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## Commitment among ethical investors: An experimental approach

Paul Webley <sup>a,\*</sup>, Alan Lewis <sup>b</sup>, Craig Mackenzie <sup>b,1</sup>

<sup>a</sup> School of Psychology, Washington Singer Laboratories, University of Exeter, Perry Road, Exeter EX4 4QG, UK

<sup>b</sup> Centre for Economic Psychology, University of Bath, UK

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### Abstract

Recent studies have highlighted two apparent ‘contradictions’ in the behaviour of ethical investors: it is not unusual for people to waive the interest on their ethical investments but say they would invest more if the interest rate was raised and it is common for people to invest both in ethical and standard funds. Lewis and Mackenzie have proposed that these contradictions can be resolved using the ideas of framing and mental accounts. The current paper uses an experimental approach to explore these issues. Participants took part in a role-play of a consultation with a ‘virtual’ financial advisor. This was setup on the World Wide Web. Participants used the Netscape browser to provide financial and other information to the financial advisor. They were then presented with a variety of investment choices. The study revealed that ethical investors were generally committed to ethical investment, and kept such investments even if they performed badly or were ethically ineffective. © 2001 Elsevier Science B.V. All rights reserved.

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\* Corresponding author. Tel.: +44-1392-264600; fax: +44-1392-264623.

E-mail address: p.webley@exeter.ac.uk (P. Webley).

<sup>1</sup> Now at Friends Provident, London.

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## **1. Introduction**

There has been a marked growth in the literature recently claiming that there is more to economics than simple optimality; as Etzioni (1988) put it “economics has a moral dimension”. This does not mean that economic decisions are irrational, merely that decision-makers may take into account what is ‘right’ as well as what is most profitable. An interest in the role of ‘morality’ or ‘ethics’ in economic behaviour can be seen in studies of the importance of fairness and reciprocity in economic behaviour (Fehr & Gächter, 1998; Fehr & Schmidt, 1999), of ethical values (Burlando, 2000) of business ethics (Wärneryd & Westlund, 1992) and in ‘popular’ models of financial markets (Winnett & Lewis, 2000).

Studies of ethical investment have been concerned with whether it is actually ethical, whether the performance of ethical trusts has a specific ethical component or whether it can be accounted for by the size or type of firms concerned and, of most importance to economic psychologists, whether ethical investors are different from others, and prepared to incur some costs in order to invest ethically (Domini & Kinder, 1984; Anand & Cownton, 1993; Lewis, Webley, Winnett, & Mackenzie, 1998).

Initial studies in the UK by Lewis and his colleagues (e.g., Lewis & Cullis, 1990; Cullis, Lewis, & Winnett, 1992; Lewis & Webley, 1994) appear to show that moral commitment is highly price-elastic: sympathetic investors are prepared to choose ethical funds as part of a mixed portfolio as long as they are performing reasonably but enthusiasm for investing ethically drops if the financial return is poor. Likewise trust managers are keen to develop ethical funds (as ‘ethicality’ is a marketable characteristic) but want their ethical funds to perform well – the message they want to get across to the investor is that they have their cake and eat it, they can express their moral concerns yet still make money. A study by Mackenzie and Lewis (1999), however, puts an interesting gloss on this picture. They carried out detailed interviews with 10 investors in shared interest (SI), a co-operative lending society which lends the majority of its money to small projects in the Third World and which pays its members an interest rate of only 2%. These interviews revealed two apparent anomalies. First, it is not unusual for members of SI to waive their right to receive interest but nonetheless claim that they would invest more in SI if the interest rate were higher. Second, it was common for investors to

have holdings both in ‘ethical’ funds and in holdings that they themselves regarded as ‘unethical’. Mackenzie and Lewis’ interpretation of these anomalies draws on the ideas of framing and mental accounts: essentially they argue that the money invested in SI is seen by the investors as ‘spare cash’ which can be used differently to core funds.

To take these ideas further, we argue that we need to use experimental approaches as well as surveys and qualitative interviews, as these approaches have complementary strengths (Webley, Robben, Elffers, & Helsing, 1991; Lewis et al., 1998). Investment has, of course, been investigated experimentally in the past: good examples are Andreasson (1987) use of a simulated market to explore, among other things, the use of the “representativeness heuristic” to estimate the future price of a stock and DiFonzo and Bordia (1997) investigation of how rumours affect trading decisions despite investors’ denigration of them. This kind of approach has also been applied to ethical investment. Webley (1992) and Lewis and Webley (1994) report a study where students role-played (on a computer) managing a portfolio of investments, including ethical investments, over a 1 1/2 year period. However, the problem with this kind of approach is that these are all simulations or role-plays of *trading* on the stock market. It is clear that most individual investors in shares and trusts do not actively trade: Wärneryd (2000) for example, reports that approximately 40% of Swedish and Dutch private investors make no transactions at all during a year. Rather they take a single investment decision (after having, for example, inherited some money) and then maintain their portfolio unchanged for fairly long periods. This suggests that a quite different type of simulation or role-play is required to investigate the behaviour of private ethical investors.

This paper reports on one such role-play, where the situation being simulated is a consultation with a financial advisor. The purpose of the study is partly methodological (the aim being to devise a suitable shell which can then be used to explore a variety of issues) but mainly to explore further the issue of what differentiates ethical from standard investors.

## 2. Method

### 2.1. Participants

56 investors took part, all of whom were offered £15 and travel expenses for their participation (although some requested that this be donated to

charity or refused payment). There were 28 standard and 28 ethical investors. Ages ranged from 30 to 88, with the vast majority of participants being over 50. Total invested assets ranged from £2300 to £658,000, with the modal amount of investment being in the £50,000–100,000 category. Ethical investors were recruited through a mailing by Friends Provident to their investors resident in Devon and through a local firm of independent financial advisors: standard investors (and two ethical investors) were recruited through the School of Psychology's participant panel. On average 28.35% of the holdings of ethical investors were ethical ones.

## *2.2. Design*

The experiment proper was split into two halves. In the first, a partial repeated measures design was used, with one between-subjects variable (ethical vs standard investor) and one within-subject variable (the financial performance of the portfolio) being investigated. Four scenarios were presented in random order which involved good ethical trust performance, good ordinary trust performance, poor ethical trust performance and poor ordinary trust performance. This performance was expressed in each case with a verbal characterisation, the lower and higher value of £1000 in five years time and the lower and higher value of the amount held in those funds in five years time. In the second half of the experiment the ethical investors were presented with scenarios which were all concerned with the ethical funds (lack of impact of ethical investment, ethical fund scandal, activist ethical fund and very poor performance of the ethical fund), whilst the standard investors were presented with scenarios depicting a stock market crash, an interest rate increase and the launch of an activist ethical fund.

The experiment was itself nested in a simulation of an investor's consultation with a financial advisor. This involved participants being asked at the outset questions about their portfolio and their preferences. Three questions were used to assign the participants appropriate advice. These questions divided people into risky/cautious, concerned with medium/long term investment and being willing to sacrifice some financial return to invest 'positively' vs being mainly concerned with maximising return on investment. At the end of the experiment, after all the scenarios had been presented, investors were given a screen of advice. This advice came in 8 variants, with each combination of risky/cautious, medium/long term investment and ethically concerned or not. The advice highlighted appropriate investment options available in three areas, which varied according to the type of investor. For example, for

those investors interested in assets that are designed to give a good return, over the short/medium term and involving low risk, the areas were Cash Management (which made recommendations about bank and building society accounts), Tax Exempt Special Savings Accounts (TESSAs) and National Savings. The advice concluded with a disclaimer “While we hope it [the advice] is realistic, however it is not in any way to be treated as proper financial advice. Before taking any real investment decisions it is important to get independent advice from a qualified Independent Financial Advisor”.

### *2.3. Procedure*

The participants were tested in groups ranging in size from 3 to 8. First they took part in a focus group discussion of aspects of investment and ethical investment (this is reported in Lewis, 2001). This took around 45 min. Then they were given a briefing on the role-play, during which they were taken through the introductory screens and shown how to operate a computer and use the Netscape browser. Questions were encouraged at this stage. Participants were told that any information they supplied was entirely confidential, that our main purpose was to mimic, using the computer, the initial interaction between an investor and his or her financial advisor and that the end result of this would be some investment advice tailored to their individual needs and preferences. They were asked to answer the questions as honestly as possible (as the relevance of the advice given would depend on the accuracy of their answers) and reminded that the information would only be used for research purposes. Participants were directed to our Website where they read the following screen display (see Fig. 1 for a flow chart of the sequence of web pages).

Welcome to sustainable financial independent financial advisors.

We are here to advise you about how to invest your money. The law requires us to give you the ‘best advice’ we can. In order to do this we need to find out a bit more about you. Most financial advisors consider that offering best advice only means finding out about your financial situation. We at sustainable financial feel that in order to give the best financial advice possible, it is also important to find out about our clients’ investment preferences and other concerns.

In order to help us to assess your preferences we ask you to complete two questionnaires, and then to make a series of hypothetical decisions about your investment portfolio.

So that we give you the most appropriate advice, it is important that you think carefully when answering the questions and making your choices.

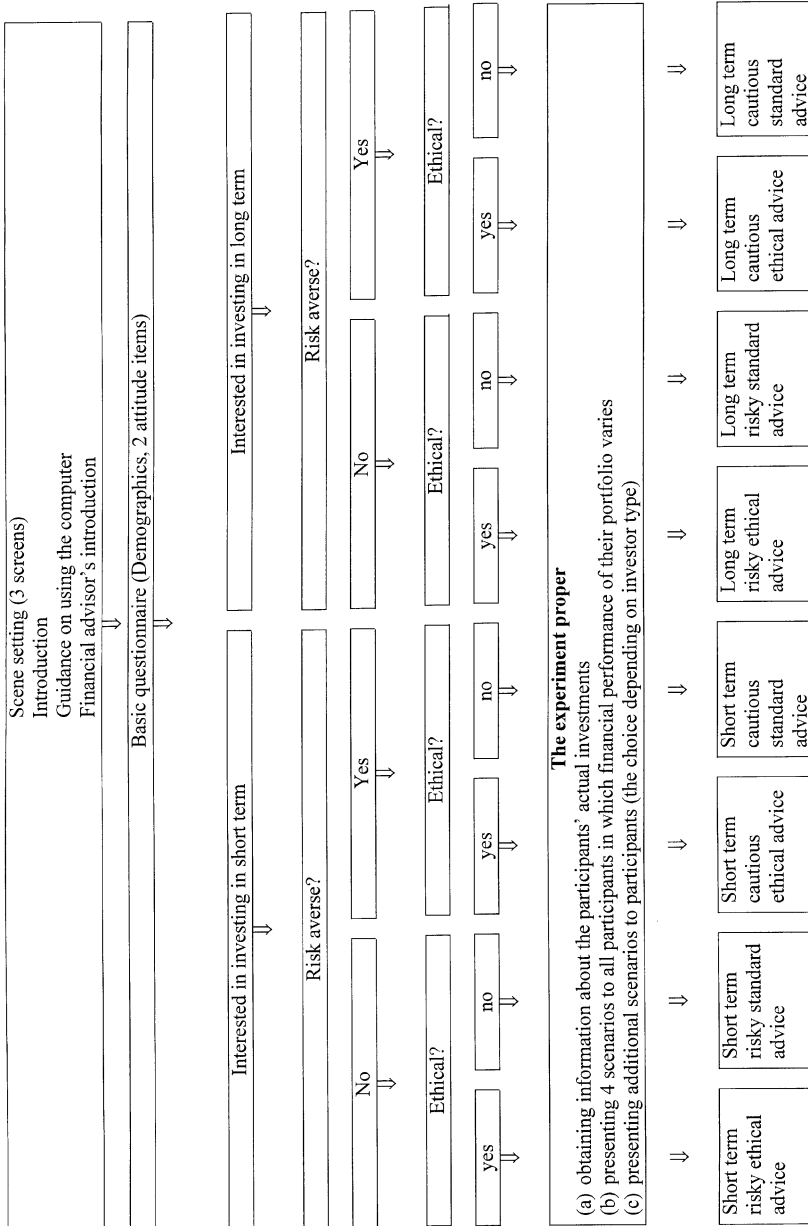


Fig. 1. Flow chart indicating the sequence of Web pages.

In the majority of cases participants had already completed these two questionnaires prior to the experimental session and returned them by post. This information had been entered in a file, which could be accessed using a code word. The first questionnaire covered basic demographics (age, gender, marital status, income), the questions used to assign the participants appropriate advice and two Likert items on ethical investment (“If a significant number of people stopped investing in companies which harm the world and its people then those same companies would soon change their policies for the better”; “When it comes down to it most people will carry on investing in companies which give them the best return on their money regardless of how the profit is generated”). The second questionnaire asked participants about their current investment portfolio. They had to detail their current holdings in the whole range of investments, though pension funds, endowment mortgages and insurance policies were excluded.

Participants were then presented with a summary of their portfolio in the form of a table which put their holdings into seven categories (current account, savings accounts, ethical unit trusts, ordinary unit trusts, higher risk equities, special ethical funds, other holdings) with an appropriate risk factor associated with each (e.g., savings account – low risk). The next screen gave the scenario instructions so:

You will be presented with eight different scenarios. Each scenario is a picture of how the next five years might turn out. For each scenario we would like to ask yourself the following question: “If this scenario comes true, how would I alter my portfolio today?” In each scenario there will be a small amount of text which explains the scenario together with a table which gives you information about the performance of the portfolio.

The rest of the scenario instructions contained an explanation of the table (which gave information about past performance, risk rating, current value of portfolio today and future values) and instructions about how to change the portfolio. The core of this was the ‘recalculate’ button, which would take the changed portfolio and show how much it would be worth in 5 years time. The recalculate button could be used as often as the participants wanted, the idea being that they should experiment with their portfolio until they were happy with it. When they had setup a satisfactory portfolio (which could be, and often was, their existing portfolio) they simply clicked on the ‘next scenario’ button to move on to the next scenario.

The first four scenarios were as follows (but were presented in a random order). In each case the opening sentence was “Over the next five years the

economy performs more or less as it has in the last few years” followed by the relevant text:

1. *Good ethical unit trust performance*: Over the next ...except that the smaller companies sector has performed better than average. Ethical unit trusts invest heavily in smaller companies, this means that the ethical unit trusts have performed *better* than ordinary unit trusts.

2. *Good ordinary unit trust performance*: ...except that the larger companies sector has performed better than average. Ordinary unit trusts are more heavily invested in this sector, this means that the ordinary unit trusts have performed *better* than ethical unit trusts.

3. *Poor ethical unit trust performance*: ...except that the smaller companies sector has performed worse than average. Ethical funds are more heavily invested in this sector, this means that the ethical unit trusts have performed *worse* than ordinary unit trusts.

4. *Poor ordinary unit trust performance*: ...except that the larger companies sector has performed worse than ethical funds. Ordinary unit trusts are more heavily invested in this sector, this means that the ordinary unit trusts have performed *worse* than ethical unit trusts.

The numerical value of the good and poor performance was equivalent for both ethical and ordinary unit trusts being in the good case £1000 now in five years being worth between £1610 and £1925 and in the bad case £1000 now in five years being worth between £1338 and £1610. This contrasted with the alternative (whether ethical or ordinary), which was specified as being worth between £1469 and £1762.

Ethical investors then were presented with the following four scenarios. In each case the opening sentence was “The stockmarket continues to perform as it has over the last few years, and interest rates remain the same” followed by the relevant text:

5. *Lack of ethical impact*: The stockmarket ...Meanwhile an influential report is published by a highly respected business ethics professor, proves that ethical investment, while well intentioned, has no positive effect in making companies more ethical or less environmentally harmful.

6. *Ethical fund scandal*: Meanwhile an investigative journalist discovers that many ethical funds are routinely contravening their ethical policies by investing in companies involved in areas (like arms and animal testing) which they say they will avoid.

7. *Activist ethical unit trust*: Meanwhile a new ethical fund is launched, the *Activist Ethical Unit Trust*. This fund is committed to a programme of shareholder action to reform corporate practice. Rather than avoiding



investing in unethical companies, it positively invests in them in order to publicly campaign to make them more ethical and less harmful.

8. *Very poor ethical unit trust performance*: ...except that the smaller companies sector has had a very bad time. As ethical funds have high exposure in this sector, they have performed *very poorly*, much worse than ordinary unit trusts.

Standard investors were presented with three scenarios, one being the activist ethical unit trust one, the other two involving a stockmarket crash (“the stockmarket crashed wiping 25% off the value of shares. Over the next few years there is a sustained bear market, with shares as a whole performing significantly worse than they have in the last few years”) and an interest rate hike (“the unexpected acceleration of the current boom and higher public sector wage claims bring the return of inflation. The Chancellor is forced to raise interest rates substantially and they remain high. This also hurts share prices”).

### 3. Results

The portfolios of the ethical investors differed from those of the standard investors. Table 1 shows that standard investors had more invested in total ( $t = 2.15$ ,  $P < 0.05$ ) and invested more than ethical investors in high risk equities and other investments. Their holdings of ordinary unit trusts were very similar. To get a simple picture of how each scenario affects changes in the portfolio, one can categorise the amount invested in a particular category of funds in a scenario as either an increase on, a decrease on or identical to the initial investment. This shows that ethical investors respond more

Table 1  
Initial percentage of investments as a function of type of investment

	Ethical investors	Standard investors
Ethical unit trusts	28.4	0
Ordinary unit trusts	22.8	21.8
Current account	4.7	4.2
High risk equities	12.7	21.9
Other investments	10.1	24.1
Savings accounts	20.4	27.1
Special Ethical Funds	0.92	0.95
Mean value of investments	£66,764	£135,983

strongly to improved performance of ethical funds than standard investors and that poor ethical fund performance does not put the ethical investors off – indeed, rather surprisingly, in this situation more ethical investors increase their ethical investment than decrease it (see Table 2). These results also show that many investors leave their portfolios unchanged (often after playing around with alternatives for some time first). Looking at the changes in the percentages of total holdings invested in ethical or standard funds gives a rather different impression. Here we compare the proportion of their holdings that investors choose to invest under different conditions in trusts labelled in particular ways. The appropriate analysis is a partial repeated measures analysis of variance with type of investor (ethical vs standard) as a between-subjects factor, financial performance of the trust and type of trust (ethical or ordinary) as within-subject factors and the change from baseline invested as the dependent measure.

This shows a significant overall effect of performance ( $F = 23.16$ ,  $df = 1.54$ ,  $P < 0.01$ ) but more interestingly, a significant interaction between trust type and performance ( $F = 4.13$ ,  $df = 1.54$ ,  $P < 0.05$ ). When ethical unit trusts perform well, both ethical and standard investors increase their

Table 2  
Changes in *ethical* investments relative to initial holdings

Scenario <sup>a</sup>	Ethical investors	Standard investors
<i>(a) Good ethical trust performance</i>		
Increased investment	20	14
No change in investment	8	14
Decrease in investment	0	0
<i>(b) Good ordinary trust performance</i>		
Increased investment	8	4
No change in investment	18	24
Decrease in investment	2	0
<i>(c) Poor ethical trust performance</i>		
Increased investment	10	4
No change in investment	15	24
Decrease in investment	3	0
<i>(d) Poor ordinary trust performance</i>		
Increased investment	15	15
No change in investment	12	13
Decrease in investment	1	–

<sup>a</sup> For each scenario ‘no change’ and ‘decrease’ in investment were collapsed and two-by-two chi-square analyses carried out. There were no significant differences between ethical and standard investors: for scenario a,  $\chi^2 = 2.69$ ,  $0.05 < P < 0.1$ , for scenario b,  $\chi^2 = 1.69$ ,  $P = \text{NS}$ , for scenario c,  $\chi^2 = 3.42$ ,  $0.05 < P < 0.1$ , for scenario d,  $\chi^2 = 0$ ,  $P = \text{NS}$ .

Table 3

Changes from baseline in percentage of investments held in funds as a function of fund performance and type of trust

	Ethical unit trust		Ordinary unit trust	
	Ethical investors	Standard investors	Ethical investors	Standard investors
Good performance	15.82	14.07	0.04	-1.5
Poor performance	4.69	4.05	-7.73	-6.15

Table 4

Changes in ethical investments relative to initial holdings (number of investors in each category)

	Decrease	Stay the same	Increase	[N missing]
Lack of ethical impact	1	19	8	0
Ethical fund scandal	9	16	1	2
Activist ethical fund	3	20	3	2
Very poor ethical performance	5	13	4	6

investment in them but, oddly, a poor performance of ethical unit trusts also leads to a slight increase in ethical investment (Table 3). By contrast, a good performance in ordinary trusts leads to little in the way of change and poor performance to a fall in the percentage invested. There is no significant difference in behaviour between the two types of investors ( $F = 0.77$ , NS): there is a significant effect of type of trust (with ethical unit trusts showing increases from baseline) ( $F = 18.83$ ,  $df = 1.54$ ,  $P < 0.01$ ).

The later scenarios presented only to the ethical investors are also interesting (Table 4). These show that the lack of impact of ethical funds actually leads to an increase in ethical holdings (only 1 individual decreases, whereas eight increase their holdings,  $P < 0.05$ , sign test), whereas the ethical scandal does put ethical investors off (with nine investors decreasing their ethical holdings compared to one increasing his holding,  $P < 0.05$ , sign test).

### 3.1. Comments by participants

These comments divided into two categories – those concerned with ethical investing in general and those concerned with the role-play itself. The latter could be further sub-divided into comments about technical issues, about over-simplification and evaluative remarks. Examples of comments about ethical investing included “As far as ethical investments are concerned, I would like to think that I would invest in such companies but I have to admit

I have put this to one side” and “there are two reasons to invest ethically – to influence companies and to maintain integrity. Just because ethical investment was found to be ineffective would be no reason to withdraw one’s funds”. Those concerned with technical matters tended to focus on issue of layout (e.g., “fairly easy to use but the layout of the tables could be improved”, “the recalculate and next scenario button could be at the same level”, “it would be useful to have a pageup/down facility”). The oversimplification in the role-play was mentioned by a number of participants. They commented that “more detail required about tax concessions etc.”, that the “Scenarios too simple when coupled to real risk assessment” and “it seems to be based mostly on the unreal premise that one can look ahead and know what will happen”. However, the evaluative comments were overwhelmingly positive, which was very encouraging. Many participants indicated that the simulation had been interesting and helpful (e.g., “it has made me think that I need to pay more attention to investments”, “highly interesting”, “a fascinating exercise”, “definitely a useful tool to improve one’s investment skills”). The advice was also generally felt to have been useful.

#### **4. Discussion**

There are clearly a number of problems with this study that need to be borne in mind in interpreting the results. The most critical of these is that some participants appeared to treat the series of scenarios as a sequence, although it was emphasised during the initial briefing that each scenario should be treated independently and the portfolios were reset, at the baseline value, for each scenario. Thus having, for example, increased ethical investments in scenario 2, such a participant would reset her ethical investments to this value at the outset of scenario 3. This carry-over effect obviously has implications for the results for the later scenarios though should just add noise to the earlier ones (as these were presented in random order). Another problem is that the focus groups held prior to the experiment may have sensitised participants both to ethical investment and to the issues involved. For the standard investors, this may have alerted them to the existence of such investments, for the ethical investors to some of the issues involved. In addition to these design problems there were some practical problems. Many of the participants were quite elderly, were unused to computers and in some cases had difficulty in using the mouse and/or reading the screen. In these instances we increased the font size of the text on the

screen and, when necessary, provided an assistant to operate the mouse and make the alterations required by the participant. The implementation of the experiment on the Web also created its own difficulties: sometimes the server went down and the screen loading was occasionally rather slow. Those participants with more computer experience could if they wished use the back button to return to earlier screens or move outside the experiment altogether (although we did not observe this) – the less experienced were obviously more constrained.

Nonetheless, this study has two very real plus points. First, and unlike *all* other previous studies in this area, our participants were real investors. Some had very large investments and all were serious investors who had considered their portfolios carefully. Second, the role-play devised for this study (seeking financial advice from an expert) had, to a considerable extent, the three features that Yardley (1995) considers essential for high quality research of this type. The role-play involved ‘presencing’ (trying to make the situation and surroundings as real as possible for the participant), ‘personalization’ (it drew on the individual’s personal experience) and ‘particularisation’ (the explicit detailing of objects etc. in the role-play that need to be readily available to awareness). According to Yardley these three characteristics will produce very high involvement, and a highly involved participant will behave as he or she would in a real situation. The participants were involved, did take the role-play seriously and were generally pleased with the advice. So despite the problems outlined above, it is reasonable to make some comments and draw some firm conclusions.

The most puzzling finding was the fact that ethical investors (and, to a lesser extent standard investors) invested more in ethical funds when these had performed poorly. Even when the ethical funds were described as performing very poorly, a number of ethical investors increased their holdings. One possible explanation for this is that these investors were following a contrarian strategy (De Bondt, 1998), that is, buying when share values have gone down. This is plausible given that some participants interpreted the scenarios as being part of a sequence. However, there seems no reason why a contrarian strategy should be applied to ethical funds and not to ordinary funds and it is notable that both kinds of investors reduced their ordinary holdings when these performed poorly. It seems more likely that this particular finding was the result of the sensitisation to ethical issues caused by the use of a focus group discussion at the outset.

The most important conclusion is that, for these ethical investors at least, ethical investment is based on ideology and identity and is not a matter just

of financial return or of the impact of ethical investment (the comment about ‘integrity’ illustrates this). These ethical investors do not seem to be like those described by Mackenzie and Lewis (1999) who have invested in SI: for our participants, ethical investment is a substantial part of their portfolio and is not seen as ‘spare cash’. If ethical investment is very important to individuals (and they see their investment as, in some sense, revealing who they are), they *may* be particularly vulnerable to sunk cost and escalation of commitment biases (Arkes & Ayton, 1999) and so, having invested ethically, they stick with it. Some of the apparent commitment of the ethical investors may also be due to a lack of suitable alternatives within the role-play. If there had been a choice of ethical holdings with different performance and liquidity characteristics (as is actually the case in the real world), participants could have shifted their funds to alternative ethical holdings.

The results also have links with some of the work on brand and advertising. Raj (1982) for example, showed that increased advertising (and by inference improved performance) of brand A leads those loyal to brand A to increase purchases of it – but increased advertising of brand B only leads to a decrease in purchases of brand A – and not to an increase in purchases of brand B. Ethical investors are not only ethical but also committed: having made their choice to invest ethically, there is a very strong tendency for them to stick with this decision.

This study suggests that it is possible to investigate the behaviour of real investors experimentally, and that further studies of this type (using a role-play of a consultation with a financial advisor) could help to explore the motivation of investors, their mental accounting, their reaction to changes in the investment environment and a variety of other issues. But future studies will need to solve some of the practical problems involved in order to make the experimental setup more user-friendly: samples of real investors will always tend to be on the elderly side and while many are willing to learn, using the World Wide Web in its current incarnation is not always a simple matter.

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