Student Debt, Attitudes Towards Debt, Impulsive Buying, and Financial Management

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The debt levels of current and ex-psychology students were compared with their attitudes towards debt, tendency towards impulsive buying, and their use of methods to reduce or limit debt. The percentage of students with some debt and their total debt levels increased with the level of university study. Tolerance toward debt followed the same pattern. Impulsive buying was not related to overall debt levels, suggesting that impulsive buying is not a major cause of student debt. Methods that could be used to reduce or limit debt were widely used by those whose debt level was high. In general, there was little indication that student debt could be attributed to financial recklessness.

In recent years there has been considerable research into why people get into debt (e.g. Berthoud & Kempson, 1992; Lea, Webley & Levine, 1993; Lea, Webley and Walker, 1995; Livingstone & Lunt, 1992; Tokunaga, 1993. See Lea, in press, for an overview). The topic clearly has both economic and psychological aspects, and, broadly speaking, accounts of why people get into debt tend either to arise from economic theory and stress rational reasons for people to be in debt, or to stress the role of the personal characteristics of the debtor.

For example, life-cycle accounts of saving (e.g. Modigliani & Brumberg, 1954) predict that people will save and dissave at different points in their lives and may incur debt at different times. Lea et al. (1993) suggest that some debt at least can be seen as a rational response to conditions of poverty. On the other hand, Livingston and Lunt (1992) found that both debt and problem debt were quite common among people with rather high incomes, suggesting that personal characteristics may also be important.

Recently, both in New Zealand (e.g. Ashby, Roberts & Parata, 1996) and overseas (e.g. Davies & Lea, 1995; Lea, Webley, & Bellamy, 1995) there has been considerable interest in student debt. New Zealand tertiary students are currently facing higher costs for their education than previously, and in many instances students go into debt to pay these costs. A number of questions arise from this phenomenon. First, can this tendency be considered as broadly rational in terms of the life-cycle account, perhaps even an investment in one's future, or are indebted students prone to behave in financially irrational ways? Second, one might ask what the long-term effects of so many young people incurring a substantial debt might be. Davies and Lea (1995) found that the more indebted English university students were more tolerant of debt than those who had smaller debts or none at all. Moreover, tolerance of debt increased with increasing time at university and appeared to lag behind increases in debt level. This result suggests that changes in their debt situation may have causally affected their attitude to debt rather than vice versa.

In the present study several aspects of student debt were considered. These include the relationship between debt levels and participants' perception of debt from Davies and Lea's (1995) Attitude to Debt Scale. This scale indicates how accepting of, or opposed to, going into debt a person is. We anticipated, following Davies and Lea's results, that as debt levels rose attitude towards debt was likely to become more positive. Davies and Lea did not investigate whether the increased tolerance to debt they found remained after students left university. Thus the present study included a sample of ex-students.

Debt levels may also be affected by an individual's personal characteristics and financial management skills. With New Zealand students having the right to borrow money (at least from the government) and with borrowing being relatively easy, there is a concern (e.g., Betts, 1998) that students may be borrowing to fund unnecessary luxuries

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(such as overseas holidays). As a result, debt levels may partially reflect what could be regarded as reckless, unnecessary spending. Hence, we measured tendencies towards impulsive buying (e.g. Rook, 1987; Rook & Fisher, 1995) in our sample with the aim of investigating the relationship between these tendencies and students' levels of debt.

We also investigated whether participants were actively trying to minimize what they owed through financial practices such as budgeting or looking for the best deals before buying. Finally, to determine if participants had an understanding of how difficult paying back their debts was likely to be, they were asked how long they thought it would take them to pay back their debts. Government estimates of the average time it will take to pay back a student loan are 38 years for a female graduate and 16 years for a male graduate, with an estimated 10% never repaying their student loan (Ashby, Robertson, & Parata, 1996). It was anticipated that participants would underestimate the length of time it would take them to repay their loan compared to the government estimates.

Method

Participants

There were two main groups of participants. The student sample contained 155 participants (41 male), who were currently studying in the Psychology Department of the University of Canterbury, and who were studying, or could go on to study, Applied Psychology, and those who were ex-students of the same department who had studied Applied Psychology (n=37). Current students were surveyed during their Stage One Psychology Laboratories (n=65), and Stage 3 (n=55) during a lecture on Industrial and Organizational Psychology. Postgraduate students were surveyed during either a first or second year Applied Psychology course (n=31). The response rate for students was 100%.

Forty ex-Canterbury students of Applied Psychology (n = 40) were contacted through networking. They had all graduated between 1992 and 1997. Thirty-three had spent a median of 24 months in full-time employment. Four had not worked full-time for a variety of reasons (e.g., having children, back studying). The final response rate for ex-students was 92.5% (37/40).

All current students had paid the same fees for the year's tuition: $2,495. Fees for past years were slightly less (e.g., $2,295 in 1996).

Questionnaires

Questionnaires for participants currently attending university were identical, and included:

1. A copy of Davies and Lea's (1995) attitude to debt scale, with the following statements:

- There is no excuse for borrowing money
- Banks should not give interest-free overdrafts to students
- Students have to go into debt
- It is OK to borrow money in order to buy food
- You should always save up first before buying something
- Debt is an integral part of today's lifestyle
- Students should be discouraged from using credit cards
- Banks should not be surprised when students incur large debts
- It is OK to have an overdraft if you know you can pay it off
- Once you are in debt it is very difficult to get out
- You should stay at home rather than borrow money to go out for an evening in the pub
- It is better to have something now and pay for it later
- Taking out a loan is a good thing, because it allows you to enjoy life as a student
- Owing money is basically wrong

Respondents answered on a 7-point scale anchored by "Strongly agree" and "Strongly disagree".

2. Questions on impulsive buying with the following statements:

- I plan carefully what to buy before I go shopping
- I like to spend money
- I buy an item I like without a lot of thinking
- There are some things I buy that I do not show to anybody for fear people will think I did a foolish thing or wasted my money
- I often buy something I see in a shop without planning to, just because I've got to have it
- I usually only buy things I need
- When I have money I cannot help but spend some or all of it
- I have often bought a product that I did not need, even when I know I had very little money left
- I try not to buy anything other than what I planned to buy
- Buying gives me a lot of pleasure
- I am very practical in what I buy
- I dislike shopping
- I anticipate the need to buy something in plenty of time to shop around for the best deal
- I try to find a shop that has items I need to buy at a reduced price

The mix of 14 impulsive / thrifty statements were derived from Friese (1997), and Hans, Morgan, Kotsipulos, and Kang-Park (1991), or constructed by the authors. Questions from Friese and Hans et al. were modified to suit a New Zealand student sample. Respondents answered on a 7-point scale anchored by "Very seldom" and "Very often".

3. Questions on sources of income, current financial position, concern over their debt level (on a 5-point scale anchored "unconcerned" and "very concerned"), methods they used to reduce or minimize debt, and the length of time participants thought it would take to pay back their student loan.

4. Some demographic details - The questionnaires for ex-students were similar to questionnaires for current students but included some additional questions relating to their year of graduation, current work status, size of student loan when they left university, to whom they owed money, and annual income.

Results

Debt levels varied greatly. The maximum debt from all sources for a student was $49,000, with 6 students having debts of over $30,000. In contrast, 24 students had no debt at all. This positive skew in the data suggested focussing on medians, rather than the means, as most reflective of the "typical" student. The median debt levels showed a progressive rise during university study. Ex-students showed even more variability, with three having debt levels over $200,000, while 7 had no debt at all. Table 1 shows the median debt (for those having debt and for all respondents), the median debt attributable to government student loans (for those taking these out) and the percentage of the group having debt of any kind.

Overall, male students and ex-students (median $7,800) borrowed significantly more than women (median = $4,800; Mann-Whitney U = 2411, $p < .05$). For the students with debt, there was a significant Spearman rank correlation between level of university study and the total debt ($\rho(147) = .285$, $p < .001$).

As well as borrowing from the government student loan scheme, the students also borrowed from a number of other sources. Fifty-four percent had a bank overdraft, the median borrowed being $1,000. Twenty-three percent had borrowed from their bank on their Visa or MasterCard, the median amount borrowed being $800. Twenty percent had borrowed money from their parents, with a median of $1,450. A much smaller percentage, 5 percent, had borrowed a median amount of $450 from stores.

Six percent of current students with a student loan thought that it would take them a lifetime to pay it back. However, most students with a government student loan were confident that they could pay their student loan back within a much shorter period of time, and median anticipated payback times were around 5 years for all student levels.

By contrast, the ex-students thought it would take a median 6.5 years. In general, students were only moderately concerned with their level of debt, with the median level of concern 3 on a 5-point scale ("Unconcerned to "Very concerned"). When concern was related to debt level, the higher the level of debt from all sources the greater was the participant's concern about their debt ($\rho(172) = .48$, $p < .001$).

Results relating to the strategies employed by students and ex-students to reduce debt are shown in Table 2. Over 50 percent of students budgeted, worked during term time and holidays, used cash rather than cheques or bankcards, did not take out the maximum student loan, and brought second hand rather than new. In fact the only categories that more than fifty percent of the students did not use were cutting back on basics, and living with parents. Similar results were found for ex-students with 50 percent or more reporting that they used the methods listed.

Table 3 shows the relationship between use or non-use of particular budgeting and money saving methods and the level of overall debt. Only methods whose use or non-use were associated with significant (Mann-Whitney U, $p < .05$) differences in debt level are shown. The obvious conclusion to be drawn from these results is that those who were more in debt generally tended to make more rather than less use of the different methods, suggesting that they were not usually particularly reckless individuals.

The fourteen items of Davies and Lea's Attitude to Debt Scale were subjected to principal components analysis. A scree plot suggested that the results were best described by a single factor (accounting for 21.4 percent of the variance). Consequently the 14 items were reversed scored when appropriate and added to give a single attitude to debt score. These attitude to debt scores ranged between –25 and 32, with a mean of 7.7 and a standard deviation of 9.9. A Cronbach alpha of 0.67 was obtained for this scale, a figure

Table 1. Percentage of students and ex-students at different levels in debt, their median debt, their median government student loan, and their average Attitude to Debt score. Figures in brackets show the corresponding medians when all respondents are taken into account, not just those with debt or a government student loan.

Level	% with debt	Median total debt ($)	Median Government Student loan debt ($)	Average attitude to debt
Stage 1	78	5,000	4,500	5.2
		(3,500)	(2,500)	
Stage 3	85	7,550	10,000	7.2
		(4,923)	(5,000)	
Post-grad	93	12,500	8,000	11.2
		(12,000)	(4,200)	
Ex-students	69	13,150	11,500	9.9
		(9,000)	(750)	

Table 2. Percentage of student and ex-student respondents who used each method to reduce or limit the size of their debt

Method	% of students using	% of ex-students using
Budgeted	75	86
Took a job during term	74	- *
Worked during holidays	81	- *
Used cash	64	69
Did not take out max. student loan	61	61
Monitored bank statements	67	61
Bought second hand	55	50
Cut back on basics	25	25
Cut back on non-essentials	69	64
Lived with parents	45	56
Delayed buying home	- *	63
Delayed buying newer model car	- *	58
Took on extra work	- *	58
Postponed overseas travel	- *	54

* The respondents were not asked about this method.

Table 3. Median overall debt levels ($) for those using, or not using, different budgeting and money saving methods

Method	Median debt ($) students using	Median debt ($) students not using
Budgeting	6,200	2,200
Worked during holidays	6,100	3,000
Did not take out max. student loan	3,200	11,000
Cut back on basics	9,000	3,500
Postponed overseas travel	17,000	7,585*

Notes
* ex-students only
Only methods associated with significant (Mann-Whitney U, $p < .05$) differences between the two groups are shown.

slightly lower than that reported by Davies and Lea (0.79). Mean scores on this scale are shown in Table 1.

The higher the level of university study the more accepting students were of debt, $r(144) = .20$, $p < .05$. There was also a significant correlation between attitude towards debt and the anticipated time to pay it back, ?(167) = .28, $p<.001$), with those who anticipated it would take them a long time to pay back their student loan being more accepting of debt. Finally, taken over the whole sample, there was significant positive correlation (ρ (178) = .24, $p <$ .001) between attitude to debt and the amount of debt people actually had. Thus, higher debt levels were accompanied by greater tolerance of debt.

Principal components analysis was also carried out on the items relating to impulsive buying. Again a scree test strongly suggested the existence of a single factor, accounting in this case for 36.7 percent of the variance. Therefore the appropriate items were reversed scored and all items added to give a single score for each individual. A large positive score on this scale indicated self-reported impulsiveness when buying, and a large negative score thriftiness. The scores ranged between -40 and 27 with a mean of -4.4 and a standard deviation of 13.5. A Cronbach alpha of 0.87 was obtained from the impulsive buying scale.

There was no significant relationship between level of study and impulsive buying. Neither were there any significant relationships between the impulsive buying scale and concern over debt, anticipated time to pay back one's student loan, or total debt outstanding. When the number of different methods of reducing or limiting debt were considered, there was a significant relationship with the impulsive buying scale, $r(131) = .30$, $p<.001$, with people who used more methods to reduce or limit their debt being the least impulsive buyers. There was also a significant correlation between scores on the attitude to debt scale and impulsive buying, $r(183) = .18$, $p<.05$. Those who were accepting of debt were more likely to buy impulsively.

Discussion

A number of features of the results indicate that much of the debt accumulated by students can be reasonably described as rational, rather than the consequence of personality characteristics or financial recklessness. The amount of debt accumulated was uncorrelated with our measure of impulsive buying. Students used a large variety of techniques to try to control their spending. Moreover, those who were most in debt tended to be more likely to use such techniques. As a minor example of such rationality, debt was not evenly distributed according to gender. Men borrowed significantly more than women, reflecting their greater anticipated future earnings. Currently women earn about 74% of the male wage in New Zealand (Humphries and Grice, 1995). In general then, the results were in accordance with the predictions of the life-cycle account (e.g. Lewis, Webley, & Furnham, 1995; Modigliani & Brumberg, 1954; Thaler, 1990).

On the other hand, at least one result suggests over-optimism on the part of the sample. The median anticipated time students expected it would take them to pay back their government student loan was 5 years. While 6 ex-students had repaid their student loan, generally the amount of time participants expected to pay back their loan had increased to a median of 6.5 years at ex-student level, indicating that repayment was harder than students anticipated it to be. Whether or not repayment would eventually prove as drawn out as anticipated by Ashby, Robertson & Parata (1996) is, however, debatable.

Students' view of debt changed with the level of debt: the higher the debt, the more tolerant they were likely to be. Our results provide no evidence as to whether the debt increase preceded attitude change (as found by Davies and Lea, 1995), or whether the two measures changed concurrently. It is also possible that the increased tolerance for debt at Stage 3 and postgraduate level may be the outcome of students who were unwilling to tolerate large increases in debt leaving university at an earlier stage. However, even when these caveats are taken into account, our results are still consistent with Davies and Lea's hypothesis that the debts accumulated by students increase their tolerance towards debt.

Our results indicate that attitude towards debt became less tolerant after leaving university. This suggests that the impact of students having a large debt does not lead to a permanent acceptance of high debt, although whether tolerance towards debt will subsequently drop to the level seen in Stage 1 students is unknown. This continued tolerance of debt may lead ex-students to regard debt repayment as less urgent and hence increase their estimate of when they will pay it back.

An obvious limitation of the present results is that they are based on a sample of psychology students rather than all tertiary students. This has the advantage of making comparisons across levels of study easier, and sampling is unlikely to be an issue for the results relating impulsiveness to debt level, for example. On the other hand, there are likely to be considerable differences in actual debt and career

expectations between students enrolled for more professionally oriented courses (in, e.g., medicine, law or engineering) and those enrolled for arts courses such as philosophy or English. Future research should investigate this issue.

In conclusion, students are borrowing heavily to fund their education costs. This appears to be from need, as the majority of participants studied were not spending impulsively. Indeed most were using a variety of financial strategies to manage their debt levels and consequently minimize the size of their debt while studying. Those with the highest debt are, however, more conscious of methods that can be used to minimize debt levels. This suggests that greater forethought about financial skills may be beneficial. That ex-students are not finding it as easy to repay their debts as current students anticipate further suggests that financial advice regarding information on both debt repayment and financial management strategies would be useful for those who will need to borrow to pay their education costs. It is likely that such financial advice, if provided before students started borrowing, would have a greater effect on behaviour than if provided once students are in debt. This is because negative views about debt are strongest when debt levels are low. As debt levels increase, people's views of debt become more positive and their incentive to minimize debt is likely to be correspondingly reduced.

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