiety						
No	484	11.3	540	10.3	174	31.1
Yes	3743	87.1	4631	88.1	372	66.4
Missing	70	1.6	84	1.6	14	2.5
Subjective health status						
(Very) good	2762	64.3	3519	67.0	209	37.3
Fair/(very) poor	1513	35.2	1713	32.6	346	61.8
Missing	22	0.5	23	0.4	5	0.9

In contrast to over-indebtedness, less consistent associations of standard socioeconomic measures with sleep problems and sleep medication use were found in the present study. Over-indebtedness, like economic difficulties, affect individuals in all socioeconomic positions but can imply far-reaching psychosocial and legal consequences of unmanageable debt burden for the family, workplace, housing and financial situation that are often long lasting. Although the concept of over-indebtedness exceeds the previously considered spectrum of socioeconomic and psychosocial parameters, available studies indicate that even less severe or short-term financial strain can adversely affect sleep in different ways [94]: In a cross-sectional sample of non-institutionalised elders, self-reported ongoing financial strain that was "somewhat to very upsetting" remained a significant correlate of sleep latency, wakefulness after sleep onset and sleep efficiency measured by polysomnography even after adjusting for sociodemographic and health-related determinants of sleep [52]. In a Finnish working-age sample, past and current economic difficulties were associated with complaints of insomnia, independent of other socioeconomic indicators, whereas education, occupational class and income showed less consistent associations with sleep-related outcomes after adjustment [55, 95]. Accordingly, a cohort study among British and Finnish

Table 3 Adjusted odds ratios (aOR) and 95% confidence intervals (CI)[†] of sleep problems and sleep medication use ($n = 7985$)

	Sleep onset		Sleep maintenance		Sleep medication use	
	aOR	95% CI	aOR	95% CI	aOR	95% CI
Over indebtedness[a]	*1.72*	*1.39 2.13*	*1.39*	*1.12 1.73*	*3.59*	*2.69 4.79*
Sex[b]	*1.48*	*1.35 1.63*	*1.32*	*1.20 1.46*	*1.90*	*1.56 2.31*
Age group						
18 29 years	Reference (Ref.)			Ref.		
30 49 years	0.86	0.73 1.02	*1.27*	*1.07 1.50*	*1.73*	*1.12 2.67*
50 64 years	1.04	0.86 1.25	*1.84*	*1.52 2.22*	*2.61*	*1.66 4.09*
65 79 years	1.04	0.85 1.28	*1.73*	*1.40 2.13*	*4.67*	*2.90 7.51*
Marital status						
Married	Ref.		Ref.		Ref.	
Separated/Divorced/Widowed	1.11	0.97 1.28	1.06	0.92 1.23	0.99	0.78 1.25
Single	*1.26*	*1.10 1.45*	0.98	0.85 1.13	1.05	0.78 1.42
Education level (ISCED)						
Low	0.95	0.82 1.09	*0.79*	*0.68 0.91*	1.21	0.95 1.54
Medium	Ref.		Ref.		Ref.	
High	0.90	0.81 1.00	*1.25*	*1.12 1.39*	1.05	0.84 1.32
Unemployment[c]	1.10	0.97 1.24	0.95	0.84 1.08	1.10	0.88 1.39
Subjective health status[d]	*2.05*	*1.83 2.30*	*1.94*	*1.71 2.20*	*2.61*	*2.14 3.19*
Depression/anxiety[e]	*2.01*	*1.65 2.45*	*2.30*	*1.83 2.88*	*4.39*	*3.50 5.51*

[†]Italics show significant results at alpha = 0.05
[a]Not over indebted (Ref.) [b]Male (Ref.); [c]Employed (Ref.); [d]Very good to good subjective health status (Ref.); [e]Absence of depression/anxiety (Ref.)

public sector employees indicated that persistent and increasing economic difficulties, in terms of insufficient financial resources to purchase food and clothes and pay bills, were associated with subsequent sleep problems [51]. In spite of overlapping definitions of economic difficulties and measures of sleep problems, in contrast, a prospective US cohort study of older adults did not identify financial strain as significant predictor of trouble falling asleep or staying asleep but primarily physical health problems and depressed mood [96]. However, the latter study specifically focused on the elderly population and did not assess persistence of financial strain.

With regards to sleep medication use, the role of socioeconomic parameters has not been examined elaborately. A retrospective cross-sectional study of the US population has reported increased odds of sleep medication use not only among individuals with higher educational levels but also the unemployed [34]. In a longitudinal study of a representative US-sample above the age of 50, higher educational attainment was associated with recent sleep treatment utilization but not the use of prescribed sleep medication [50]. Higher income was associated with treatment use outside of a doctor's recommendation among those currently utilizing treatment. These findings of an association between higher educational attainment and treatment patterns were ascribed to a greater initiative to self-treat among individuals with higher educational level or income [50] and better access to medical information [34]. Use of sleep medication among the unemployed was assumed to relate to sleep disturbances rooted in experiences of anxiety, stress and financial strain [34]. In contrast to the latter findings, a Swiss population-based study found an association between socioeconomic status and subjective and objective measures of sleep but not the use of sleep medication [49]. Crude analyses based on a representative sample of 5000 Norwegian citizens indicated a lower lifetime, current and chronic sleep medication use among those with a higher socioeconomic status in terms of educational level. However, adjusted analyses identified higher socioeconomic status as independent risk factor for higher current sleep medication use [29]. Methodological differences as well as country-specific prescription and payment regulations possibly contribute to the varying results.

Psychosocial stress

In line with previous research we assume that mechanisms that link over-indebtedness and sleep outcomes are not only related to material but also psychosocial effects emerging from a persistent lack of financial resources to cover payment obligations and living costs. A reduction of absolute material standards, for instance, in terms of living conditions, can result from accumulating

debt over time and facilitate unparalleled experiences of stigmatization, feelings of shame, failure and hopelessness that may induce high levels of stress [41, 42]. Stress exposure, e.g. in terms of upsetting life events, has been suggested as a key trigger of subjective sleep complaints [35, 36]. In line with recent evidence on the influence of hyperarousal (i.e. heightened physiologic or cognitive-emotional activation) on insomnia [43–45], over-indebted individuals' stress exposure and stress response, in turn, may play a vital role in sleep problems. Over-indebted individuals might feel constrained to increase working hours to cover payment obligations which, in turn, reinforces stress [40, 97], and lead to family conflicts due to challenges juggling family and work. Such work-family conflicts have been shown to be associated with women and men's sleep complaints [98–100] and sleep medication use among women [101]. Financial strain might also result in relocation to more affordable housing which is typically linked to environmental noise exposure, and might in turn impact sleep [86]. Moreover, stress may affect lifestyle factors such as smoking [102, 103] that has been linked to sleep complaints [37, 38]. In this context, variations in legal regulations and social norms concerning the perception of unmanageable debt across countries [39, 104–107] might contribute to variations in the populations' stress responses to over-indebtedness.

Although stress is commonly considered a risk factor of disturbed sleep, the evidence for the role of stress in sleep problems is ambiguous. To some extent, this may be due to the wide spectrum of methodological approaches, population characteristics and operationalization of stress and sleep [35, 108]. A number of studies illustrated an association between psychosocial stress and both subjective and objective sleep outcomes in heterogeneous populations [35, 36, 108–115]. In a prospective study among women in the United States, both subjective and objective sleep outcomes were predicted by chronic stress assessed across various domains including work, family as well as finances [35]. On the basis of longitudinal data, Pillai et al. [36] reported a significant relationship between higher levels of stress at baseline in terms of major stressful life events (e.G. *major* illness, divorce or death of a spouse and financial problems) and the onset of insomnia. Greater chronicity of stress exposure was associated with a higher likelihood of developing insomnia. In this context, subjective appraisal of the financial strain and diminished coping abilities that have been linked to sleep disturbances [36, 109] may contribute to an increased susceptibility to insomnia in the face of over-indebtedness. Stress responses in the form of both intentional and involuntary reactions have been shown to significantly mediate the association between stress exposure and insomnia: Maladaptive coping by behavioural disengagement, distraction and substance use as well as cognitive intrusion as a measure of the psychological impact of stressful events were identified as prospective risk factors for insomnia [36]. Moreover, trait sleep reactivity as a measure of sleep disruption in response to stressful events increased the risk for developing insomnia in the same community-based sample of adults with no history of insomnia or depression [116].

Given the severe financial difficulties and psychological stress related to major debt burden, the previous research indicates that over-indebtedness may reflect a relevant risk factor for sleep problems and associated sleep medication use. In line with previous findings, the results of the present study suggest a vital role of over-indebtedness in sleep problems as well as sleep medication use – independent of conventional socioeconomic measures. These findings may, for instance, manifest in barriers to help-seeking for sleep problems from health professionals among those facing severe financial strain. At the same time, potential over- or misuse of sleep medication as a strategy to cope with difficulties initiating or maintaining sleep might contribute to withdrawal or dependence symptoms [117]. Yet further research is necessary to understand the mechanisms between financial difficulties and psychosocial stress related to over-indebtedness, and health outcomes.

Limitations

Due to the cross-sectional design of the study, the results only reveal associations but does not address causation. However, in line with previous studies [8–13, 118, 119] that have illustrated poor health outcomes in relation to over-indebtedness, it seems more likely that sleep problems reflect an effect of over-indebtedness rather than its cause. Further research is necessary to examine this potential causal link. Recruitment was restricted to those utilizing debt counselling centres more than once which ensures that only those affected by major over-indebtedness that requires further counselling are represented in the OID survey data. Consequently, participants of the OID survey might reflect a subgroup of over-indebted individuals that seek advice due to unbearable strain and associated health effects, including sleep problems, on the one hand. On the other hand, those willing to participate in the survey might also face lower levels of stress as a result of counselling, and in turn report sleep problems less frequently than the target population. Therefore, it cannot be ruled out that the relationship between over-indebtedness and sleep problems and sleep medication use is attenuated or overestimated. Some individuals in the general population sample based on DEGS1 might have been misclassified as non-over-indebted. A possible implication of this is that the association between over-indebtedness and sleep problems and sleep medication use is attenuated.

Differences in the operationalization of variables between the DEGS1 and OID survey may have contributed to biased results. It can be assumed that the assessment of health complaints in the OID survey yields an underrated prevalence of mental illness compared to DEGS1: Over-indebted participants were asked to self-report any chronic illness as well as health complaints underlying medication use in the previous week whereas participants in DEGS1 were specifically asked to self-report certain psychological disorders diagnosed in the previous 12 months. Consequently, effect sizes of over-indebtedness might be overestimated as psychological disorders reflect a vital covariate of sleep outcomes. Concerning data collection, bias might have been introduced by the retrospective assessment of sleep problems and sleep medication use, and errors related to self-reporting.

Exclusion of participants with missing data in one or more sleep outcomes may have introduced bias. However, sensitivity analyses that were conducted to examine the potential influence of exclusion of respondents due to missing data have shown stable results.

Confounding might arise from different sampling and recruitment frames of the two samples compared in this study. However, we adjusted for relevant variables to account for confounding.

Due to a lack of data, a number of possibly relevant covariates that can affect sleep outcomes were not statistically controlled for and may induce unmeasured confounding. For instance, factors such as individual characteristics (e.g. stress response), employment characteristics (shift work, having multiple jobs), caregiving or parenting and ethnicity could not be taken into account, but may confound the association between over-indebtedness and sleep problems and sleep medication use. Ethnicity was assessed equally in both the OID survey and DEGS1, however, not available for public use in DEGS1. Data on income were not collected in the OID survey but educational attainment as well as employment status were considered as standard measures of socioeconomic status previously associated with sleep-related outcomes. Approved debt advisory centres in North Rhine-Westphalia included in this study can be assumed to offer counselling services to clients that have a long tradition and are similar to other regions in Germany. Nevertheless, minor variations in patterns of service use might occur over time and across geographic locations. While these aspects limit the generalizability of our findings, the present study nevertheless provides important evidence on the independent association between over-indebtedness and sleep problems as well as sleep medication use that may be used to guide public health intervention throughout Germany and initiate new lines of research.

Conclusions

The present study reveals a strong association between over-indebtedness and sleep problems in terms of sleep onset and maintenance as well as sleep medication use. These associations were independent of standard socioeconomic measures and were not accounted for by other sociodemographic or health factors. The results contribute to the increasing evidence on the vital role of socioeconomic factors with regards to sleep problems and sleep medication use. As sleep is essential to good health and functioning, the understanding of risk factors of problems related to sleep is crucial to improve health and reduce health disparities. Considering over-indebtedness as a risk factor for sleep problems helps to provide a basis for early intervention in clinical practice that needs to address both unmanageable debt burden and sleep problems. Specifically, when health-related causes are not detectable, referring over-indebted primary care patients that seek medical consultation for sleep problems to social support and debt counselling services can contribute to alleviating sleep disturbances. Thus, awareness of the association between over-indebtedness and sleep problems and sleep medication use in epidemiologic research and health care can help to avert detrimental health effects and societal cost of sleep problems.

Additional files

Additional file 1: Table S1. Complete case analysis (*n* 7680) Sensitivity analysis, complete case analysis to validate the approach to handle missing data. (DOCX 16 kb)

Additional file 2: Table S2. Adjusted odds ratios (aOR) and 95% confidence intervals (CI) of sleep problems and sleep medication use (*n* 7985) Additional multiple logistic regression model for sleep problems and sleep medication use, adjusted for sleep medication use and sleep problems respectively. (DOCX 16 kb)

Abbreviations

aOR: Adjusted Odds Ratio; CI: Confidence interval; DEGS1: German Health Interview and Examination Survey for Adults, first wave; GNHIES98: German National Health Interview and Examination Survey 1998; ICD 10 GM: German adaptation of the International Statistical Classification of Diseases and Related Health Problems; ISCED: International Standard Classification of Education; NRW: North Rhine Westphalia; OID survey: Over indebtedness survey; Ref.: Reference; RKI: Robert Koch Institute; SES: Socioeconomic status

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Authors' contributions

EM substantial contributions to conception and design of the study, acquisition of funding, project administration, methodology and formal analysis; KW and UZ substantial contributions to funding acquisition, conception and design of the study; JT substantial contribution to acquisition of data; JW and M TP substantial contribution to analysis and interpretation of data; JP substantial contribution to data curation and interpretation of data. All authors have made a contribution to drafting the article and/or revising the manuscript critically, and have approved the version to be published.

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Availability of data and materials
The data on over indebted individuals (OID survey) generated and analysed during the current study are not publicly available due to confidentiality concerns but are available from the corresponding author on reasonable request. The general population data (DEGS1) that support the findings of this study are available from the national public health institute, Robert Koch Institute (RKI) (https://www.rki.de/EN/Content/Health Monitoring/Public Use Files/public use file node.html).

Ethics approval and consent to participate
The OID survey was approved by the ethical committee of the University Medical Faculty in Bonn (No. 167/17). Respondents received information on study procedures, anonymity and confidentiality, and were informed that participation in the study was strictly voluntary both verbally and in writing. Formal consent requiring witnessed signature was not collected, however, the return of the anonymous questionnaire indicates consent from the participants for their data to be used in the study. Respondents could complete the questionnaire at the debt advisory centre or any other setting and return it using the stamped addressed envelope provided by mail or by handing the sealed envelope to one of the debt advisors. The DEGS1 study protocol was approved by the Charité Universitätsmedizin Berlin ethics committee in September 2008 (No. EA2/047/08). Participants provided written informed consent prior to the interview and examination.

Consent for publication
Not applicable.

Competing interests
The authors declare that they have no competing interests.

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Over-indebtedness and its association with the prevalence of back pain

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Abstract

Background: Over-indebtedness is an increasing phenomenon worldwide. Massive financial strain, as found in over-indebted persons, might influence the occurrence of back pain. In this explorative study we examined the prevalence of back pain in over-indebted persons in Germany for the first time ever and compared it to the prevalence of back pain in the German general population.

Methods: A cross sectional study comprising 949 participants (52.6% women) was conducted to collect data on the point prevalence of back pain in an over-indebted collective. A representative sample of the German general population (N = 8318, 53.4% women) was used as non-indebted reference group.

Results: The point prevalence of back pain was 80% in the over-indebted collective, compared to 20% in the general population. The influence of socioeconomic factors on the prevalence of back pain differed partially between the general population and the over-indebted collective. Being over-indebted was identified as an independent effect modifier and was associated with an eleven times increased probability to suffer from back pain (aOR: 10.92, 95%CI: 8.96 - 13.46).

Conclusion: Until now, only little is known about the effects of intense financial strain like over-indebtedness on health. Our study suggests that over-indebted persons represent a risk group for back pain and that it might be sensible to take financial strain into account when taking a medical history on back pain. Over-indebtedness and private bankruptcy is of increasing importance in industrialized countries, therefore more research on the subject seems to be necessary.

Background

It stands to reason that the worldwide financial crisis increases a phenomenon known as "over-indebtedness". With the provision of new products in financial services, access to loans is easier than ever, consumer over-indebtedness is increasing, and this alerts the European public to

this new upcoming risk [1]. There is currently no standard definition of over-indebtedness which is accepted throughout the European Union. In Germany, a private household is said to be over-indebted, if "its income over an extended period is not sufficient for servicing debt on time (after deducting costs of living expenses) despite a reduction of the standard of living" [1]. It is estimated that currently 3.13 million private households in Germany alone are affected by over-indebtedness [2]. But over-indebtedness does not seem to be exclusively a European problem. For example, in 2004 12.1% of U.S. citizens were at least in danger of being over-indebted (considering the official poverty rate) [3], a number that - regarding the current financial markets - probably has to be adjusted upwards. Over-indebted private households are in a fragile economic situation and are in danger of social exclusion and increased vulnerability [4]. Until now only little is known about extensive financial strain like over-indebtedness and its consequences to health. In another evaluation, we were able to describe an association between over-indebtedness and obesity for the first time [5]. Apart from obesity, back pain is also a health condition which was reported to be associated with psychosocial factors. Perceived financial strain could represent a moderator variable for the socio-economic position in adult life which again has been reported to be associated with the prevalence of low back pain [6-9]. Therefore, this study deals with the possible association between over-indebtedness and the prevalence of back pain in a German over-indebted cohort.

Aim

As the prevalence of back pain was reported to be associated with the social status of a person, we hypothesized that over-indebtedness, i. e. being under strong financial strain, might be associated with an increased prevalence of back pain and might pose an effect modifier of back pain. In order to elucidate this hypothesis we compared a cohort of over-indebted persons to a representative sample of the German general population.

Methods

Over-indebted individuals (OI-survey)

A cross-sectional study on over-indebted individuals (OI-survey) of the University of Mainz considered over-indebted persons in Germany (older than 16 years) who sought out free-of-charge debt counselling agencies. The survey was carried out by these debt counselling agencies of Rhineland-Palatinate and Mecklenburg-Western Pomerania. One person per over-indebted household, usually the one seeking advice, was asked to fill in a self administered questionnaire on over-indebtedness, psychosocial and socioeconomic factors and health. Amongst other things, the questionnaire covered the following issues: current medical problems (in this evaluation we considered "mental illnesses at the moment (e. g. depression)", and "back pain at the moment"), social support (using e. g. a standardized German questionnaire for social support [10-12]) and questions on over-indebtedness (e. g. duration, amount of debt, legal situation). The questionnaire was evaluated and improved after a feasibility study in 2006. Details on the survey have recently been published [12,13]. Altogether 2,711 copies of the final questionnaire as well as prepaid envelopes were handed out to over-indebted consulters during one of their counselling sessions and the consulters were asked to send back the filled-in questionnaire anonymously to the study centre at the University of Mainz. Without any reminder action, altogether 949 persons (response rate: 35.0%) participated in the OI-survey.

German general population (German National Telephone Health Interview Survey 2003 - GNT-HIS)

Data of a representative sample of the German general population was obtained by a telephone interview conducted by the Robert-Koch-Institute in 2003 (GNT-HIS). Again, details on the survey have already been published [14,15]. In the GNT-HIS, 15,918 persons were contacted via telephone, 8,318 individuals participated (response rate: 52.3%). The interview questionnaire covered various aspects of diseases (e. g. "Do you suffer from depression"), including risk factors for these diseases, quality of life, health care utilisation and socioeconomic status.

Low back pain

The question "To what extent do you complain about back pain at the moment? (five possible answers)" was used to identify the point prevalence of LBP in the over-indebted collective (OI-survey). To compare the OI-data with the GNT-HIS-data, the five possible answers were dichotomized. "I complain to some degree", "I complain considerably" and "I complain strongly" were encoded as "back pain", while " I do not complain" and " I barely complain" were encoded as "no back pain". In the GNT-HIS, the point prevalence of LBP was calculated according to the question in the GNT-HIS 2003-questionnaire "Did you have back pain yesterday" with the possible answers "yes" and "no". Chronologically all persons participating in the GNT-HIS were firstly asked whether they experienced LBP during the last twelve months: "Did you experience back pain during the last 12 months?". Secondly, only those persons who had stated to have had LBP during the last 12 months were questioned further whether they experienced LBP yesterday.

Other variables

In both data sets, age was stratified into four groups (<= 30 years, 31-40 years, 41-50 years, and >= 51 years). Data on socioeconomic variables was collected by ticking the corresponding answers, which were analogue in the two

data sets. Apart from that, physical activity and smoking behaviour were surveyed by similar pre-formulated answers in the two data sets, too. Body-Mass-Index was calculated by self-reported height and weight and stratified into "underweight and normal weight", "overweight" and "obesity" according to the WHO-definition [16]. Mental illnesses in the OI-survey were evaluated by the questioning "Do you suffer from mental illnesses (e.g. panic attacks, depression)", while in the GNT-HIS the question was solely focused on depression: "Do you suffer from depression?".

Combined data set

In order to evaluate the possible association between being over-indebted and the prevalence of back pain, both data sets (OI-survey and GNT-HIS) were combined. All participants of the GNT-HIS were categorised as "not over-indebted", while all OI-participants were categorised as "over-indebted". Although a bias towards the null cannot be ruled out, this procedure was chosen due to lack of information on debts in the GNT-HIS.

Statistical methods

In both data sets, the prevalence of low back pain associated with over-indebtedness was calculated using SPSS 15.0 (Microsoft). As potential confounders from the literature sex, age, school and professional education, status of employment, mental illnesses (especially depression), Body-Mass-Index, physical activity and smoking habits were considered. Bivariate group differences were tested by calculating the unadjusted odds ratio. Continuous variables were categorized, to find non-linear effects. Multivariate analyses (multivariate binary logistic regression model (inclusion)) were conducted. $P < 0.05$ was considered to be statistically significant. Adjusted odds ratio (aOR) and associated 95% confidence intervals (95%CI) were calculated.

Ethical approval

The ethical committee of the medical association of the German Bundesland Rhineland-Palatine and the data protection officer of Rhineland-Palatinate approved the OI-survey in the German states Rhineland-Palatinate and Mecklenburg-Western Pomerania. Approval of an ethical committee was not necessary for the GNT-HIS data, as these were an existing public access dataset on which only secondary analyses were conducted.

Results

Over-indebted participants of the OI-survey

All in all 949 persons (response rate: 35%), 446 male (47.0%) and 499 female (52.6%), aged between 18 and 79 years (41.27 ± 11.31 years, median: 41 years) participated in the OI-survey. 767 of them (80.8%) reported to have had back pain at the moment of being questioned.

German general population of the GNT-HIS

Of 15.918 persons who were contacted via telephone, 8318 persons participated in the GNT-HIS (recourse: 52.3%), 3872 male (46.5%) and 4446 female (53.4%), aged between 18 and 96 years (46.67 ± 15.64, median 45 years), 22.2% (n = 1849) of whom reported to have had LBP yesterday.

Back pain prevalence of over-indebted persons in comparison to the general population - potential factors of influence

Unadjusted odds ratios for potentially influencing factors known from the literature are depicted in tables 1, 2 and 3. In the general population, a higher risk for reporting

Table 1: Association between biometric data and back pain in the over-indebted OI-cohort and the general population of the GNT-HIS

	OI-survey (n = 949)						**GNT-HIS (n = 8318)**					
	Total n = 949	**%**	**Back pain n = 767**	**%**	**Unadjusted odds ratios OR**	**95%CI**	**Total n = 8318**	**%**	**Back pain N = 1849**	**%**	**Unadjusted odds ratios OR**	**95%CI**
Sex												
male	446	47.0	360	80.7			3872	46.5	663	17.1		
female	499	52.6	406	81.4	1.04	0.75-1.44	4446	53.5	1186	26.7	**1.76**	**1.58-1.96**
Age												
<= 30 years	199	21.0	139	69.8			1324	15.9	223	16.8		
31-40 years	244	25.7	204	83.6	**2.20**	**1.40-3.47**	1829	22.0	344	18.8	1.14	0.95-1.38
41-50 years	301	31.7	257	85.4	**2.52**	**1.62-3.92**	2027	24.4	443	21.9	**1.38**	**1.16-1.65**
>= 51 years	201	21.2	166	82.6	**2.05**	**1.28-3.29**	3138	37.7	839	26.7	**1.80**	**1.53-2.12**

Bold print: statistically significant results; level of significance $p < 0.05$

Table 2: Association between socioeconomic variables and back pain in the over-indebted OI-cohort and the general population of the GNT-HIS

	OI-survey (n = 949)						GNT-HIS (n = 8318)					
	Total		Back pain		Unadjusted odds ratios		Total		Back pain		Unadjusted odds ratios	
	n = 949	%	n = 767	%	OR	95%CI	n = 8318	%	N = 1849	%	OR	95%CI
Nationality												
German	904	95.3	735	81.3			8018	96.4	1784	22.2		
other	33	3.5	25	75.8	0.72	0.32-1.62	300	3.6	65	21.7	0.97	0.73-1.28
Family status												
married and living together	281	29.6	236	84.0			4639	55.8	1070	23.1		
married and living alone	71	7.5	59	83.1	0.94	0.47-1.88	203	2.4	51	25.1	1.12	0.81-1.55
single	297	31.3	222	74.7	**0.56**	**0.37-0.85**	2126	25.6	357	16.8	**0.67**	**0.59-0.77**
divorced	256	27.0	212	82.8	0.92	0.58-1.45	692	8.3	187	27.0	**1.24**	**1.03-1.48**
widowed	37	3.9	33	89.2	1.57	0.53-4.66	640	7.7	179	28.0	**1.30**	**1.08-1.56**
School education												
Hauptschule e. g. expanded primary school	461	48.6	378	82.0			2412	29.0	658	27.3		
no graduation	95	10.0	72	75.8	0.69	0.41-1.16	64	0.8	20	31.3	1.21	0.71-2.07
secondary school	256	27.0	212	82.8	1.06	0.71-1.58	2167	26.1	488	22.5	**0.78**	**0.68-0.89**
technical college orgrammar school	84	8.9	67	79.8	0.87	0.48-1.55	3383	40.7	625	18.5	**0.60**	**0.53-0.68**
Professional education												
apprentice-ship	462	48.7	380	82.3			2927	35.2	692	23.6		
no professional education	237	25.0	189	79.7	0.85	0.57-1.26	745	9.0	219	29.4	**1.35**	**1.12-1.61**
vocational school	82	8.6	65	79.3	0.83	0.46-1.48	1133	13.6	288	25.4	1.10	0.94-1.29
university	89	9.4	76	85.4	1.26	0.67-2.38	2735	32.9	518	18.9	**0.76**	**0.66-0.86**
Status of employment												
full-time	210	22.1	173	82.4			3809	45.8	698	18.3		
apprentice-ship	18	1.9	15	83.3	1.067	0.30-3.88	245	2.9	30	12.2	**0.62**	**0.42-0.92**
(early) retirement	101	10.6	86	85.1	1.23	0.64-2.36	1713	20.6	474	27.7	**1.71**	**1.49-1.95**
unemployed	290	30.6	232	80.0	0.86	0.54-1.35	323	3.9	102	31.6	**2.06**	**1.60-2.64**
homemaker	148	15.6	114	77.0	0.72	0.43-1.21	685	8.2	188	27.4	**1.69**	**1.40-2.03**
part-time	107	11.3	88	82.2	0.99	0.54-1.82	1535	18.5	357	23.3	**1.35**	**1.17-1.56**

Bold print: statistically significant results; level of significance $p < 0.05$

back pain was observed for female participants, age above 40 years, being married and living together, lower educational and professional status, retirement, unemployment or being a homemaker, lack of physical activity, overweight or obesity, and depression. In the over-indebted population, a higher risk for reporting back pain was associated with the following factors: age above 30 years, being married and living together, lack of physical activity, and reporting mental illnesses like depression.

Influence of the factor "over-indebtedness" on the point prevalence of back pain

After adjustment for all of the above mentioned variables, "being over-indebted" turned out to have an independent

Table 3: Association between lifestyle and medical factors and back pain in the over-indebted OI-cohort and the general population of the GNT-HIS

	OI-survey (n = 949)						GNT-HIS (n = 8318)					
	Total		Back pain		Unadjusted odds ratios		Total		Back pain		Unadjusted odds ratios	
	n = 949	%	n = 767	%	OR	95%CI	n = 8318	%	N = 1849	%	OR	95%CI
Smoking behaviour												
daily	537	56.6	431	80.3			2216	26.6	491	22.2		
sometimes	61	6.4	51	83.6	1.25	0.62-2.55	602	7.2	135	22.4	1.02	0.82-1.26
ex-smoker	168	17.7	141	83.9	1.28	0.81-2.04	2238	26.9	509	22.7	1.03	0.90-1.19
non-smoker	174	18.3	138	79.3	0.94	0.62-1.44	3260	39.2	713	21.9	0.98	0.87-1.12
Sports/work-out												
no sports	520	54.8	423	81.3			3027	36.4	760	25.1		
<1 hour/week	266	28.0	229	86.1	1.42	0.94-2.14	828	10.0	206	24.9	0.99	0.83-1.18
1-2 hours/week	78	8.2	65	83.3	1.15	0.61-2.16	1292	15.5	277	21.4	**0.81**	**0.70-0.95**
>2 hrs/week	67	7.1	40	59.7	**0.34**	**0.20-0.58**	3134	37.7	597	19.0	**0.70**	**0.62-0.79**
BMI												
underweight and normal weight	401	42.3	324	80.8			4378	52.6	887	20.3		
over-weight	306	32.2	234	76.7	0.79	0.55-1.13	2830	34.0	627	22.3	**1.14**	**1.02-1.28**
obesity	238	25.1	206	86.6	1.53	0.98-2.39	938	11.3	286	30.5	**1.73**	**1.48-2.02**
4Mental illness (e. g. depression)												
no	580	61.1	449	77.4			7529	90.5	1528	20.3		
yes	369	38.9	318	86.2	**1.82**	**1.28-2.59**	783	9.4	319	40.7	**2.70**	**2.32-3.15**

Bold print: statistically significant results; level of significance $p < 0.05$

effect on the prevalence of back pain (aOR: 10.92, 95%CI: 8.96-13.46) (table 4).

Discussion

In this explorative analysis, over-indebted individuals were more likely to report back pain than individuals of the general population. This association was not fully explained by traditional socioeconomic variables. Therefore, the variable over-indebtedness seems to be an independent predictor of back pain.

In this analysis, the back pain point prevalence of ~20% found in the German general population goes along with the majority of reports which point out varying estimates of back pain point prevalence in the general population ranging from 14 to 28% [17-21]. By contrast the point prevalence of back pain in the over-indebted OI-survey turned out to be approximately 80%. In 2006 Burton et al. stated in the European guidelines for prevention in low back pain that studies are needed to determine how and by whom interventions are best delivered to specific target groups [22]. With an increasing number of over-indebted households worldwide, and with our results in mind, over-indebted persons might pose an emerging risk group for back pain and apart from this first analysis more specific research in this area might be helpful for addressing the back pain problem in this risk group in the near future.

A couple of methodological issues have to be considered with regard to this evaluation. Firstly, the OI-survey was a written questionnaire study, while the GNT-HIS was conducted by a telephone interview. Schwarz et al. [23] reported differences between the results of written and interview questionnaires. The mode of data collection may influence respondents' judgemental processes via its impact on the retrieval of relevant information from memory, its impact on respondents' elaboration of the response alternatives presented to them, and its impact on the judgemental strategies used. Nevertheless, because of the careful interview design, we believe that the differences because of the different administration mode might be only limited. The possible truncation of the memory search process in the GNT-HIS interview, e. g., as com-

Table 4: multivariate analysis of the combined data set (OI-survey and GNT-HIS) with over-indebtedness as independent variable (statistically significant associations only)

	Combined data set (OI-survey and GNT-HIS) (n = 9267)			
			adjusted odds ratios aOR	95%CI
Biometric variables	*sex*	male	-	-
		female	1.60	1.42-1.80
	Age	<= 30 years	-	-
		>= 51 years	1.38	1.11-1.72
Socioeconomic factors	*school education*	"Hauptschule", expanded primary school	-	-
		technical college or grammar school	0.77	0.67-0.90
	family status	married and living together	-	-
		single	0.83	0.71-0.97
	status of employment	full-time	-	-
		unemployed	1.29	1.03-1.62
Lifestyle/medical factors	*mental illness (e. g. depression)*	no	-	-
		yes	2.36	2.04-2.74
	physical activity	no sports	-	-
		>2 hrs/week	0.81	0.71-0.91
	BMI	underweight and normal weight	-	-
		obesity	1.51	1.29-1.77
Financial strain	*over-indebtedness*	no	-	-
		yes	10.92	8.96-13.46

* multivariate model (inclusion) adjusted for all variables depicted in tables 1, 2 and 3; table 4 depicts statistically significant associations only; level of significance $p < 0.05$

pared to the self-administered questionnaire might not be of the utmost importance as the questions referred to back pain yesterday (as compared to "back pain at the moment") which lies in the near past. But secondly, this difference in the definition of back pain point prevalence in this explorative comparison poses another risk for bias. Questioning for "back pain at the moment", which stands for a broader time span, might lead to a higher prevalence than questioning for "back pain yesterday". Nevertheless, when we compared "back pain at the moment" in the over-indebted individuals with "back pain during the last 12 months" in the general population (1-year prevalence), we still calculated elevated adjusted odds ratios of about three. Therefore, we assume that the differences in the methodological approach are not solely responsible for the results we describe here. Thirdly, when discussing methodological flaws, it should also be mentioned that a health based bias of the GNT-HIS participants could be more or less excluded [24], while the design of the OI-survey (anonymously sent back questionnaires) did not allow for evaluation of the non-responders. For that we do not know whether only persons with health problems sought out the opportunity to fill in the questionnaire in order to voice their problems or if persons with health problems in particular did not feel up to this task.

The here conducted explorative analysis found a slightly different risk profile for over-indebted individuals as compared to individuals of the general population. Especially socioeconomic variables, e. g. education or unemployment, seemed to loose influence in the face of strong financial strain like over-indebtedness. In the general population we calculated the same risk profile as reported by other authors [25], namely a decrease in odds ratios with better education and a higher prevalence of back pain in unemployed persons compared to full-time employees. In comparison to that, we could not detect these associations in the participants of the OI-survey. But with a back pain prevalence of 80% in the over-indebted individuals, this

result might also be due to a lack of variance in this cohort.

Schneider et al. [26] described in a representative cohort of the German general population (N = 3488 between 18 and 69 years old) occupational categories with lower-than-average and higher-than-average prevalence of back pain, the 7-day-average being 34% in the general German population between 1997 and 1999. What catches the eye in the article of Schneider et al. is the fact that the above-average prevalence was identified for occupations with physically strenuous work and, in most cases, lower socio-economic class. About 60% of the persons attending debt counselling agencies in Germany are stemming from low socio-economic classes [4] and are therefore likely to hold strenuous jobs. This might have influenced some of the results. Nevertheless, socioeconomic variables like school education and professional education - other possible attributes of lower class manual workers - did not play a statistically significant role in the odds ratios of the OI-survey. This again might be associated with the fact that a large number of over-indebted participants were unemployed.

While regular physical activity for more than two hours a week turned out to be "protective" both in the general population and the over-indebted collective, the calculated OR indicated that the over-indebted persons might profit even more by a regular exercise as their OR with regard to regular activity was calculated to be 0.34 (95%CI: 0.20-.058) compared to 0.70 (95%CI: 0.62-0.79) in the general population. Nevertheless, the little case numbers of over-indebted persons actually working out more than two hours per week have to be considered. Finally, mental illnesses like depression led to a 2.7 times increase in the risk of back pain in the general population but "just" to a 1.8 times increase in the over-indebted population, a result that might depend on a competing effect financial strain has on mental health [12] on the one hand, nevertheless this result might also be due to the different measurement of the variable "mental illnesses" on the other hand.

The available literature indicates a clear link between psychological variables and back pain [27]. Psychological variables are probably related to the onset of pain, and to the occurrence of acute, sub-chronic, and chronic pain [27]. Apart from that, financial strain is probably linked to perceived poor health and depression [12,28-30] and might influence the prevalence of back pain via these mechanisms, too. One factor of financial strain might be measured, amongst other things, by the burden of debt a person faces. This assumption made, over-indebted persons, who are threatened by a life-event like private bankruptcy, seem to be more likely to complain about back pain than the general population. Nevertheless, Skillgate et al. [31] did not find an association between low back pain and life events, but over-indebtedness and bankruptcy were a) not a proposed life event in their examination and b) might not have been important in Sweden at the time of evaluation (1993-1997). In contrast, in our explorative analysis, "over-indebtedness" turned out to be an independent moderator variable factor for the prevalence of back pain. As "over-indebtedness" was not a prompted item in the GNT-HIS questionnaire we coded all GNT-HIS participants (general population) as "not over-indebted" in the combined data set. This procedure might lead to a shift towards the zero-effect and therefore, apart from the methodological discussions above, the calculated ten times higher odds ratio might also depict only a minimum estimation of reality.

Conclusion

This is the first study that considered over-indebted persons as a special back pain risk group. We found evidence that over-indebted individuals might suffer from back pain more often than individuals from the general population and that over-indebtedness might be an independent moderator variable. The increasing number of over-indebted private households in industrialized countries and the importance of back pain for a countries economy and health care system, gave us reason to believe that a preventive approach to the "public health problem" back pain related to over-indebtedness is imminent. It may be found in socioeconomic, legal and political changes. But a first step in the right direction, i. e. a first step to elucidate the situation, might be the inclusion of a debt anamnesis in longitudinal health surveys of the general population.

Competing interests

The authors declare that they have no competing interests.

Authors' contributions

EO and EM had the idea for the evaluation. EO wrote the paper, which was subsequently modified in discussion with all authors. HR, EO, EM were responsible for the analysis. EM and SL conceptualised the OI-survey and developed the study protocol. All authors read and approved the final manuscript.

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The study sponsor had no involvement in study design, in the collection, analysis, and interpretation of data; in the writing of the report; and in the decision to submit the article for publication.

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Research article

Over-indebtedness as a marker of socioeconomic status and its association with obesity: a cross-sectional study

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Abstract

Background: The recent credit crunch will have implications for private households. Low socioeconomic status is associated to various diseases. While income, education and occupational status is frequently used in definitions of socioeconomic status, over-indebtedness of private households is usually not considered. Over-indebtedness is currently increasing in high-income countries. However, its association with health – particularly with obesity – remains unknown. Therefore, the aim of this study was to assess an association between over-indebtedness and overweight or obesity.

Methods: A cross-sectional study on over-indebtedness and health including 949 over-indebted subjects from 2006 and 2007 in Rhineland-Palatinate and Mecklenburg-Western Pomerania (Germany) and the telephonic health survey 2003 of the Robert Koch-Institute including 8318 subjects, who are representative for the German population, were analysed with adjusted logistic regression considering overweight (BMI ≥25.0 kg/m^2) and obesity (BMI ≥30 kg/m^2) as response variable.

Results: After adjusting for socio-economic (age, sex, education, income) and health factors (depression, smoking habits) an independent effect of the over-indebt situation on the probability of overweight (aOR 1.97 95%-CI 1.65–2.35) and obesity (aOR 2.56 95%-CI 2.07–3.16) could be identified.

Conclusion: Over-indebtedness was associated with an increased prevalence of overweight and obesity that was not explained by traditional definitions of socioeconomic status. Over-indebtedness should be additionally considered when assessing health effects of socioeconomic status.

Background

The recent credit crunch will affect public and private health services in various ways and there is already evidence of current cutbacks [1]. The turmoil in the banking system may also affect charitable healthcare providers. Naomi House children's hospice in Winchester (UK), for example, faces the potential loss of nearly $10 m it has invested in the troubled Icelandic bank Kaupthing Singer and Friedlander [2]. Other than that mentioned the financial crises will influence individuals' every day life with consequences for the individuals' health.

A remarkable increase in the number of over-indebted people in European countries and the US can currently be observed [3]. For example, in Germany, about 3 million private households (7.6%) corresponding to more than 6 million residents are currently over-indebted [4,5]. Over-indebtedness can be defined as lack of possible debt redemption in due time due to the relation of income and cost of living after a remarkable cutback in standard of living [6].

The link between socioeconomic status and health is well documented, particularly for overweight [7-12]. However, current definitions of socioeconomic status do not consider over-indebtedness and the effect of over-indebtedness on health remains unknown.

Therefore we examined a possible association between over-indebtedness and overweight in adults in Germany.

Methods

Data on over-indebted individuals (n = 949) from a cross sectional study were considered together with the German National Telephonic Health Interview Survey of the Robert Koch-Institute (n = 8318), which is representative for the German population.

a) German National Telephone Health Interview Survey 2003 conducted by the Robert Koch-Institute (GNT-HIS)

Details on the survey have recently been published [13]. In brief, the GNT-HIS 2003 is a nationally representative health survey of the adult population in Germany with computer assisted telephone interviews (n = 8318) covering various aspects of diseases, including risk factors, quality of life, health care utilisation and socioeconomic status. The response rate of the GNT-HIS 2003 was 52.3%.

Ethics review board approval was not obtained for these secondary analyses of an existing public access dataset.

b) A cross-sectional study regarding over-indebted individuals (OI-survey)

This study was performed in order to measure the health status of over-indebted individuals and their participation in all aspects of society and their utilization of the health care system. It is a survey on over-indebted residents of the German states Rhineland-Palatinate and Mecklenburg-Western Pomerania. An anonymous survey was organised among clients of debt counselling centres. The survey was carried out by the centres for debt and insolvency counselling of Rhineland-Palatinate and Mecklenburg-Western Pomerania and by the centre for debt counselling of the Johannes Gutenberg-University Mainz in 2006 and 2007. Overall, 949 over-indebted subjects were interviewed (participation rate 39.7%). In the OI-survey we did not use reminder-actions in non-responders. Details on the survey have recently been published [14]. Ethical committee approval was obtained. Informed consent was waived to assure anonymity.

Socio-demographic parameters (age, sex, income, education), Body-Mass-Index, smoking behaviour and depression were obtained in both surveys and used for the analyses. All participants of the telephonic health survey were categorised as not over-indebted, while all OI-survey-participants were categorised as over-indebted. Although a bias towards the null cannot be ruled out, this procedure was chosen due to lacking information on debts in the telephonic health survey.

Participants with missing data of Body-Mass-Index (*GNT-HIS* n = 179; OI-survey n = 8) were excluded for analyses. The joint database (GNT-HIS and OI-survey) contained 9080 data records (941 data records of the OI-survey and 8139 data records of GNT-HIS).

Participants' self reports on height and weight were used to calculate the Body-Mass-Index in order to define the target value "overweight" and „obesity". The WHO classifications for overweight (≥25.0 kg/m^2) and obesity (≥30.0 kg/m^2) were used [15]. Data on participants without overweight or obesity were used as reference.

The prevalence of overweight and obesity associated with over-indebtedness was calculated.

As potential confounders from the literature sex, age, education, income, depression and smoking habits were considered. In crude analysis, they were a priori coded by using binary dummy variables, to improve understanding.

Proportions and their 95%-confidence intervals of dependent variables and potential confounders were calculated. Corresponding unadjusted odds ratios and their 95 percent confidence limits for the association between overweight or obesity and the potential confounders were calculated by using logistic regression analysis.

In multiple logistic regression analysis, all potential confounding factors were modelled in their original categorical form or by using the original binary dummy variables (sex, smoking). They were hierarchically entered to assess their cumulative influence on the association between the risk factor "over-indebtedness" and overweight/obesity.

All calculations were carried out with the software package SPSS (SPSS Inc., Chicago, Illinois), version 14.0

Results

Characteristics of study participants

An association between over-indebtedness and gender was not observed (table 1). On average over-indebted participants were younger, with lower education and income, and had a higher prevalence of depression, overweight, obesity and daily tobacco consumption compared to the general population (table 1).

Potential confounders

Unadjusted odds ratios for the association between possible confounders and overweight/obesity are shown in table 2. A higher risk of being overweight or obese was observed for male sex, and age above 40 years as well as for being depressive. Subjects reporting a higher education, higher income, and smokers had a lower risk of overweight or obesity (table 2).

Confounder adjusted estimates

After adjustment the association between over-indebtedness and body composition had an odds ratio of 1.97 (95%-CI 1.65 to 2.35) for overweight and 2.56 (95%-CI 2.07 to 3.16) for obesity (table 3). Adjustment for socioeconomic status variables such as education or income did not explain this association (table 3).

Discussion

A higher risk of obesity was observed for over-indebted individuals compared to the general population. This association was not explained by components of traditional socioeconomic status definitions such as education and income as well as by other characteristics including sex, age, depression, and smoking habits. This explorative finding suggests an independent association between over-indebtedness and overweight or obesity.

These results are unlikely due to differences in the composition of the study collectives of both surveys. Rather more these findings are in accordance with international models assuming a link between individual's financial situation and the diversity of access to „healthy" food [16-18]. An inverse relationship between energy density of food and its costs combined with the inability to pay can be a partial reason for the higher risk of overweight or obesity among over-indebted subjects.

Apart from the shortness of financial resources and possible associations with obesity, over-indebted individual's psychological distress has to be considered. A depressed emotional state can lead to increased food intake (hyperphagous reaction hypothesis) [19]. In the situation of over-indebtedness, eating can become a compensation and gratification. The subsequent positive feeling might be a substitute for other deficits.

The remarkably increased risk of obesity among the group of occasional and former smokers as well as among non-smokers compared to daily smokers might also be a sign for surrogate behaviour. Smoking has been shown to affect Leptin levels that are associated with satiety and food intake as well as smoking increases the basic metabolic rate possibly explaining these findings [20-22].

Table 1: Prevalence of overweight, obesity and potential confounders within general and over-indebted population

	GNT-HIS (general population) n = 8318		OI-survey (over-indebted population) n = 949	
	% with parameter present	95% CI	% with parameter present	95% CI
Overweight	44.3	43.2–45.3	56.8	53.6–59.9
Obesity	11.3	10.6–12.0	25.1	22.3–27.8
Sex (male)	46.5	45.5–47.6	47.0	43.8–50.2
Age (>40 years)	62.1	61.1–63.1	52.9	49.7–56.1
Education (≥10 years)	68.3	67.3–69.3	40.0	36.9–43.2
Income, net (>1500 €)*	54.4*	53.3–55.5	22.6	19.9–25.2
Depression (yes)	9.4	8.8–10.0	38.9	35.8–42.0
Smoking (yes)	33.9	32.9–34.9	63.0	55.9–66.1

Notes: in crude analysis, covariates were dichotomised to improve understanding
*2134 subjects gave no information about income. By excluding them from the dataset the appropriate portion value for this character would be 73.2%

Table 2: Unadjusted odds ratios for the association between possible confounders and overweight/obesity

	Overweight		Obesity	
	Odds ratio	95% CI	Odds ratio	95% CI
Sex (male)	1.96	1.80–2.13	1.15	1.02–1.30
Age (>40 years)	2.55	2.34–2.79	2.00	1.74–2.30
Education (≥10 years)	0.47	0.43–0.51	0.46	0.41–0.52
Income, net (>1500 €)	0.88	0.80–0.97	0.67	0.58–0.76
Depression (yes)	0.98	0.87–1.11	1.50	1.27–1.77
Smoking (yes)	0.68	0.63–0.74	0.74	0.66–0.85

Notes: in crude analysis, covariates were dichotomised to improve understanding; n = 9080

It might belong to a poor stress management based by the financial strain of over-indebtedness to lapse stronger into non-health-conscious behaviour like „smoking" or „increased food intake leading to obesity" [23].

The choice of food is mainly determined by personal taste, cost and convenience and less by health aspects or the will to maintain a well-balanced diet [24]. Increasing the availability of „healthy" food by low-pricing campaigns could be an effective public health measure.

Over-indebtedness affects a series of risk factors for chronic diseases such as leisure time activities as well as participation in social activities [25]. Similarly, the diet might be limited in quality. The quality of an individual's diet often depends on financial resources and the ability to choose food [26-28] possibly boosting the overweight pandemic in low socio-economic groups [16,29]. Energy-dense food such as sweets or fatty snacks are often less expensive [30] compared to food with lower energy density such as fruit or vegetables [18,31].

The financial situation of over-indebted private households can partly account for the high prevalence of obesity among this group of persons. Lower quality of life deriving from deprived economic, social and environmental circumstances as well as behavioural risk factors and limited access to participation in daily life have to be taken into account when considering the complexity and diversity of the causes of obesity.

A couple of methodological issues have to be considered. First, overweight or obese people might have difficulties in finding a job or might have lower salaries than normal-weight individuals and thus may be more prone to over-indebtedness [32,33]. Such a reverse causation cannot be ruled out [34]. Second, in the general population sample, some subjects might have been over-indebted, possibly underestimating the true association between over-indebtedness and obesity reported in this study. Third, self-reported weight and height were used for these for analyses [35-37]. Self-reporting of weight and height might result in reporting bias. A potential non-differential misclassification cannot be ruled out and might have attenuated the association between over-indebtedness and overweight or obesity. A differential misclassification might result in different prevalences of overweight or obesity. However, this is similar to a change of the cut-off values for overweight or obesity and it has been shown that a change in cut-off values still allows assessment of relationships [38]. Fourth, one of the states (Mecklenburg-Western Pomerania) included in the survey on over-indebted people has one of the highest rates of unemployment in Germany. Non-indebted subjects from this state may have a lower income and higher prevalence of obesity when compared with Germany in total. However, since

Table 3: Unadjusted and adjusted odds ratios for the association between over-indebtedness and overweight/obesity*

	Overweight		Obesity	
	Odds ratio	95% CI	Odds ratio	95% CI
Over-indebtedness (unadjusted)	1.60	1.40–1.83	2.54	2.16–2.99
Adjusted for				
Sex and age	1.98	1.71–2.29	2.91	2.46–3.44
+ Educational level	1.65	1.42–1.93	2.42	2.03–2.90
+ Income level	1.76	1.49–2.09	2.41	1.97–2.95
+ Depression	1.81	1.52–2.15	2.34	1.90–2.87
+ Smoking	1.97	1.65–2.35	2.56	2.07–3.16

Notes: *confounders and independent risk factors modelled in ordinal, polytomous categorical form; n = 9080

adjustment for income did not explain the association between over-indebtedness and obesity, confounding due to income seems to be unlikely.

Conclusion

The results of the present study illustrate that apart from traditional socioeconomic factors over-indebtedness is associated to health in terms of body composition. Definitions of socioeconomic status used for health research should also consider the dept situation.

Competing interests

The authors declare that they have no competing interests.

Authors' contributions

EM, SL conceptualised the study and developed the study protocol of the OI-survey. EO, HR and AMT were responsible for the analysis. EM and AMT wrote the initial draft of the paper, which was subsequently modified in discussions with all authors. EM is the guarantor of the work. All authors read and approved the final manuscript.

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The study sponsor had no involvement in study design; in the collection, analysis, and interpretation of data; in the writing of the report; and in the decision to submit the article for publication.

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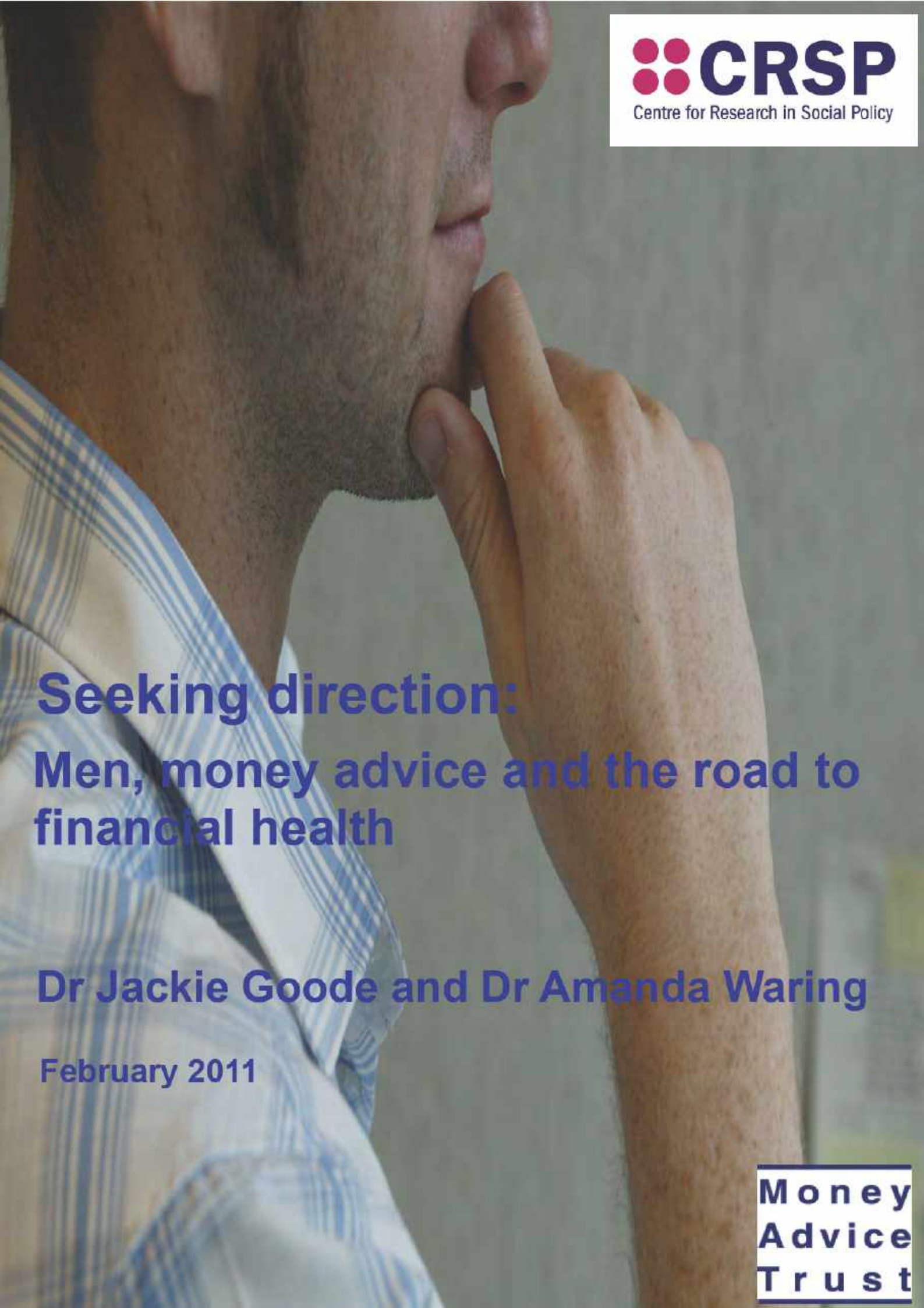

CRSP
Centre for Research in Social Policy

Seeking direction:
Men, money advice and the road to financial health

Dr Jackie Goode and Dr Amanda Waring

February 2011

Money Advice Trust

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Foreword

This research was commissioned to help further our understanding of the complex relationship between men and debt. There is a good deal of research already published on women and debt, and we wanted to ascertain any common tendencies in the reactions of men to a debt problem, most notably in the ways they seek and respond to advice. Anecdotal evidence was that men may be less likely to seek advice early when faced with a debt problem, and we wanted to understand whether this was true and if so what reasons may lie behind this. We now know that men who were unable to access advice when they tried were less likely to do so again, though positive experiences reinforced advice-seeking behaviour. Barriers faced by men included confusion between government or charitable debt advice services and commercial debt consolidation services, with a preference for the former and feelings of distrust for the latter. An interesting outcome is that men prefer empowering approaches that enable them to have a 'do it yourself approach' when dealing with their debts.

We know from evidence from various sources including most recently Shelter's research into experiences of clients who used their dedicated homeowner helpline that people who seek advice early have a better outcome. It is vital that people seek advice early when struggling with debt, so as to maximise the range of options available to them and prevent unnecessary enforcement action which can often be costly to the consumer – and it is important for the advice sector to understand what reasons might prevent men from seeking early advice, and explore how this situation can be remedied.

This research will be used to make money advice more accessible to men. We can also use the findings to hone our knowledge of how best to advise men with debt problems. By understanding the different ways in which men manage their finances, we can improve the advice we offer to ensure it is more effective for any individual that seeks money advice. Finally, and most importantly, this study will help us refine the way in which we look to guide men out of debt and back into financial health.

Joanna Elson

Joanna Elson OBE CDIR ,
Chief Executive, Money Advice Trust

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Jackie Goode and Amanda Waring
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Executive summary

In a context of growing levels of problematic personal debt and men's apparent reluctance to seek debt advice, this study, using in-depth interviews with twenty men, investigated 'triggers' into problematic debt for men; men's contributions to the management of household finances; how men see their own debt advice needs, and men's experiences and expectations of debt advice services.

Causes of problematic personal debt

- A lack of sustained employment providing an adequate and stable income was the most important trigger into problematic debt. This applied to men who: had been reliant on benefits for substantial periods of time; had a pattern of 'churning' in and out of work; had lost vital overtime; had experienced business failure; or had been made redundant.
- In contrast to female patterns of problematic debt found in earlier research, the problematic debts of a small number of men were associated with addictions.

Managing problematic personal debt

- Patterns of control and management of household income and expenditure, including getting into and managing debt, were embedded in the nature and dynamics of couple relationships. Different outcomes of such dynamics included one partner becoming responsible for debts incurred by the other; women being left with little access to money and carrying an unequal burden of the 'worry' associated with debts; and men controlling and managing household finances via internet and telephone banking.
- Although research has shown that even modest savings act as a buffer to withstand 'adverse shocks' in households managing problematic debt, most men in this study had either exhausted their savings in servicing debts or constantly needed to raid short-term savings in order to make repayments.

Experiences of debt advice

- Just over half of interviewees had sought debt advice, although not all had managed to access it.
- Those who had tried to get advice and been unable to do so felt disinclined to do so again (perhaps due to the barriers some men had to overcome in order to make an initial approach). Positive experiences of receiving advice, on the other hand, reinforced the likelihood of seeking advice again, should the need arise in the future.
- Those who had received debt advice spoke positively of its benefits. These were both practical and emotional. Practical help included crucial information about where they stood legally, advice on strategies for dealing with creditors, and pro forma letters; emotional benefits included relief of stress and worry and achieving peace of mind.

Barriers to advice seeking by men

- Gendered divisions of 'financial labour' within the family in which this was seen as part of the woman's role.
- A range of emotional responses to problematic debt from men that precluded them from addressing the issue.
- Over-optimistic assessments of prospects for improving the situation.
- Lack of awareness, understanding and inaccurate perceptions of what advice services offer.
- Confusion about not-for-profit debt advice organisations and commercial debt consolidation services, combined with a marked preference for the former and a marked distrust of the latter.
- Lack of self-confidence and the social skills perceived to be necessary to access services.
- A powerful need to see themselves as in control of their finances and able to 'do it themselves' in relation to managing problematic debt.

Delivering debt advice

- Those who had actually received advice over the telephone had found this helpful, even when they felt their circumstances to be relatively complicated.
- Face-to-face encounters were seen as enabling men to: create the kind of rapport necessary for talking openly; communicate the whole picture to the advisor; take the time needed to understand the advice being given; and take notes for future reference.
- Although none had had experience of online toolkits, these are compatible with men's expressed needs to be offered the means to 'help themselves' and to re-gain a measure of control of personal/family finances.

Recommendations

- Policy aimed at securing sustainable jobs that provide a minimum income standard is likely to have a major impact on reducing problematic personal debt, as are policies that support the ability of low-income families to save.
- The part played by addictions in men's problematic debt reveals a need to support the provision of treatment and prevention services for those with or at risk of addictions, particularly in relation to problem gambling.
- The likely increase in demand for debt advice as a result of the recession means that services need to make advice more accessible to men, for example, by: targeting services/money advice promotion at places where men are likely to be, such as football clubs; making user-friendly 'money packs' available to couples setting up home together; emphasising services' independent not-for-profit status in order to build trust; and framing advice-giving in terms of enhancing men's ability to 'do it themselves'.

1 Introduction

This research was conducted between April and July 2010 with men in low income to average income households who defined themselves as having problematic personal debt. The study aimed to explore 'triggers' into problematic debt; men's patterns of household money management; their definitions of problematic debt; the strategies used in dealing with it; and their attitudes towards and experience of debt advice services. The findings are set in the context of what was learnt about experiences of credit and debt in low income families from recent research conducted by the Centre for Research in Social Policy (CRSP) and funded by the Joseph Rowntree Foundation (JRF).

1.1 Within-household inequalities

Household income, the sources it comes from, how it is distributed between family members and who benefits is a constantly shifting target for research, policy and practice. This is increasingly the case as families themselves change and as the need to reduce child poverty remains urgent. There has been a huge increase in the numbers of men and women living together and children born outside of formal marriage. There have been high rates of divorce and remarriage. There has been increasing recognition and regulation of same-sex relationships. In light of these changes, there has also been less emphasis in recent household finances research on *marriage*, and the beginnings of more work comparing *different kinds* of households (see Special Issue *Journal of Socio-economics*, Vol. 37, 2008), including how these are associated with different patterns of household money management and allocation. In addition, there have been attempts to understand the subtle processes of negotiation and identity construction that allow financial inequalities to co-exist with a rhetoric of equality within partner relationships (Sonnenberg, 2008; Goode, 2009).

For very good reasons to do with the welfare of children, the emphasis on gendered financial arrangements and outcomes within the household has translated, in practice, to a focus on *women's* roles and impacts on *women*. There is a strong body of research, for example, that

demonstrates that while men are more likely to exert *control* over how income is actually allocated in families, women are more likely to *manage* finances single-handedly in low-income households, where financial management tends to be a burden rather than a source of power; and that women privilege children's needs in the way they manage low household incomes. Within families in receipt of benefits in particular, the source and recipient of income are also highly significant for its allocation, so that methods of benefit payment that assume the dependence of one partner, typically the woman, on the other can reinforce gendered inequalities (Goode et al., 1998). It is also the case that women are more likely than men to use professional advice services, (for example, in relation to health needs). A 'side-effect' of the focus in research on household finances on women's roles and the unequal burden they can carry is that men have rarely been the focus of inquiry *in their own right*.

Debt and couple relationships

Two recent publications on couples' financial decision-making (Goode, 2009; Rowlingson and Joseph, 2010) give *some* insight into men's views, perceptions and behaviours. Interactions between partners where they were interviewed together, for example revealed the ways in which decisions in relation to debt are deeply embedded in the nature of the couple relationship, and that men's identities as 'breadwinners' and as 'partners' continue to have salience, whether they are in or out of employment. Where partners were interviewed individually, differences in views, attitudes and perceptions between men and women about how finances are and should be managed were revealed in the discrepancies that appeared in their separate accounts. If men's practices in this area are different to women's and if they exert such influence over decision-making in family finances both within and beyond partner relationships, and yet traditionally have not sought advice in a timely way when problematic debts arise, we need to understand more about their *own* attitudes and practices in relation to domestic money management; the circumstances in which they incur problematic debts; and the strategies they use once this has happened.

Men and debt advice

There are some signs that the effects of the recession may be leading men to seek debt advice more than has traditionally been the case. The number of men contacting the Consumer Credit Counselling Service (CCCS) for debt advice, for example, has increased by 51% since 2007, while

the number of women increased only half this much. Since the charity began in 1993, a greater proportion of women have always approached CCCS for help but now the numbers from each gender are almost level. The service attributes this to the recession, suggesting that men have suffered its effects more than women because of a combination of rising unemployment, a slower rate of salary increases and rising household expenditure, particularly in relation to the cost of gas and electricity. Almost half of those approaching the charity attributed the cause of their debt to reduced income, including redundancy or unemployment, whereas fewer than 16% of women gave unemployment as the primary reason for their debt problems. In the light of this, it would be beneficial to understand more about how men are managing their domestic finances in this economic environment and how they see their own debt advice needs.

1.2 Aims of the study

The aims of the study were:

- to provide contextual information, from a recent study of credit and debt in low-income families' (Dearden et al., 2010), on men's and women's orientations towards and experiences of money management and debt-advice;
- to explore 'triggers' into debt for men on low incomes;
- to explore male patterns of domestic money management;
- to explore the strategies men use in dealing with problematic debt;
- to explore men's attitudes towards (and where possible, experience of) debt advice services; and
- to understand any barriers to men accessing and utilising advice and how advice agencies might take these into account in their service delivery.

1.3 Methods

The Centre for Research in Social Policy (CRSP) recently conducted a study of experiences of credit and debt (CAD), funded by the Joseph Rowntree Foundation (JRF). That study used in-depth interviews with men and women in low-income families over a period of a year. As a preliminary to this study, we conducted secondary analysis of the CAD data, focusing on debt advice, before recruiting and undertaking in-depth interviews exclusively with men for this study.

1.3.1 Women, men and debt-advice in the CAD study

Very few men we spoke to had sought advice about their debts whereas a number of women had. For some women this had been on an informal basis with friends:

'I do talk to people about it … like with my friends, you know. Everybody knows that I've had debts and I've been a bit stuck at times. I've always been quite open with people anyway and asked people for advice.'
(CAD22)

Other women who had used a debt advice service spoke positively of the benefits:

'Years and years ago [I had] money advice … She was brilliant, lovely woman … We went on a successful appeal together ….'
(CAD9)

'I did (seek advice) a few years ago with Sure Start, because they used to help you with things like that … they had a person who helps you manage money and that … if it weren't for them I'd have just left it and left it and I'd have lost my house.'

(CAD14)

'At one point we consulted Money Advice because of the council … I gave money to my ex and he was supposed to be paying my TV licence and my rent and money miraculously disappeared and I didn't find out about it until the council said "We're taking you to court because you owe this, this, this and this". Needless to say I'm not with him anymore.'
(CAD17)

'Yes … [for] arrears … They gave me quite a lot of help. When it went to court they told me to tell them that I could only afford £3 a week, so that's what I should pay, and they agreed.'
(CAD52)

A few women talked about the difficulties of accessing services, although it should be noted that

this was primarily in relation to Citizens Advice Bureau (CAB):

> *'I was on the phone one day for over two hours. I kept ringing but it was constantly engaged ... I know a few people who have tried to get through to the Citizens Advice Bureau and you can never get through. The lines are always busy.'*
> (CAD3)

> *'I know people who have who've said it was tough to get an appointment. Maybe just having a bit more availability for people to be able to help out and make it a bit easier. ... I think specifically in the current climate advertising the Citizens Advice Bureau would help.'*
>
> (CAD22)

> *'I found the Citizens Advice to be very, very useful but ... although there's lots of information about Citizens Advice it's not as visible as it could be ... because it's voluntary so they're always understaffed ... So as useful as it is, it's low visibility relatively. And it's constantly under stress ... It's just not publicised as much as it needs to be, especially at the moment.'*
> (CAD34)

Only two women referred to barriers to using a debt advice service, in the first case because she felt it would damage her chances of getting her children back to live with her; and in the second case, due to a youthful desire to spend money without thinking about the consequences:

> *'I couldn't trust anyone .... because when I had my kids, I used to get this Sure Start woman ... and every time I used to say something to her she used to blab it to my social worker ... it got said in court .... It was against me getting the kids back.'*
>
> (CAD12)

> *'I felt like I was being told off because people were trying to give me advice and saying "Well, you need to be careful, you need to do this, you need to do that" and I was like "Well I don't want to, I want to be 21 and I want to go out and I don't want to have to think about money". But I should have done really, and then I wouldn't have got in the trouble that I'm in .... [I] left it too long because I didn't like having to write the letters ... If people can find the help, definitely take it, there's no shame in admitting that you're in debt or whatever because I think 80% of the population are now.'*
>
> (CAD50)

In contrast, it was unusual for men to report talking about their debts, even informally to friends. For one man, it was not something that should be discussed outside the family:

'How I look at it is, it's in the family so you keep it in the family. You do not discuss it outside the family.'

(CAD40)

When another did talk to someone else, it was to seek information about the law:

'It was when I was first made redundant … I was sitting on my backside feeling sorry for myself, I was pretty much in debt and in a bit of a mess … I actually went to my dad's accountant and sort of said, "You understand a lot more of the laws, what can I do?"'

(CAD54)

One of the few who *had* used a debt advice service had been prompted to do so by an advertising campaign and he now felt they should continue to be resourced, especially in the current economic climate:

'I have spoken to National Debtline and Citizens Advice … in relation to my credit card that I defaulted on … there has been a few campaigns I think for the National Debtline and that is what prompted me … I sought them out in the Yellow Pages or on the internet ... [what the government can do to support people who are in debt is] greater regulation of the credit system and possibly more help or money for people like the Citizens Advice and more money for things like the National Debtline …. put more money into that, at least at the moment.'
(CAD53)

And another had sought help from CAB in severe crisis and when referred to them by health professionals:

'The only people that has helped me manage my debts has been the Citizens Advice Bureau … they have wrote to all the debtors telling them the situation and that is why I have got probably about an extra £20 in my pocket a week now … It was actually when I took that overdose and the psychiatric team were coming to see me, it was them who got me in touch with the Citizens Advice ...'

(CAD23)

Most men we talked to had *not* sought advice, however, and the reasons they gave contrasted markedly with women's overall willingness to seek help. The most common reason reported by men for their reluctance was that they could (and should) 'do it themselves':

> *'When I got my job they asked if I wanted to see [someone for debt advice], but I just cleared up my debt anyway with [the job] ….'*
>
> (CAD15)

> *'My point is, why can't you do it yourself? …. I have got on to my creditors, but they don't stop the putting on extra money. How come these other people can do it, get it stopped and we can't? You know, people trying to do it themselves. Why have they got more clout than what we have?'*
>
> (CAD30)

> *'I haven't [sought debt advice] because like I say I always try to get myself out of debt. This is what I'm saying, I don't like people knowing what I'm thinking … to me if I've got a problem, I like to keep it inside me. Do you understand?'*
> (CAD35)

> *'… at one point I probably did think about going to [CAB], but again I never really got around to it …. I didn't really feel I needed it at the time and I didn't really want to go through all my finances and be made to feel that I wasn't in control.'*
> (CAD36)

These indications of men's attitudes from the CAD study alerted us, then, to the kinds of issues to explore further in *this* study, with its exclusive focus on men.

1.3.2 Recruitment

This study used individual in-depth interviews with 20 men from the East Midlands (Nottingham, Derby and Leicester), in low to average-income households. Just over half were living in households with annual incomes of less than £15,000 and a quarter with incomes of less than £25,000. On the hypothesis that earlier levels of borrowing combined with the recession may have impacted on men whose income levels had not previously rendered them vulnerable to unmanageable debts, we included some 'higher' incomes: two had household incomes between £30,000 and £40,000, and one had a household income of £42,000 (see Section 1.3.3). All

defined themselves as having problematic levels of debt. We recruited men who had and men who had not sought debt advice. Interviews took place in the home. They lasted between an hour and an hour-and-a-half and were tape-recorded and fully transcribed.

Just over half our participants (11) were recruited from men in the CAD study households who had not actively participated in that study or had done so only marginally; another one was recruited through one of these participants; the rest were recruited on the doorstep by professional recruiters. The recruitment process was in itself revealing of men's attitudes and feelings about problematic debt. The CAD study had used a longitudinal approach, re-interviewing participants every two months over a period of a year and a good research relationship built up with many families during that time. Consequently, although we had not interviewed the men we recruited from these households in depth (or at all) before, we benefited from the trust that had been established. Even so, having consented, some began the interview by stating that they would not normally talk to anyone on this subject, or avowing that we would probably only get one word answers from them. (This was not the case in practice; in fact some men commented at the end of the interview on how good it had been to 'talk').

Doorstep recruitment proved much more difficult. Women who fitted the criteria and were willing for their partners to participate were either unable to persuade them to come to the door, or the men who did so then refused outright or refused when subsequently contacted.

'Snowballing' proved equally difficult. A few men volunteered the information that they had friends who were in similar or worse debt than they, but they felt unable to approach them on our behalf, were convinced that such an approach would meet with a refusal, or in one case, found this indeed to be the case. The reasons behind this general reluctance were explored in the interviews we did conduct, and form part of the findings, but there was reference by potential participants throughout the recruitment process of the threat to men's pride that participation would constitute. This is a familiar discourse and it may be that it operates as a 'resource' for men to call upon to justify not engaging with this difficult subject. We also explored this further with our participants – who had after all managed to talk at some length to us.

1.3.3 The sample

Age

Participants ranged in age from 25 to 63, with most being in their 30s and 40s.

Household composition

Over half lived with a partner/wife and children; three were in couple households without children; four lived in single households (one with his son; one sharing care of his son); and one lived in a shared house.

Housing status

Most (13) were in rented accommodation; of these, seven were council tenants, four were privately renting and two were housing association tenants. There were seven owner-occupiers.

Employment status

Nine were employed full time at the time of interview (including one on a temporary contract of three weeks with an agency); three were employed part time; one was self-employed; and seven were in receipt of benefits.

Ethnicity/nationality

Two men described themselves as Caribbean British, one as British Pakistani and the rest as White British.

Household income

Table 1 Annual Household Income

< £10,000	< £15,000	< £20,000	< £25,000	< £30,000	£30,000-40,000	£42,000
3	6	3	2	3	2	1

Types of debt

Our interviewees told us about fourteen different types of debts. All but one had multiple forms of debt. They are shown, in the order of most frequently occurring debts, in Table 2. The numbers in brackets correspond to the interviewees listed in Annex A.

Table 2 Types of credit/debt

Type	No of People	
1 Credit card	12	(2,4,5,6,9,12,13,15,16,18,19, 20)
2 Arrears on bills	9	(2,3,4,5,8,9,10,13,15)
2 Instalment purchases	9	(6,7,8,11,12,14,16,17,18)
2 Bank/building society loan	9	(1,4,5,8,11,12,16,18,19)
5 Overdraft	8	(6,9,12,13,14,15,16,18)
6 Mortgage	7	(12,14,15,16,18,19,20)
6 Catalogue	7	(3,5,6,7,8,10,12)
8 Loan from family/ friends	6	(9,10,11,13,15,20)
9 Doorstep loan	3	(7,8,11)
9 Student loan	3	(5,13,20)
11 Store card	2	(6,20)
12 Credit union loan	1	(10)
13 Child support arrears	1	(8)
14 Unpaid tax bill	1	(6)

Those with one or more household member in employment had higher debts and more types of debt than those households reliant on benefits. Credit card debts were the most frequent, followed by arrears on bills, hire purchase commitments, bank or building society loans and overdrafts. Those reliant on benefit income were more vulnerable to priority debts such as utilities, while those with a regular wage-derived income had greater access to and propensity to debt from consumer credit commitments.

1.3.4 The interviews

As a preliminary to exploring the acquisition of problematic debt, we wanted to form a picture of how couples managed their income and expenditure and their household financial decision-making practices. In order to do this, we asked about banking arrangements; responsibility for day-to-day management of bill-paying and accounting; access to one's 'own' money; the need to get permission from or to 'justify' expenditure to one's partner; and who had the 'final say' over larger items of expenditure. These are 'tried and tested' approaches to exploring the intra-household management and distribution of income, drawing out a crucial difference between *management* and *control* of income:

> *'There is an important distinction between money management (which may give the household manager circumscribed power over finances) and overall (executive) control (Pahl, 1989). For example, it is possible for an ostensibly joint management system to be operated either as a whole wage or housekeeping allowance system if the main earner retains a high level of control of the 'pooled' money, thus obliging the other partner to seek permission before making any non-routine expenditure. The right to control one's earnings can therefore militate against equal sharing, even when partners are aiming for equality … the use of a joint bank account – and the inferred intention of equal sharing underlying its use – does not always in practice translate into equal access to and control over the households' financial resources. There are many other factors that potentially undermine equal access to common resources – including those of a psychological nature…'*

(Burgoyne and Sonnenberg, 2009: 91)

We explored these issues before asking interviewees to choose from the typology of household allocation systems referred to above (see Annex B) as a basis for further discussion. With changing patterns of family formation, and the appearance of different kinds of households, as well

as new forms of 'invisible' money and electronic banking, people's domestic financial arrangements may not fit as neatly into discrete categories as a typology suggests. Nevertheless, asking interviewees to say which of a selection of 'systems' came closest to their arrangements provided a useful tool to enable them to represent their arrangements as they saw them, and offered a stimulus for them to elaborate on the picture they had already painted – as they sought to clarify, for example, on where they fitted and how they diverged from the different options.

Those men who lived alone had all previously been in co-habiting relationships, and with them we explored any changes that had taken place in how they manage their household finances and debts now. We were interested, in whether having responsibility for day-to-day management, perhaps for the first time, might be associated with seeking debt advice, and if not, why not.

We then explored how they had acquired problematic debts; experiences of debt advice for those who had accessed it; barriers to seeking debt advice for those who had not sought it; and views on how debt advice services might encourage men to access their services in a timely way.

2 Domestic money management

Key points

- **Couple's banking arrangements ranged from the straightforward to the highly complex. A single current account was associated with the need to have one person, usually the woman, managing a limited income.**
- **Separate accounts were associated with separate spheres of responsibility, in some cases reflecting the man's assessment of the status of the relationship, and in others a desire to preserve personal responsibility for debts incurred outside of the relationship.**
- **In some higher income households, men took responsibility for managing a number of different accounts online/via mobile phone on a day-to-day basis, constituting an 'electronic' form of the familiar pattern of 'juggling' income and expenditure in order to manage debts; where this occurred, men tended to characterise it as enabling them to be 'smart' money managers.**
- **The use of numerous accounts appeared in its most extreme form for the interviewee with high levels of problematic debt, who identified himself as addicted to gambling.**
- **Earlier research by CRSP showed that even modest savings acted as a buffer to withstand 'adverse shocks' in households with problematic debt. Most men in this study aspired to having an active savings account; some had dormant accounts where savings had been exhausted by servicing debts while others constantly raided short-term savings to meet regular commitments, including debt repayments.**
- **The dynamics of couple relationships were highly significant in how problematic debt was both acquired and managed. An important distinction in how money gets allocated within the household is between the overall control of income and its day-to-day management. In couple households in this study, detailed descriptions of couples' practices suggested that a 'whole wage' system (in which one person exercises control *and* day-to-day management) was the most common, followed by more shared arrangements ('pooling'). As in earlier research, male whole-wage systems gave women very little access to household income, and female-managed pools were associated with an unequal share of the burden of managing debts.**

2.1 Banking arrangements

Earlier research has shown that couples' banking arrangements often symbolise the nature of the couple relationship, with a joint account, for example, being characteristic of married couples. This was the case for Mr Pearson and his wife. Just using one account reflected their choice to adopt a system in which Mrs Pearson took overall responsibility for managing the household finances from a single 'pot'. They decided when they married that it was unnecessary for Mr Pearson to maintain his own bank account given that his wife was the main breadwinner. Use of one account to enable the woman to manage everything was also the case in Mr Butcher's and Mr Telford's households. Both of these men preferred to leave financial responsibility to their partners. Although most of our couple households used joint accounts, in fact, this choice did not necessarily reflect the nature of the couple relationship in a straightforward way. The demands of managing a limited budget effectively also influenced use of the 'traditional' arrangement of a single joint account to which both have access and which is used for all income and expenditure.

Other arrangements were much more complicated, featuring within-household combinations of: joint current and savings accounts; separate accounts; joint and separate accounts; and multiple joint current accounts. The presence of several accounts sometimes arose from a need to juggle money around to pay certain bills, or to have one protected 'pot' of money not subject to direct debits and the risk of incurring bank charges. For Mr Repton, for example, fairly complex banking arrangements enabled him to manage the family finances in a very active and sophisticated way (see Section 2.2). He did this primarily from a joint account but also maintained his own separate account. The separate account was not about maintaining a degree of financial independence from his wife, however, but was rather a consequence of an outstanding overdraft on his personal account, which he did not wish to bring into the joint financial arrangements he and his partner had set up on entering into married life.

In other cases, maintaining separate accounts was associated with separate spheres of responsibility and seen as enabling a greater degree of control over one's own sphere. Mr Flintham explained that keeping the separate accounts he and his wife had had before they married, enabled each of them to 'keep tabs on' their own personal expenditure. He could be confident about there being sufficient funds available to him for the essential expenditure for which

he was responsible if he did not also have to take into account any personal expenditure of his wife's.

The highest number of accounts (nine) was held by Mr Nelson, who identified himself as addicted to gambling. Multiple accounts had initially been a feature of his efforts to make money through savings and investments, using free overdraft facilities, for example, and investing student loans. After losing thousands of pounds through gambling, however, having so many accounts meant that he was now spending an inordinate amount of time managing his debts in order to avoid penalty charges.

The five single men were all 'banked'. For Mr Hakim, Mr Winters, Mr Nelson and Mr Bolton, their banking arrangements had remained unchanged since living with a partner, as each had had an independent bank account then. Mr Compton's sole bank account had made his arrangements simpler, as he and his ex-wife had had a number of joint bank accounts and a savings account for each of their three children.

In contrast to the CAD study, and again reflecting somewhat higher incomes within this sample, a number of our interviewees had active, if modest, savings accounts at the time of the interview; some who had had savings in the past had exhausted them or were failing to accrue savings by constantly having to 'dip into' the account to meet their regular commitments; others aspired to being able to 're-activate' savings accounts that were in fact dormant. Mr Norton was the sole exception to this. He had been able to build up savings in his online savings account, which he saw as a safeguard against the threat of future redundancy.

Other men who used internet banking also referred to 'savings' accounts but their descriptions of these showed that, in practice, they were used as designated 'pots' of money to pay household bills, rather than as a way of building up funds for the future. Online banking was significant in this study in that it was characterised, by those men who used it, as enabling them to be 'smart' managers of household finances (see Section 2.2).

2.2 Patterns of money management

Unlike earlier research, which found an association between low-income households and female management, in our (15) couple households, there was some variety (see Table 3 below). This may reflect the mixture of married and co-habiting couples in the sample; and the variety of single and dual-earner couples and households reliant on benefits in the sample.

Table 3 Money management

	Whole wage	Pooling	Independent management
With children			
Married	1	4	2
Co-habiting	3	1	
Separated/divorced			2
Without children			
Married		1	
Co-habiting	1	1	1
Separated/divorced			3
TOTAL	5	7	8

Research has shown an association between marriage (as opposed to co-habitation) and pooling arrangements and that was borne out here. It was the most common choice among couple households, (although, importantly, in two of these, examples of actual practices clearly indicated a **male whole wage** system in operation, with less equal access to money, in practice, than a pooling system suggests).

Those who unequivocally chose **pooling**, and whose illustrations and examples bore this out, were married and all except one couple had children. This dual-earner couple without children used a **male-managed pool** in which household finances were managed online/electronically. They had begun their married life with a partial pooling system but had found the autonomous spending this allowed each of them did not facilitate the level of control over their finances that their commitments – including debts that his wife had accrued – required. He had therefore set up a number of 'online savers' – effectively 'pots' of money for different purposes, which he actively manages. This online day-to-day management allows greater flexibility than direct debits and facilitates saving for annual expenditures like car insurance, in order to escape charges for spreading the cost over a year. He had also set up text alerts, to notify him in advance if he was in danger of going beyond his overdraft limit and incurring charges.

Married couples *with* children used a **female-managed pool**; that is, the wife managed the finances on a day-to-day basis. Various explanations were given for why the woman had this responsibility in these couples, the gist of which was that they were better at it, more 'with it', less likely to spend on 'silly things'. This being the case, how do men access personal spending money under these arrangements, in families where there is little or no disposable income? It may arise out of negotiation, it may be accessed covertly, but quite commonly it was a tacit arrangement embedded within the dynamic of the relationship, in which the man did not need explicitly to assert his authority, as his wife deferred to him when there was disagreement. This in turn arose out of a need to preserve his identity as the 'head of the household' or breadwinner, even when he was out of work.

Of the five who chose a Whole Wage system, four chose a **female whole wage** system (where all the income is managed by the woman, but the man may access some personal spending money), with illustrations that bore this out. The fifth described a **male whole wage** system. Although they had joint current and savings accounts, there was an additional account (used solely by him as a repository for funds to cover car and pet insurance). He had 'taken over' both control and day-to-day management of their finances after debts that his wife had accrued when they first got together were put in the hands of a debt-recovery agency. As she intermittently suffered from depression and was happy for him to 'take charge' of their finances to allow her to concentrate on looking after the children, he actively managed accounts online, moving money around to cover

direct debits, choosing a standing order for debt repayments to allow him some control over increases proposed by creditors, and using a 'Google docs' online spreadsheet which he accessed via his mobile phone, in order to monitor and manage income and outgoings on a daily basis.

This distribution of financial allocation systems meant that women had primary responsibility for managing finances on a day-to-day basis in seven of the couples – four through a Female Whole Wage system and three through a Female-managed Pool; men had primary responsibility for managing finances on a day-to-day basis in five cases – three through a Male Whole Wage system and two through a Male-managed Pool; the remaining three couple households operated an Independent Management system.

There was some association between male control of household income/expenditure and the acquisition of debt or an inability to reduce problematic debt, and of women being disadvantaged by this. There was also some indication of male control arising out of the female partner's earlier acquisition of debt. Such examples of what has been referred to as 'sexually transmitted debt', in which one partner effectively becomes liable for, or bears the impact of, debts which the other brings into the relationship suggest that each may benefit from advice tailored to their needs: the partner who incurred the debts may benefit from 'conventional' debt advice, while the partner who becomes liable for these debts may well benefit from financial guidance aimed at avoiding the situation becoming worse.

All of the men living in lone male households, (now inevitably using **Independent management**), had been in co-habiting partnerships in the past; in each case, unmanageable debts had formed part of the couple's relationship, but in different ways. In Mr Nelson's case, he already had high levels of problematic debt when he moved in with his girlfriend and therefore made no financial contribution to household expenses. His inability to get his life 'in order' then contributed to the break-up of the relationship. In Mr Bolton's case, his girlfriend had debts of her own when she moved in with him. He was in a well-paid job as an accountant and could meet all his borrowing commitments at that time, whereas she was in receipt of benefits. He took responsibility for all household expenses and also supplemented her benefit income when needed, which eventually

had an impact on his own acquisition of problematic debt when the relationship broke up. Where a break-up of a partnership had been preceded by an extended period of relationship instability, systems of household financial management and allocation used during this period acted as a 'tracer' of the couple relationship; that is, they too became unstable.

Although the number of 'single' men with problematic debt in our sample was small, the fact that they now had sole responsibility for the management of their household finances, in some cases for the first time, might suggest that they would be likely to seek debt advice. In fact, three of the five had done so. We will explore their experiences of this and the reasons the others gave for not having done so, in Section 4.

Examining couples' 'allocations systems' and exploring where their practices fitted or diverged from such categorisations began to open up the ways in which the use of credit and the acquisition of unmanageable debt, like other expenditure-related 'decisions' are embedded in the dynamics of control and management of household income and expenditure. This is explored further in Section 3.3.

3 The causes of problematic debt

Key points

- **Insecure and long-term low income (as opposed to consumer spending to finance high material standards of living) acted as a primary trigger into problematic debt.**
- **The impact of the recession on loss of income, leading to problematic debt, was evident.**
- **Certain male behaviours that were referred to in women's accounts in the CAD study were recounted in much more detail here – such as male-initiated 'autonomous' spending that rendered attempts to budget carefully much more difficult.**
- **In some instances, problematic debt was a significant feature of family breakdown while in others problematic debt followed family breakdown.**
- **Accounts of drug and gambling addictions, although small in number, had led to severe problematic debt and partnership breakdowns.**

3.1 Persistent low income

Although as we saw, Mr Compton did his best to manage his finances, he had struggled with debts as a result of being reliant long-term on invalidity benefit due to debilitating depression. He felt particularly overwhelmed at the point his youngest son left home to go and live with his mother, resulting in Mr Compton no longer receiving child benefit.

Similarly, for others of our interviewees with children, being in long-term receipt of benefits or 'churning' in and out of work over a period of some years had led to problematic debt, which they saw little chance of rectifying in the near future.

Mr Graham and his wife lived in privately-rented accommodation with their pre-school age son. Mrs Graham had a son from a previous relationship who stayed with them at weekends and during

school holidays and Mr Graham had a child from a former relationship for whom he paid child maintenance. Their debts included bank loans, mounting bank charges on an old account of Mr Graham's, door-step loans, catalogue debts and numerous arrears. Mr Graham had just started a new job involving shift-work after being unemployed for around nine months. He had experienced a long-term pattern of being in and out of work. He and his partner had used an online calculator to work out how much he needed to earn to be better off than when they were receiving benefits. Even with working tax credit, he was not much better off in his latest job, and the complexities of and delays in processing his entitlements throughout periods of 'churning', together with different amounts of income coming in at different times from different sources, exacerbated the challenges of avoiding problematic debt when on long-term low income:

> *'We should have had an extra four weeks [housing benefit] because I was unemployed for over six months … but … they stopped it instantly and said "Now you've got to apply for it again" … it takes them about four months on average normally .. to get four weeks' rent … and then another time I broke my hand when I was signing on … so they said "You've got to claim incapacity benefit". I said "Well, it's coming off in a week, what's the point?" … still had to do it. Then the council said "Hang on, we're stopping paying because you've changed benefit". And then I had to change benefit again because my cast was off … four month's (delay) each time … and then they only paid two months. So we end up in massive arrears again.'*

As we saw, Mr Winters was now an unemployed lone parent with a ten-year-old son, who had lived with him for the last seven years. His total income was £120 a week and he had council tax and water rates arrears, catalogue debts, loans from a doorstep lender and a credit union and also borrowed occasionally from his mother. He was not sure whether debts accrued from a council house tenancy immediately after his relationship broke up were also still outstanding or whether enough time had passed for them to have been 'wiped' but he knew that there was no possibility of accruing further debts via the use of credit. Low income families regularly rely on credit to 'smooth' income and 'make ends meet', but problematic debt often leads to financial exclusion from all but the most expensive forms of credit and this was the case for Mr Winters:

> *'I can't get owt on credit, or get like HP, or go down and 'get-something-pay-next-year'. I can't have none of that.'*

At the same time, he saw little prospect of work to improve his situation.

3.2 Loss of income: unemployment, loss of overtime, business failure

For seven of our interviewees, the 'adverse shock' of being made redundant, losing overtime or going out of business had been the significant trigger into unmanageable debt. Cancellations of overseas contracts, a 'last-in-first-out' policy, the crisis in the construction industry and the drying up of work in machine-maintenance after an initial good start in a newly-launched business had left these men with unmanageable debts. An eighth interviewee who was self-employed was also concerned about his level of indebtedness because he was actually getting very little work.

Mr Storer and his family lost their house when he went out of business overnight following the cancellation of a large contract. He became depressed and unable to work for an extended period, during which his wife took on several part-time jobs. The family were under great strain at this time. Some years on, at the time of the interview, they were council tenants, he and his wife were in full-time employment and the few debts they had were manageable. Although they continued to use a doorstep lender at Christmas and holiday times, he described them now as debt-averse.

After his fledgling business failed Mr Barton, who lived with his partner but had no children, was fortunate enough to keep his house thanks to a sympathetic mortgage company, and he had also since found full-time work. But he had been left with huge debts and would not want anyone to go through the sleepless nights he had experienced as a result of acrimonious and not always successful negotiations with aggressive creditors. He anticipated many years of paying off the £15,000 business loan he had taken out, as well as arrears he had accrued while unemployed.

Mr McPherson also worked in construction and had intermittent work erecting marquees, but since his partner was made redundant at the same time as him and subsequently went back to college, they were struggling to provide for their son and service the debts they had acquired as a result of their redundancies/unemployment.

Mr Houseman had always earned 'good money', first as a plasterer and later as a site manager in the construction industry, initially abroad and recently in the UK. When work 'dried up' at the start of the latest recession, he was left with a £7,000 tax bill, an overdraft and credit card debts. He was in receipt of pension credits, had little hope of clearing his debts and was told after a court hearing that he may face bankruptcy.

Mr Bolton, a separated man who shared the care of his school-aged son, had been earning a sufficient salary as an accountant to meet all his borrowing commitments when he was made redundant. When his partner and her daughter first moved in, he took responsibility for paying all the household bills as she was unemployed and in debt. Later, he re-mortgaged his house to build an extension. The relationship broke up soon afterwards, and in December 2009 he was made redundant for a second time. As a result, he owed around £10,000 in mortgage arrears, credit card debts and hire purchase (HP) commitments. At the time of the interview, he had got three weeks' work from an agency and was still negotiating his way through the benefits system.

Mr Flintham, a married man with two school-aged children, worked full time as a cooper and his partner worked part time as an administrator. Their joint income was sufficient to regularly meet their commitments on mortgage payments (£400 a month); bank loan (£15,000 for home improvements); overdraft (£1,000, acquired due to six weeks off work sick); credit card (£7,000 for household goods, car maintenance/fuel and family outings); HP (£80 a month); and catalogue, until orders stopped coming in from breweries and he lost his regular overtime. His wife had been able to increase her hours, bringing their combined income to £400 a week, and he thought they could 'ride it out' by making minimum repayments until the World Cup and the Olympics hopefully led to improved orders at the factory.

Mr Donaldson and his family came to England when government changes in land use affected his garage business in the small island of St Martin's. He hoped to save enough to return home and buy more land, and got work immediately, but was made redundant at the start of the recession. He still hoped to return when his older daughter had completed her higher education.

Mr Hepworth, a self-employed painter and decorator, had 'three or four weeks' work at the time of the interview. He had been constantly worried about getting work for the last year, and feared that the working families tax credit he had relied on in the past was about to be cut, which would leave them 'in a mess' and make their debts unmanageable.

3.3 Couples' 'decision making' around expenditure

In line with the research showing that in low-income families especially, one person, typically the woman, has the main responsibility for managing household finances as a way of budgeting more effectively, this was predominantly the case in couple households with children. However, our interviews also revealed the ways in which the dynamics of partners' financial decision-making can lead to additional 'unplanned' expenditure (thereby either incurring debt or making it more difficult to reduce problematic debt), despite the best efforts of the person with 'assigned' responsibility.

We saw that in Mr Donaldson's family, for example, his wife had overall responsibility for managing their finances due to being more 'skilled' in accounting than him. He also described how she allowed him to have the 'final say' where there was disagreement. Later he described making autonomous purchases without prior consultation in a way that risked going overdrawn:

> *'I just went in and just purchased a cutter to cut the grass. Now before I bought that I make sure … I checked to get the best for the money. But it is not something which I knew would have come up this month, and I also thought of, how can I buy it without jeopardising our other monthly expenditure? I waited for the right time. She has a very tight margin. Now I bought that – [with] the tight margin – if something goes wrong that we need, then you have to sacrifice somehow to buy that. And there is where the extra load goes on the bank, and then you might go in to overdraft.'*
>
> (Mr Donaldson)

Mr Donaldson also took out a bank loan. As part of his church work, he wanted to go on a trip to Africa. He also saw a loan as opening the door to further credit in the future should they need it:

'What were the loans for? Oh OK, yes, yes, yes, that loan, I was going on a volunteer charity trip in Africa. So it helped to cover expenses and what not, and I also assisted some needs. But that money, I also got contribution from back home to help too. Yes, yes, it is not much really we pay. We don't pay much for that. I just did it because, you know, they say it is good to always have a relationship with the bank. In the future, you need a loan, it will be easy to have that established relationship with them, you know?'

It was not clear, however, how much prior consultation with his wife there had been about this.

Mr Graham similarly made autonomous purchases, which he saw as modest enough not to matter, although in a context of problematic debt, even small, unplanned purchases can have an impact:

'She does more of the working out and keeping track of things. I don't think about it, to be perfectly honest … "Have you paid this have you paid that, blah, blah, blah", you know, just keeping track. [Might you forget?] I might just not remember to pay something, yes … [What about your DVD (that had previously been mentioned) then, would you feel that you could just go and make that purchase without consultation or discussion, so to speak?] Yes probably, depends on how much it is really. If it is a cheap one then yes, a few quid is not really going to matter … I have to try and stop myself to do anything really, because I just go and do something …. Go off and do it and then come back: "oops!""

(Mr Graham)

In Mr Butcher's case, it appeared from his account that neither partner was exerting overall control. He lived with his partner Angie and their two children. They were both in receipt of benefits, paid into their only bank account, which was in Angie's name. Before he moved in with Angie, he described his lifestyle as "just having parties, getting up, going out, forgetting about it, coming back, having parties – just a single life, but just not paying any bills … just spending my money on junk." This had led to substantial arrears on water rates, council tax, TV licence and rent – debts that he brought with him into the partnership. Further arrears had mounted up in the five years they had been together. He did not access his partner's account because "I know I just end up going out and spending it on rubbish and putting the kids and Angie in shit". She was responsible for the day-to-day management of their finances, but gave him money when he asked for it:

'[So when you said before you'll just ask Angie for the odd tenner or whatever … how often, is it kind of like regular …?] It's like every three days really … I've not been asking for as much money lately for my weed.'

However, he felt she was no better at money management than he was, and cited a list of what he felt were completely unnecessary purchases:

'I'll show you … she spent £20 on that spongy thing that you use for your window screen … she got two fake chamois that ain't even real leather, this cream you can use to polish up chrome and stuff like that … That's what I mean, I think she's just as bad as me when it comes to spending. We're both as bad as each other.'

Nevertheless, the fact that she was nominally 'in charge' of their finances enabled him to feel more 'secure' and to avoid worry:

'It's down to her, she knows what's in the bank, she'll know how much to spend … if I had a hundred quid in my pocket today, I'd just float around and spend it and have nothing and wonder where it's all gone kind of thing … [it's interesting that you say that you think she's as bad as you and yet between you, you chose that Angie would look after the money …] I know that I've got that little bit more secureness over the money … The advantage is I don't have to worry about having to pay the bills.'

In Mr Smiley's case, an ideology of 'fairness' was cited in relation to engaging in personal expenditure. As we saw, he described their arrangements as a male-managed pooling system, in which he had overall control. But as he explained here, whenever he spent on himself, he would give his partner an equivalent amount to spend on herself:

'If I am spending money on myself, I don't see why she shouldn't be able to spend money on herself. We are an equal partnership in everything we do. We are both poor and we would both like to spend money on ourselves. So if I am spending money on myself, she has got all the right in the world to say. So before she does it: give it to her.'

His financial control was therefore exercised through a combination of taking 'executive' decisions ("If I am spending money on myself …") and an expectation that his partner would regulate her own demands according to what he told her about how much disposable income was available. This enabled him to ensure bills were paid and maintain a 'fair' allocation of resources. But it also meant doubling individual expenditure from a very limited income. The dynamics in play in Mr Smiley's relationship also meant that he could influence decisions about using credit for individual expenditure. For example, they took out credit to buy his birthday present:

> *'I got a donation off my mum of £50 for my birthday and it was £150 for the Xbox. Tara knew I really wanted one and we couldn't afford one outright. Because my mum had got the deposit, I could afford it at Brighthouse. So it was her [partner's] idea. So, part of my birthday present, she will pay the £10 a fortnight to get it paid off.'*

He also made the decision to use doorstep lenders for setting up home expenses:

> *'I had used Provident in the past. They are a rip off but I can't get credit … I know the rate of interest is ludicrous and I feel awful wasting so much money on the interest, but it is the only option I was left with. I didn't have another option.'*

And because he could not get mainstream credit due to an outstanding loan from an earlier period in his life, he had suggested that his partner use her ability to set up direct debits to buy new furniture on credit:

> *'You see adverts for SCS sofas, £10 a month for a £500 sofa – "that looks nice doesn't it Tara, why don't you get it?"'*

Mr Chivers recounted a similar story when describing his own and his wife's use of credit cards when they first got them:

> *'I looked at it and thought "Shouldn't do anything silly with this". Managed for about two weeks and then walked into a record shop.'*

When his wife then got her credit card, and they went to buy a PlayStation, he did ask her 'Are you sure you want to do that?' – but described this as 'putting up a very weak defence'.

This kind of 'influencing' of one's partner in relation to expenditure is not uncommon, and not unique to couples with problematic debts. In low-income households, however, where there is little or no truly disposable income, and where it is usual for one person to have overall responsibility for budgeting, relationship dynamics that act effectively to 'sabotage' attempts to minimise all but essential expenditure can contribute to or exacerbate problematic debt.

Dynamics can change however. Further down the line, with two school-aged children, a baby on the way, and reliant solely on his earnings, Mr Chivers felt that he and his wife were both much more responsible and organised financially. They still had debts they felt were problematic, but they were also much more conscious of not leading each other into further debt:

> *'... it's not wanting to go back (to former high levels of problematic debt). It's also mutual respect. We don't want to get each other or the children into the situation where we can't get something essential because we have spent it on something frivolous.'*

Mr and Mrs Norton's problematic debt also arose from decisions that were located in emotional aspects of their relationship. But in this case, they were joint decisions taken by a couple intent on starting a family. Mr Norton now lived with his wife, three year old twins and a younger daughter. The twins had been conceived as a result of expensive IVF treatment. As Mr Norton explained, this had been a very stressful period for them, during which they first of all 'compensated' for failures to conceive by buying a bigger house, and then took out another loan to 'have one more go' at IVF:

> *'... we had two goes which cost £10,000 ... I know it's probably off the subject a bit but it's financially draining and it's emotionally draining as well you see. And we moved house and treated ourselves to a bigger house and everything, and we decided to have one more last go. So I borrowed the money and that's where the loans come from ...'*

3.4 Family breakdown

Family breakdown figured as significant features of problematic debt for Mr Compton, Mr Winters, Mr Graham and Mr Bolton – in combination with loss of income due to long-term unemployment, loss of hours and 'churning' in and out of work.

Mr Compton spent some time trying to care for the children while in full-time work after his wife left ten years ago:

> *'I had the kids for the first few years, and then when she got another property, that is when she applied for the kids again … and then the children wanted to go back to their mum like, because I was rushing them to the childminders in the morning so I could work. And then come back home, get all the breakfasts ready for the next morning, put it on a tray like, cover it over, get the dinners ready soon as I got back, got them back home, then helping them with their school work and things like that at night.'*

However, he suffered a breakdown from the pressures of trying to work and care for the children and had not worked since. He used a credit card to 'smooth' his income, but these debts plus arrears gradually mounted and he had been unable to pay them from his Incapacity Benefit. As referred to earlier, his ability to service his debts and manage on his income was further exacerbated by the loss of Child Benefit when his youngest child left school and went to live with his mother:

> *'… you haven't got enough money to live on … I never had no debts as such, you know when I had the kids with me … because obviously their money was coming in so you could pay the bills … I used to get the family allowance monthly instead of weekly, so you worked on that basis of how much you had got coming in that month.'*

Also referred to earlier, Mr Winters acquired substantial arrears after he separated from his partner and moved into a council house. He was employed for a short period of time when his son was younger but found it too difficult to keep work hours and care for his son. As for many lone mothers, and in contrast to men who are in partnerships where the woman bears the responsibility

for servicing debts, he found being responsible for his son, while struggling with debts, a source of enormous worry:

> *'It's got better since I've had him because I don't really want people knocking at the door. As it stands at the minute I ain't had no letters about no arrears for ages because the TV is sorted, the water rates is sorted, I get my gas and electric on a key meter. Housing benefit is covered and whatnot so really in that way it's a lot better than it used to be. I used to get really worried and stressed out, sleepless nights and that, thinking the bailiffs were coming.'*
>
> (Mr Winters)

And again in common with many lone mothers, being unable to provide as well as he'd like to for his son was a source of depression:

> *'I want a good life and I want nice things and I want to go on holidays … but it just ain't going to happen with the situation at the minute. So as it stands, that's only a dream … There's no prosperity about at all is there, not for anyone. I'm dreading when my kid leaves school really to be honest … I must have applied for a hundred jobs in the last two months … I wake up in the morning with good intentions like looking for work and then by the time I get back it's just depression really. When I was a kid my mum and dad paid for me to go and watch Leicester, go on these trips, and all this and that. I can't do none of that for my boy. So it is bad depression really.'*

Although Mr Graham's debts could be attributed to some extent to a pattern of churning in and out of low-paid jobs, the breakdown of a former partnership and the commitments he had to the child of that partnership meant that he not only came into his marriage with problematic debt, but that he was now trying to support two families from an income not adequate to the task. This had led to a history of repeated borrowing to pay off debts and contain mounting arrears. Although the Child Support Agency suspended payments from his benefit income when he was out of work, the working tax credit he received when he was in work was deducted to go towards these payments, leaving him unable to improve the extent of his problematic debt.

Mr Bolton owned the house that his partner and her daughter moved in to share with him, and they extended it when they had a son of their own. When their partnership broke up, she wanted him to

borrow from his parents or re-mortgage the house to enable her to set up house separately. He was unwilling to do the former and unable to do the latter because he had already done so to build the extension. He therefore exhausted his savings, used his credit cards and went overdrawn to fund the financial settlement. This left him in an even more vulnerable position when he was made redundant for a second time. As he himself explained when asked how he would account for his problematic debts, the factors we are identifying here as 'triggers' into problematic debt do not act in isolation but interact and become part of a cumulative process:

> *'... partially the break-up of the relationship ... Getting into the relationship. Getting out of the relationship! ... Being out of work ... the first two times being made redundant ... basically, it's a knock-on effect, isn't it?'*

3.5 Addictions

There were three examples of men for whom addictions had led to severe problematic debt; one was still regularly smoking 'weed', one was an ex-heroin and crack cocaine addict and one was still struggling with a gambling addiction.

Mr Butcher was very open about regularly smoking 'weed' which he regarded as a factor in his sustained problematic debt. He had substantial rent arrears and was troubled by the fact that he was not entering into a process of negotiation with the council over the repayment of this debt.

> *'The weed, that's what helps me – but it don't – it makes me worse, the weed. It makes me forget that in the long run it makes you more paranoid and think more about the situation. So I don't really win one way or another. But I feel that's the way that helps me – but it don't.'*

Mr Butcher saw his marijuana habit as both contributing to his problematic debt and as inhibiting his ability to address it effectively. On the one hand, smoking helped him 'forget' his problems; on the other, it made him paranoid and thereby unable to confront his financial problems. Either way, his addiction was a significant feature of his current circumstances.

Mr Smiley who was 31 had been a heroin and crack cocaine user between the ages of 23 and 29. He lost his job as a fork-lift driver when his employer found out and then did eight months in a rehabilitation unit. He had been clean of drugs for two years at the time of interview but was still deemed unsuitable for work and was in receipt of Incapacity Benefit. He and his new partner, aged 18, received income support and child tax credit for their three-month-old son, bringing their total income to £430 a fortnight. He felt this enabled them to pay their current bills, eat well enough and care for their baby, but not to equip their home, pay off debts or have any social life. Having become rehabilitated, he was very frustrated that he could not now find a job:

> *'It can be painful to feel that feeling inside – utter – what's the word – totally lost. And I don't know what to do in order to improve my situation. Dejected, that's the word. Utterly dejected because there just isn't the work available to me in this area. I'm a reliable person. Even as a drug addict, I managed to turn up to work every single day without fail for four and a half years and fulfil my duties as an employee. And I know for sure if I could do it as a drug addict, I'm damn sure I'll do it now.'*

For the last two years the bank had been chasing him for an unpaid loan of £1,000 spent mainly on drugs. He had far more debts arising from his drug addiction than this, but his former partner had cleared his as well as her own debts with compensation she received from a car accident. The fact that he and his current partner were reliant on benefits, however, meant that some purchases had once more been made on credit – from 'Brighthouse' and from a doorstep lender.

Mr Nelson's debts were also a result of an addiction – in his case, to gambling. Mr Nelson was 30. He had dropped out of the first university he attended, and worked for a while before going travelling abroad for some months. He had started afresh at another university on his return but did not complete his degree there. He worked again for while as a salesman and was then mobilised in 2007 by the Territorial Army (TA) to serve in Afghanistan for six months. His relationship with his girlfriend finished when he was out there, and he moved in with a new girlfriend's family on his return, getting work once more as a salesman. At this time, he began to gamble quite heavily.

He had invested his wages from his time in Afghanistan, as well as his student loans, in stocks

and shares and ISAs, and this had enabled him to accrue between £30,000 and £40,000 in 'savings'. However, he lost all but £3,000-4,000 of this through gambling, plus additional amounts by accessing cash on credit cards. Having had problems at work he left his sales job and was in dispute with his employer over unpaid wages. He moved into the shared house he was living in when his new relationship broke up, and despite having attended Gamblers Anonymous for a while, he was still struggling to abstain completely. He was in receipt of Job Seekers Allowance of £54 a week but still received wages intermittently from his Territorial Army activities. He used credit cards, including a new one he had just acquired with a £4,000 credit limit, for food and petrol.

Mr Nelson had a total of nine bank accounts, with overdrafts of between £200 and £2,000 on eight on these, amounting to £8,000 in total. He paid interest on all of them, from £3 or £4 to £20 a month, sometimes borrowing from his family when he could not cover the charges from his benefit or TA income. He also had £20,000 outstanding in student loans.

4 Debt advice

Key points

- **Just over half of interviewees had sought debt advice, although not all had managed to access it.**
- **Those who had tried to get advice and been unable to do so felt disinclined to do so again (perhaps due to the barriers some men have to overcome in order to make an initial approach); positive experiences of receiving advice, on the other hand, reinforced the likelihood of seeking advice again should the need arise in the future.**
- **Barriers to advice seeking included:**
  - **gendered divisions of labour in which a man's partner 'does his worrying for him' thereby protecting him from the full impact of their problematic debt;**
  - **a range of emotional responses that preclude addressing debts, such as anger and denial;**
  - **over-optimistic assessments of prospects for improving the situation;**
  - **lack of awareness, understanding and inaccurate perceptions of what advice services offer;**
  - **confusion between charitable debt advice organisations and commercial debt consolidation services, combined with a marked preference for the former and a marked distrust of the latter;**
  - **lack of self-confidence and the social skills perceived to be necessary to access services; and**
  - **male 'pride' (which is in fact a 'short-hand' term for a complex set of issues around male identity and the relationship between money and masculinity), which functions as a 'resource' that men draw on to justify sorting things out for themselves – a form of financial as opposed to household 'DIY'.**
- **Mixed opinions about modes of debt advice service delivery:**
  - **an expressed preference for face-to-face delivery of advice services for complex**

problems but satisfaction from those who had actually accessed telephone advice, including in relation to complex issues;

- **a degree of discomfort for some with using the telephone;**
- **an element of lacking in confidence in face-to-face encounters in which complex situations had to be articulated and explained, unless well-prepared in advance by knowing what to expect; and**
- **little knowledge or experience of internet-based services.**

- **Approaches that empower men by helping them to feel in charge once more and that are compatible with a need to 'do it themselves' are likely to be effective, especially if this is framed in terms of their role of providing a better future for themselves and their families.**

4.1 Men's experiences of debt advice

Just over half of our interviewees (11) had sought debt advice, although not all of them had actually accessed it (see Table 4 below).

Some had been referred from their first point of contact to more specialist help, Mr Butcher, for example, had initially been taken by his partner to Sure Start, but then did not attend the appointment they were given. Mr Hakim had appeared in court over rent arrears and was advised on that occasion by a duty solicitor. He contacted her again when there was a two-month delay in the processing of his application to renew a discretionary allowance towards his Housing Benefit:

> *'She says, "Oh I closed your file until the next year so you had better go to the Law Centre". But that Law Centre, I know what they are going to do, they are going to tell me the same thing: "You applied for it, so you are waiting". I already know that.'*

Table 4 Accessing debt advice

Men who had sought debt advice	11	
Men who had received debt advice	7	
Face-to-face	5	
By telephone	2	
Sources of advice (including initial 'referral' to specialist debt advice service)	Citizens Advice	(4)
	Local money advice service	(4)
	Sure Start	(2)
	Court-based solicitor	(2)
	CCCS	(1)
	National Debtline	(1)
	Rehabilitation counsellor	(1)
	Unknown	(1)

On a subsequent occasion, he was advised to contact the Citizens Advice Bureau, but did not do so because he had no confidence that they would be able to help either. Unfortunately, it appears that an experience of an unhelpful response from one source can have a 'knock-on' effect in terms of one's perceptions of other services. This was also the case for Mr Houseman. After being made redundant, a delay in receiving pension credit left him with no income. The Job Centre advised him to go to Citizens Advice but he could not get an appointment:

> *'I rang the bell, nobody answered, rang the bell [again], somebody answered: "You can't come in". I said, "Well I haven't got a phone number for you". So she let me in, gave me a phone number. She said, "But you probably won't get through because we don't very often answer the phone". So I tried about four times, nobody answered …. wouldn't give me an appointment there and then for any time: "No, you have got to phone up and make an appointment.'"*
>
> (Mr Houseman)

Following this, he asked his landlord to write him a letter threatening eviction – on the basis of which he got a more favourable response to the person he spoke to from the Pensions Service. He also sought advice when he received a letter from the Inland Revenue regarding money he owed them – this time from a local money advice service but they told him that they were unable to deal with anything to do with the Inland Revenue, and did not give him any information about how or where he might get help. He was then at a loss to know where to go for help and reverted to his 'default' position of not talking to anyone about his troubles:

'Well who do you talk to, you know? I don't want to keep telling [partner] "Oh we are in this debt". Then she will start worrying about it. I am a bottler, I bottle things up … very private, very quiet person … Eventually I tried to sort it out, I am not somebody who goes blabbing to everyone "I am in terrible trouble.""

He went on to reiterate how hard it is for him to 'open up':

'I'm a very private person. Talking to you is a bit of a miracle for me, I don't normally. I don't open up to anybody. [What would it mean for you to do that? To go to-, I mean you did, you did go …] I did go yes, in desperation, when I first got this tax bill. [Was it hard for you?] Yes it was very hard, yes, to try and tell some person I didn't know.'

At his court appearance in relation to money owed to the Inland Revenue, the person handling his case apparently reassured him that they 'couldn't get blood out of a stone'. He was still not sure whether he was facing bankruptcy, however, and the whole experience had left him reluctant ever to seek debt advice again:

'I would have opened up at the time. But now I wouldn't even bother … I manage [the rest of my debts]. Slowly but surely … [Are there any things that, if you were in that situation again, where you were worried about a debt … that would make it easier for you to get useful advice?] No I don't think so. I think I can sort it all out myself now.'

Mr Graham had also tried to get an appointment with the Citizens Advice Bureau, but had been unsuccessful:

'We tried once … went to the Citizens Advice, but the queue was just ridiculously long and then they told us, up to a certain point of people, that is enough … you will have to come back tomorrow … you have to get there 7.30 a.m. and it was middle of winter, with [son, who was] only a few month old.'

Like many others, he and his wife had not sought advice until threatened with eviction. They had not gone sooner because the rent arrears were due to a four-month delay in receiving housing

benefit, which they kept hoping would be paid. As with Mr Houseman, his experience of an unsuccessful attempt to access an advice service left him disinclined to do so in the future. But there were a number of other reasons, too, in his explanation:

> *'I haven't really got time to go and wander in to town or go see somebody, if they aren't actually going to let me in the door, due to the amount of queues they have got. And can I really be bothered to stand there for hours waiting to see somebody who might not be able to do 'owt anyway ...? So I wouldn't even bother with ... Citizens Advice ... [Are you aware of any others?] No not really. I don't know whether there is. I think there probably is. I think [wife's] mother went to one of those "put all your debts in one place" type of thing, you know the people that phone up ... get some of them squashed ... I can't remember what they are called now ... But I am not really bothered about that. I don't feel we have got enough major high debt to bother ... We have got a bit ... we have a bit if you totted it all up, but not like – see, when they are advertising, it's like credit cards and loans and stuff like that. We haven't really got them. Ours have been manly utility bills and stuff, our debts.'*

If we unpack this, it is not only the time and effort needed to access a service, but a lack of confidence that they would be able to do anything to help. Further, like a number of others we spoke to, Mr Graham confused not-for-profit advice services, with profit-making debt-consolidation services that advertise and promote themselves on TV and online. He was not explicit here about not trusting the latter, but others were. Finally, the promotion these firms undertake gives the impression that using advice services is only appropriate in relation to high levels of certain types of debts, reinforcing the inclination people already have to assess their own position as 'not serious enough' to warrant help. There was also a lack of awareness that commercial debt management companies (although not debt consolidation companies), can only deal with certain types of debt, namely consumer credit/non-priority debts.

Most of those who *had* received debt advice reported just how helpful it had been. There were a couple of exceptions. Mr Repton had sought advice on behalf of his wife. He did not follow the advice he was given in respect of bankruptcy because of the impact this would have had on their ability to get a mortgage. In the end, his parents helped them and he thought that if he ever needed advice again it would be to them he would turn first.

Mr Bolton, who had been made redundant twice from his job as an accountant was a confident

and articulate man well able to negotiate with his creditors on his own behalf once he knew where he stood legally. He was directed to a debt advice service by the Citizens Advice Bureau, whom he had consulted about mortgage and fuel arrears. However, he was given only what he felt constituted 'common sense' advice about the need to write to his lenders, tell them of his situation and 'hope you will be able to come to some sort of agreement'. He thought that, since that time, ample information had become available on the internet about borrowers' rights and what one's legal position is in relation to various credit commitments and debts.

Others were very positive about having benefited from advice given. Mr Storer was directed towards advice at a court appearance, at the time his business failed and they had accrued numerous debts:

> *'There was one particular debt, I can't remember what it was, but I went to, is it CCC or something like that …? They sorted out one particular thing for me, I can't remember what it was. They were taking me to court for it …. So I saw Credit Council. They handled it. They rang them up and spoke to them on my behalf and sorted it out … [How did you know about them?] The people who were threatening to take me to court, told me to ring them. So I did and it was sorted out … It was great, it stopped it completely …. The company rang me back and said "We've heard from the Consumer Credit Council, they've made a suggestion of £10 a week or a month are you agreeable to it?" … I made arrangements for direct debit and it was sorted.'*

In contrast to Mr Hakim, having used this service once and found it very useful, Mr Storer said he would do so again should the need arise. Asked why he had not sought advice until appearing in court, he explained that he had not known then that such a service existed. Even if someone had told him earlier, however, he felt he would not have acted on it because:

> *'… at my worst I wasn't really thinking about anything … [wife] was doing all the work. I was sitting in front of the telly and that was mostly all I did.'*

Just as a negative experience can jeopardise the likelihood of someone seeking advice in the future, a positive one reinforces the likelihood of repetition should the need arise:

'I think they're great … very helpful. If I needed to I would use them again … probably go to Consumer Credit Council again.'

Mr Smiley had received debt counselling as part of a drug rehabilitation package. He was assigned a counsellor whom he could consult about debts, housing, employment and so on and it was in the context of this relationship that he received debt advice. Because they built up a relationship of trust, he had no qualms about asking for advice, although probably would not have done so outside of this relationship:

'I didn't have a problem with asking. It wasn't like I made an appointment to go specifically for advice. It was more, you know, I had made a friend of her, and I knew she would be a good person to speak to about the situation I was in.. probably if I didn't have that relationship, I would probably not have phoned a debt advice place … as soon as I got the letter and they says they weren't accepting [my offer] I knew who to talk to straightaway … if I didn't know who to talk to … my attitude would have been 'Sod them then, they're not getting a penny. I would have ignored them and I would have thought to myself "Fine, they can take me to court."'

Mr Compton and Mr Barton had suffered disabling anxiety and sleepless nights after battling over an extended period with unsympathetic and sometimes aggressive creditors. Both finally got advice that helped them tackle creditors and relieved their anxieties to some extent. Mr Compton, for example, was directed towards Sure Start by friends who had children. Sure Start then directed him towards the 'Leicester Money Advice' service. They gave him advice on changing his bank account, how to prioritise his bills and how to negotiate with his creditors. This not only gave him information that he has continued to utilise, but also much-needed peace of mind:

'It was peace of mind plus practical knowing. Sort of takes the worry off your mind so much … because you know they can't do anything. Because you gain legal advice as well, and what to do if they do take you to court … it takes that much pressure of your shoulders, you know, thinking about it all the time, and saying "Now I know that I am safe. I'm not going to get the house took off me."'

Mr Chivers went to CAB at the point when the number and frequency of letters from creditors started to cause him stress, and was very appreciative of the advice he was given over a series of

meetings with them, which enabled him to put in place a 'framework around which to start repaying things'. Although he had volunteered the comment that 'Men tend to be proud and not particularly attuned to asking for advice, or at least not from people outside their own circle', he had seen his own advice-seeking as a positive step:

> *'I wasn't embarrassed about it, I was actually doing something productive about the situation we had got ourselves into. I think if I had felt any embarrassment about doing that, that would have taken it away – the fact that the only place to go from where we were was forward. You know, I didn't feel embarrassed about talking about what we owed, what we wanted, where we had got ourselves and I totally wanted to get out of it. I knew the organisation exists to help, so there is no point in going in telling half truths, hiding things and hoping they won't find out, because they can't help you if you do that … once you are in the system with CAB you can make appointments and turn up just before your appointments so you don't have to hang around. And they know what they are talking about, they know what they are doing.'*

4.2 Barriers to advice-seeking for men

A complex mixture of responses to problematic debt and the likelihood or otherwise of seeking timely advice arose from our interviews, including factors to do with divisions of household labour, cost, emotional responses, and issues of identity.

4.2.1 Gendered divisions of labour

For those men in families with 'female-managed' systems, seeking debt advice may be seen as part of the same division of labour – and therefore as part of 'the woman's job' – while the man's job is to put his efforts into getting work. Mr McPherson articulated this:

> *'Anna has (sought advice). I haven't. … I think I need to, but the thing about it is, you've got to get all your bills on the table. You have to know what all your financial debts and stuff … Anna, she knows what debts we've got in the house. To an extent, she's working on them, and I know for a fact, I'm not saying I'm expecting her to pay the bills or whatever, but I know for a fact she's going to, no matter what. She's going to put food in the cupboards … Because my main thing is, if I do get work, I'll just concentrate on the gas, electric and*

putting food in the cupboards, and then she will most probably take care of other things.'

Even if this division of labour is not made explicit, the fact that a man's partner 'does his worrying for him' protects him from the full impact of problematic debt and this in itself may act as a barrier to his seeking debt advice himself. Mr Graham reported that he did not talk to his partner about their debts, and he did not worry about them either:

'Pam gets more annoyed than I do, see, so I don't have to get annoyed because she gets really annoyed … [in previous partnership] no one got annoyed, so I did …. I got fed up. But here, Pam gets more fed up than I do. [Right - it is kind of her job to do the worrying then?] Yes, that is right - and she can moan at me about it.'

4.2.2 Denial

Although a well-documented phenomenon not peculiar to men, there was evidence among our interviewees of 'putting one's head in the sand' over bills as a way of not facing up to the situation. Such a response is not likely to lead to seeking timely advice with the debts that consequently mount:

'Every few months I'd get like letters off Severn Trent (water rates), thinking "Oh, I need to sort it". Just end up putting it in the drawer and forgetting about it until the next one come. Same again – forget about it …'

(Mr Winters)

Although there was evidence from the CAD study of *women* not wishing to face the full extent of their debts and therefore 'doing nothing', this response appeared to be qualitatively different for men and women, with women's strategy of 'putting it in the drawer' arising out of a sense of feeling overwhelmed, and men either getting angry, or their denial taking the form of being unable to even admit that there is a problem. These responses are addressed in more detail in Sections 4.2.6 and 4.2.9.

4.2.3 Belief that nothing can be done

Mr Hakim, Mr Winters and Mr Graham all felt it would be pointless seeking debt advice when there was no way of accessing additional income to pay debts and arrears:

> *'I don't know really [if I would seek advice], because I don't know what advice they can actually give me, other than, pay. And I am not going to pay.'*
>
> (Mr Graham)

In addition, Mr Winters talked of always prioritising his son's needs over his debts. This belief that, with an inadequate income, services cannot do anything to help you anyway made seeking advice appear pointless:

> *'The thing is with the debts, you've got to have the money to pay them don't you like? So no, I didn't really (seek advice) because I'm thinking my circumstances ain't changed, I'm always going to be in the same boat. No matter who they send me to see, I'm still going to have the same money .... either way it's going to boil down to the point where I need shopping for my house and I ain't bothered who I owe, even if it was like some loan shark or something, if my kid needs feeding, it's as simple as that. He comes first.'*
>
> (Mr Winters)

4.2.4 Cost

In common with some others, Mr Winters also mentioned the cost of phone calls as a factor potentially inhibiting seeking advice:

> *'Half the battle is, I ain't even on the landline at home. It's always me going to a phone box paying extortionate rates and ... I can't do it. I can't afford half the time to put money on my (mobile) phone ... it should be free phone numbers for people on Income Support.'*

Further discussion revealed that this was not the greatest barrier, however:

'I don't know it [a free phone number] might [make it easier] if I was struggling on my bills. But I can't say, I can't really see myself doing it. I just want to get a job, fend for myself, then let the letters start coming.'

The idea of 'fending for oneself' is dealt with further in Section 4.2.9.

4.2.5 Over-optimistic assessments

A barrier to seeking advice in a *timely* way was an over-optimistic assessment of how manageable one's debts were and how capable one might be of dealing with them unaided, by returning to work:

'[People delay] because they think it's not too bad, init? It's controllable. Because the thing was, when I got my debts, I'm thinking "Oh yes … I know I can work, and I know how much money I'm going to get". So say my debt was £1,000, I thought to myself "I'll pay £500 off". I thought to myself "That's it finished". But as it's gone on, it's gone on and on and on. It's ended up being more money … I didn't never think I would be out of work this long.'

(Mr McPherson)

4.2.6 Anger

We saw that had Mr Smiley not had his rehabilitation counsellor to call upon, his reaction to unsympathetic creditors would have been 'sod them'. A number of other interviewees also displayed this response. To some extent there was an expectation that creditors would be realistic about what people on low incomes could afford to pay, and also a desire to be treated in a civilized manner. When this was not the case, getting angry and deciding to do nothing at all was an act of defiance from some men:

'It's just when the bill's too daunting. What really bugs me is when they're like -, surely they know what situation I'm in – Income Support – and they send you letters: "We want our money now!" I don't like that attitude. They could send a letter: "Mr Winters, I know you're in serious financial difficulty; anything you pay would be a big help." Not like "We want it in full now!" – that's just like – sling it in the bin – I don't like that.'

4.2.7 Lack of confidence, social skills and fear of the unknown

Seeking debt advice was also seen to involve being organised enough have a clear picture of

one's overall financial situation, articulate enough to present a clear account, and confident enough to go into an unfamiliar situation without knowing what to expect or what was going to be expected from you. This was the case for Mr McPherson, who did not feel skilled or confident enough in social interactions of this kind to get the required result:

> *'It's not easy [to go for advice] but when you think about it, it's not difficult, do you know what I mean? Because at the end of the day, all I have to do is make an appointment to go down. The only problem is, I'm just blindfolded. I don't know what I'm going to. I know that I've got to take my debts and stuff, but I don't actually know what I'm going into, I don't know what to ask them, I just don't know which way to go. It's easy to stay here. I come out thinking "What the hell did I go there for? Did it really cover what I really wanted?" Do you know what I mean?'*

The fear of failure was also based on previous experience of being unequal to such tasks:

> *'There's a lot of times I'll go to something, and I come back, and Anna will say to me "What did they say?" I'm like "Ummm ..." She told me to take her car into the garage. She goes "Did you tell him this? Did you tell him that?" ... She went and picked up the car ... and the guy told her what the problem is and what he's done. Because I knew she would have wanted me to explain every single thing, word for word, and I would have got it wrong.'*

4.2.8 Being 'smart' with money

For women in low-income families, there is evidence to show that clever budgeting in order to feed the family and prioritise children's needs may be experienced as a burden but can also be a source of pride. There were suggestions from this study that being 'smart' with money can be a source of pride for men, constituting part of one's identity as a 'clever financial consumer'. For example, Mr Repton was very keen to demonstrate how he managed all their finances online, through a 'multiple online savers' system and regular text alerts from the bank which detail his outgoings; he also used his Asda credit card for all expenditure during the month, for example on petrol, food and socialising, in order to build up points which could then be spent at Christmas, always clearing the balance when he got paid; in addition, they took a new credit card in order to access a discount offer when they purchased their engagement rings, and did not use the card subsequently; and he consulted the online 'moneysupermarket' site to inform his decision to purchase loan repayment and redundancy protection policies. Having taken a loan from his

parents to deal with his wife's debts when they first got together, and another loan to pay for their wedding, his active management of their finances formed part of a broader approach to life in which he 'likes to progress and doesn't want to sit still'. They did have an overdraft from time to time and he did feel that their debts were problematic. However, he had plans to seek financial advice (as opposed to debt advice) in relation to 'moving forward': he will further look into advantageous ways of managing money in order to enable them to start a family in the next few years.

Mr Chivers also wanted to be 'smarter' in the way he managed their finances, like a colleague of his:

> *'A guy at work has got a smart idea about credit cards. He lives the month off his credit card, and then before his wages go in he pays the credit card. So he is earning interest on his wages for a month, and he pays off the credit card and doesn't pay the interest on them. I would like to get myself in that situation.'*

Mr Nelson was also keen to demonstrate how clever he had been with money, investing two student loans and earnings from a spell of service in Afghanistan in stocks and shares; opening multiple bank accounts with no-cost overdrafts and taking out numerous credit cards to enable him to transfer balances. Although his addiction to gambling led him to lose between £30,000 and £40,000 accumulated in this way, and although his main source of income now was from benefits, he still felt he had been clever:

> *'It was a decent wage (in Afghanistan) ... had saved a good £15,000 just by being at university and monies from student loans ... so I managed to build up quite a sizeable savings that, I could say £30,000 to £40,000, something like that ... and investing very cleverly at the right times ... every day I began to build up a way of me analysing the investments that I had, and the ones that were worth looking at ...'*

There was an element in the way some of our interviewees talked about being 'smart' or 'clever' with money that went beyond effective budgeting, making it a phenomenon that had not featured in the CAD study. It may be that it is more typical of men and the way they wish to see

themselves, or it may be a feature of being sufficiently 'financially included' to operate like this. The flipside of being 'smart' in this way, however, is that should problematic debt arise for someone for whom such skills contribute to a sense of pride, it represents a source of 'wounded' pride, and by implication, a blow to one's (masculine) identity.

Traditionally when research on this subject has referred to men's 'identity', it has been in relation to a man's 'breadwinner' status. As we have seen, there is evidence in this study too of the significance of a man's 'breadwinner identity' (for example, Mr Donaldson's reference to his wife's 'stepping back' and allowing him the final say over expenditure especially now that he is out of work; and to his retaining some authority as 'the most he can give' while he is out of work). In a new 'financialised' environment, however, 'being smart with money', in this sense of actually *making* money – as opposed to women's *saving* the family some money by skilful budgeting – seems to be a new source of (potentially) positive masculine identity. In part it is about being 'productive', in part it is about 'playing the system'. At the same time, it brings with it the risks that failure to make money from such 'clever' strategies – or worse still losing money – makes it even harder for men to seek advice should they acquire problematic debts.

4.2.9 'Pride'

Male pride is often the first thing to be cited when exploring why men do not seek debt advice and to some extent it appears to function as a 'resource' that men can draw upon as a kind of 'shorthand' for a number of complex attitudes and emotions.

Mr Winters was very conscious of having been irresponsible in his youth, when he lived on and off with his girlfriend and spent money on heavy drinking. Older now and a lone parent with responsibilities, he felt that he ought also to be financially independent. Asking for help, whether that is borrowing from his own parents, or seeking debt advice, compromised this:

> *'Half it's embarrassment. When you get old you want to fend for yourself and it's about pride and dignity and whatnot.'*

Mr Repton, who had consulted a debt advice service on his wife's behalf, but who would call on

his parents for help with debts should the need arise again, also referred to the shame of seeking advice, and the pride that would inhibit doing so:

> *'I suppose you feel ashamed more than anything else … you don't feel proud of yourself being in debt, you feel more ashamed … you are kind of admitting there is something wrong.'*

'Stubbornness' was sometimes referred to, for example by Mr Flintham:

> *'… you can understand why people get in a big mess … they probably think, 'No I will sort it. And they won't go out there and seek help. They are probably too proud to do it … or too stubborn or stupid or whatever it is, I don't know, but yes, you can understand why people get in a mess … because they have let it get worse and worse and worse, and then it might be too late then.'*

Mr Nelson referred to it too. He now spent most of his time actively managing his *debts* rather than his *investments*, with daily visits to all the banks he uses and daily checks on his remaining stocks and shares ISA on the library computer. He recently enquired about an online loan "just to cover some of the (bank) charges", but cited his own stubbornness in accounting for why he felt that debt advice services would have nothing to offer him:

> *'Because I am educated and not ignorant, I don't think they would be telling me anything I didn't know … and it is that stubbornness. People call me arrogant. I don't think I am arrogant. I am quite self-confident about what I know and what I am capable of.'*

As his very long interview progressed however, he did intermittently overcome his 'arrogance' sufficiently to recognise his predicament:

> *'For a while I was able to manipulate the system to my advantage. Now, it has not got on top of me, but now it is, it is kind of, it is a chunk of my life that goes towards looking at finances and dealing with them I guess.'*

But seeking debt advice would mean admitting that he cannot manage the situation himself and he was unable to do that more than momentarily, as when he posed a question to himself:

> *'Do I have a problem? I wouldn't like to admit it to myself let alone anyone else … it is almost opening up your entire financial situation to someone else, to then help you manage it because you are not capable of managing it yourself … I have got myself into this situation through no fault of anyone else's but my own, and until I am willing to admit that I am not capable of managing it by myself, is there any need for me to get help and advice on it? ... Admitting is the problem … I can always cover the costs that I have got for the debt problems I have created for myself.'*

While a gambling addiction may not be a 'typical' trigger into problematic debt, a discourse of solving problems *for oneself* appeared quite frequently in our interviews in relation to not accessing debt advice services, forming a powerful constituent of what is commonly referred to more briefly as male 'pride'. We saw it, for example, when Mr Houseman referred to being a 'big boy now', the implication of which was that you should 'sort your own problems'; and when Mr Smiley thought about seeking advice beyond the drug-counselling context in which he had received debt advice:

> *'… you feel, "Why should somebody help me … when I have got myself in to financial difficulty?" You are there, you have done it, get yourself out of it. [Even though (advice services) wouldn't take that attitude towards you?] No they wouldn't obviously. It's my attitude. Again, I suppose, it's being a private person. It's my attitude. I got myself in to it.'*
>
> (Mr Houseman)

> *'I think debt advice agencies are good things for people who need them, but you know, I can't explain, my attitude was and probably still is, "I can handle it on my own.""*
>
> (Mr Smiley)

Men have traditionally been associated with household 'DIY'; doing it yourself in relation to managing problematic debt seems to be a form of 'financial DIY' which inhibits accessing timely advice when it could help.

4.3 Delivering advice services to men

Promoting debt advice services

Asked about what debt advice services might do to make themselves more appealing to men at an early stage, there was some discussion of marketing and advertising. Some were aware of what was on offer and did not see a need for advertising:

> *'I don't think they can really do much more ... you see them on the internet, you see them on the telly, you see them in the papers. There's not much more they can do.'*
>
> (Mr Storer)

However, the extent to which the advertising of services reaches men appeared to be patchy as some of those we spoke to had not heard about services and advocated advertising as a method of raising awareness:

> *'Well I suppose newspaper adverts would be a start, not only national but in local. Because I assume it's a countrywide ... Probably get some interviews on local radio as well. Obviously I don't know what the funding is like but even national television advert ...'*
>
> (Mr Pearson)

As highlighted earlier, there was some confusion between charitable organisations and profit-making debt consolidation services, with the latter being treated with suspicion:

> *'I know that I wouldn't trust them (things like Ocean Finance) ... a lot of them are out to make money. I wouldn't trust them. But I know there's things out there.'*
>
> (Mr Hepworth)

The fact that a number of men who had wanted advice, either at the time of the interview or in the past, had not known where to go or where to start suggests that advertising is necessary. However, the key message here seems to be how important it is for debt advice services to promote their independent not-for-profit status in any advertising they do undertake. Despite the fact that a number of our interviewees had access to the internet and that some were very enthusiastic about using it, for example, for online banking, there was no evidence of its use to look for or to receive debt advice. In the context of knowing how trustworthy services are, however, one of our interviewees did see the internet as a source of 'quality control'.

> *'... I'd read consumer reviews, you know, people who have used the service ... I'd just go to, what is the word, customer ratings for debt advice agencies ... find out which were the most popular, which were the best, which were the most well informed and I would ring that one.'*

Modes of delivery

There was some variation in what our interviewees thought about effective modes of debt advice service delivery, but it should be noted that not all were speaking from experience (see Table 4 above, p.35). Those who had received face-to-face advice were generally pleased with it. Across the sample as a whole, including those who had and those who had not received advice, face-to-face advice was seen as the most appropriate form of service delivery for more complex situations. Generally speaking, phone contact was seen to be fine if an answer to a straightforward question was being sought:

> *'... it depends what sort of query you have you know. If it is just a query, online is great, telephone can be good ...'*
>
> (Mr Smiley)

> *'One debt – just phone them up for a repayment, I have got no problem with that. But not to discuss lots of things.'*
>
> (Mr Graham)

Some of those we spoke to appeared to feel inhibited by talking on the telephone. Mr Repton, Mr

Telford and Mr Pearson all talked about feeling 'not very good at' or 'not very keen on' talking on the phone. Over and above a natural disinclination to using the telephone per se, it was not seen to be the best form of communication if more than *information* was being sought. A face-to-face encounter was seen as necessary if you were to be able properly to understand *advice* being given:

> *'I think telephone advice is useful, but face-to-face contact you can get the gravity of what someone is saying more easily. I have never been a fan of phones anyway ... talking to someone on the phone, you can get a lot of information but you might not get the full meaning of what they are saying.'*

(Mr Chivers)

Face-to-face contact was the preferred way of getting advice, therefore, if the situation was more complex, as this better enabled a person to communicate the whole picture to the advisor; allowed more time to understand advice being given; and offered the opportunity to take notes:

> *'.... with face-to-face you can write things down, jot things down, draw something out for the other person and say, this is how it works, this is how it fits together. So it is more emotive that way, you get more of the meaning of what you are saying across.'*
>
> (Mr Chivers)
>
> *'If you're going to talk about four or five bills or something, to squash or whatever ... I prefer to sit down with somebody, and they could explain things properly ... you don't tend to get the proper gist when you are on the phone on certain things.'*
>
> (Mr Graham)

A meeting with an advisor was also seen to offer the ability to create the kind of rapport that might be necessary for some men to be able to talk openly. Mr Pearson and Mr Smiley both alluded to this:

> *'It seems more personal ... I think you can actually relate more to the person as well if you're facing them. If they know their business they can probably draw you out anyway. Get your problems out more.'*
>
> (Mr Pearson)

> *'... it would be very serious for me to go to the bother of going to contact one, and in which case when I did I would want to see someone face-to-face, sit down and get a proper face to face conversation with someone about my situation. A phone call is very impersonal, online is very impersonal.'*
>
> (Mr Smiley)

However, it should be noted that both of those who had received telephone advice for relatively complex problems expressed their satisfaction with it. It appears then that an expressed preference for face-to-face advice may well change in the light of a positive experience of receiving telephone-mediated help. Furthermore, as we saw, some men felt nervous about meeting someone face-to-face without being prepared by knowing exactly what to expect. For Mr McPherson, using the internet for debt advice would on the one hand afford him a greater degree of anonymity than a meeting with someone in person; on the other, it could alleviate some of the pressure that he associated with the risk of appearing stupid in a face-to-face encounter:

> *'... Internet I think is more appropriate. Not appropriate, but I think that's easier. You're not looking in people's face, not under so much pressure ... I don't want to be looking at somebody and I'm like waffling on ...'*

Empowering men

Regardless of how advice had been delivered, those who had benefitted from it seemed particularly to value practical assistance that enabled them to re-gain a measure of control. For Mr Compton, the support he received had helped him identify his priority bills and take practical steps towards meeting his payments in order to avoid accruing further debt:

> *'They said, main priorities are your rent – your rent, your council tax, gas and electric are your main priority bills. And obviously your food. Any hire purchases can be sorted out through ... the courts, if they take you to court. They are not your priority bills, they are non-priority bills. Bank is non priority ...'*

For Mr Chivers, the advice and support he received from CAB also empowered him by giving him a 'framework' through which he could take control of the negotiation process.

> *'The CAB had a series of standardised letters already written. They let me read them, told me to sign them, I read through and saw nothing wrong with the pre-formatted text, signed them and happily let the CAB do the negotiations with the people we owed money to, because they carried more weight ... it gives a framework around which to start repaying things, and once you got the framework up you can then start moving around within it and say, 'Well this is what I can afford to pay you. My costs have gone up and my income hasn't. I can't afford to pay you anymore.'*

The ability to take an active role in dealing with their debt problems was also highlighted by those men who had *not* sought advice in the past but who talked about what they would ideally want from debt advice services. As Mr Butcher explained, he would be looking for guidance and tools to manage his own affairs:

> *'More like show me the way kind of thing. Help me step by step, more like how to be able to pay that, as well as being able to pay that, as well as this, as well as living on this – whatever you've got left. Just juggle the money like, if anything.'*

As a longer-term strategy, several men talked about the importance of teaching financial capability at school as a way of preventing debt. As Mr Chivers put it:

> *'Once people are in debt it is difficult to say [what to do]. If people got into debt because they have a blasé attitude to money, it may be necessary that financial education is better, at school and beyond. So there is education on what you can expect when you do owe money … what you should expect to be requested and what is going too far … Because scaring people into paying money doesn't tend to work. It tends to make people run away. I know because I ignored the red letters and thought … "They are nasty. I don't want to know about those.'"*

Mr Chivers' references to knowing what to expect; a tendency to ignore debts; reacting negatively to creditors' tactics; and to what 'does not work', hint at a number of the barriers to advice-seeking documented in detail earlier, and reinforce the suggestion that what *does* work in relation to enabling men to seek debt advice are approaches that are compatible with 'empowering' them to 'do it themselves'. We did not specifically ask our interviewees about online self-help advice

toolkits, and none volunteered experience of them. This is perhaps not surprising since these are relatively new initiatives, but this approach does seem to meet some of the needs highlighted by this study. Mr Chivers referred to being given the tools to manage his own affairs by being offered a 'framework' to enable him to engage in a process of negotiation with his creditors and thereby to take control of his affairs once more, and online toolkits offer this. By offering advice 'remotely' the internet may also help overcome some of the psychological barriers men experience to seeking advice, that threaten their sense of masculine identity.

A face-to-face service will always be necessary for some, and this is a judgment that can be made during a telephone consultation. Where a face-to-face encounter is the most appropriate choice, the message is the same: an approach that empowers men by helping them to feel in charge once more and that is compatible with a belief in debt-related 'DIY' is likely to be 'what works', especially if they see it as part of their role of 'providing' a better future for them and their families. Perhaps Mr Chivers, who *did* seek timely advice, should have the last word:

> *'I wasn't embarrassed about it. I was actually doing something productive about the situation we had got ourselves into. I think if I had felt any embarrassment about doing that, that would have taken it away – the fact that the only place to go from where we were was forward.'*

5 Conclusions and recommendations

This is a small-scale qualitative study the findings from which are not generalisable to the wider population of men. Nevertheless, they are indicative of a number of important issues in relation to men's experience of problematic debt: how they acquire it, how they manage it and how they might be enabled to utilise debt advice effectively. The research found:

- A lack of sustained employment providing an adequate and stable income was the most important trigger into problematic debt. This applied to men who: had been reliant on benefits for substantial periods of time; had a pattern of 'churning' in and out of work; had lost vital overtime; had experienced business failure; and had been made redundant.

- A small number of men whose problematic debts were associated with addictions provided a contrast with patterns of female problematic debt.

- Patterns of control and management of household income and expenditure, including the acquisition and management of debt, are embedded in the nature and dynamics of couple relationships. They are also reflected in couples' banking arrangements. These sometimes left women with little access to money and sometimes carrying an unequal burden of the 'worry' associated with debts. On the other hand, men who managed household finances via internet and telephone banking saw themselves as being 'smart' with money.

- Although research has shown that even modest savings act as a buffer to withstand 'adverse shocks' in households with problematic debt, most men in this study had either exhausted their savings in servicing debts or constantly raided short-term savings to make repayments.

- Just over half of interviewees had sought debt advice, although not all had managed to access it.

- Those who had tried to get advice and been unable to do so felt disinclined to do so again (perhaps due to the barriers some men have to overcome in order to make an initial approach).

- Positive experiences of receiving advice, on the other hand, reinforced the likelihood of seeking advice again should the need arise in the future.

- Those who had received debt advice spoke positively of its benefits, which were both practical and emotional. Practical help included crucial information about where they stood legally, and pro forma letters that could be used to communicate with creditors; emotional benefits were being relieved of stress and worry and acquiring peace of mind.

- There was patchy awareness of what debt advice services were available and exactly what help they offered among the minority of the sample who had not sought advice. At the same time, some confusion existed about charitable debt advice organisations and commercial debt consolidation services, with the latter being treated with suspicion.

- Barriers to advice seeking included:
  - gendered divisions of labour;
  - a range of emotional responses that precluded addressing debts;
  - over-optimistic assessments of prospects for improving the situation;
  - lack of awareness, understanding and inaccurate perceptions of what advice services offer;
  - confusion about charitable debt advice organisations and commercial debt consolidation services, combined with a marked preference for the former and a marked distrust of the latter;
  - lack of self-confidence and the social skills perceived to be necessary to access services;

  - a powerful need to see themselves as in control of their finances and able to 'do it themselves' in relation to managing problematic debt.

- A variety of views about the most effective modes of debt advice service delivery according to the complexity and extent of problematic debt. Men in this study saw a face-to-face encounter as enabling them to: create the kind of rapport necessary for talking openly; communicate the whole picture to the advisor; take the time needed to understand the advice being given; and to take notes for future reference. However, a caveat must be included here, as it is not possible to generalise from a small scale qualitative study in which only around half the participants were speaking from direct experience of having accessed debt advice and of whom some had particularly complex debts. Those who had received advice over the telephone had found it helpful, even when they felt their circumstances to be relatively complicated. Furthermore, although none had had experience of online toolkits, these certainly chime with the expressed needs of men we interviewed for being offered the means to 'help themselves'.

- Regardless of how advice had been delivered, those who had benefited from it seemed particularly to value practical assistance that enabled them to regain a measure of control.

- Approaches that empower men by helping them to feel in charge of their finances once more and that are compatible with a need to 'do it themselves' are likely to be effective, especially if they are framed in terms of men's role in providing a better future for themselves and their families.

Recommendations for policy and practice

- **Given the causes of problematic debt revealed here, policy aimed at securing sustainable jobs that provide a minimum income standard is likely to have a major impact on reducing problematic personal debt.**

- **Even modest levels of savings were shown to act as an effective buffer against**

problematic debt. Policies designed to enable and support the ability of low-income families to save, therefore, have the potential to act in both a preventative and an ameliorative way.

- **The part played by addictions in men's problematic debt reveals a need to support the provision and development of treatment and prevention services for those with or at risk of addictions, particularly in relation to problem gambling, as part of a national responsible gambling strategy.**

- **The contribution of relationship dynamics to problematic debt and the contribution of problematic debt to relationship break down suggest that 'money advice packs' would be an invaluable resource for couples at the point of setting up home together; these might also be made available through Relate.**

- **The likely increase in demand for debt advice as a result of the recession means that services need to make advice more accessible to men. This is particularly important in light of the evidence that unsuccessful attempts to access services had such a negative effect on men's willingness to seek advice again, while experience of debt advice was associated with high levels of satisfaction and a willingness to use services again if necessary. Targeting services/money advice promotion at places where men are likely to be may also enhance access.**

- **Given the mistrust of commercial debt-advice services evidenced here, emphasising services' independent not-for-profit status would contribute to the building of trust and overcome barriers that some men experienced to seeking debt advice.**

- **There is a need for more awareness amongst debt advisers and financial advisers of when a referral is required and good knowledge of what service is provided by the other. Money advisers and financial advisers need to work closely together to ensure**

that signposting occurs where relevant to a person's financial circumstances.

- **Men's accessing of debt-advice services would be facilitated by framing the promotion of these services in terms of enhancing men's ability to 'do it themselves', regain control of their finances and provide for their families.**

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Annex

Annex A The interviewees

1 Mr Donaldson, 45, Black Caribbean, married, lives with wife and two daughters (24 and 11) and grandson (three), unemployed, wife works part-time. Household income: less than £10,000. Debts: bank loan.

2 Mr Compton, 45, White British, divorced, in receipt of incapacity benefit. Household income: less than £10,000. Debts: credit card arrears, rent arrears, water rates arrears.

3 Mr Butcher, 25, White British, living with partner and two children, both in receipt of benefits. Household income: less than £15,000. Debts: rent, water rates and catalogue arrears.

4 Mr Hakim, 40, British Pakistani, separated, works part-time. Household income: less than £10,000. Debts: credit cards, overdraft, bank loan, arrears.

5 Mr Chivers, 28, White British, married with two children (seven and five) and baby on the way, works full-time, wife caring for children. Household income: less than £30,000. Debts: credit cards, loans, catalogues, arrears.

6 Mr Houseman, 63, White British, living with partner, both in receipt of benefits. Household income: less than £15,000. Debts: unpaid tax bill, credit card, store card, HP and overdraft.

7 Mr Storer, 45, White British, married with two adult and one school-aged children at home, both he and wife employed full-time. Household income: £30,000-40,000. Debts: catalogues, HP, doorstep loans.

8 Mr Graham, 32, White British, married with one child and one step-son at weekends/holidays, employed full-time, wife caring for children. Household income: less than £20,000. Debts: catalogue, HP, bank loans, doorstep loans, numerous arrears, including child support payments.

9 Mr McPherson, British Caribbean, 30s, living-apart-together with partner, 11-year old son, unemployed, partner works/attends college. Household income: less than £20,000. Debts: credit card, overdraft, loans from family, arrears.

10 Mr Winters, White British, 31, separated, unemployed, lone parent with 10-year old son. Household income: less than £15,000. Debts: catalogues, arrears, loans from family.

11 Mr. Smiley, White British, 30, lives with partner and three-month-old son, both in receipt of benefits. Household income: less than £15,000. Debts: HP, bank and building society loans, doorstep loans, loans from family.

12 Mr Flintham, White British, 49, married with two children (11 and seven), works full-time, wife works part-time. Household income: less than £25,000. Debts: mortgage, credit cards, catalogues, HP, bank and building society loans, overdraft.

13 Mr Nelson, White British, 30, single, in receipt of benefits plus intermittent income as reservist soldier (Territorial Army), multiple occupation household. Household income: less than £15,000. Debts: credit cards, multiple overdrafts, loans from family, arrears.

14 Mr Hepworth, White British, 45, married with two children (11 and nine), self-employed, wife caring for children. Household income: less than £30,000. Debts: mortgage, hire purchase, overdraft.

15 Mr Bolton, White British, 46, separated, shared care of school-aged son, temporarily employed (three-week contract with agency). Household income: £30,000-40,000. Debts: mortgage arrears, credit cards, overdraft, loan from family, arrears.

16 Mr Norton, White British, 38, lives with partner and three children (four-year-old twins and three-year-old). Works full-time, partner caring for children. Household income: less than £20,000. Debts: mortgage, hire purchase, credit cards, bank loan, overdraft.

17 Mr Telford, White British, 34, lives with partner and five children (12, 10, five, three and under one), works full-time, partner caring for children. Household income: less than £15,000. Debts: HP.

18 Mr Barton, White British, 32, lives with partner, both employed full-time. Household income: less than £30,000. Debts: mortgage, credit card, HP, building society loan, overdraft.

19 Mr Pearson, White British, 55, married, works part-time, wife works full-time. Household income: less than £25,000. Debts: mortgage, credit card, loan.

20 Mr Repton, White British, 27, married, both work full-time. Household income: £42,000. Debts: mortgage, credit cards, store card, substantial loan from family.

Annex B Typologies of household financial allocation systems

Pahl's typology of household financial allocation systems:

- The 'female whole wage' system, in which the man hands over his whole 'wage packet' to his partner, but has some personal spending money; she adds her own earnings, if any, and is then responsible for managing the financial affairs of the household.
- The 'male whole wage system', in which the husband has sole responsibility for managing household finances, a system that can leave non-employed wives with no personal spending money.
- The 'pooling system' involves complete or nearly complete sharing of income; both partners have access to all or nearly all the money that comes into the household and both spend from the common pool. (As Pahl comments 'There has always been an issue about the extent to which the ideology becomes a reality', 1995: 366). Further, pooling systems can be broken down into 'female-managed pool' and 'male-managed pool', according to who has ultimate responsibility for organising household money and paying household bills. In a study by Vogler and Pahl (1994), only 20% of couples agreed that both were equally responsible for the management of their pooled money (see below).
- The 'housekeeping allowance system' involves separate spheres of responsibility for household expenditure. Typically the husband gives his wife a fixed sum of money for housekeeping expenses, to which she may add her own earnings, while the rest of the money remains in the husband's control and he pays for other items.
- The 'independent management system' is defined by both partners having their own source of income and neither having access to all the household funds.

Vogler (1994) developed Pahls' work using a quantitative approach with households across all income levels, where the distribution was as follows:

Household allocative systems showing different forms of pooling

	Per cent	N
Female whole wage	27	343
Female managed pool	15	205
Joint pool	20	250
Male managed pool	15	191
Male whole wage	10	118
Housekeeping allowance	13	153

Source: Vogler and Pahl (1994:367).

As Vogler observed, 'The orthodox model of households as egalitarian decision-making units within which resources are shared equally, applied to only a fifth (20%) of the households (p. 241). She highlighted two aspects to these inequalities where women were particularly at a disadvantage: different levels of general financial deprivation; and unequal access to personal spending money. She found that on both counts, the inequalities were greatest under female-managed and housekeeping allowance systems. Importantly, she showed that inequalities were inversely linked to income levels. She also explored the relationship between strategic control and differential access to money. In low income families, even where women controlled finances, they did not gain equal access to resources, unlike in higher income families where resources were under male control:

> *'Female-managed systems were characterised by a disjunction between strategic control over finances and access to money. Despite egalitarian or even female strategic control over finances, wives in these households experienced significantly higher levels of financial deprivation than husbands, while husbands had greater access than wives to personal spending money.'*
>
> (p. 241)

Her findings also confirmed that:

> *'Women are most likely to manage finances single-handedly in low-income households where financial management is likely to be a burden rather than a source of power.'*
>
> (p. 243)

Vogler's large-scale study was important in throwing more light on the ways in which *low-income households'* pattern of money management and control differed from those in other households.

Further work by Pahl in the late 1990s examined the impact of 'new' forms of money, such as credit and debit cards, telephone and internet banking (Pahl, 1999). This study showed that *independent management* was particularly characteristic of younger couples, cohabiting couples, those without children and those where the woman was in full-time paid work. Lewis's (2001) study similarly found a higher degree of independence in money management among younger couples, compared with the older couples, and among cohabiting as opposed to married couples.

Annex C Topic guide

Introduction

- Check that they have had/give project *information leaflet*.
- Acknowledge with former CAD interviewees that some of this may be familiar ground to them – but their circumstances may have changed, and in any case, we want to give them the opportunity to talk in-depth about some of the issues we were only able to touch on briefly before.
- Explain that a lot of research has been done on *women* and household finances so we're particularly keen to get men's perspectives.
- Explain that there are no right and wrong answers – we're interested in their personal views and experiences.
- Explain that the first part of the interview is *general background information on household finances*, and the second part is looking specifically at *experiences of credit and debt*.
- Tell them we expect the interview to last about an hour.
- Remind them that their participation is voluntary, and that they do not have to answer any questions they do not wish to.
- Remind them that everything they say will be treated in strictest confidence.
- Get signed consent.
- Ask permission to record.

Recruitment questionnaire

EITHER: Complete questionnaire (CAD interviewees)

OR: Verify questionnaire information

Income

I'd like to ask you a little bit more to begin with about the money you've got coming in…

In terms of your household income, can you tell me how this is made up?

[Probe:]

- from employment

(amount of own wage/salary – paid monthly/weekly?)
(amount partner's wage/salary? – paid monthly/weekly?)

- from benefits/tax credits (which ones?)

  [for couples:] whose name they are in? how often paid?

  [for lone male parents only:] any child support, if children's mother working (and/or other kinds of money from previous relationship – eg informal arrangements, how much? paid how often?)

- any other kinds of income? (eg second job, casual earnings, money from relatives? – who gets it ? how much? how often?)

[Where money coming in from more than one source, cite them in turn and ask:]

- Whose money is that?/Whose money do you see that as being? [Is some 'yours', some 'hers' and some 'ours'?] Why is that?

Outgoings

And could you run through how much your main outgoings are for me?

[Prompt:]

- Mortgage
- Rent [+ arrears?]
- Council tax
- Water rates
- Gas
- Electricity
- TV licence
- Landline telephone/internet
- Mobile phone Insurance (buildings, contents, car, life)
- Any Insurance (buildings, contents, car, life)
- Child support (formal or informal)
- Any savings? (Prompt: And do you ever manage to put anything by? On a regular/irregular basis? How 'held'? How much? What *for*?)

NB. If they mention repayments on their debts here, say we're going to look at them in detail later

Banking arrangements

Does the household/your income come into a bank account(s)?

(If no bank account/operating cash economy/– why is that?)

[Probe:]

- Do you bank with: mainstream bank; building society; post office; online banking?
- How *many* bank accounts in the household?

[In couple households only:]

For each account:

- In whose name(s) (individual or joint?)
- And what are they used for? (savings; separate 'bill' account etc)
- Who has access to which accounts?
- (re internet banking) Do you know each other's passwords?
- Who *actually* accesses which in practice, and in what circumstances – give examples

- *[In relation to any savings in couple households:]* You mentioned savings – *Who* saves this money? How regularly? Who knows about it? What is it *for*? Who accesses it? For what? *(Examples)*

- How did these banking arrangements come about?
- *Why* is it arranged like this? Does this arrangement work well for you? In what way?
- Has the way you organise your banking arrangements/accounts always been like this? When did arrangements change? Why?

Managing the money

[In lone households where man has been in a partnership/co-habited in past:]

- So obviously you yourself are responsible for household finances on a day-to-day basis … Was that the case when you were with your ex-partner? How did that come about? Was it the subject of any discussion? [With rest of questions below, use past tense for lone households]

[In couple households:]

- Do/did you see money coming in from different sources as for spending on different things? *(Explore perceptions of differences between earned and benefit income; and perceptions of differences between different types of benefits eg child benefit as for the children)*
- In terms of the outgoings you described, how are/were payments actually made/organised? [eg meters; by cheques; credit/debit cards; going to post office; Direct Debits – what from which accounts?]
- Have there been times when you've had to cancel Direct Debits, or times when payment of them has put them overdrawn, resulting in bank charges?
- Who is/was responsible for ensuring payment? How does/did this happen? (for lone male: and now?) (NB in couples, interviewee may not know, where partner mainly responsible, but try probing nevertheless eg so have payments ever been missed? How did this come to your notice? What happened then?)
- Does/did either of you check bank statements? Occasionally or on a routine basis?
- What happens(ed) when there's an unexpected expense (eg emergencies like boiler break-down, or seasonal expenses like Xmas, birthdays)? How are they met? *[Example]*
- So who would you say is/was mainly responsible for household finances on a day-to-day basis?
- How are/were decisions made about other kinds of spending? *[…or does/did it depend on scale of purchase: 'big' things –v- day-to-day things?]* Can you give me some examples?
- And who has/had the final say on *major* purchases? *[If they ask you what 'major' is - ask them what they would define as 'major' decisions, or major commitments, or items of expenditure]* Why is/was that? And is/was that always the case? *[Explore: For example, if they say it's 'joint' ask for an example of a joint decision or ask them to describe the process they went through when deciding to make a major purchase]*

- Does/did either of you ever 'ask permission' of the other before spending? *[Example]*
- Do/did you ever feel the need to 'justify' your spending to your partner? Or vice versa? *[Examples]*
- Do/did you and your partner ever check up on each other's spending?
- Do/did you see some of the money coming in as 'yours' to spend as you wish(ed)? Where does/did this money come from? *(NB is it money coming from specific source(s) that is regarded as one's 'own' money?)* How much? Is/was this occasionally or on a regular basis? Is/was this an amount that was discussed and agreed between you? And what do/did you spend your money on? (eg car, 'hobby', going out with mates, drink)
- And does/did your partner have her 'own' money? Where does/did this come from? How much? Occasionally or regularly? Agreed amount? What spent on?
- Who pays/paid when you go/went out together?
- Is it important to you to have money 'in your own right'? Why?

Can I ask you to take a few moments to have a look at these options, and say which of them you think comes closest to the way you do/did things in your household?

[SHOW CARD]

Thinking about it overall, how well does/did the way you arrange your finances, and the way you divide(d) the roles and responsibilities work for you? Why?

What are/were the advantages and disadvantages of doing things this way?

How do you think your (ex-)partner might answer this question?

[For lone households:]

- When you were first on our own, did you have to 'set up house' all over again? How did you finance that? *[NB credit often used at this point]*
- And since being on your own, how have things changed as far as managing money is concerned? How have you found being solely responsible for organising the domestic finances?
- Can you tell me a bit about how you go about it? (eg consciously budgeting/just paying bills as and when they arrive/putting a bit by etc)
- Does it make much difference to you, compared to how you organised your household finances previously? In what way(s)?
- Do you ever have to 'go without' [ie in order to pay bills/service debts/meet children's needs]? What? How often?
- Would you say you've learned anything about managing household finances since being on your own… what? …and how? *[Expand]*.

Debt advice-seeking

- Have you/your partner ever had any contact with any debt advice agencies *[Prompt: CAB, National Debtline, private companies*
- Why was it you/her that contacted them? *[Explore reasons in light of foregoing picture of divisions of roles/responsibilities]*

[If yes, for each one:]

- What led up to that? *[Was there a specific trigger… or..What prompted them to contact service]*
- How did you/she know where/who to go to?
- Did you/they go immediately things started to get problematic? Why/Why not? *(Explore differing views of when debt levels get defined as 'problematic'; explore timeliness or otherwise of advice-seeking)*
- What happened when you/she saw them? What advice did they give? What did you/she do as a result? *(Explore decision-making process between partners, eg how much communication/ discussion/negotiation there was after advice)*
- How did you find the experience? *[Expand: views, experiences, helpful/not helpful, why?]*

ALL:

- How do you feel about seeking advice from outside agencies in general … for example, on other matters … such as health? Have you ever contacted other services for advice? *[Examples]*
- Some people have said that men in particular are reluctant to seek advice from outside agencies – what do you think of this? *[Explore barriers as fully as possible, eg pride/shame; privacy around money matters and having to disclose financial details; accessibility (time, places); whether it would make a difference who the person delivering the service was eg man/woman]*

Modes of delivery of debt advice services

- Are there any things that might make it easier for you to use a debt advice service? *[Explore: where services are; times available; online access]*
- Are there times/circumstances when specific channels of contact are important? [Prompt: telephone/online/face-to-face] When are each of these important/adequate/vital etc? *[Expand as much as possible]*
- Do you think there are any other things debt advice agencies could do to make their services more appealing to you?
- Do you think there is anything more the government could or should be doing to help people who are struggling with debts?

Is there anything further you'd like to add?

May we give you a ring if there's anything we need to clarify later?

Thanks.

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The Effect of Over-Indebtedness on Health: Comparative Analyses for Europe

Stefan Angel*

I. INTRODUCTION

The relationship between socio economic status and personal health has been investi gated extensively. Generally, there is strong evidence of an income gradient in health (Deaton 2002; Deaton 2003; Cutler et al. 2006; Wilkinson and Pickett 2006). How ever, it is challenging to disentangle the income effect from other dimensions of socio economic status (e.g., education, social class, occupation, wealth), to control for unobserved confounding factors, and to deal with the possibility of reverse causal ity. This has resulted in mixed evidence on the causal nature of the relationship between income and health (Adams et al. 2003; Smith 2004; Frijters et al. 2005; Jones and Wildman 2008; Cutler et al. 2011; Economou and Theodossiou 2011; French 2012). In particular, there has been little research on how exactly low income is linked to bad health, i.e., which mediator variables are relevant. For policy makers who aim to reduce health inequalities, evidence of the details of the transmission processes can provide guidance on how to allocate resources effectively among policy areas. Previous work, for instance, has looked at the consumption of medical goods and services, healthy food (James et al. 1997; Martikainen et al. 2003), and housing conditions (Bonnefoy 2007; Gibson et al. 2011; Bilger and Carrieri 2013).

Another possible explanation for the observed income gradient concerning health can be debt and/or the inability to repay debts. On the one hand, getting into debt can be a means of consumption smoothing, maximizing life time utility without necessarily or immediately implying a problem for the household. On the other hand, being indebted or experiencing problems with paying back outstanding debts can also be a source of disutility.

A growing body of research focuses on debt as a consequence of low income and its relation to physical and mental health. Two recent systematic reviews pro vide an overview of the available evidence (Turunen and Hiilamo 2014; Richard son et al. 2013). Richardson et al. (2013) reviewed 65 articles[1] and also performed a meta analysis (Mantel Haenszel random effect model) on a selected

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subgroup of studies. Ten papers included nationally representative samples of the general population. The vast majority of studies focused on mental health and most of them were conducted in the UK or the USA. Overall, the results of the review and adjacent meta analysis suggest that unsecured debt increases the risk of poor health. However, the authors also mention a number of limitations concerning the existing evidence. Firstly, most of the studies use cross sectional data, which means that causality of the observed relation cannot be established (unless assumptions are very strong), either due to selection mechanisms or reverse causality. It is true that longitudinal studies based on panel data can control for some of these sources of bias. However, there are still only few panel studies available and those that exist (Keese and Schmitz 2014; Bridges and Disney 2010) are generally less likely to have standardized measures of health. Secondly, different definitions of debt are used in the literature, which makes it difficult to compare these studies in terms of their effects on health indicators. Finally, there has been little research on how the impact of debt on health might be reduced and/or on how it differs between household types and individuals (i.e., effect heterogeneity and moderator variables). For instance, as Selenko and Batinic (2011) showed for a sample of 106 clients of debt counseling institutions in Austria, the effect of perceived financial strain is stronger if individuals have lower self efficacy beliefs.

Turunen and Hiilamo (2014) use a broader range of search terms and analyze a final sample of 33 papers published between 1994 and 2013. The impact of in debtedness varies largely across this sample. The authors differentiate between effects on six different health outcomes: mental health, depression, suicidal behavior, mortality, physical health and health related behavior. In general, their results resemble those of Richardson et al. (2013). Unmet loan payments and unpaid financial obligations are related to poorer subjective health and health related behavior. However, there is less evidence available concerning the rela tionship between indebtedness and physical health indicators. In addition, many studies are cross sectional and do not sufficiently control for selection bias. Like Richardson et al. (2013), the authors stress that the connection between indebted ness and poor health is influenced by a variety of specific factors (e.g., the source of debt, repayment structure, psychological resilience). They argue that indebted individuals experience financial strain, shame and distress. This can also lead to taking insufficient medication and coping behavior that is detrimental to health.

The present paper adds to the literature on the effect of debt on health in the following ways. First, it focuses on debt related measures that refer to imbal anced budgets and problematic illiquidity (‘over indebtedness’) by measuring arrears for payment obligations (bills and credits). Such a condition is likely to

1. The authors used the following search terms: Indebtedness; Debt and Health; Mental disorder; Mental illness; Depression; Anxiety; Stress; Distress; Alcohol; Drug; Suicide; Eating Disorder; Psychosis; Schizophrenia.

result in creditor action and can thus be a potential trigger of distress. The study applies panel regression models with the aim of minimizing selection bias based on unobservable time constant personal heterogeneity and time fixed effects. Second, representative survey data for several European countries are used. This makes it possible to investigate the relationship between over indebtedness and health using a cross country comparative method, i.e., to analyze the degree of effect heterogeneity across countries and seek potential explanations for it. Finally, the study investigates what role such country level factors play in mod erating the effect of problematic debt on health.

II. EXPLANATORY FRAMEWORK AND HYPOTHESES

The explanatory framework that is used here proposes two channels that link over indebtedness and health. First, repayment obligations may provoke discom fort and mental distress and can thus lead to psychosomatic disorders (Drentea and Lavrakas 2000; Jacoby 2002). Increased stress is attributed to financial pres sure, increased financial management demands, the burden of the debt itself as well as the creditors' debt collection activities (Drentea and Lavrakas 2000). There is also a socio cultural dimension or 'Stigma Effect' to this, as some forms of credit, such as debt incurred from a home or education loan, are more socially accepted (in Western countries) than having outstanding debt for consumption. For instance, using a sample of European households, Georgarakos et al. (2010) find that the same debt burden creates more distress in countries with fewer mortgage holders than in countries where a significant percentage of households use mortgage debt. Similarly, Gathergood (2012) includes county level data on private bankruptcy orders in England and Wales in his panel regression models. His results show that individuals who live in areas with frequent incidences of bankruptcy and who have problems repaying their unsecured debts experience less deterioration in psychological health. This is interpreted as evidence of reduced social stigma and thus less distress. Further more, unsecured credit card debt can cause more stress for a debtor than out standing obligations that are secured by collateral (Drentea and Lavrakas 2000). Finally, the individual's framing of their debt situation is important. Drentea and Lavrakas (2000) identified the subjective appraisal of the eco nomic situation as the most important predictor of physical impairment and mental health.

A second explanation for why one could expect an effect of debt on health refers to the economic model of health production (Grossman 1972). According to this model, health is an asset which is produced or reduced by the individual. Consequently, there is a question of optimal (utility maximizing) resource allo cation between health and other goods. High debt is seen as a constraint, leading individuals to spend less on goods and services associated with their own health

(e.g., medical services, food). As a result, people save on costs in order to avoid arrears on their debt obligations, which could trigger stressful collection activities by creditors (Drentea and Lavrakas 2000; Jacoby 2002). Additionally, debtors with high debt may resort to health adverse coping behavior (e.g., drinking, smoking).

This paper aims to investigate both channels in detail by using comparative hi erarchical panel data with individuals nested in households and countries. In gen eral, it is expected that people in over indebted households are more likely to report health problems. Moreover, by exploiting the between country variation of the effect size of over indebtedness on health, these two areas are explored in more detail. First, it is hypothesized that distress due to pressure on the debtor is greater if a country has a more creditor friendly institutional setting. Such a setting could be reflected, for instance, in a wider range of options for collecting debt or enforcing contracts for creditors (average time and money effort to collect debts, caps on default interest rates, indicators that measure the degree of creditor harassment). A similar argument applies to the possibilities of debt relief. Being over indebted in a country where there are more and faster ways of debt relief or where dispute resolution with creditors is easier should result in lower levels of distress.

Third, distress is expected to be greater in countries where the social stigma of being over indebted (being late with payments due to illiquidity) is higher and where a larger proportion of the society is more negatively oriented towards buy ing on credit. Evidence from the USA shows that credit market innovations that reduce the (social and tangible) cost of bankruptcy and the cost of borrowing have played an important role in accounting for the rise in bankruptcies and unsecured borrowing (Livshits et al. 2010). Although it is difficult to single out the social stigma component of the individual cost reduction, some evidence sug gests that stigma has declined, at least for the wealthier groups in society (Cohen Cole & Duygan Bump 2008). Finally, as implied by the health production argument, the effect of over indebtedness on health should be smaller in coun tries where health services are more easily accessible for the individual in terms of direct costs and availability.

III. DATA AND VARIABLES

The analyses all use EU SILC (European Survey on Income and Living Conditions) panel data from four consecutive years (2005 2008) for several European countries (UDB version 2008 4).[3] Three health indicators are available in SILC: self assessed

3. For an extensive description see: http://ec.europa.eu/eurostat/web/microdata/european union statistics on income and living conditions [accessed June 2, 2015].

general health measured on a 5 point scale; limitations in daily activities due to health problems (3 point scale); and a binary variable indicating whether a person suffers from a chronic (long standing) illness or condition. The main focus in this pa per is on self assessed health, converted into a binary variable (1=bad or very bad health, 0=fair/good/very good health). The results of robustness checks using the limitations in daily activities indicator as the dependent variable are discussed in the next section. The gross sample contains 1,251,081 observations for 493,276 per sons in 27 countries, with survey participants aged 16 or older. The Netherlands and Slovenia had to be excluded from the regression analysis, as the "degree of urbani zation" control variable is not available for these countries. After excluding cases with missing values for self assessed health, there were a total of 817,872 observa tions for the dependent variable (329,029 persons in 138,456 households across 25 countries).

There are numerous suggestions as to how over indebtedness can/should be measured (European Commission 2008). However, one core feature of most def initions is illiquidity. For Europe, there is currently no comparative panel data that covers *both* personal or household wealth *and* the amount of outstanding debt. EU SILC includes information on whether, due to lack of money, a house hold has had arrears (yes/no) during the last 12 months prior to the interview for the following items: i) mortgage or rent payments; ii) utility bills; and iii) hire purchase installments or other loan payments. These three arrears variables are used to construct a compound indicator ('1', if a household was in arrears with any of these items, otherwise '0'), which is henceforth labeled '*arrears*'. More over, a narrower concept of over indebtedness is used. Towards a common European definition of over indebtedness, a group of experts proposes to operationalize a household as being over indebted if it meets five criteria: (i) comparably high commitment payments push the household below the poverty threshold; (ii) the household was in arrears with at least one financial commit ment; (iii) the household considers the burden of monthly payment commitments to be at least 'heavy'; (iv) the household's payment capacity is considered to be at least 'difficult'; and (v) the household is unable to meet unexpected expenses (European Commission 2008). Based on this suggestion and the availability of data within EU SILC, a second dummy variable (0/1) was constructed. It be gins with the group of households that have been in arrears, as identified for the first definition. Second, the household must note that the financial burden of their total housing cost is heavy, or that they deem the repayment of debts from hire purchases or loans as a heavy burden. Third, households perceive making ends meet as a 'great difficulty' or a 'difficulty'. Fourth, the household assesses that it does not have the financial capacity to face unexpected finan cial expenses. If all four conditions apply at the same time, a household is de scribed as being '*at risk of over indebtedness (AROI)*', receiving the value '1' (otherwise zero).

IV. METHODS

The empirical analysis comprises two parts. In the first part a model was esti mated, based on the total sample and relating health to over indebtedness. A proper identification strategy was necessary to minimize the endogeneity of the independent variable of interest. For instance, there could have been a selection of individuals with low income or low education in the over indebtedness group. If these groups also tend to be in bad health, estimators for the effect of over indebtedness would be biased upwards. Including relevant observable control variables in the model partly reduces this problem. EU SILC provides a large set of variables where the equivalized disposable income (measured in country specific quintiles), tenure status (housing wealth indicator), the highest education level attained measured by the UNESCO International Standard Classification of Educa tion (ISCED), age, marital status, self defined current economic status, degree of ur banization and sex are used as controls. Moreover, the panel data structure allowed controlling for unobserved time invariant person specific (e.g., risk behavior, cog nitive ability) and country specific factors (e.g., credit market features, between country differences in the assessment of personal health) that could be related to over indebtedness and health. Finally, time fixed effects were included to capture macro economic shocks and other effects that vary over time but are constant for all observations in a given year. A fixed effects logit specification (conditional max imum likelihood estimation) was used as the basic model and will be compared to a pooled logit model to disclose the selection bias. Furthermore, fixed effects linear probability models (OLS) were estimated in order to get an approximation of mar ginal effects for the within estimators as these are not available for the conditional fixed effects logit models without imposing certain assumptions on the fixed ef fects. To check for the robustness of the substantial outcomes, several alternative model specifications were estimated. All results are summarized in the next section.

SILC is a four year panel with a rotational design. Any household remains in the survey for four years. Each year, one of the four sub samples from the previ ous year is dropped and a new one added. The 2005 2008 panel dataset contains those households that should have been at least in their second wave in 2008. However, the lower part of Table 1 in the supplementary information (SI) shows that there are also a number of dropouts in each wave. This raises the issue of at trition bias, which occurs if the determinants of attrition that also influence health cannot be controlled for in the health equation (Honoré et al. 2008). Using fixed effects panel regressions makes it possible to control for time invariant person fixed effects and a variety of observable socio economic variables. Nevertheless, attrition bias could still be an issue after conditioning on this set of variables as a result of the unobservable health status, i.e. health related dropouts. To test for this source of bias, both a variable addition test (Jones et al. 2013; Verbeek and Nijman 1992) and Hausman tests (Verbeek and Nijman 1996) were used.

Attrition tests did not show any evidence of health related attrition conditional on the model variables (Table 2 in the SI).

The second part of the analysis focuses on the effect heterogeneity of over indebtedness between countries and possible explanatory factors for it. Different modelling frameworks can be used for assessing the influence of variables at the national level on the effect size of variables at lower levels. Bryan and Jenkins (2013, 2015) summarize five main approaches that have been applied to multi level country data. In general, two issues are of particular relevance. First, it has to be decided whether country effects (slopes of over indebtedness) should be modeled as random draws (*random effects*) from a distribution of possible effects (usually a normal distribution with the mean equal to zero and the variance to be estimated) or if they should be modeled as fixed effects. With the latter strat egy, estimated effects are conceptualized as non transferable, i.e., they are likely to operate in the countries analyzed but not in others (e.g., states not included in SILC). The second question concerns the reliable estimation of parameters at dif ferent levels. Statistical properties of estimators are well defined only if both the number of countries and the number of individuals nested in these countries are large. The latter does not hold for most multi country survey data including SILC (N_C= 21 countries in this paper). However, there is no exact guidance about the minimum number of countries required for reliable (asymptotically efficient) es timates of country effects in the literature and it can range from 15 to 50 groups, depending on the model specification (Bryan and Jenkins 2015).

This study therefore applied a two step estimation strategy (Lewis and Linzer 2005; Bryan and Jenkins 2013) using country fixed effects. In the first step, fixed effects panel regression models were estimated separately for each country. In the second step, esti mated country specific coefficients for over indebtedness were related to country level variables. As the number of countries in the sample is small, less formal descriptive methods are mainly used to describe cross country differences for step one estimates, following the recommendations in Bryan and Jenkins (2015) and Bowers and Drake (2005). This reveals possible country groupings/rankings or similarities as well as bivar iate relationships with selected macro variables. However, as the country sample size for this paper is at the margin of the recommendations in the literature, some results of bivariate regression models using OLS and WLS with the *edvreg.ado* in STATA (Lewis and Leoni 2007) are also provided in the supplementary online material.

V. RESULTS

1. The effect of over indebtedness on health

Table 1 shows that there is considerable variability in the proportion of over indebtedness and (very) bad self assessed health among different countries.

Based on EU SILC, the mean of this variable in 2008 varied between approxi mately 0.03 in Ireland and 0.22 in Lithuania. A similar degree of variability can be found for the arrears indicator (variance of 0.00605), while the between country variance of the likelihood of AROI is smaller (0.00156). There is a moderate positive correlation between (very) bad self assessed health and over indebtedness at the country level with a higher magnitude for AROI.

Turning to the regression results at the household level, Table 2 reveals that, while controlling for income, education, age, marital status, number of children, economic status, urbanization, individual and time fixed effects, living in a household that has been in arrears in the last 12 months prior to the interview sig nificantly increases the odds of reporting a bad health status by 22.6% compared to a situation without any arrears (column 2). The positive significant effect found for arrears also shows up in the linear probability fixed effects model (column 3). The difference between the estimators of the pooled logit model (column 1) and the fixed effect model underlines the importance of controlling for time and person fixed effects. This indicates that there is a selection effect into arrears with respect to self assessed bad health due to unobservable time invariant individual factors. In principle, all these outcomes are also observed for the AROI indicator (columns 4 6). However, the effect size for this second indicator is slightly stronger.

To test the robustness of the results, several checks were applied (Table 2 in the SI). Results for these models are presented in the supplementary online ma terial. The fixed effects specification controls for selection bias due to unob served time invariant factors. Another potential problem is reverse causality that could, for instance, result from a direct effect of health on debt due to high medical bills. For example, repaying their debt may be difficult for individuals if they are forced to leave the labor market due to an adverse health shock. To control for this, several checks were applied. First, following Keese and Schmitz (2014), a subsample of constantly employed persons (working full time or part time) was examined in order to deal with the indirect effect of an adverse health shock on arrears due to job loss. The fixed effects logit specifications resulted in statistically significant odds ratios of 1.38 for *arrears* and 1.37 for *AROI*. Thus, for constantly employed persons, being at risk of over indebtedness increases the odds of reporting a bad health status by around 37% a stronger effect compared to the total sample (Table 2). Second, in one specification, the health state of the previous year was included in the pooled logit model to capture state depen dence. (Very) bad health in the previous year substantially increases the odds of bad health in the current year by the factor 16.3 for both *arrears* and A*ROI*. The point estimates for *arrears*, however, only slightly decrease to 1.57, and to 1.80 for *AROI* (1.51 and 1.85, respectively, if four year SILC longitudinal weights are used) but remain statistically significant. Third, to address the poten tial simultaneity of income and health, a specification with lagged values for

Table 1

Sample means for 2008: over-indebtedness and self-assessed health

	Bad/very bad self-assessed health	arrears	AROI
AT Austria	0.082	0.059	0.022
BE Belgium	0.078	0.064	0.034
BG Bulgaria	0.169	0.345	0.188
CY Cyprus	0.087	0.128	0.082
CZ Czech Republic	0.147	0.036	0.023
DK Denmark	0.062	0.020	0.003
EE Estonia	0.150	0.084	0.021
ES Spain	0.084	0.068	0.042
FI Finland	0.070	0.088	0.023
FR France	0.080	0.089	0.045
GR Greece	0.110	0.267	0.093
HU Hungary	0.205	0.156	0.093
IE Ireland	0.029	0.082	0.047
IS Iceland	0.040	0.103	0.025
IT Italy	0.109	0.142	0.073
LT Lithuania	0.224	0.070	0.026
LU Luxembourg	0.072	0.047	0.028
LV Latvia	0.209	0.120	0.064
NO Norway	0.075	0.076	0.016
PL Poland	0.181	0.117	0.065
PT Portugal	0.219	0.050	0.028
RO Romania	0.102	0.256	0.095
SE Sweden	0.050	0.054	0.014
SK Slovakia	0.158	0.053	0.034
UK United Kingdom	0.053	0.068	0.035
Correlation with self-assessed health	0.204	0.311	

Notes: Source is EU-SILC UDB 2005 2008.

income was estimated, but this did not substantially alter the estimates. Further more, in most SILC countries, income refers to the calendar year preceding the interview when the health status is surveyed. As a fourth check, both over indebtedness indicators were replaced by their respective first lags, which resulted in an insignificant effect of both indicators. However, it is difficult to tell whether this is due to reverse causality or because there is in fact only a short term effect of over indebtedness on health. Given the outcomes of the other checks mentioned above and the fact that the arrears indicators in the survey already refer to the 'last twelve months' prior to the interview, the latter interpre tation seems more probable.

Other robustness checks refer to the coding of variables. The cut off point for transforming the 5 point scale of the original dependent variable into a binary indicator varied. If 'limitation in daily activities due to health problems' is used as the dependent variable instead of self assessed health, the estimates of *arrears* and *AROI* remain statistically significant and do not substantially change in size. Moreover, two further specifications contained all arrears variables separately

Table 2

The effect of over-indebtedness on poor self-assessed health model estimates

	(1) Pooled logit (OR)	(2) FE logit (OR)	(3) FE LPM	(4) Pooled logit (OR)	(5) FE logit (OR)	(6) FE LPM
Household reports arrears (yes/no)	**1.674*****	**1.226*****	**0.009*****			
Household is at risk of over-indebtedness (yes/no)				**2.069*****	**1.324*****	**0.017*****
Equival. inc. 1st quintile	Reference Category			Reference Category		
Equival. inc. 2nd quintile	0.928***	1.003	0.000	0.937***	1.008	0.000
Equival. inc. 3rd quintile	0.849***	0.996	0.001	0.860***	1.003	0.000
Equival. inc. 4th quintile	0.756***	0.932	0.003	0.768***	0.940	0.003
Equival. inc. 5th quintile	0.612***	0.897*	0.004*	0.623***	0.901*	0.004*
Pre-primary education	Reference Category			Reference Category		
primary education	0.651***	0.884	0.008	0.648***	0.879	0.009
Lower secondary education	0.548***	0.804*	0.014	0.547***	0.803*	0.014
(upper) secondary	0.408***	0.756*	0.017	0.409***	0.749*	0.018
Post-secondary non-tertiary	0.348***	0.806	0.015	0.348***	0.797	0.016
1st/2nd stage of tertiary	0.289***	0.735*	0.018	0.289***	0.732*	0.019
Other control variables	Not displayed			Not displayed		
Country-fixed effects						
BE	Reference Category			Reference Category		
DK	0.828**			0.829**		
GR	1.070			1.131*		
ES	1.434***			1.434***		
FR	1.060			1.066		
IE	0.246***			0.246***		
IT	1.194***			1.194***		
LU	1.171**			1.170**		
AT	1.327***			1.324***		
PT	3.168***			3.196***		
FI	1.080			1.076		
SE	0.669***			0.662***		
UK	0.689***			0.689***		
BG	2.956***			2.920***		

Table 2. (Continued)

	(1) Pooled logit (OR)	(2) FE logit (OR)	(3) FE LPM	(4) Pooled logit (OR)	(5) FE logit (OR)	(6) FE LPM
CY	1.474***			1.467***		
CZ	2.243***			2.234***		
EE	3.326***			3.345***		
HU	3.864***			3.887***		
LV	4.796***			4.790***		
LT	4.033***			4.064***		
PL	2.954***			2.969***		
RO	1.309***			1.506***		
SK	5.049***			5.034***		
IS	0.707**			0.697**		
NO	1.125			1.138		
Year-fixed effects		included			included	
intercept	0.013***		0.141***	0.013***		0.142***
R^2 / Pseudo R^2	0.289	0.014	0.16	0.290	0.014	0.16
N (observations)	795762	91070	795762	792431	90401	792431
N (countries)	25	25	25	25	25	25

Note: *p<0.05, **p<0.01, ***p<0.001. Sample Size varies due to listwise deletion. Source is EU-SILC UDB 2005 2008. Unbalanced Panel. Unweighted Data. LPM: linear probability model with robust S.E. Cluster robust S.E. for pooled logit models (persons clustered in households). The variable sex is excluded from the fixed effects models. OR: Odds Ratios (factor referring to conditional change of odds. Odds are defined as probability of poor health divided by the probability of not reporting poor health). No follow-up of persons leaving the sample if they change country of residence. Unconditional risk of poor self-assessed health: 12%.

and different combinations of problems with arrears (which constitute the *arrears* indicator). Finally, instead of the equivalized personal income quintiles, income poverty indicators and first lags for indicators of equivalized personal income quintiles were used as controls. Applying all of these modifications to the fixed effects specifications did not substantially alter the results for any of the over indebtedness indicators. Using all three available arrears types separately as well as different combinations of them revealed that arrears for consumption purposes seem to matter most. Furthermore, the effect on health becomes stronger the more arrears a household has accumulated. Finally, when estimations were made using the supplied longitudinal weights, there were no substantial differences from the main model in Table 2.

2. Effect heterogeneity between countries

In the following, the results of the second research question on between country effect heterogeneity are presented. Fig. 1 contains a ranking of slope estimates for *arrears* and *AROI* among European countries. These parameters stem from fixed effect logistic regression models estimated separately for each country for

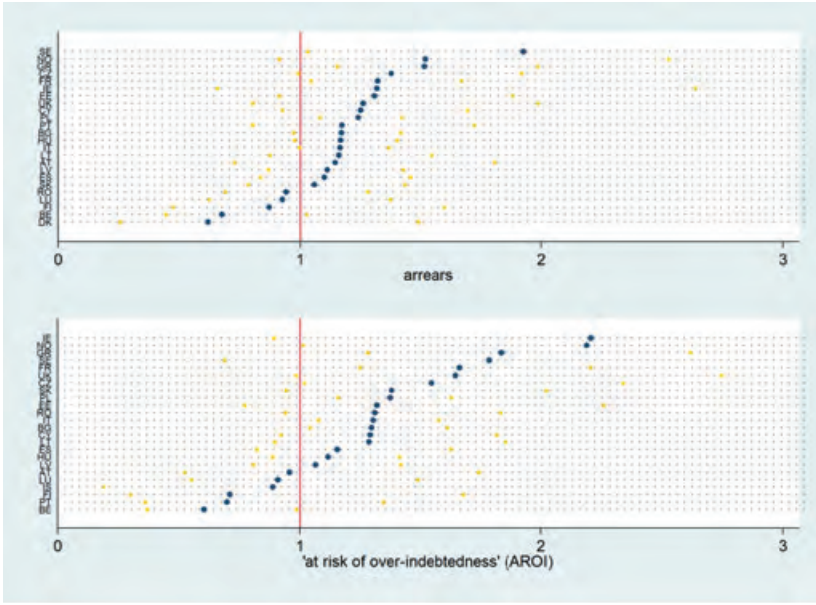

Figure 1

The effect of over-indebtedness on health variation between countries. Note: Source is EU-SILC UDB 2005 2008. Point estimates (odds ratios) and 95% confidence intervals for separate two-way fixed effects logit models for each country are displayed. The same control variables as in Table 2 are used. Abscissa is right-truncated for better visibility. Odds ratios for arrears in Iceland (odds ratio = 4.7, upper 95% bound > 6) and AROI in Denmark (Odds ratio = 2.4, upper 95% bound > 6) are not displayed for better visibility.

the 2005 2008 sample (=1st step) using the same specification and variables as for the total sample (Table 2, columns 2, 5). Blue dots represent point estimates and yellow dots stand for the limits of the 95% confidence interval. The strongest effects consistent for both over indebtedness indicators are found for Greece, Ireland, France, Norway and Sweden. Overall, the variation between countries is moderate, though higher for AROI. However, LR Tests comparing the base line model to pooled logit models including interaction terms between country dummies and over indebtedness showed that there is significant effect heteroge neity between countries.

The final step of the analysis aimed to explain the observed differences in the effect size. First, macro variables for countries at the top of the ranking were explored. Second, the relationship between macro variables and slope estimates was examined using bivariate correlations and regression models. This investi gated the four main hypotheses that relate to the stress and health production ar guments outlined in section 2. It was expected that over indebtedness would be more strongly associated with health (through enhancing distress levels) in

countries where i) it takes creditors less effort (time and cost) to obtain outstand ing debts (i.e., greater efficiency in collecting overdue debt); ii) dispute resolu tion between creditors and debtors and debt discharge are more difficult; and iii) being over indebted is associated with a higher social stigma. Five different proxies were used to capture social stigma effects. They refer to the frequency of arrears and debt, attitudes to debt and the general level of affluence measured by GDP per capita (ppp). It was expected that a higher number of (over)indebted households would correspond to a lower social stigma. Moreover, it was thought that in countries with a higher general level of affluence, not being able to meet financial obligations in time would be associated with a higher level of social stigma. Finally, the effect of over indebtedness on health should be greater in countries where iv) the affordability of medical services is more lim ited. Table 3 in the SI contains a summary of the precise definition and data sources for all macro variables. The corresponding figures for each country are shown in Table 4 of the SI.

Fig. 2 shows the relative distance between the national score (Table 4 in the SI) and the total mean for each macro variable. According to the postulated hy potheses, a greater distance of a macro indicator from its total mean should be observed for those countries where there is a stronger effect of over indebtedness on health. Five countries with high magnitudes for the effect size consistent over both indicators (Fig. 1) are compared to the group of remaining countries. The upper panel contains those macro variables for which a positive correlation with the country specific slopes (and thus a positive relative distance from the total mean) is hypothesized and vice versa in the lower panel of Fig. 2. All indicators are indexed according to the hypotheses they refer to. In general, no clear picture emerges for most of the propositions stated from this first comparison of macro variable profiles. It can be seen, however, that three out of five countries where a strong effect of over indebtedness on health is observed also have a compara tively higher GDP/capita. Likewise, four out of five countries with a strong effect of over indebtedness on health have a lower rate of persons with arrears. This provides some weak descriptive evidence for the social stigma hypothesis.

For European countries, it is very difficult to find comparable quantitative in dicators at the country level that refer to debt discharge procedures. Instead, a debt regime variable (Hoffmann 2012) was chosen to capture the compound effect of the various rules and steps involved in debt discharge/debt settlement. Hoffmann (2012) differentiates between five different discharge regimes across countries based on information on discharge conditions, i.e., possibilities for over indebted persons to discharge their debts. The first regime covers countries in which either no or only very strict consumer debt discharge mechanisms were in place in 2008. The second regime refers to countries which only enable a partial discharge. The remaining three discharge regimes all enable a complete discharge, albeit with a variety of approaches. The third regime follows a

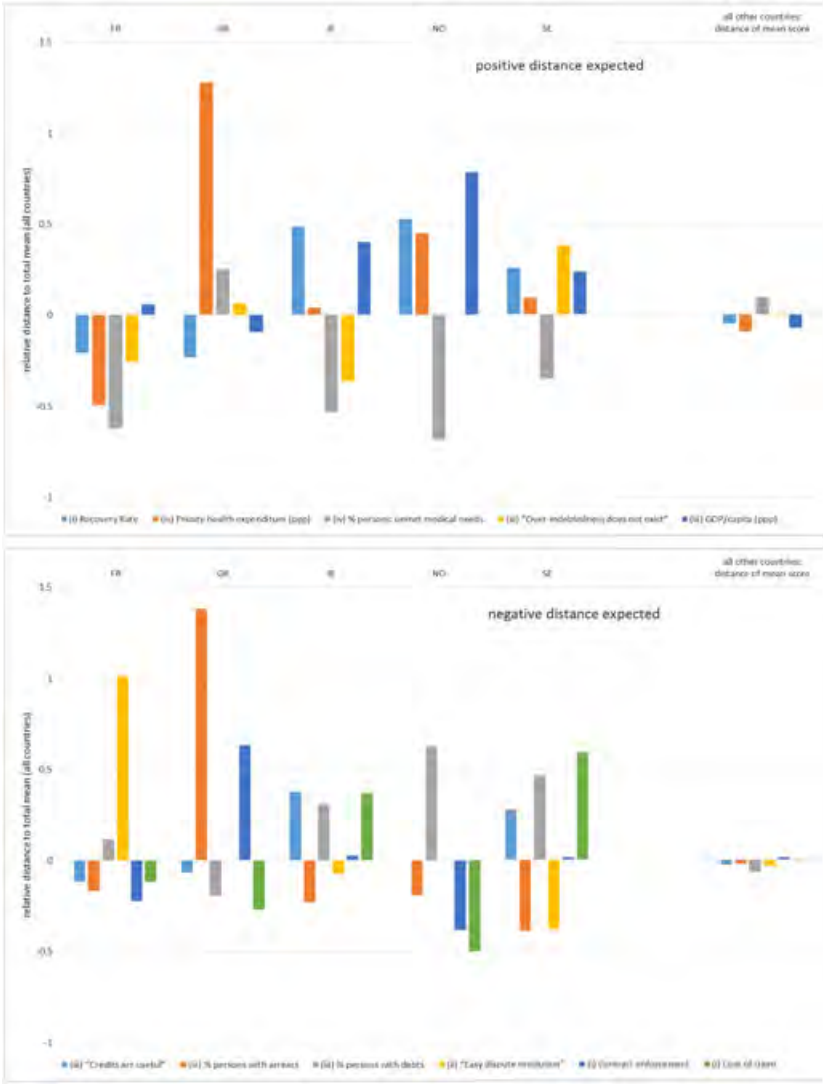

Figure 2

Country-level variables for countries with strong effects of over-indebtedness on health. Note: Own calculations based on country-level variables from Table 4 of the SI. Relative distance from total mean for each country-level variable $\left[\frac{(x_{ij} - \bar{x}_j)}{\bar{x}_j}\right]$ is displayed for *i* countries and *j* country-level variables.

Scandinavian approach, covering the Nordic countries, while another is influ enced by German law and covers Germany, the Netherlands and Belgium. For this analysis, these are combined into one group. The final discharge regime

covers the countries which are the most debtor friendly, i.e., the UK and France. Fig. 3 plots the average of the slope estimates against debt regimes. In general, the evidence for the hypothesis on stress through stricter debt discharge mecha nisms is weak. There are hardly any differences in the effect size of over indebtedness on health among debt discharge regimes for the arrears indicator. For AROI, contrary to expectations, the effect on health is strongest in countries where regulations are most debtor friendly according to Hoffmann (2012). This could be explained by sorting mechanisms of debtors, i.e., if debt discharge is more debtor friendly, stress does not result from enduring/complicated discharge processes but from an increased incentive for households with higher a priori over indebtedness to borrow/overspend money, whereas they would otherwise have been more reluctant to incur these debts at all. However, further analyses are necessary as these investigations only rely on bivariate comparisons due to data limitations for macro indicators.

Fig. 1 and Table 4 in the supplementary information (SI) show two final aspects of the bivariate association between macro variables and slope estimates. Based on these methods, there is generally no strict evidence for most of the hypotheses discussed above (i.e., correlation coefficients do not have the ex pected sign; estimates are not statistically significant and/or do not have the ex pected sign). One notable exception refers to the cost of debt collection. The higher the creditor's (plaintiff's) costs for completing the procedures (% of claim), the stronger the effect of AROI on self assessed health. Similarly, Fig. 2 also showed that two of the countries with a strong effect of over indebtedness on health have an above average value for the cost of claim indicator. These outcomes stand in contrast to the expected effect outlined in section II. A possi ble explanation might lie in the fact that that, in some countries, the higher cost for completing procedures might also lead creditors to carry out more intensive debt collection and other legal activities in order to recover outstanding debts quickly and successfully, and thus cause debtors higher distress levels. How ever, as the number of countries is rather small and thus limits the inclusion of control variables, this relation can only be interpreted as correlation. More over, a moderate negative correlation (Fig. 1, Table 4 in the SI) between, on the one hand, the percentage of people agreeing that dispute resolution with banks/insurances in a particular country is easy, and the magnitude of the effect of over indebtedness on health on the other hand, lends some support to the debt stress hypothesis.

VI. DISCUSSION

This study focused on over indebtedness as a possible explanation of the widely observed income gradient on health. First, it tested whether a link between

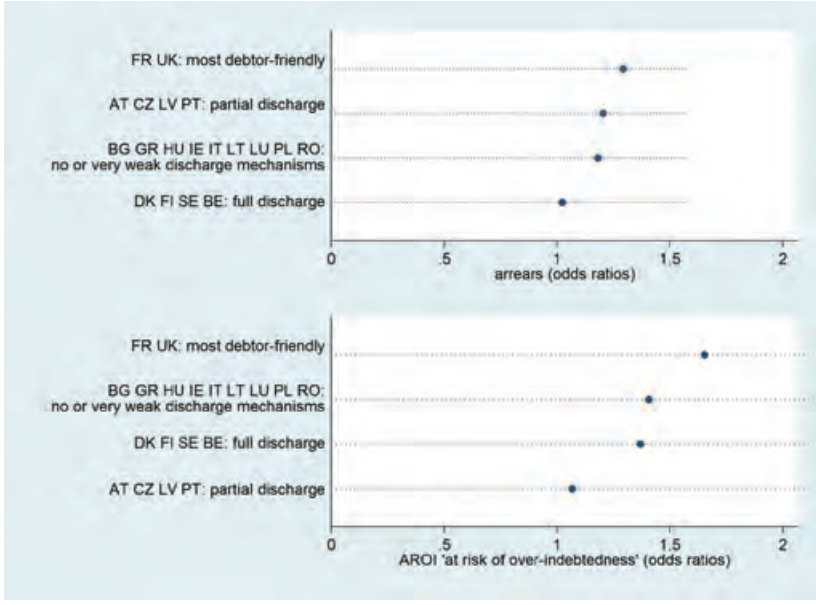

Figure 3

Average effect of over-indebtedness on health for different debt discharge regimes. Note: Calculations based on EU-SILC UDB 2005 2008 and Table 4 of the SI. Means of country-specific slope estimates (two-way fixed effects logit modes) for different debt discharge regimes according to Hoffmann (2012) are displayed.

over indebtedness and health could be identified for a sample of European households. Panel regression models, controlling for both observed and unob served time constant heterogeneity, showed that indicators of over indebtedness based on arrears for different payment obligations increase the likelihood of bad/very bad health, independently of income, education, and other dimensions of socio economic status. However, the effect seems to be only short term and is not very strong in terms of economic significance. Furthermore, a limitation of the fixed effect approach is that it is not possible to control for time varying unobserved effects (e.g., change in risk preferences if arrears are experienced). Further research could replicate these analyses using standardized measures of physical and mental health.

The second research question exploited the comparative nature of the dataset to investigate the links between over indebtedness and health in more detail. One link refers to increased stress due to payment problems, illiquidity, and social stigma. The second link is based on the hypothesis that over indebted individuals avoid spending too much on medical care, which in turn has adverse health effects. Compared to a situation of low income but without arrears,

households with overdue obligations may face increased pressure to cut costs in order to avoid stress resulting from creditors' collection activities. To explore these links in more detail, the study asked whether selected institutional factors at the national level are associated with the effect size of over indebtedness on health. The indicators investigated were the accessibility and private cost of health services, debt management and debt discharge regulations, dispute resolu tion with banks/insurance companies, and the social stigma of being over indebted.

Descriptive analyses showed that some aspects of debt collection costs are associated with a stronger effect of over indebtedness on subjectively assessed poor health in the countries studied. In contrast, easier dispute resolution with banks is correlated with smaller effects of over indebtedness on health. There is also some weak evidence that relates to social stigma/comparison effects. For countries with a greater effect size of over indebtedness on health, a higher level of affluence and overall prevalence of arrears was observed. However, no clear evidence was found for the health cost argument. The latter result is in line with Keese and Schmitz (2014), who used the number of visits to a doctor as an indicator. In their German sample, they found that members of indebted house holds are actually more likely to see a doctor. This could be due to the fact that private health costs are generally low in most European welfare states. Further research could investigate the health production pathway between over indebtedness and health by using a sample that increases the range of private health costs between countries or by using variables for using health care and cost measured at the individual level.

Obstacles to analyzing the variation in effect size lie in the rather small number of countries and/or limited metric data on debt collection practices and dispute settlement. This limits the possibilities for a multivariate analysis of between country differences. Consequently, the results found for the second research question cannot be interpreted causally. Further analysis could replicate this anal ysis with datasets that include a higher number of countries. Another extension could apply cluster analysis methods based on a broader or updated range of quantitative indicators on debt collection, creditor harassment and debt relief reg ulations. Such methods could be used to check whether there are different debt regimes for private households in Europe and to spur research on their explana tory power.

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Summary

The aim of this paper is twofold. First, it tests whether an effect of over-indebtedness on self-assessed health exists. Fixed-effects panel regression models based on panel data for 25 European countries show that being in arrears increases the likelihood of reporting bad/very bad health. However, effects are weak in terms of economic significance. The second research question focuses on the effect heterogeneity of overindebtedness among different European countries. It asks whether country-level factors moderate the effect of problematic debt on health. These macro-variables are the accessibility of health services, debt management and debt discharge regulations, dispute resolution with banks/insurance companies, and the social stigma of being over-indebted/in debt. Descriptive analyses showed that some aspects of the legal debt-collection process (e.g., higher costs of debt collection) are associated with a stronger effect of over-indebtedness on subjectively assessed poor health. There is also some evidence that easier dispute resolution with banks and insurance companies is correlated with smaller effects of over-indebtedness on health.