

First steps out of debt: Attitudes and social identity as predictors of contact by debtors  
with creditors

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RUNNING HEAD: First steps out of debt

## Abstract

Questionnaire research was carried out to identify factors that may encourage problem debtors to take the first steps towards getting out of debt. Consumers with debt problems were identified with the aid of creditor organisations and Her Majesty's Court Service for England and Wales. Responses were also sought from non-debtors from the same consumer groups as the debtors. Response rates from debtors were very low, but results confirmed the existence of a group of chronically poor consumers with widespread and long-lasting debt and also confirmed the demographic differences between this group of debtors and non-debtors found in previous research. These debtors showed marked attitudinal differences from non-debtors, with reduced optimism and financial self-esteem, and a less internal economic locus of control. They also showed a distinct social identity, identifying with fellow debtors and feeling stigmatised both generally and personally. Within the debtor group, engagement with creditors was higher in people reporting lower debt levels, but seeking advice was more frequent in those reporting higher debts. Engagement was associated with a stronger attitude of financial self-efficacy and with a perception of the debtor identity as more permeable. Neither demographic nor psychological factors significantly predicted which debtors would seek advice.

*JEL classification: D12 Consumer economics: Empirical Analysis; D14 Personal Finance; D91 - Intertemporal Consumer Choice; Life Cycle Models and Saving*

*PsychINFO classification: 3040 Social perception and cognition; 3920 Consumer Attitudes & Behavior*

*Keywords: Poverty, Social Identity, Social Issues, Self efficacy, Money, Debt*

1. Introduction

*1.1 Credit use, debt, and problem debt*

Consumer credit use is on the increase, and the total indebtedness of UK consumers has reached unprecedented levels. In the UK, total household debt in April 2009 stood at £1.4 trillion, more than double that a decade ago (Department for Business Enterprise & Regulatory Reform, 2009), and even if mortgage borrowing is excluded, the total is £232bn, or roughly £1000 per household (at the time, £1 exchanged for approximately \$1.6 US).

Lea (1999) drew a distinction between credit use, debt, and problem debt, to mark the practical and psychological distinction between manageable credit arrangements and unmanageable situations where people have no way that they can see to repay loans or meet regular commitments. The present paper is concerned with problem debt. Problem debt creates difficulties for the creditors who are unable to recover debt, for the consumers who are unable to pay it, for institutions within the legal system who are called on to regulate the recovery process, and for advice agencies who seek to help (primarily) consumers. The major UK charitable agency offering all forms of advice to individuals, Citizens Advice, now has a case load that is one third composed of debt cases (Aznar, 2009), and in addition there are numerous specialist debt advice agencies.

Although there has been substantial research on debt within economic psychology, most of it has been concerned with the factors associated with indebtedness. However, longitudinal studies (e.g. Webley & Nyhus, 2001) have shown that even severe debt is not necessarily a permanent state, and that some people do successfully recover from debt. The

present paper seeks to shift the focus of research towards the factors that might be associated with escape from indebtedness.

### *1.2 Previous literature: The Antecedents, Behaviour and Consequences of Debt*

Given the practical significance of debt in society, it is no surprise that economic psychologists have sought to understand it. There are three aspects from which a psychology of debt can be considered. We can seek to understand why people get into debt; we can look at the behavioural and psychological phenomena associated with being in debt; and we can consider how people can be helped to get out of debt. From all three aspects, we have to recognize that debt is not only, and probably not even primarily, a psychological phenomenon. It obviously is a form of economic behaviour, but in addition any full account of debt is bound to require sociological analysis and is likely to have political implications. Nonetheless, previous research has demonstrated unambiguously that psychological variables play a part in an understanding of debt.

Most previous research on the psychology of debt has concentrated on its antecedents, trying to trace the psychological and other factors that lead some individuals to have debt problems. Theoretically, taking on debt is an interesting case of intertemporal choice, and this has led to analyses of what kinds of commodities are more likely to be bought on credit (e.g. Prelec & Loewenstein, 1998). Empirical literature has concentrated more on what kinds of people are more likely to experience, or escape, debt problems, either because of general circumstances and psychological attributes (e.g. Lea et al., 1993, 1995; Stone & Maury, 2006; Viaud & Roland-Lévy, 2000; Webley & Nyhus, 2001), because of specific behaviours such as gambling (e.g. Barron, Staten & Wilshusen, 2002), or because of the provision of counselling

on how to avoid debt (e.g. Hartarska & Gonzalez-Vega, 2006). The burgeoning literature on student debt (from Davies & Lea, 1995, to Oosterbeek & van den Broek, 2009) largely shares this focus. Among the psychological variables that have often been found to be associated with higher debt are more tolerant attitudes towards debt (Lea et al., 1993), a more external locus of control (e.g. Ding, Chang & Liu, 2009; Livingstone & Lunt, 1992; Tokunaga, 1993; though contrast Lea et al. 1995; Wang, Chen & Wang, 2008; and, for student samples, Norvilitis, Szablicki & Wilson, 2003; Trent, Lee & Owens-Nicholson, 2006), a sense of inadequacy about money or money management (e.g. Lea et al., 1995; Stone & Maury, 2006), and excessive optimism (Brown et al., 2005, for the general population; Seaward & Kemp, 2000, for students).

Many of the studies referred to above have also thrown some light on the (generally negative) psychological impacts of indebtedness. Recent epidemiological studies have shown that debt is a substantial risk factor for psychological distress, for example depression, independent of the poverty that typically accompanies it (e.g. Brown, Taylor & Price, 2005, and Jenkins et al., 2008, for the general population; Roberts et al., 2000, for students). Davies and Lea (1995) argued that more tolerant attitudes towards debt might be a consequence rather than a cause of greater debt, and Lea et al. (1995) suggested that the same might be true for perceived competence at money management.

### *1.3 Steps towards becoming debt free: Encouraging engagement with creditors*

In contrast with the well established research on factors associated with debt, few studies have considered how indebted people become debt-free, and the present paper aims to begin consideration of this question. The conventional wisdom has traditionally been that the

first stage in overcoming debt is to engage with creditors (Ford, 1988, p.8), and this remains a common view:

When people are struggling to pay for everyday essentials and repay their credit obligations, such as credit cards and personal loans, the advice sector and the credit industry encourage them to contact all their creditors as soon as possible to negotiate reduced repayments (MacDermott, 2008, p. 5).

The fact that this advice has to be given shows that debtors do not automatically contact creditors when they run into difficulties, and indeed in some previous research, serious debtors have shown considerable reluctance to approach creditors, and reported that creditors were one of the less useful sources of help (Lea et al., 1995, Table 3). The present paper therefore concentrates on debtors' decisions to engage with creditors.

Debt cases place a heavy load on the legal system, and in England and Wales this falls on Her Majesty's Court Service (HMCS). Therefore, in the mid 2000's HMCS's parent department, the UK Department for Constitutional Affairs (now part of the Ministry of Justice) introduced a programme of ways to help people avoid, reduce, or manage debt problems (Department of Trade and Industry, 2005). This programme placed emphasis on encouraging debtors to deal with debt earlier, and providing effective advice, so that debt problems could be resolved without court involvement. Engagement with creditors played a major role in this programme, and it included an experimental scheme in which debtors received either a Pre-Action Notice (PAN), or a different form of warning of court action, as a last action by the creditor before issuing court proceedings. The present research took place within the context of this scheme. Two different kinds of PAN were used, but both used a

standard format to detail the amount allegedly owed and set out the debtor's options to resolve the debt, including engaging with the creditor in various ways; the alternative warning provided similar information, but was based on the current practice of the individual creditor. Here we refer to all three of these types of communication as a Warning of Court Action (WOCA). From the point of view of the questions posed in the present paper, they provided a context within which we were able to quantify engagement as reported by debtors, and compare them with statistics on engagement levels that were available from the creditor organizations co-operating in the PAN experiment.

With the aid of the creditor organizations, we were able to send questionnaires to people who were (or had recently been) in severe debt, to the point of being sent a WOCA. This corresponds closely to the “severe debt” sample considered in previous work (e.g. Lea et al., 1993, 1995).

#### *1.4 Psychological constructs and hypotheses*

In searching for variables that might predict engagement, we considered first the economic, demographic, social and psychological variables that had been found to predict indebtedness in the earlier studies referred to above. Not all of these could be included, since we wanted to keep the questionnaire reasonably short in order to increase return rates; however we retained representative measures in order to make sure that the debtor group we were working with matched those studied in the previous literature. Furthermore, a key objective of the present research was to investigate the relationship to debt of constructs derived from social identity theory (see, for example, Tajfel & Turner, 1979). This has recently been deployed in accounting for economic behaviour at a general level (e.g. Ahmed,



2007; Akerlof, 2007; Akerlof & Kranton, 2000; Morris, Carranza & Fox, 2008), but has also been invoked in connection with some behaviours clearly related to debt and escape from debt, such as the use of credit cards (Feinberg, Westgate & Burroughs, 1992) and the use of services by homeless people (Christian & Abrams, 2003). For the current research, an important facet of social identity theory was the perceived permeability of group boundaries: if debtors believe they will ever be able to leave the debtor group then they may be more likely to engage with creditors.

We used two indicators of debtors' engagement with creditors: seeking advice and contacting the creditor. We focused questions about these on the receipt of the WOCA, taking that as a standard stimulus that might provoke engagement. The research took place during 2006, that is, before the credit crisis that began in the second half of 2007, and at a time when credit use was expanding sharply. Our specific hypotheses were:

1. That debtors would differ from non-debtors on a range of economic, demographic and psychological variables, including optimism, locus of control and as found in previous studies.
2. That measures derived from Social Identity theory would also, and independently, show differences between debtors and non-debtors.
3. That within the debtor group, some of these measures would also differ between those who were, and were not, actively seeking to escape from debt, either by engaging with creditors or by seeking advice; and that these differences would be independent of any effect of the scale of individuals' debts. In the absence of

previous literature, no explicit prediction could be made about which variables would be associated with taking the first steps out of debt.

## 2. Method

The investigation used a cross-sectional questionnaire methodology. Participants were recruited from populations of known debtors and non-debtors; within the debtor group we had independent information about engagement with creditors, though self-reports of this were sought, as were self-reports of advice-seeking. The questionnaires were loosely based on those used in previous, similar research (e.g. Lea et al., 1993, 1995).

### 2.1 *Samples*

#### Debtors

Creditor organisations collaborating in the PAN pilot provided information about debtors to enable questionnaires to be mailed out. This information consisted of: name, address, telephone number, and whether the debtor had engaged with the creditor following issue of the WOCA. To protect debtors' privacy, the files containing this information were handled only by the researchers engaged in the project, and all copies were deleted after the completion of the mail-out. The research took place in two Phases, to allow the questionnaire to be modified for Phase 2 in the light of preliminary results from Phase 1. Four organisations provided debtor information for Phase 1 of the project and two organisations provided debtor information for Phase 2 of the project. One of the Phase 1 creditors supplied further debtor information in Phase 2 to enable us to send out a second batch of questionnaires. Three of the six creditors supplying debtor information were utility

companies; the remaining three organizations were a local authority, a government department, and a debt collection firm. All were based in England and their debtors had English addresses.

Questionnaires were sent to debtors randomly selected from the debtor lists provided by creditors. The differences between the three forms of WOCA were found not to influence the behaviours discussed in this paper, so they are not discussed further here. However, roughly equal numbers of people who had received the three different forms of WOCA were contacted. In anticipation of poorer response rates from debtors who had not engaged with creditors following receipt of a WOCA, in Phase 1 the questionnaire was sent to twice as many non-engagers as engagers for each WOCA type. "Engagement" was determined by the creditor and was defined as either having made a full payment to the creditor, or coming to an arrangement to pay the debt in instalments, within the time allowed by the WOCA. As there were substantially fewer engagers in the debtor information lists supplied by the creditor organisations for Phase 2, we sent out questionnaires to all engagers for whom full addressee information was available in this phase.

### Non-debtors

A non-debtor group was included in the mail-out in Phase 2. The purpose of this group was to allow us to see whether any differences between debtor groups (especially between engagers and non-engagers) were similar to differences between debtors and non-debtors, and also to characterise the debtor respondent group and ensure that it was similar to debtor groups examined in previous studies. This sample consisted of consumers of one of the utility company creditors and the local authority creditor, selected randomly subject to the

constraint that they did not currently owe any money to that particular creditor and had not done so for the past twelve months.

Table 1 shows how many questionnaires were sent out to each kind of recipient in each phase.

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Insert Table 1 about here

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## 2.2 *Design and procedure*

Each consumer selected to be included in the sample was sent an envelope containing a personalised letter inviting participation in the research, the questionnaire, a consent form, and one or two freepost envelopes for return of the questionnaire and other information. The questionnaire was printed in six different colours, and the colour of questionnaire received by debtors depended on the type of WOCA issued to the debtor, and whether the debtor had engaged or not. All non-debtors received white questionnaires.

Incentives for participation differed between the two phases. In Phase 1, at the end of the questionnaire, debtor respondents were asked to tick a box if they were willing to be interviewed by a researcher. They were advised that they would be paid £50 for an interview. If willing to be interviewed, they were asked to complete the consent form with their contact details and, in order to preserve anonymity of their questionnaire responses, return the form in a second freepost envelope. Results of these interviews are presented in a separate report, and they will not be discussed further in the present paper. In Phase 2, a paid interview was

again offered, but questionnaire completion was further encouraged by offering respondents the opportunity to enter a draw to win a cash prize of £500. Non-debtors were not invited for interview and nor were they offered any incentive for participation.

Respondents who did not seek any reward for participating were able to complete the questionnaire without giving any identifying information in either phase. To be eligible to be entered in the prize draw used in Phase 2, respondents were required to return the prize draw form containing their contact details with the questionnaire, to deter people from sending back the form without participating in the study. Respondents who were willing to be interviewed were asked to tick a box on the questionnaire and also on the bottom portion of the prize draw form. Although we were thus unable to provide complete anonymity for Phase 2 respondents unless they chose not to enter the prize draw or to be interviewed, in Phase 1 we had found respondents often posted back the questionnaire and the consent form for an interview in the same envelope suggesting lack of anonymity would not necessarily reduce the response rate. To safeguard the anonymity of the questionnaire responses, the prize draw forms were separated from the completed questionnaires immediately on receipt.

In order to establish that the questionnaire items were appropriate to the target sample, we pilot tested the Phase 1 questionnaire with five debtors, who completed it in an interview situation in which their comments and suggestions were invited. One of these debtors was recruited through the Citizens Advice Bureau in Exeter to gain general feedback, and the others were recruited through one of the creditors involved in the PAN pilot. The Phase 2 questionnaire was pilot tested with three of the Phase 1 questionnaire respondents.

The collaborating creditor organizations sent WOCAs to the debtors during the period from October 2005 to September 2006. Phase 1 questionnaires were mailed during May 2006, and Phase 2 questionnaires during October and November 2006. All questionnaires were sent after the addressee had been sent a WOCA.

### 2.3 *Questionnaires*

The questionnaires used in the two phases were the same except as noted in this section. In Phase 1, the questionnaire consisted of four sections; a fifth was added in Phase 2. The sections were as follows:

(a) Nine items attempting to assess both how respondents perceive debtors and how they identify with debtors ("social identity of debtors"), together with one item about their perception of the incidence of overdue indebtedness. The nine questions in the social identity (SI) scale were included so as to form five subscales, and the wording of these items is included in Table 2. They were intended to find out if respondents: (1) identified themselves as debtors (group membership); (2) thought there were differences between debtors and non-debtors (inter-group differences); (3) perceived discrimination against people who owed money (discrimination of debtors); and (4 and 5) believed debtor group boundaries were permeable (whether it was possible to leave or join the group).

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Table 2 about here

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(b) Items concerning respondents' perceptions of their financial situation and their feelings about debt and communications from creditors. In the Phase 1 questionnaire, there were two such items, concerning respondents' anxiety about their ability to pay current debts and the priority they would give to repaying debts to nine different types of creditor. In the Phase 2 questionnaire, six further questions were added, concerning respondents' subjective perception of their financial situation, their anxiety about being taken to court or contacting creditors, whether they had made an assessment of their debts, and past attempts they had made to contact and negotiate with creditors. The question about prioritization of debts was deleted as the preliminary analysis of Phase 1 responses showed that it had yielded very similar findings to previous research in this area.

(c) Ten questions relating to respondents' receipt of a WOCA from the creditor who had supplied us with their contact details, and the steps they subsequently took in relation to engaging with the creditor and seeking advice or assistance from other parties. These questions, and the response categories made available, are listed in Table 3.

(d) Thirteen demographic and debt status items, covering gender, age, ethnicity, educational level, marital status, composition of the respondent's household, housing tenure, employment status (whether or not employed, and whether the main breadwinner for the household), income, total amount of debt outstanding, number of creditors, and number of times court proceedings had been issued against the respondent for non-payment of a debt.

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Table 3 about here

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(e) In Phase 2 an additional section was included containing 13 items adapted from three different attitude scales. In order to determine if respondents who were more optimistic were more likely to seek a way to get out of debt and thus may be more likely to engage with creditors, there were six items from the Life Orientation Test-Revised (Scheier, Carver & Bridges, 1994). There were also four items from Rotter's Locus of Control scale (Lefcourt, 1976) to measure respondents' perceived control over financial events, and three items from the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995). Items having direct relevance to financial behaviour were selected. The wording of these items is included in Table 2.

For the non-debtor sample, the questions relating to receipt of a WOCA were omitted.

### 3. Results

#### 3.1 *Return rates*

Of the 5,704 questionnaires sent to debtors, 238 (4%) were returned as undeliverable because the addressee was no longer at that address, leaving 5,466 assumed to have been delivered to the intended recipient. Of these, 264 (126 in Phase 1 and 138 in Phase 2) were returned completed, giving an overall response rate of 5%. Response rates for debtors of individual creditors ranged from 4% - 7%; the lowest response rate was for creditors of debt



collection agencies, and the overall response rate in Phase 2, where this creditor category formed a large part of the sample, was correspondingly lower than in Phase 1. Engagers were more likely to return the questionnaire than non-engagers: overall 7% of engagers returned their questionnaires, while only 4% of non-engagers did so; the difference is significant  $\chi^2(1, N = 5466) = 15.35, p < .0005$ . .

A subset of the Phase 1 debtor sample were telephoned and asked if they had completed the questionnaire. If they had not, they were invited to do so over the telephone. The purpose of this was to detect any gross differences between responders and non-responders. However, telephone numbers were only available for 70% of the debtor group, and contact could only be made with a small proportion of these, even with repeated attempts at calling them. From numerous telephone contacts attempted, very few questionnaires were completed, and the use of telephone follow-up was abandoned after 10 responses had been collected in this way, making an overall total of 274 responses. Note that these telephone conversations consisted only of oral administration of the questionnaire; they did not constitute interviews.

Of the 264 questionnaires returned by mail, 215 respondents (81%) consented to be contacted about an interview. Of the 10 questionnaires completed by debtors over the phone, four (40%) of these agreed to an interview. It seems, therefore, that debtors are more likely to return the questionnaire if they wish to be interviewed and that the £50 interview participation fee provided a strong incentive for doing so. Because of the small size of the telephone subsample, further statistical investigation of the difference between the telephone and postal respondents is not appropriate. However, there were no obvious differences between the two

groups with the exception of their willingness to be interviewed, and thus we included the telephone responses in the debtor data set.

Of the 1,441 questionnaires sent to our non-debtor sample, 39 (3%) were returned undeliverable because the addressee was no longer at that address or a family member advised the addressee was unable to complete it due to ill health, leaving 1,402 assumed to have reached the intended recipient. Of these, 236 (17%) were returned completed. Thirty-nine of the total non-debtor group reported that they had overdue debts (presumably with creditors other than the creditor through whom they had been recruited) and four respondents did not answer this question. These forty-three respondents (18%) have been omitted from the non-debtor sample in the analyses reported here, leaving 193 non-debtors available; supplementary analyses showed that including the self-reported debtors does not modify our conclusions.

### 3.2 *Manipulation checks and scale reliabilities*

Only 4% of the respondents from the debtor sample reported that they did not currently owe money to anyone, as against 83% of the non-debtor sample. Almost half (49%) of debtor respondents reported currently owing money to five or more creditors, as against under 2% of the non-debtor sample. These data confirm the categorization of the debtor sample as a group with serious debt problems well outside the normal population range.

The respondents' self reports of paying money to the creditor who had issued the WOCA, or at least making contact with them, were significantly in agreement with the corresponding creditors' reports ( $\chi^2(1, N = 185) = 29.57, p < .0005$ ). Because agreement was not total, in the main analyses we treat as engaged all respondents who were reported as such

either by the creditor or by themselves. Parallel analyses were carried through using self-report and creditor report alone as criteria for engagement; these gave qualitatively similar results in most cases, but differences are noted below.

Recall of receiving the WOCA referred to in the questionnaire was poor. The design of the study meant that all the debtor group had in fact received a WOCA, but only 195 (71%) of the 274 questionnaire respondents acknowledged they had received one in relation to an amount owing to the WOCA creditor. Although there were some differences between the groups sent different types of WOCA these were small and not relevant to the issues discussed in the present paper; details are given by Lea, Mewse & Wrapson (2007).

The internal consistency of the psychometric measures used, and the intercorrelations between the scales, were tested using the non-debtor sample only, to avoid inflation of the values due to all the items being correlated with indebtedness. Cronbach  $\alpha$  values for the attitude scales, and inter-item correlations for the pairs of items used to assess social identity constructs, are included in Table 2. Although all inter-item agreement measures were significant, some were relatively low, and where this may account for non-significant results it is noted in the discussion below.

### 3.3 *Differences between debtors and non-debtors*

A series of analyses were used to establish the predictive value of demographic variables, the three attitude scales, and social identity variables in discriminating between debtors and non-debtors. Initially, first order analyses were used to establish whether each kind of variable did have a relation with indebtedness, and only variables that had a significant correlation (at a relaxed criterion of  $p < .10$ ) were retained for further analyses.

Secondly, a hierarchical series of binary logistic regressions was used. Because the predictive value of demographic and attitude variables has been established in previous research, these variables were entered into the analysis first, in order to see whether the social identity variables added any predictive power. However, because the attitudinal data were available only for the Phase 2 sample, a second analysis was performed omitting these variables, in order to examine the impacts of the social identity variables with the maximum sample size. Results of all these analyses are summarised in Table 4. Note that the regressors include variables that are most probably causes of debt alongside others that are most likely consequences; given the correlational design of the study, the two could not be definitively distinguished.

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Table 4 about here

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There were significant first-order differences between debtors and non-debtors on all the demographic variables, as shown in Table 4. Logistic regression (Model 1 in Table 4) showed that many of these variables had independent associations with debt status: debtors were more likely than non-debtors to be under 55, to rent housing rather than own it, to have more children in their households, to have left education at age 18, and to be non-employed. There was a striking first order association of gender with debt, with only 26% of debtor respondents being male compared with 48% of non-debtor respondents, but this effect had a

small and non-significant coefficient in the regression equation, showing that it was accounted for by other characteristics of debtors. For subsequent analyses, age was reduced to a dichotomy (up to 55 vs. over 55), but the educational level and work status variables were included unchanged. Gender and the number of adults in the household were dropped.

All the attitude and social identity scales showed significant first-order differences between debtors and non-debtors. In the logistic regressions, adding either the attitude or the social identity items to the selected demographic predictors (Models 2 and 3 respectively in Table 4) led to significant improvements in the prediction of debt status. Significant effects were found for the self-efficacy and locus of control scales when attitudes were used, and for the group belonging and ease of joining scales when social identity was used. When both attitudes and social identity scores were included in the regression (Model 4 in Table 4), coefficient estimates for individual predictors became unstable because of the very high level of fit achieved (98% of cases were correctly categorized), but it was possible to show that adding the social identity scores significantly improved the fit even with the attitude scores already taken into account ( $\chi^2_5$  for model improvement = 21.51,  $p < .001$ ).

### 3.4 *Amount of debt*

Respondents in the debtor group were asked to estimate the current total of their overdue debts, within a series of 5 categories in Phase 1 and 6 in Phase 2. For analytic purposes these were reduced to two, for debts of below and above £2000; this figure was chosen because it split the sample into two nearly equal groups (52% and 48% respectively). The same analytic approach as above was taken. Because this analysis concerned only the

debtor group, within which very few respondents reported owning their houses outright (see Table 4), the housing status variable was reduced to a dichotomy, renting or living with friends vs. owning outright or on a mortgage. The same applies to all subsequent analyses.

Results are summarised in Table 5. On first-order tests, most of the demographic variables were associated with amount of debt as with the debtor/non-debtor distinction, and in the same ways, but fewer of them were significant. In the logistic regression analysis (Model 1 of Table 5), the collective demographic variables significantly predicted reported debt amount, but only the number of children in the household was individually significant. Accordingly, only this last variable was taken into account in the analysis of the association of attitudinal and social identity scales with level of debt.

All the attitudinal and social identity variables were related to reported debt amount in the same way as to membership of the debtor group on first-order analysis. However, none of the differences were significant for the attitudinal variables. The differences for three of the social identity variables were significant (group differences, discrimination, and ease of leaving the debtor group). In the ordered logit analyses, the attitudinal variables on their own did not significantly predict reported level of debt (Model 2 of Table 5), but the social identity variables did (Model 3). Taking all the variables together did not lead to significant prediction (Model 4). The perceived ease of leaving the debtor group was a significant predictor of reported debt level regardless of whether attitudinal variables were included in the analysis.

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Insert Table 5 about here

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### 3.5 *Debtor engagement with creditors*

Similar analyses were used to investigate what factors were related to engagement with creditors within the debtor group. The results are summarized in Table 6. On first-order analyses, the only demographic variables significantly associated with engagement were amount of debt, number of children in the household, and level of educational qualification; the association between housing tenure and engagement was close to significance. On logistic regression analysis, only educational level had an independent significant effect, so this was the only variable carried forward for further analysis.

On first order analysis, two of the attitudinal variables and one of the social identity variables showed significant associations with engagement. Debtors who engaged scored higher on financial self-efficacy and internal locus of control, and on perceived ease of leaving the debtor group. In logistic regressions in which educational level was included, the relationships with self-efficacy and perceived ease of leaving the group remained significant when the attitudinal and social identity variables were included separately. When both were included, financial self-efficacy remained significantly associated with engagement, but none of the social identity variables were. The differences between Models 2 and 2a, 3 and 3a, and 4 and 4a are slight, showing that the results were essentially unchanged when amount of debt was included in the regressions. They were also qualitatively unchanged when creditor reports alone were used as the criterion for engagement. When self-reports alone were used

as criterion, all three attitudinal variables showed significant effects. In addition to the effect of financial self-efficacy, debtors who scored higher on optimism were less likely to report engaging, and those who scored higher on internal locus of control were more likely to, though these additional effects were only revealed in the regression analyses; they were not significant on first-order analysis.

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Insert Table 6 about here

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### 3.6 *Seeking advice*

Among the debtors, 37% reported that they had sought advice or assistance from at least one of the agencies listed in Table 3. The most commonly used was Citizens Advice, which 25% of all debtors reported using. No other single agency was used by more than 4% of the debtors. For further analysis, debtors were counted as having sought advice if they reported consulting any of the agencies. Table 7 shows the first order relations between advice seeking and the demographic, attitudinal and social identity variables. There were no significant associations, except that those reporting debts of over £2000 were more likely to seek advice than those reporting lower debts. Regression analyses are therefore not reported here.



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Table 7 about here

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### 3.7 *Other psychological and behavioural variables*

Responses to two of the eight additional questions about reactions to debt and contact with creditors (see paragraph 2.3(b) above) showed significant associations with the main dependent variables. People who had engaged were more likely to open a letter from the creditor immediately than people who had not ( $\chi^2 = 12.46$ , 3 degrees of freedom,  $N = 84$ ,  $p < .01$ ), and those who had sought advice were more likely to have worked out their total debts ( $\chi^2 = 4.27$ , 1 degree of freedom,  $N = 134$ ).

## 4. Discussion

Despite the fact that the data were collected over 15 years later, the present results agree closely with previous studies using similar methodology (Lea et al., 1993, 1995) about the demographic variables predicting membership of the debtor group. The strongest predictors of membership of the debtor group are low income, living in rented rather than owned housing, not being in employment, and having more children in the household. Debt remains primarily a problem of family poverty.

However, again as was found in previous studies, social and psychological variables contribute to the prediction of debt status. Debtors have a reduced sense of optimism and financial self-efficacy and a more external locus of control than non-debtors, and in a range of

different ways the two groups respond differently to the items we used to investigate whether being in debt is a distinct social identity to a greater extent than non-debtors. Some of these associations are diminished or cease to be statistically significant when demographic factors are taken into account, because they are themselves correlated with the demographic factors associated with debt; it must also be borne in mind that some of the scales were of low internal consistency and that would reduce the power of the analysis. But the logistic regression analyses confirm that several of them contribute independently to predicting debt status. The investigation of social identity factors was a novel feature of the present study, and it appears that they are potentially valuable predictors of debt status. All the scales gave significant first order associations with debt status that were consistent with the idea that debtors perceive being in debt as a distinct social identity that is, in a variety of ways, more strictly bounded than non-debtors perceive it as being.

The results show that debtors who are taking steps to manage their indebted situation do differ in a number of ways from those who are not. A major concern in the analysis was to ensure that such differences did not reflect a lower level of debt, so that those who engage with creditors are simply the less severe debtors. This did not seem to be the case. Those who seek advice from third parties in fact tend to be more heavily indebted than those who do not, though we could not find any other significant predictors of advice-seeking. Those who act in accordance with the standard advice, and engage with their creditors in some way, do indeed tend to be less indebted than those who do not, but psychological factors are associated with engagement over and above that effect (though demographic factors are not). In particular, a higher sense of financial self-efficacy is a consistent predictor of engagement. A higher perception that the debtor social identity is permeable, in the sense that it is possible

to leave the debtor group, was also a good predictor, but not when attitudinal variables were taken into account; however the sample size available for the combined analysis was small and it cannot be ruled out that in a larger sample there would be an independent effect of social identity perceptions.

Although the present results were obtained in the UK, and there are structural and legal differences between countries in respect of credit and debt that would limit the generalisation of some details of the results to other countries, we expect the broad trend of the results to apply to any developed countries; the general trends of the results obtained by Livingstone and Lunt (1992) and Lea et al. (1993, 1995) in the UK have already been replicated, for example, in France (Viaud & Roland-Lévy, 2000), the Netherlands (Webley & Nyhus, 2001), and the United States (Stone & Maury, 2006).

Two methodological concerns vex the present results, as they do previous investigations using similar methodology. The first is the low response rates. Our attempts to boost response rates by methods that are strongly recommended in other contexts (Dillman, 1978) were entirely unsuccessful. Such low rates are typical when using postal questionnaires to ask questions about sensitive financial matters to people who are often at the margins of society, and they were a feature of our previous work on similar debtor samples (Lea et al., 1993, 1995). As in those studies, it was the most indebted participants who were least likely to return questionnaires, no doubt a reflection of their precarious life situation, and it should be noted that the non-debtors were more likely to respond even though they were not offered incentives, whereas the debtors always were. The effects of low response rates are exacerbated by missing values on individual items even on the questionnaires that are returned, resulting in attrition of sample numbers as more complex

models are considered in Tables 5 to 7; this has also been a feature of previous research. In consequence, conclusions drawn from this kind of survey do need to be supported by converging evidence from other methodologies. In particular, we cannot say that the characterisation of debtors, or of engagers among debtors, that emerge from the present study apply to all, or even the majority, of those who owe money to the kinds of creditors who were co-operating with us. What emerges from all our studies, however, is that there is at least a sub-population among debtors of people who are in debt primarily because of poverty. Among this group at least, the psychology of debt is a facet of the psychology of poverty.

The second limitation of our methodology is that it is almost entirely correlational, so that directions of causality cannot be established. This particularly applies to the psychological correlates of indebtedness and debtor behaviour. Both attitudes and social identity perceptions are mutable. If debtors who engage with their creditors have a higher sense of self-efficacy and an increased perception that the debtor social identity is permeable, that may well be a result of successful engagement rather than a cause of making the attempt to engage. Similarly the observation that engagers are more likely to deal with correspondence from creditors promptly may be a consequence of starting to engage, and therefore needing to know how creditors are reacting, rather than a cause of engagement; and making an assessment of the total of one's debts is almost certainly a consequence rather than a cause of seeking advice, since doing so is routinely recommended or even required at an early stage in debt advice.

Most fundamentally, in attempting to study the process of escape from debt, we have used engagement with creditors and seeking advice as the first steps in doing so. Advice agencies have plentiful case histories of both successful and unsuccessful attempts at

engagement, and Lea et al. (1995) note that although the majority of serious debtors who sought advice said that it was helpful, a substantial number said that it was not. It remains to be investigated whether engaging with creditors is in fact a successful first step out of debt.

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## References

- Ahmed, A. M (2007). Group identity, social distance and inter-group bias. *Journal of Economic Psychology*, 28, 324-337.
- Akerlof, G. A. (2007). The missing motivation in macroeconomics. *American Economic Review*, 97, 5-36.
- Akerlof, G. A., & Kranton, R. E (2000). Economics and identity. *Quarterly Journal of Economics*, 115, 715-753.
- Aznar, C. (2009). *A life in debt*. London: Citizens Advice.
- Barron, J. M., Staten, M. E., & Wilshusen, S. M. (2002). The impact of casino gambling on personal bankruptcy filing rates. *Contemporary Economic Policy*, 20, 440-455.
- Brown, S., Garino, G., Taylor, K., & Price, S. W. (2005). Debt and financial expectations: an individual- and household-level analysis. *Economic Inquiry*, 43, 100-120.
- Brown, S., Taylor, K., & Price, S. W. (2005). Debt and distress: evaluating the psychological cost of credit. *Journal of Economic Psychology*, 26, 642-663.
- Christian, J., & Abrams, D. (2003). The effects of social identification, norms and attitudes on use of outreach services by homeless people. *Journal of Community & Applied Social Psychology*, 13, 138-157.
- Davies, E., & Lea, S. E. G. (1995). Student attitudes to student debt. *Journal of Economic Psychology*, 16, 663-679.
- Department for Business Enterprise & Regulatory Reform: Consumer and Competition Policy Directorate (2009). *Household debt monitoring paper: H1 2008*, Downloaded 1 April 2009 from <http://www.berr.gov.uk/files/file18547.pdf>.
- Department of Trade and Industry (2005). *Tackling over-indebtedness: Annual Report 2005*,

Downloaded 1 April 2009 from <http://www.berr.gov.uk/files/file18547.pdf>.

- Dillman, D. A. (1978). *Mail and telephone surveys: the Total Design Method*. New York: Wiley.
- Ding, C. G., Chang, K. C., & Liu, N. T. (2009). The roles of personality and general ethical judgments in intention to not repay credit card expenses. *Service Industries Journal*, 29, 813-834.
- Feinberg, R. A., Westgate, L. S., & Burroughs, W. J. (1992). Credit cards and social identity. *Semiotica*, 91, 99-108.
- Ford, J. (1988). *The indebted society*. London: Routledge.
- Hartarska, V., & Gonzalez-Vega, C. (2006). Evidence on the effect of credit counseling on mortgage loan default by low-income households. *Journal of Housing Economics*, 15, 63-79.
- Jenkins, R., Bhugra, D., Bebbington, P., et al (2008). Debt, income and mental disorder in the general population. *Psychological Medicine*, 38, 1485-1493.
- Lea, S. E. G. (1999). Credit, debt and problem debt. In P. E. Earl & S. Kemp (Eds.), *The Elgar companion to consumer research and economic psychology*, pp. 139-143. Cheltenham: Edward Elgar.
- Lea, S. E. G., Mewse, A. J., & Wrapson, W. (2007). Study into debtor behaviour in support of Pre-Action Notice (PAN) Pilot: Final report. In Her Majesty's Court Service *Consultation paper CP 22/07*, Downloaded 1 April 2009 from <http://www.justice.gov.uk/consultations/docs/cp2207-a.pdf>.
- Lea, S. E. G., Webley, P., & Levine, R. M. (1993). The economic psychology of consumer debt. *Journal of Economic Psychology*, 14, 85-119.
- Lea, S. E. G., Webley, P., & Walker, C. M. (1995). Psychological factors in consumer debt:

- Money management, economic socialization, and credit use. *Journal of Economic Psychology*, *16*, 681-701.
- Lefcourt, H. M. (1976). *Locus of control*. Hillsdale NJ: Erlbaum.
- Livingstone, S. and Lunt, P. (1992). Predicting personal debt and debt repayment: psychological, social and economic determinants. *Journal of Economic Psychology*, *13*, 111-134.
- MacDermott, A. (2008). *With a little help from my friends*. London: Citizens Advice.
- Morris, M. W., Carranza, E., & Fox, C. R. (2008). Mistaken identity: Activating conservative political identities induces "conservative" financial decisions. *Psychological Science*, *19*, 1154-1160.
- Norvilitis, J. M., Szablicki, P. B., & Wilson, S. D. (2003). Factors influencing levels of credit-card debt in college students. *Journal of Applied Social Psychology*, *33*, 935-947.
- Oosterbeek, H., & van den Broek, A. (2009). An empirical analysis of borrowing behaviour of higher education students in the Netherlands. *Economics of Education Review*, *28*, 170-177.
- Prelec, D., & Loewenstein, G. (1998). The red and the black: mental accounting of savings and debt. *Marketing Science*, *17*, 4-28.
- Roberts, R., Golding, J., Towell, T., et al. (2000). Mental and physical health in students: the role of economic circumstances. *British Journal of Health Psychology*, *5*, 289-297.
- Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A re-evaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, *67*, 1063-1078.
- Schwarzer, R., & Jerusalem, M. (1995). Generalized self-efficacy scale. In J. Weinman, S. Wright, & M. Johnston (Eds.), *Measures in health psychology: A user's portfolio*, pp. 35-



37. Windsor, UK: NFER-Nelson.
- Seaward, H. G. W., & Kemp, S. (2000). Optimism bias and student debt. *New Zealand Journal of Psychology, 29*, 17-19.
- Stone, B., & Maury, R. V. (2006). Indicators of personal financial debt using a multi-disciplinary behavioral model. *Journal of Economic Psychology, 27*, 543-556.
- Tajfel, H. & Turner, J. C. (1979). An integrative theory of inter-group conflict. In W.G. Austin & S. Worchel (Eds.), *The social psychology of inter-group relations*, pp. 33-47. Monterey, CA: Brooks-Cole.
- Tokunaga, H. (1993). The use and abuse of consumer credit: Application of psychological theory and research. *Journal of Economic Psychology, 14*, 285-316.
- Trent, W. T., Lee, H. S., & Owens-Nicholson, D. (2006). Perceptions of financial aid among students of color: Examining the role(s) of self-concept, locus of control, and expectations. *American Behavioral Scientist, 49*, 1739-1759.
- Viaud, J., & Roland-Lévy, C. (2000). A positional and representational analysis of consumption: Households when facing debt and credit. *Journal of Economic Psychology, 21*, 411-432.
- Wang, M. J., Chen, H., & Wang, L. (2008). Locus of control and home mortgage loan behaviour. *International Journal of Psychology, 43*, 125-129.
- Webley, P., & Nyhus, E. K. (2001). Life-cycle and dispositional routes into problem debt. *British Journal of Psychology, 92*, 423-446.

Table 1

Numbers of questionnaires mailed out according to creditor industry group, debt status, creditor-reported engagement and phase of the study.

Phase	Non-engaged debtors		Engaged debtors		Total debtors	Non-debtors	Total
	1	2	1	2		2	
Utility	1260		675		1,935	453	2,388
Government Dept	228	184	125	19	556		556
Local Authority		376		123	499	988	1,487
Debt collection agency		2398		316	2,714		2,714
	1,488	2,958	800	458	5,704	1,441	7,145

Table 2

Questionnaire Items used to measure attitudes and social identity. Response options for all items were Strongly disagree (1) to Strongly agree (5)

Measure	Items	R = Reverse scored	Cronbach $\alpha$ or Pearson $r$ for scale
<b>Social identity</b>			
Group belonging	I identify with people who owe money I feel strong ties with people who owe money		.68
Inter-group differences	There are clear differences between people who owe money and people who do not		
Discrimination of debtors	In our society I feel people who owe money are looked down on In our society I feel looked down on because I owe money		.40
Permeability – ease of leaving group	How easy do you think it is for people who owe money to get out of debt? To what extent do you think it would be easy for you to get out of debt?	R R	.37
Permeability – ease of joining group	How easy do you think it is for people who don't owe money to get into debt? How easy do you think it is to get into a situation where you owe money?		.60
<b>Attitudes</b>			
Life Orientation (optimism)	In uncertain times, I usually expect the best If something can go wrong for me, it will I rarely count on good things happening to me I'm always optimistic about my future I hardly ever expect things to go my way Overall, I expect more good things to happen to me than bad		.81
Locus of Control (external)	To a great extent my finances are controlled by accidental happenings When it comes to money, I have often found that what is going to happen will happen When I make plans concerning money, I am almost certain to make them work		.65

Self-Efficacy	My finances are determined by my own actions When I have a money problem, I can usually find at least one solution If I owed money that I couldn't repay immediately, I would feel confident in my abilities to sort the situation out I can usually handle any money problems that come my way	.48
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Table 3

Questionnaire Items used to assess steps taken by participants in response to communications about their debts. Respondents were instructed to skip some questions if responses to previous questions made them irrelevant.

Item	Response categories
Did you receive a warning from [name of creditor] that court action would be taken if you did not repay the money owed?	Yes/No
Was the warning of court action issued by the court or [name of creditor]?	Court/Creditor
What was the first thing you did after receiving the warning of court action?	I paid all or part of the amount owing I contacted [name of creditor] to ask for more time to pay I contacted [name of creditor] querying the amount claimed I sought advice or assistance from someone else (please tell us who) I did nothing Other (please tell us what)
Did you pay any of the amount owing to [name of creditor]?	Yes/No
If you didn't pay any of the amount owing, could you tell us why not	I didn't have the money I didn't believe I owed the amount claimed I didn't believe [name of creditor] would take court action against me It didn't worry me if [name of creditor] did take court action against me Other (please tell us what)
Did you contact [name of creditor]?	Yes/No

If you didn't contact [name of creditor], could you tell us why not	I wasn't sure who to contact I didn't think contacting [name of creditor] would make any difference I thought if I contacted [name of creditor] they would want further information about my debts I didn't believe [name of creditor] would take court action against me It didn't worry me if [name of creditor] did take court action against me Other (please tell us what)
In the last 9 months have you sought assistance or advice from any of the organisations listed below regarding any moneys owing to [name of creditor] OR in connection with moneys owing to other people?	National Debtline Citizens Advice Bureau Consumer Credit Counselling Service (CCCS) CLS [Community Legal Service] Direct Payplan Any other organisations (please tell us who)
What made you seek assistance or advice from these organisations?	I saw an advertisement and I thought they might be able to help me I received a warning of court action from [name of creditor] if I didn't repay the amount I owed I received a warning of court action from someone else I owed money to A family member, friend or neighbour suggested I contact them I have used this type of organisation before for advice or assistance Other (please tell us what)

If you didn't seek advice from these organisations, can you tell us why not?	I didn't know about these organisations
	I didn't want to discuss my finances with a stranger
	It was too difficult to get hold of anyone to talk to
	I didn't think they would really be able to help
	Other (please tell us what)

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Table 4  
Prediction of Debtor status

Predictor	Means or % in groups			Coefficients in logistic regression models (positive coefficients indicate greater likelihood of being a debtor)			
	Non-debtor	Debtor	Sig.of group difference	Model 1	Model 2	Model 3	Model 4
Demographics				***	***	***	***
Age Group			***	***			
Under 25	1%	11%					
25-34	15%	31%		-.67			
35-44	17%	31%		-.58			
45-54	16%	19%		-.35			
Over 55	50%	7%		-3.16**	-3.30**	-2.39***	
Gender (male)	48%	26%	***	-.22			
Housing tenure			***	***	*	***	
Renting etc	23%	81%		2.20**	5.60*	2.47***	
Mortgage	41%	17%					
Owned outright	36%	2%		-1.57*	-16.75	-1.47*	
Breadwinner	67%	78%	*	-.08			
Income group	3.49	1.73	***	-.71***	-1.04***	-.59***	
Household size							
Adults	1.82	1.50	***	-.39			
Children	.46	1.22	***	.55**	.82*	.51*	
Educational qualifications			***	***	**	**	
None	26%	28%					
Age 16	16%	23%		.14	1.78	.22	
Age 18	30%	38%		1.27*	4.93**	1.55**	
Post 18	28%	11%		-.29	2.54	-.27	
Work status			***				
Not working	45%	59%		1.33*	1.82	1.41*	
Part-time	16%	18%		.33	-1.23	.69	
Full-time	39%	23%					
Attitudes					***		***
Optimism	3.11	2.65	***		1.60		
Financial self efficacy	3.91	2.69	***		-1.96*		
Internal locus of control	3.67	2.72	***		-2.72*		
Social identity						***	***
Group belonging	2.72	3.92	***			.52*	
Group differences	2.39	3.79	***			.10	
Discrimination	2.82	3.01	***			.38	
Ease of leaving	2.42	1.77	***			-.41	
Ease of joining	4.07	4.44	***			.83**	
Regression model statistics							
$\chi^2$				256.12***	181.24***	290.93***	202.75***
Degrees of freedom				16	13	15	18
Nagelkerke pseudo- $R^2$				.70	.91	.77	.96
% cases correctly classified				86%	94%	91%	98%
Cases included (N)				343	161	339	161



Notes to Table 4:

Models 1 and 3 use data from both Phases; Models 2 and 4 use data from Phase 2 only because they include the attitudinal variables that were measured in that Phase only, so sample sizes are lower for these models. Other sample size differences are due to cases with missing values on some variables.

Model 1 includes all demographic predictors significant on first order tests

Model 2 includes all demographic predictors significant at  $p < .10$  in Model 1 and the attitudinal variables

Model 3 includes all demographic predictors significant at  $p < .10$  in Model 1 and the social identity variables

Model 4 includes all demographic predictors significant at  $p < .10$  in Model 1 and the attitudinal and social identity variables. Regression coefficients were unstable because of the high level of fit achieved

Numbers of cases included fall across models because of missing data on items that are included in later models

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

Table 5

Prediction of higher reported overdue debt (over £2000) among the debtor group

Predictor	Means or % in groups			Coefficients in logistic regression models (positive coefficients indicate greater likelihood of reporting debts > £2000)			
	Low debt	High debt	Sig.of group difference	Model 1	Model 2	Model 3	Model 4
<b>Demographics</b>							
Age Group							
Under 25	15%	6%					
25-34	31%	31%					
35-44	28%	36%					
45-54	19%	20%					
Over 55	7%	8%					
Gender (male)	27%	25%					
Housing rented	85%	76%	+	-.41			
Breadwinner	81%	75%					
Income group	1.57	1.90	*	.14			
Household size							
Adults	1.42	1.57	+	.22			
Children	1.05	1.44	*	.28**	.08	.29**	.05
Educational qualifications							
None	25%	29%					
Age 16	24%	25%					
Age 18	40%	35%					
Post 18	11%	12%					
Work status							
Not working	63%	57%					
Part-time	17%	19%					
Full-time	20%	25%					
Attitudes							
Optimism	2.71	2.60			-.31		-.40
Financial self efficacy	2.80	2.61			-.15		.16
Internal locus of control	2.81	2.66			-.41		.24
Social identity							
Group belonging	3.82	3.94	+			***	+
Group differences	3.64	4.05	*			.14	.11
Discrimination	3.79	1.54	*			.12	-.11
Ease of leaving	2.00	4.49	***			.16	.21
Ease of joining	4.40					-.80***	-.88*
Regression model statistics							
$\chi^2$				14.67**	3.48	33.68**	13.49
Degrees of freedom				4	4	6	9
Nagelkerke pseudo- $R^2$				.08	.04	.17	.17
% cases correctly classified				63%	60%	63%	66%
Cases included (N)				245	110	246	101

Notes to Table 5:

Models 1 and 3 use data from both Phases; Models 2 and 4 use data from Phase 2 only because they include the attitudinal variables that were measured in that Phase only, so sample sizes are lower for these models. Other sample size differences are due to cases with missing values on some variables.

Model 1 includes all demographic predictors significant on first order tests

Model 2 includes all demographic predictors significant at  $p < .10$  in Model 1 and the attitudinal variables

Model 3 includes all demographic predictors significant at  $p < .10$  in Model 1 and the social identity variables

Model 4 includes all demographic predictors significant at  $p < .10$  in Model 1 and the attitudinal and social identity variables.

Numbers of cases included fall across models because of missing data on items that are included in later models

+  $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

Table 6  
Prediction of engagement (creditor- or self-reported) among the debtor group

Predictor	Means or % in groups			Coefficients in logistic regression models (positive coefficients indicate greater likelihood of engagement)						
	Not engaged	Engaged	Sig. of group difference	Model 1	Model 2	Model 2a	Model 3	Model 3a	Model 4	Model 4a
Reported debt >£2000	62%	39%	***			-1.01*		-0.41		-0.81
Demographics										
Age Group										
Under 25	10%	10%								
25-34	31%	30%								
35-44	27%	33%								
45-54	25%	18%								
Over 55	7%	9%								
Gender (male)	23%	33%								
Housing rented	86%	76%								
Breadwinner	79%	77%								
Income group	1.70	1.77								
Household size										
Adults	1.49	1.50								
Children	1.40	1.05	*	-0.11						
Educational qualifications										
None	31%	26%								
Age 16	30%	14%		-0.50	.63	.67	-0.61	-0.71	.60	.64
Age 18	31%	44%		.51	1.07	.32	1.37	.26	.55	.51
Post 18	7%	17%		1.09+	.23	.77	1.02	.95	-0.11	-0.43
Work status										
Not working	66%	55%								
Part-time	13%	20%								
Full-time	21%	25%								
Attitudes										
Optimism	2.60	2.68			*	**			*	**
Financial self efficacy	2.53	3.09	***		-1.01	-1.23			-0.85	-0.87
Internal locus of control	2.64	2.86	*		1.39**	1.95**			1.28*	1.91*
Social identity										
Group belonging	3.90	3.88					**	*		
Group differences	3.82	3.69					.72	.20	-0.18	-0.07
Discrimination	3.99	3.86					.07	-0.03	.31	.29
Ease of leaving	1.52	1.92	***				.07	.07	-0.02	.12
Ease of joining	4.40	4.40					11.64**	.88**	.93	.60
Regression model statistics										
$\chi^2$				11.15*	13.63**	20.63**	24.21**	24.68**	17.42+	20.69+
Degrees of freedom				4	6	7	8	9	11	12
Nagelkerke pseudo- $R^2$				.09	.28	.41	.19	.19	.37	.44
% cases correctly classified				63%	64%	80%	69%	70%	73%	75%
Cases included (N)				171	59	56	164	159	55	52

Notes to Table 6:

Models 1, 3 and 3a use data from both Phases; Models 2, 2a, 4 and 4a use data from Phase 2 only because they include the attitudinal variables that were measured in that Phase only, so sample sizes are lower for these models. Other sample size differences are due to cases with missing values on some variables.

Model 1 includes all demographic predictors significant on first order tests

Model 2 includes all demographic predictors significant at  $p < .10$  in Model 1 and the attitudinal variables; Model 2a also includes reported debt level

Model 3 includes all demographic predictors significant at  $p < .10$  in Model 1 and the social identity variables;

Model 3a also includes reported debt level

Model 4 includes all demographic predictors significant at  $p < .10$  in Model 1 and the attitudinal and social identity variables; Model 4a also includes reported debt level

+  $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

Table 7

Prediction of seeking advice among the debtor group. None of the first-order differences were significant other than that due to amount of debt, so regression analyses are not reported.

Predictor	Means or % in groups	
	No advice sought	Advice sought
Reported debt >£2000	42%	56%
Demographics		
Age Group		
Under 25	13%	7%
25-34	32%	31%
35-44	29%	36%
45-54	21%	17%
Over 55	6%	9%
Gender (male)	27%	24%
Housing rented	81%	82%
Breadwinner	76%	80%
Income group	1.79	1.62
Household size		
Adults	1.49	1.50
Children	1.25	1.16
Educational qualifications		
None	27%	29%
Age 16	24%	22%
Age 18	39%	36%
Post 18	10%	13%
Work status		
Not working	60%	59%
Part-time	18%	17%
Full-time	22%	24%
Attitudes		
Optimism	2.65	2.64
Financial self-efficacy	2.62	2.80
Internal locus of control	2.72	2.74
Social identity		
Group belonging	3.87	4.00
Group differences	3.78	3.81
Discrimination	3.86	4.02
Ease of leaving	1.82	1.70
Ease of joining	4.44	4.45