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The saving and spending habits of young people

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Abstract

Over 250 British children and adolescents completed a questionnaire on their sources of personal income (pocket money/allowance, part-time job, gifts), as well as how much they had saved, where it was stored, and for what purpose it was intended. Particular attention was paid to bank accounts. The participants also responded to various attitude statements about money and the economic situation in general. Results showed numerous sex and age, but few class differences. Males received more pocket money and presents than females, and older children more than younger children. Over 80% of the children claimed their parents would not give them extra money if they had spent it all. Regression analyses showed that the best predictors of regularity of saving, as well as the proportion of money saved, were the more money received; the less money spent in the previous week and total amount of money saved in the previous week. The results are discussed in terms of the limited empirical literature on children's pocket money allowances, particularly with respect to demographic differences. Limitations of the methodology are also reported. © 1999 Elsevier Science B.V. All rights reserved.

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1. Introduction

This paper addresses the question of why, where and how children and adolescents save money they have been given (allowances, pocket money), or personally earned. There are a few studies on young people's understanding of banking (Jahoda, 1981; Ng, 1983, 1985; Takahashi & Hatano, 1994), but far fewer on children's saving (Dickens & Ferguson, 1957; Sonuga-Barke & Webley, 1993; Goudge & Green, 1986; Ward, Wackman & Wartella, 1997), though this is changing (Waerneryd, 1998).

While there are numerous formal economic theories for why adults save (Keynes, 1936; Duesenberry, 1949; Modigliani & Brumberg, 1954; Friedman, 1957), there is less psychological research on actual saving particularly among children and adolescents (Katona, 1975; Kerr & Cheadle, 1997; Furnham, 1985, 1987, 1999; Webley, Levine & Lewis, 1991). Lunt and Livingstone (1991) argued that adult saving is related to an individual's life events, coping strategies and social networks. In their study of British adults, they were able to account for 65% of the explained variance in actual recurrent saving. Livingstone and Lunt (1993) examined in particular the relationship between saving and borrowing. Habitual or regular savers were found to have different psychological motivations from borrowers, seeing debt either as a failure or as a normal part of everyday life. People who saved and had savings, while simultaneously having debts, felt more optimistic and in control of their lives than those who had debts but no savings (Furnham, 1997). Thus, debt seemed to be related to moral issues and savings to optimism. The results showed very clearly that savings and borrowing are neither simply opposites or independent behaviours.

But how, where and why do children save? Are their saving habits simply a function of parental requests and requirements, or of the total amount of pocket money received? Does having an allowance (regular pocket money) make any difference? And to what extent is the habit of saving a function of the three classic demographic variables of age, sex and social class? Abramovitch, Freedman and Pliner (1991) investigated how spending in an experimental store was affected by children's experience of money. Their participants (aged 6, 8 and 10) were given \$4, either in the form of a credit card, or in cash, to spend in an experimental toy store which offered a variety of items priced from 50 cents to \$5. They were allowed to take home to save any unspent money. Children who received an allowance (pocket money) spent roughly the same amount in the cash and credit card condition

(\$2.32 vs \$2.42), but those who did not receive an allowance spent much more with a credit card (\$2.82) than when they only had cash (\$1.76). After they had finished in the store, the children were given a pricing test in which they had to say how much familiar items (e.g. running shoes, televisions) cost. Children who received an allowance scored higher on this test, as did the older children. These results suggest that receiving an allowance may facilitate the development of monetary competence, though this result remains disputed (Furnham & Argyle, 1998). The amount, regularity and rules attached to allowances may be equally predictive of monetary understanding and usage as is whether it is received at all.

Sonuga-Barke and Webley (1993) argue that children's behaviour and understanding of saving – like all economic behaviour – is constructed within the social group, and are fulfilled by particular individuals, aided by institutional and other social factors and facilities. They believe one needs a child-centred view of economic activity, examining children as economic agents in their own right, solving typical economic problems such as resource allocation. They argue that the literature on this topic suggests that children do save more money as they grow older, but it is not clear why. Certainly, it must be voluntary, though it could be discretionary or contractual. In a series of methodologically diverse and highly imaginative experimental studies, Sonuga-Barke and Webley (1993) found children recognise that saving is an effective form of money management. Children realise that putting money in the bank can form both defensive and productive functions. The children valued saving because it seemed socially approved and rewarded. Saving was seen in their studies and understood as a legitimate and valuable behaviour, not an economic function. However, as children get older, they appear to understand and challenge these assumptions, but inevitably see the practical advantage in saving.

Sonuga-Barke and Webley (1993) argue that saving is defined in terms of the quality of a set of actions (going to the counter and depositing money), made in relation to one or other institutions (bank or building society). From the functional point of view, saving is therefore an adaptive response to the income constraint problem. Because money spent on items in the present self-evidently cannot be respent in the future, this realisation leads to understanding the relationship between present and future consumption and, in turn, the importance of saving. In assessing the cost of any choice alternative, the value of the future choices that can therefore be made has to be taken into account. They believe that children learn much from saving and need to be helped to learn these lessons.

There are various popular books for parents and “young people”, dispensing advice about saving and spending (Rendon & Kranz, 1992). Davis and Taylor (1979) recommend that children as young as six and seven years old should be encouraged to save for a relatively inexpensive item that may be purchased in a matter of weeks. They argue that children should be taught to save for emergencies, to make the best use of opportunities, and to acquire the concept of interest. Saving, they argue, also offers an opportunity to learn about investments and shares, as well as the rules attached to borrowing money. Godfrey (1993) recommends that even pre-schoolers store their money in three jars with quite specific purposes for the money in each: the first jar for “quick change” (money to be spent at any time); the second for “medium-term savings” (two to four weeks for a specific item); and the third for “long-term savings”. She also recommends family banking where all members of the family discuss how money for joint projects is stored, taxed and spent.

Bodnar (1997) notes the existence of banks in America aimed specifically at children. She found the average saving customer of the *Young Americans Bank* is 9 years old and has a balance of \$450. She recommends three ways to encourage saving: insist children divide their allowance into three piles (spend, save and give to charity); demand a half-and-half plan which requires that half of all income is saved, or the easier spare-change method where only notes are spent and coins saved (or vice versa). “To raise a generation of super savers, give them a reason to save. To keep them interested, reward them for their efforts. To guarantee their success, devise a system that makes saving easy” (p. 75).

Books aimed at young people themselves seem less prescriptive. Thus Rendon and Kranz (1992) advise American children to keep anything under \$100 at home. “A piggy bank, a money box, a special hiding place in a desk or dresser drawer, or some other private place could be a good place to keep your savings. However, be sure that you really have chosen a safe place” (p. 91). They note the rudimentary facts of savings accounts to their young readers and add (sagely) that money being relatively inaccessible helps people to save.

Because so little work has been done in this area, this study remains exploratory. The focus, however, will be on sex and age differences in sources of income, saving and spending of money. Furnham and Thomas (1984a), who looked at 7–12 year olds, found little evidence of sex or class differences in a fifteen item pocket money questionnaire, but, as may be expected, numerous age differences. Social class differences probably remain important but class is

difficult to measure accurately and working class children often difficult to test. Older children received more money, saved more, and were more likely to go shopping than younger children. This study focuses on a slightly older age band of children, 11–16 year olds, as they typically begin secondary school. It is at this age that economic understanding and activity increase (Lunt & Furnham, 1996).

The three demographic variables examined suggest some obvious hypotheses. It may be expected that *age* is the most powerful predictor of saving. Older children would get and save more money, spend their money differently (on different items) and be more interested in, and take part in, banking, saving and business more than young people. All relevant studies in this area have demonstrated the effect of age differences particularly around the time of going to secondary school (Furnham & Thomas, 1984a,b). Secondly it was anticipated that there would be numerous *sex* differences. Davies and Lea (1995) found females (at university) to be less comfortable with debt and better money managers. Hence it was predicted that they would save more and borrow less than males. However because of differences in socialization it was predicted males would be more involved in banking than females (Furnham & Argyle, 1998). Finally numerous *class* differences were expected if there was sufficient numbers of young people from middle and working class backgrounds in the sample. It was predicted that the higher the social class the more money participants saved and the more experience they would have of the formal economic world of banks. Previous studies have indicated that working class children often receive more money through allowances than middle class children and get involved in the workings of the economy (through jobs) earlier than middle class children. Alas in this study it was not possible to test the hypothesis about class differences because of the limited number of working class participants.

2. Method

2.1. Participants

In all, there were 158 males and 122 females in this study: 86 were 11 years old, 59 were 12 years old, 60 were aged 14 years, 54 were 15 years old, and 20 were 16 years old. Based on an analysis of their fathers' occupation, it seemed that 66 (24%) were upper middle class, 139 (50%) were lower middle class and

71 (26%) were working class. They were drawn from three schools from rather different demographic catchment areas in the South East of England.

2.2. Questionnaire

Each participant was given an eight page questionnaire. The first part looked specifically at how much money the participants earned, how and why they saved it, and on what they spent it. This was followed by 20 attitude statements about spending and saving that were rated on an agree/disagree scale. These items were derived from the above cited, salient literature. Items were drawn from many sources and piloted for their suitability with this age group.

2.3. Procedure

All participants were tested in their class-time by their class teachers. The questionnaire took about 40 minutes to complete and some younger participants required help. After taking part in the study, they were debriefed. There was a 98% completion rate. Every effort was made to ensure that students filled out the questionnaire accurately and honestly and that they understood the issues involved.

3. Results

3.1. Percentages

Table 1 shows the means where appropriate or percentage answering yes or no for each question. Nearly 90% (86.7) of the respondents claimed to have a regular source of income, the vast majority of which (70%) came from pocket money (around £2.50 or \$3.75 per week). Over 90% said they received money as a Christmas and birthday present, receiving over five weeks pocket money equivalent on birthdays, and about four weeks pocket money at Christmas. Most respondents (80%) noted that their parents would not give them more money if they spent it all, confirming their middle class status. Just under three quarters (72.5%) claimed that they lent money to friends, but just over half (54.25%) claimed that they borrowed money from friends.

Most (92%) reported that they had money saved and that this was in a cash box at home. Relatively few of the participants stored money elsewhere,

Table 1

Results for each question. Mean responses or percentages as well as the results from the two way (Sex \times Age) Analysis of Variance. The numbers under the columns sex, age and S \times A are *F* levels from the ANOVAs. Significance levels: ****p* < 0.001, ***p* < 0.01, **p* < 0.05

	Yes	No	Sex	Age	S \times A		
(A) Do you have a regular source of income?	86.7%	13.3%	7.37**	0.02	2.87		
(B) If yes, please say which of the following sources apply in your case and how much you receive per week in each case							
			Sex	Age	S \times A		
Pocket money from parents		£2.42	5.73**	27.41***	4.09*		
Part-time jobs		63p	0.02	25.29***	0.01		
Odd jobs around the home		34p	5.13*	0.19	0.88		
Full-time holiday job		13p	1.07	0.82	1.93		
	Yes	No	Sex	Age	S \times A		
Are you usually given money as a Christmas/birthday present?	91.8%	6.1%	3.96*	0.65	1.53		
If yes, how much money do you get at Christmas?	£10.50		8.02**	7.16**	1.92		
Your birthday	£18.90		4.93*	3.68*	1.66		
Would your parents give you more money if you had spent it all?	19.3%	80.7%	0.44	2.13	0.08		
Do you ever lend money to your friends?	72.5%	27.5%	0.10	1.42	0.37		
Do you ever borrow money from your friends?	54.2%	45.8%	2.08	2.63	1.18		
(C) Do you have any money saved?	92.0%	6.9%	0.31	1.45	0.49		
(D) If yes, please say where the money is saved and approximately how much you have saved in each place (tick as appropriate).							
	£10	£10–50	£51–100	£101–500	£501–1000	£1000+	No answer
Cash box at home	27.5%	22.5%	3.6%	2.5%	0.4%		39.5%
Parents look after it	2.1%	2.5%	2.5%	2.1%	0.4		78.9%
Own bank account with cheque book	3.2%	4.6%	7.1%	7.1%	0.7	2.1	72.4%
Own building society account with cheque book	0.7%	1.8%	1.4%	3.9%	0.7	0.4	90.1%
Own building society account without cheque book	1.4%	7.0%	6.2%	20.2%	7.8	8.1	45.0%
Post Office savings account	2.4%	3.5%	2.7%	11.0%	8.6	6.7	65.0%
Shares	0.7	1.2	1.2	2.8	0.8	3.6	89.9%

Table 1 (Continued)

	Yes	No
(E) Do you save regularly?	67.1	32.9
(F) If yes, what proportion of what you receive or earn do you generally try to save?		
No answer		10.0
25%		5.2
50%		28.0
75%		21.3
Nearly all		10.0
Practically none		25.6
(G) If you do save, why do you save? (tick all that apply)		
Parents tell me to		25.9
Friends save		5.4
For something special I want to buy		71.1
For a holiday		18.6
For emergencies		12.9
Simply to have more money		52.9
(H) Do you personally have a bank account?	Yes 66.5	No 33.5
(I) If no, why don't you have one? (tick all that apply). If yes, go to question K.		
Don't have enough money		14.7
Simply haven't got around to getting one		44.0
Banks are never open when I want to use them		0
Don't like having to stand around in long queues waiting to get served		7.1
Don't find them very helpful		8.1
Nobody else in my house has one		3.0
(J) Do you intend to open a new bank account in the next 12 months or so?	Yes 26.3	No 72.2
(K) If yes at H, how long have you had a bank account?		
Less than one year		11.8
1–2 years		17.6
2–4 years		25.7
More than 4 years		37.9
(L) Why did you open a bank account? (tick all that apply)		
Parents advised me to open one		26.2
Parents opened one for me		44.3
Advice from school teacher to open one		2.1
Because I got a job that required me to have one		4.2
Because friends had one		5.2
To keep my money safe		54.5
To earn interest on my money		51.8
To have a cheque book		3.7
To have a credit card		11.0
Because of special offers made by banks		25.7

Table 1 (Continued)

Because I can get discounts at certain shops				11.5
Because I saw it advertised				6.3
(N) Have you ever changed from one bank to another?			Yes	No
			20.7	79.3
(O) If yes, why did you do that?				
Because I moved house				9.5
Because I did not like my bank				20.9
Because someone told me that another bank was better than the one I was with				13.6
Because my new bank made a special offer				17.2
(P) How often do you go to the branch of the bank where your account is held?	More than once a week	About once a week	Once or twice a month	Less than once a month
	7.7	4.4	55.2	29.0
(Q) How often do you go into a branch of your bank other than your own branch?	More than once a week	About once a week	Once or twice a month	Less than once a month
	2.4	1.8	76.2	16.1
(R) About how often do you deposit money in your bank account?		About once a week	Once or twice a month	Less than once a month
		6.0	56.0	35.2
(S) About how often do you withdraw money in cash from your bank account?		About once a week	Once or twice a month	Less than once a month
		6.8	67.0	22.2
(T) About how often do you use your cheque book other than to withdraw money from your bank for yourself?	More than once a week	About once a week	Once or twice a month	Less than once a month
	13.2	1.8	78.9	6.1
(U) Have you ever been to your bank for any of the following reasons (tick all that apply)?				
To obtain advice about saving money				11.4
To arrange a Standing Order/Direct Debit				7.4
To obtain travellers' cheques				16.0
To get a loan				0.0
To query a bank statement				19.8
To arrange an overdraft				0.0
Because the manager asked to see me				5.0
(V) Do you keep a regular check on how much money you have in your bank account?			Yes	No
			63.0%	37.0%

Table 1 (Continued)

If yes, in what way? (please tick all that apply)		
Keeping a record in my cheque book each time I use it		14.4
Requesting a bank statement from my branch on a monthly basis		60.9
Requesting a bank statement from my branch whenever I go into it		21.6
	Yes	No
(W) Have you spent money on any of the following in the last 4 weeks?		
Sweets, chocolate, ice-cream etc	81.8	18.2
Comics, magazines	57.1	42.9
Books	24.4	75.6
Cigarettes	8.0	92.0
Compact discs	38.0	60.4
Soft drinks	61.8	38.2
Alcoholic drinks	16.4	83.6
Going to discos etc	26.2	73.8
Bus and train fares	39.6	60.4
Clothes and footwear	44.7	55.4
Cosmetics	23.6	76.4
Records or audio tapes	31.3	68.7
School equipment	24.4	75.6
Admission to sports, eg football, tennis	21.5	78.5
Cinema	37.1	62.9
Video hire	19.3	80.7
Pets	20.0	80.0
Club subscriptions	8.7	91.3
Bicycle	8.4	91.6
Slot machines (Space Invaders, fruit machines etc)	17.1	82.9
Sports equipment	22.2	77.8
Computer equipment or games	18.2	81.8
Presents for other people	60.0	40.0
Others (please specify)		
(X) How much money did you receive last week as:		
Pocket money/allowance (including money earned for working around the house)		£2.67
Money earned from your regular job (if any)		£0.70
A gift		£0.51
(Y) How much of your money did you spend last week?		£1.85
(Z) How much money did you <i>put into</i> a bank, post office, savings account, building society or other savings scheme, <i>last week</i> ?		£0.65

Note: Question (M) about British high street banks was removed.

although a fifth of them had between, £100 and £500 (\$150–\$750) in a building society account. About two thirds (67%) claimed to save regularly, with a quarter (25%) saving half of their pocket money, but another quarter of the sample saving almost none (26.5%). The most commonly cited reason for saving (71.1%) was to buy something special. About two thirds (66.5%)

said they had a bank account (though it may well be in their parent's name), and most of those that did not simply reported that they had not go around to opening one. A quarter, in fact, reported that they intended opening a new bank account in the forthcoming year, though there is not way of checking that. Of those that already had a bank account, just over a third (37.9%) reported having it for more than four years.

When asked why they had opened a bank account, five reasons seemed most important: to keep money safe; to earn interest on money; because their parents opened it for them; because their parents advised them to open it; and because there were special offers for young people opening bank accounts. Nearly 80% of the respondents held accounts at either one of the big four banks in Great Britain. About a fifth of the respondents had changed banks for a variety of reasons. Visits to banks were relatively infrequent (once or twice a month). Curiously, the respondents reported withdrawing money more frequently than depositing it, presumably because they deposited comparatively large amounts and withdrew small amounts.

Nearly two thirds (63%) claimed to keep a regular check on their bank balance, mainly by requesting a bank statement on a monthly basis. The four items that the respondents most often spent their money on were sweets, chocolate and ice-creams, soft drinks, presents for other people, and comics/magazines. Finally, asked how much money they received the previous week (including money for household chores), the average amount was, £2.67 (\$4.00) which was 25p (40c) more than their weekly pocket money (question B). They claimed to have obtained, in addition, £1.21 through jobs and gifts in the previous week, and spent, 1.85 (on average) in total.

3.2. *Sex and age differences*

A series of sex \times age ANOVAs were then run on selected questions. They focused particularly on monies received by the participants. They were grouped into two age groups: 11–12 years old ($N = 145$) and 14–16 years old ($N = 134$).

Various questions (A, B and X, 12 in all: see Table 1) referred to monies received. In all, there were seven sex differences. Males, compared to females, reported that they were more likely to receive more weekly pocket money (£2.62 vs £2.13), got more weekly pocket money from odd jobs around the house (48p vs 26p), got more money at Christmas and for birthday presents, and received more pocket money than the previous week (£2.96 vs £2.29).

There were also seven significant age differences, all concerned with the amount of money children received. Not unsurprisingly, the older children (14–16 years) received more than the younger children (11–12 years) as weekly pocket money (£3.06 vs £1.70) for odd jobs (45p vs 38p) at Christmas, birthdays and the previous week. There were fewer than chance sex \times age interactions.

A series of two-way ANOVAs were also completed on various other questions. Because of the problem of type II errors resulting from this relatively large number of analyses, only those where the significance level was $p < 0.01$ were considered of note. There were, in all, relatively few sex differences. Females attempted to save a greater proportion of their money than males ($F(1, 189) = 8.27, p < 0.01$). Males were more likely to personally have a bank account than females ($F(1, 240) = 7.04, p < 0.01$). Of those who had bank accounts, males appeared to have had them for longer than females ($F(1, 174) = 8.52, p < 0.001$).

Many of the reasons for changing bank yielded significant differences (question O). Males were more likely to change banks if others told them another one was better ($F(1, 162) = 11.70, p < 0.001$), if a new bank made a special offer ($F(1, 157) = 9.18, p < 0.01$). Males also reported going more frequently to their branch of the new bank ($F(1, 167) = 7.36, p < 0.01$), and other branches ($F(1, 152) = 9.11, p < 0.01$) more frequently than females (question P and Q). Males were more likely to use a chequebook to withdraw money ($F(1, 102) = 28.88, p < 0.001$) and go to the bank for advice about saving ($F(1, 174) = 11.96, p < 0.001$).

Predictably, there were also a number of important age differences, though surprisingly, slightly less so than for sex. Older children were more likely to have a bank account ($F(1, 238) = 6.48, p < 0.01$); more likely to save a proportion of their pocket money ($F(1, 189) = 8.27, p < 0.01$); to save simply to make more money ($F(1, 220) = 10.51, p < 0.001$). Older children were, naturally, less likely to have their parents open a bank account for them ($F(1, 178) = 11.87, p < 0.001$); but more likely to open an account because of the interest rates ($F(1, 177) = 7.78, p < 0.01$); or to get a credit card ($F(1, 177) = 5.78, p < 0.01$). Older children were much more likely to have gone to their bank for advice than younger children ($F(1, 102) = 9.86, p < 0.01$). They were also much more likely to keep a regular check on their bank account than younger children ($F(1, 182) = 28.59, p < 0.001$). Many of the questions (W) referring to how they spent their money yielded significant age effects. Older children reported that they were more likely to spend their money on cigarettes, compact discs, alcoholic drinks, discos, bus fares and

clothes than younger children. Overall, there were fewer sex and age significant interactions than one may expect by chance.

3.3. *Attitudes to saving and spending*

Of the 20 items, those that elicited most agreement were: (10) “I don’t like owing money”; (1) “It is important to save”; and (20) “I love shopping”. Those that showed highest disagreement ratings were: (13) “I wouldn’t be without a credit card”; (9) “I never pay for something if I can get it on credit”; (12) “I don’t care if I don’t have much money” (see Table 2).

A VARIMAX rotated factor analysis was computed on the 20 item scale. Five factors emerged with eigenvalues of 71.00 and which, in total, accounted for half of the explained variance. The first factor had six items loading on it at 30.40, all to do with *spending money*. The second factor had four items loading on it, all of which were concerned with *saving money*. The third factor had five items loading on to it, all of which were concerned with the *mechanics of banking*. The fourth factor had three items loading on it, which were expressed as *indifference to money*. The final two item factors contained two items which reflected *work ethic* values.

The factor scores were then treated to a sex by age ANOVA. There were main effects for sex on the third ($F(2, 240) = 28.58, p < 0.001$), fourth ($F(1, 237) = 8.88, p < 0.01$) and fifth ($F(1, 230) = 13.90, p < 0.01$) factor. Males endorsed the third factor (mechanics of banking) more than females, but females endorsed the fourth (indifference to money) and the fifth (work ethic) factor more than males. There were no age or sex \times age effects.

3.4. *Regressions*

Two sets of regressions were performed. The first involved two logistic regressions onto question E: children’s regular saving and secondly onto question F: the proportion of money saved. In the first logistic regression ten independent variables were regressed onto the binary question: do you save regularly? They were the sex, age, class of the participants, how much money they had received the previous week, how much they spend the previous week, how much they saved in the previous week, how much they usually received at Christmas and birthdays; whether their parents would give them more money if they spent it all and whether they ever lent friends money or borrow from them. The overall model proved reasonable (χ -square = 17.32,

Table 2

The results of the VARIMAX analysis of the 20 items and the ANOVA on the factor scores

Items	Factors						
	X	SD	1 ^a	2	3	4	5 ^b
(1) It is important to save	4.27	0.84	-15	0.64	22	-20	19
(2) I tend to spend money as soon as I get it	2.77	1.38	69	-30	-06	00	-20
(3) I believe in putting some money aside for a rainy day	3.18	1.23	0.9	0.66	-13	13	01
(4) When I save, it is usually because I want something special	3.76	1.23	25	-19	39	18	43
(5) I am interested in looking at different ways of saving money	2.61	1.33	06	64	15	04	-17
(6) I have always tried to save	3.38	1.30	-27	64	08	-06	03
(7) Money is for spending, not for holding on to	2.72	1.26	55	-32	-05	-09	-24
(8) Every once in a while, I like to go on a big spending spree	3.56	1.37	68	07	06	-17	35
(9) I never pay for something if I can get credit	2.06	1.18	43	28	17	15	-33
(10) I don't like owing money	4.30	1.22	-03	02	00	05	56
(11) Having a lot of money has never been my aim in life	2.36	1.28	-13	-11	-13	77	19
(12) I don't care if I don't have much money	2.23	1.21	-07	00	-09	77	13
(13) I wouldn't be without a credit card	1.90	1.23	13	-01	54	-01	06
(14) Everybody should have a bank account	2.87	1.36	06	11	78	-04	08
(15) Modern people use cheques and cards, not cash	3.10	2.38	-01	-18	42	00	-37
(16) I believe in making money work for me	3.42	1.18	16	32	46	-24	-22
(17) You can't get far without a bank account	2.68	1.24	-13	20	71	-04	-04
(18) I never seem to have enough money	3.42	1.35	46	-28	23	-08	-19
(19) I don't believe I will ever be rich	2.75	1.27	00	14	08	64	-25
(20) I love shopping	3.73	1.38	70	-01	10	-08	-25
		Eigenvalue	3.06	2.76	1.66	1.34	1.24
		Variance	15.3%	13.8%	8.3%	6.7%	6.2%
ANOVA		Sex (S)	2.58	0.07	28.58***	8.88**	13.90***
		Age (A)	0.64	0.38	0.00	2.44	2.22
		S & A	0.43	0.25	2.09	0.99	1.32

^a 1 = Disagree.^b 5 = Agree.** $p < 0.01$.*** $p < 0.001$.

$p < 0.06$) and 68.1% of the participants were correctly predicted if one assumed all saved. Three predictor variables were significant: the more money received, less money spent and more money saved the previous week, the more likely they were to be regular savers. When the analysis was repeated with just these three variables the model fit improved dramatically (χ -square = 11.38, $p < 0.001$)

The second regression regressed the same ten variables onto the question of how much of their “regular income” the participants liked to save. The regression was significant ($F(10, 250) = 1.82$, $p < 0.05$) and accounted for 6.8% of the variance. Only two independent factors were significant: the more the participant received the previous week and the more they spent seemed indicative of their regular saving patterns. These two regressions showed a fairly consistent pattern. The total amount of money received, spent and saved in the previous week seemed a good predictor of habitual saving.

Next, in order to examine how the personality money-related behaviours effected monetary attitudes, a series of regressions were done on to each of the factor scores (ten in all), resulting from the two factor analyses (C and D). The independent variables were sex, age, total amount of weekly pocket money received from parents, whether the respondent borrowed and lent money to friends, whether they had a bank account, and the total amount of money they claimed to have spent the previous week. The variables were chosen partly for theoretical reasons and partly because of the distribution of the responses in this study.

Four of the five regressions were significant for the 20 item scale (attitudes to spending and saving). For the first factor, *spending money*, ($F(7, 189) = 2.03$, $p < 0.05$; r square = 0.07), the two predictors were the amount of money spent the previous week ($t = 1.91$, $p < 0.05$) and the fact they borrowed money from friends ($t = -1.96$, $p < 0.05$). The third regression on the mechanics of banking was also significant ($F(7, 189) = 3.65$, $p < 0.001$; r square = 0.12). Sex ($t = -3.42$, $p < 0.001$) and bank account ($t = -2.96$, $p < 0.001$) were significant, indicating that males with bank accounts endorsed this factor more than females without bank accounts. The fourth factor, *indifference to money*, was also significant ($F(7, 189) = 3.43$, $p < 0.001$; r square = 0.11), which indicated that younger children ($t = -2.56$, $p < 0.01$) and those who lent money to their friends ($t = -2.09$, $p < 0.05$) were most likely to endorse this factor. The final factor, *the work ethic*, was also significant ($F(7, 185) = 2.25$, $p < 0.05$), r square = 0.08), which indicated that females endorsed this factor more than males.

4. Discussion

This study attempted to examine the monetary and economic attitudes and behaviours of young people, a topic of considerable interest to their parents (Furnham, 1999; Furnham & Thomas, 1984b) as well as researchers. There is no doubt that young people from 11–16 are economically very active, many with part-time jobs and the majority with bank accounts albeit in their parent's name. Whilst the vast majority of their regular income comes from parental allowances, children in this age group still received significant gifts and many had money saved. Most borrowed, lent and saved money, and were clearly very active economic citizens; especially with regard to banking.

The study focused on a number of demographic differences. Sex and age differences were examined, but not social class, because of the restriction of range in the sample as noted in the introduction. The sample was quite clearly predominantly middle class. Whilst it was expected to find many age differences due to cognitive maturation, few significant sex differences were expected (Furnham, 1999). However, what was perhaps an important finding was the numerous sex differences throughout the study. Both books for parents on economic socialisation (Davis & Taylor, 1979; Godfrey, 1993) and studies on adults themselves self-reported behaviour towards their children (Furnham, 1999; Furnham & Thomas, 1984b) show adults feel it is wrong to socialise males and females differently and hence one should expect few, if any, differences, particularly in the amounts of money given to children. Yet the literature on a slightly older group – namely university students, do suggest interesting and important sex differences. Thus Davies and Lea (1995) found female students were less comfortable with debt and better money managers than a comparable group of males. The literature on adult sex differences in money beliefs and behaviours however shows many differences. Furnham and Argyle (1998) review many studies on “money pathology” which shows that males report greater confidence, independence of action, risk taking and gambling with respect to money while females show a greater sense of envy and deprivation.

The data showed in this study that males received more pocket money, more household chores payment and more birthday money than females. It seemed that males in this age group tended to receive about 20% more money than females, though the reason for this difference is unclear. It may be that parents allow boys to take part-time jobs earlier than girls; or that they pay boys more for sex-linked household chores than girls (Mortimer & Shanahan, 1994). The results may also be the result of sampling limitations or

inaccurate reporting. This is, however, in accordance with earlier national surveys, which showed that girls get less pocket money and less odd job money than boys, though recent surveys have shown that this pattern has, if anything, reversed (Walls, 1996).

Other sex differences appeared to indicate that females were more economically conservative and less economically active than males. The interpretation of the results from all the sections looking at beliefs and behaviours seemed to suggest that males were more interested in, and involved with, money and economic issues. They seemed more interested and assertive, especially with banking, and to have a greater belief in the economic system than females. Whilst these results are consistent and interesting, it is not at all clear as to their origin, or indeed, how they are maintained (Abramovitch et al., 1991). Yet in their review of children and adolescents understanding on the nature of work Bowes and Goodnow (1996) found extensive evidence of gender differences in understanding the nature of work, non-work and reward for work. Thus adolescents when looking at work differ considerably: females opt for people-oriented work values while males value money status and security. Certainly it seems as children get older and have an increased understanding of their social world they may be more prone to develop the gender-linked stereotypical behaviours acceptable in their society.

Inevitably, there were numerous age differences, given that the participants in this sample were aged between 11 and 16. The results showed that older children received more money from pocket money, part-time jobs, Christmas and birthday gifts. They were also, naturally, more involved in all economic activities. They saved more, did more banking-related activities, and spent their money rather differently on different items, as may be expected (Furnham & Argyle, 1998).

However, there were surprisingly few differences in their monetary attitudes. Only one out of the ten main effects for age on the two sets of factor scores derived from the money (see Table 2) sections of the questionnaire. It seems, therefore, that for early adolescents, sex rather than age is an important factor in shaping economic attitudes, if not behaviours. The attitude items may be particularly prone to social desirability responding. Further they do not measure economic understanding or indeed economic behaviour.

The young people in this sample appear to receive, at Christmas, on average, five times their weekly pocket money allowance. Further, about half appear to have saved at least that amount given at Christmas. This study did not consider whether money was given as cash or as a cheque. Pilot work suggested that even young children were given cheques on the understanding

that the money would be banked for them by parents. Further if the sum were reasonably significant (over £20) a cheque was used for security. However both of these factors are likely to be class linked. Part-time jobs appear as much smaller sources of income, though this clearly changes as children get older (Bowes & Goodnow, 1996).

Just over four-fifths of the children reported that their parents would not give them additional money (during the week) if it ran out, reflecting traditional, middle-class beliefs about using pocket money to teach children about postponement of gratification (Furnham, 1999). Another way, of course, is to encourage saving. It is interesting to note that most children aimed to save rather to lend to, or borrow from, their friends, and that none of these economic activities was related to sex or age (Furnham & Argyle, 1998).

Over 90% of the sample claimed to have money saved. Two-thirds said they saved regularly, and nearly half claimed to save between 50% and 75% of their income though this may well be an over-exaggeration. Nearly two-thirds of the sample claimed to have a bank account and over a third said that they had had it for more than four years. This may reflect banks' eagerness to sign up young people into special schemes aimed at them. They do this presumably because they know that the majority of people still do not change bank accounts which are often opened on a whim, or because of an advertised gift or special offer. Indeed, about as many respondents said they opened a bank account because their parents advised it as said they did so because of the special offers from the banks. However, most of the respondents claimed they saved to buy something special or to keep their money safe. What is perhaps surprising from the results is how often children visit banks and check their statements. For over half, this seems a regular monthly activity of some considerable interest to them. This may, of course, reflect either the nature of this particular sample or the fact that some respondents are not reporting honestly.

The results of the regression gave some insight into what factors determined economic attitudes of young people of this age. It was important to note that money received, spent and saved in the previous week were the best predictors of the regularity and proportion of saving. This implies habitual behaviour which may be set very early and encouraged by parents and teachers (Furnham & Thomas, 1984a; Furnham, 1999). It is interesting that demographic factors seem unrelated to either of these two variables. The second set of regressions showed some demographic predictors of attitudes to saving. Thus the fact that these young people borrowed or lent money to friends, and how much they had spent in the previous week were all

predictors of monetary beliefs. Indeed, it would be surprising if it were otherwise. This, of course, leads to the well-established problem of the relationship between attitudes and behaviour and the causal links between them. What the regressions did show was that total income from pocket money was not a good predictor of saving attitudes, but rather how children used their money and how much they spent, lent, borrowed or saved. Yet their total income was the best predictor of the regularity of saving and the proportion saved.

As Gunter and Furnham (1998) have shown, the children's market is substantial and growing. Advertisers, manufacturers and financial institutions have not been slow at recognising the importance of attracting and socialising the young consumer. Understanding what young people do, and understanding the market place, is therefore of considerable interest to applied researchers as well as those interested in the theoretical question. This study goes some way to answering some of these issues, but inevitably requires extension and replication.

This study was not without its limitations. The first problem was that it looked at a fairly small homogenous middle class sample of English children, who seemed to be surprisingly active savers. It is doubtful if a matched group of working class children would be such active or enthusiastic savers or indeed have so much money saved. A second problem lies in the questionnaire method and the possibility of random or social desirability responding. Whilst there was no reason in this study to doubt the validity of the teacher administered and supervised method some of the results did appear somewhat inconsistent. The sample certainly gave the impression of interacting frequently with their bank (checking statements etc.) very regularly and nearly 10% reporting having large amounts of money in the bank. It is possible that some of the questions on banking and saving were inaccurately answered. It is clearly desirable to have collaborative evidence – possibly from banks themselves – on saving patterns of children and adolescents.

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References

- Abramovitch, R., Freedman, J., & Pliner, P. (1991). Children and money: Getting an allowance credit vs cash and handling of money. *Journal of Economic Psychology*, 12, 27–42.
- Bodnar, J. (1997). *Dr Tightwad's money-smart kids*. New York: Random House.
- Bowes, J., & Goodnow, J. (1996). Work for home school or labour force: The nature and sources of changes in understanding. *Psychological Bulletin*, 119, 300–321.
- Davies, E., & Lea, S. (1995). Student attitudes to student debt. *Journal of Economic Psychology*, 10, 663–679.
- Davis, K., & Taylor, T. (1979). *Kids and cash: Solving a parent's dilemma*. La Jolla, CA: Oak Tree.
- Dickens, D., & Ferguson, V. (1957). *Practices and attitudes of rural white children concerning money*. Technical report no. 43, MS, Mississippi State College, Agricultural Experimental Station.
- Duesenberry, J. (1949). *Income saving and the theory of consumer behaviour*. Cambridge, MA: Harvard University Press.
- Friedman, M. (1957). *A theory of the consumption function*. Princetown, NJ: Princetown University Press.
- Furnham, A. (1985). Why do people save? Attitudes to and habits of saving money in Britain. *Journal of Applied Social Psychology*, 15, 354–374.
- Furnham, A. (1987). The determinants and structure of adolescents' beliefs about the economy. *Journal of Adolescence*, 10, 353–371.
- Furnham, A. (1997). The half full and half empty glass: The views of the economic optimist and pessimist. *Human Relations*, 50, 197–209.
- Furnham, A. (1999). Economic socialisation: A study of adults' perceptions and uses of allowances (pocket money) to educate children. *British Journal of Developmental Psychology*.
- Furnham, A., & Argyle, M. (1998). *The psychology of money*. London: Routledge.
- Furnham, A., & Thomas, P. (1984a). Pocket money: A study of economic education. *British Journal of Developmental Psychology*, 2, 205–212.
- Furnham, A., & Thomas, P. (1984b). Adult perceptions of the economic socialisation of children. *Journal of Adolescence*, 7, 217–231.
- Godfrey, N. (1993). *A penny saved: Teaching your children the values and life skills they will need to live in the real world*. New York: Fireside.
- Goudge, P., & Green, F. (1986). Child's play: Developing a savings account for kids. *Marketing Intelligence and Planning*, 3, 13–24.
- Gunter, B., & Furnham, A. (1998). *Children as consumers*. London: Routledge.
- Jahoda, G. (1981). The development of thinking about economic institutions. *Cahiers de Psychologie Cognitive*, 1, 55–78.
- Katona, E. (1975). *Psychological economics*. Amsterdam: Elsevier.
- Keynes, J. (1936). *The general theory of employment, interest and money*. London: Macmillan.
- Kerr, M., & Cheadle, T. (1997). Allocation of allowances and associated family practices. *Children's Social and Economic Education*, 3, 1–11.
- Livingstone, S., & Lunt, P. (1993). Savers and borrowers: Strategies of personal financial management. *Human Relations*, 46, 963–985.
- Lunt, P., & Livingstone, S. (1991). Psychological social and economic determinants of saving. *Journal of Economic Psychology*, 12, 621–641.
- Lunt, P., & Furnham, A. (1996). *Economic socialisations*. London: Elgar.
- Modigliani, F., & Brumberg, R. (1954). Utility analysis and the consumption factor: A interpretation of the data. In: K. Kurihara, *Post-Keynesian economics*, New Brunswick, NJ: Rutgers University Press.
- Mortimer, J., & Shanahan, M. (1994). Adolescent work experience and family relationships. *Work and Occupations*, 21, 369–384.
- Ng, S. (1983). Children's ideas about the bank and shop profit: Developmental stages on the influence of cognitive contrasts and conflict. *Journal of Economic Psychology*, 4, 209–221.

- Ng, S. (1985). Children's ideas about the bank: A New Zealand replication. *European Journal of Social Psychology*, 15, 121–123.
- Rendon, M., & Kranz, R. (1992). *Straight talk about money*. New York: Facts on File.
- Sonuga-Barke, E., & Webley, P. (1993). *Children's saving: A study in the development of economic behaviour*. Hove: LEA.
- Takahashi, K., & Hatano, G. (1994). Understanding of banking business in Japan: Its economic prosperity accompanied by economic literacy. *British Journal of developmental Psychology*, 12, 585–590.
- Waerneryd, B. (1998). *The psychology of saving*. Cheltenham: Edward Elgar.
- Walls, (1996). *The walls (pocket money) monitor. The authoritative survey on British children's pocket money*. Walton-on-Thames, Surrey.
- Ward, S., Wackman, D., & Wartella, E. (1997). *How children learn to buy*. London: Sage.
- Webley, P., Levine, M., & Lewis, A. (1991). A study in economic psychology: Children's savings in a play economy. *Human Relations*, 44, 127–146.